

Soden, Rebecca and Seagraves, Liz and Coutts, Glen (2008) Evaluation of arts across the curriculum.
[Report]

<http://strathprints.strath.ac.uk/26622/>

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (<http://strathprints.strath.ac.uk>) and the content of this paper for research or study, educational, or not-for-profit purposes without prior permission or charge. You may freely distribute the url (<http://strathprints.strath.ac.uk>) of the Strathprints website.

Any correspondence concerning this service should be sent to The Strathprints Administrator: eprints@cis.strath.ac.uk

Evaluation of the Arts Across the Curriculum Project

Final Report

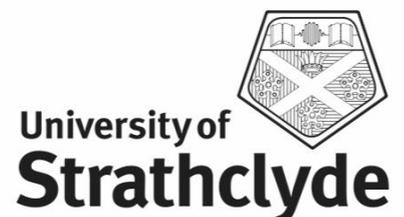
Dr Rebecca Soden and Liz Seagraves
The Quality in Education Centre

and

Glen Coutts
Department of Sport, Culture and the Arts

March 2008

University of Strathclyde
Faculty of Education
Jordanhill Campus
76 Southbrae Drive
Glasgow
G13 1PP



CONTENTS PAGE

	Page no.
Members of the evaluation team	i
Acknowledgements	i
Executive Summary	ii
1. Introduction	1
1.1 Introduction	1
1.2 Background to AAC	1
1.3 The evaluation	2
1.4 Structure of report	3
2. Artists' and teachers' interpretation of Integrated Curricular Lessons	4
2.1 Introduction	4
2.2 Diversity in delivery of ICLs	4
2.3 Artist/teacher/pupil interaction during ICLs	5
2.4 Overview of findings	5
2.5 Issues arising from observational and related data	8
2.6 Summary	11
3. Impact of the AAC project on pupils	13
3.1 Introduction	13
3.2 Pupil views on the impact of AAC	13
3.3 Differences connected with gender, primary/secondary pupils and stages 1 and 2 of the project	17
3.4 Impact on developing creative approaches and pupils' creative thinking skills	18
3.5 Teacher views on the impact of AAC on pupils	20
3.6 Artist views on the impact of AAC on pupils	22
3.7 Parent views on the impact of AAC on pupils	22
3.8 Observational data	22
3.9 Summary	23
4. Impact of the AAC project on teachers, artists and schools	24
4.1 Introduction	24
4.2 Participant perceptions of the initial training event and support for new participants	24
4.3 Teacher views on the impact of AAC on teachers	25
4.4 Artist views on the impact of AAC on artists	26
4.5 Teacher views on the impact of AAC on whole school issues	27
4.6 Challenges, factors for success and sustainability	29
4.7 Summary	31
5. Conclusions, discussion and points for consideration	32
5.1 Introduction	32
5.2 Main findings and conclusions	32
5.3 Meeting the aims of Arts Across the Curriculum	33
5.4 Factors which facilitate effectiveness	37
5.5 The expressive arts as a vehicle for carrying current school curriculum knowledge and for achieving broader educational targets	38
5.6 What needs attention in future AAC-type projects?	39
References	41
Annexe Numbers of respondents to surveys and interviews	46

Appendices A to F – technical report (in separate document) :

Appendix A	Evaluation design and research methods	1
Appendix B	Evaluation stage 1 data collection (2005-06)	17
	B1: views of artists and teachers on initial training and support	17
	B2: evidence from pupil surveys and focus groups	29
	B3: evidence from teacher survey and interviews	58
	B4: evidence from artist survey and interviews	83
	B5: views of parents	100
Appendix C	Evaluation stage 2 data collection (2006-07)	103
	C1: views of new artists and teachers on initial support	103
	C2: evidence from pupil surveys and focus groups	110
	C3: evidence from teacher survey and interviews	139
	C4: evidence from artist survey and interviews	159
	C5: views of parents	181
Appendix D	Differences observed in the data between stage 1 and stage 2 of the evaluation	189
Appendix E	Classroom observations of ICLs	198
Appendix F	Selected AAC classes with comparator groups	207

Available on request

Appendix G	DVD of artists' video diaries – <i>Arts Across the Curriculum: the Way They See it</i>, Glasgow: University of Strathclyde, 2007.	
	Available on request from the Department of Sport, Culture and the Arts, Jordanhill Campus, University of Strathclyde or www.strath.ac.uk/degas	

Available as a separate volume

Appendix H	Evaluation instruments	
-------------------	-------------------------------	--

Members of evaluation team from the Faculty of Education, University of Strathclyde

The principal members of the evaluation team were:

Glen Coutts, Reader, Department of Sport, Culture and the Arts, Principal Investigator
Dr Rebecca Soden, Reader, Department of Educational and Professional Studies
Liz Seagraves, Senior Researcher, Quality in Education Centre

The team were supported by the following research staff, who provided invaluable support in relation to coding and data entry, pupil focus groups, teacher and artist interviews, initial analysis of both survey and interview data and preparation of the video diaries:

Jane McKay
Jan Thomson
Lauren Kirkland
Katy Brady
Elaine Beck
Shilpi Gupta
Fiona Stewart

Elaine Kirkland provided outstanding administrative support throughout the lifetime of the project.

Acknowledgements

Firstly, the researchers would like to thank the Scottish Government, the Future Learning and Teaching team and all members of the project advisory group, who provided invaluable support and advice and, secondly, all the participants who made possible the data collection for this evaluation of the Arts Across the Curriculum project. These include: the Scottish Arts Council, local authority Cultural Co-ordinators and Creative Links Officers (CLOs), artists, headteachers and other senior management in schools, class teachers, pupils and parents. We are grateful to the Scottish Arts Council and local authority co-ordinators for their support.

All artists and teachers were invited to complete questionnaires and high return rates were achieved, so the team really appreciate the additional time and commitment that this involved. We also thank the schools and teachers who facilitated the completion of pupil questionnaires. Observations of integrated curricular lessons (ICLs), interviews and focus groups were carried out in a sample of schools and particular thanks are due to these schools. We are especially grateful to the local authority that provided access for our in-depth study; the enthusiastic support and engagement of senior management, teachers, artists and pupils as well as the CLO were very much appreciated.

We also thank Professor Kay Livingston, University of Glasgow, for her contribution to and support for the work of the evaluation in its initial stages.

Evaluation of the Arts Across the Curriculum Project

Executive Summary

1. Introduction

This is the final report on the evaluation of the Arts Across the Curriculum (AAC) project, prepared by the evaluation team in the Quality in Education Centre (QIE) at the University of Strathclyde, who were commissioned by the Scottish Government (formerly Scottish Executive) Education Department.

2. The Arts Across the Curriculum project

Arts Across the Curriculum is a three-year pilot project sponsored by the former Scottish Executive's Future Learning and Teaching (FLaT) programme¹, the Scottish Arts Council, and seven local authorities in which the initiative is being piloted. In order to be eligible to participate in AAC, local authorities had to have a Creative Links Officer in post. The seven Creative Links Officers were responsible for the management of the AAC project in their local authority. The six key aims of the project are:

1. to increase pupils' achievement, particularly in understanding, in identified subject areas across the curriculum
2. to increase pupils' motivation to learn
3. to support and develop the skills of teachers to work collaboratively and creatively
4. to encourage links between different areas of learning and erode subject barriers
5. to improve the ethos of the school
6. to explore the efficacy of the expressive arts as a delivery mechanism across the curriculum.

The ideas expressed in the project's aims are drawn mainly from the Lakeside Education and Arts Partnership (LEAP) approach and their Arts Impacting Achievement (AIA) project. These follow the Chicago Arts Partnerships in Education (CAPE) approach, commonly known as the 'Chicago model'.

At the heart of Arts Across the Curriculum is the 'integrated curricular lesson' (ICL) that arts professionals and teachers plan and deliver together. Creative Links Officers were responsible for choosing the schools, artists and structure of these ICLs. Their purpose is to enhance pupils' understanding of curriculum content through arts activity and for pupils to gain greater insight into the arts. Artist and teacher integrate their specialist knowledge in designing lessons to achieve this end.

3. The evaluation

The aims of the evaluation, as agreed with the FLaT team, are to:

1. describe the extent to which the six *key aims* of the Arts Across the Curriculum project have been met
2. identify strengths and any gaps in the training and support available to teachers and artists involved in the Arts Across the Curriculum project in the participating schools
3. assess the overall impact of the Arts Across the Curriculum project on teachers, artists and pupils in the participating schools (including any gender differences in relation to outcomes)
4. explore how the expressive arts can be used as a vehicle for carrying current school curriculum knowledge and for achieving broader educational targets
5. establish conditions that support effective implementation and embedding of the Arts Across the Curriculum project.

Outline of research design

From April to August 2005, a picture of the initiative was constructed from interviews, observation of the main AAC training event and planning meetings, and from AAC documents provided from various sources including schools, local authority managers and the Scottish Arts Council.

¹ Information on the FLaT programme can be found at <http://www.flatprojects.org.uk/>

During the period September 2005 to June 2006, data were gathered using a variety of instruments which included pupil, teacher and artist surveys, structured observation of ICLs and interviews with a sample of artists, pupils, teachers and parents.

Between September 2006 and June 2007, these measures were repeated in order to identify any changes in impact that might have arisen when stakeholders had accumulated experience of implementing ICLs.

In addition to these measures, a number of artists provided rich data through the compilation of video diaries (see Coutts & Dougall, 2005) and there was an in-depth study in three schools which involved semi-participant observation and extended exploration of teachers' and artists' understandings of the project aims and how they might be implemented effectively. The in-depth study included one focus group with the headteachers from the three schools and a further focus group with the artists and teachers. In June 2007, individual interviews took place with key members of the SAC and Creative Links Officers. Finally, the views of project monitors, who had been appointed by the FLAT team as 'critical friends', were sought in August 2007.

4. Key findings

4.1 Artist and teacher interpretations of ICLs and related issues

There was a high degree of diversity among authorities and schools in the ways in which ICLs were developed and delivered; for example, the frequency and length of art input, the length of time a group of pupils participated in AAC, the curricular area addressed and the art discipline involved. However, the classroom observation data showed that interaction promoting the key aims of AAC appeared in the vast majority of observed lessons; the observers noted in particular that arts activities were used to enhance the curriculum content. The evidence shows that the artists and teachers were adapting the Chicago/LEAP model in sensible, productive ways to fit curricula in Scottish schools. Throughout the project, the arts activities were being used to help pupils learn other knowledge, and this evidence differentiates AAC activities from other initiatives that have introduced arts activities into schools. However, the various strands of data suggest that more attention needs to be given to enabling pupils to develop creative thinking as well as content outcomes.

Suitability of art form for different academic content

There was evidence, especially by the second year of the project, that teachers and artists believed that many ideas that are difficult for pupils could be effectively illustrated through the available art forms. In commenting that an art form 'involves looking at something from a different perspective', one artist summarised a view expressed by others: that it is reasonable to believe that any art form offers a way of promoting insight into ideas in most academic subjects. However, this does not mean that representation was straightforward, and both teachers and artists reported that this was challenging to achieve. Careful planning and pedagogical understandings are key to effective ICLs.

Planning for integration

Taken together, the data suggest that teachers and artists collaborated very well together. Success depended on setting realistic goals for a series of ICLs, careful analysis of the concepts learners were to grasp and weighing up a range of possible pedagogical strategies. A key factor was the artists' ability to help pupils to represent challenging curricular concepts through artistic activities. Success was also associated with being able to balance the various constraints in the context and reach solutions acceptable to both artist and teacher.

Evidence of teachers and artists developing ideas jointly was more marked in the second than in the first year of the project, possibly because it takes time to develop understanding of the sophisticated notion of integrating two disciplines to enhance learning in both. The planning sheets provided were not particularly helpful: 'they are a formality, not a tool'.

Integration in action

In almost all lessons, high levels of productive interaction were observed between young people and their artists and teachers. The highest proportion of invitations to talk initiated by artists in both years fell into the category connected with deepening pupils' understanding of curricular content. In both

years, artists initiated more than twice as many invitations to talk as teachers over the typical observation slot, a finding which can be explained in part by three inter-related factors (i.e. the artists often led the recap of curricular content; they orchestrated the lessons around the arts activities and they used many short questions to focus pupil attention). The artists demonstrated high levels of skill in using questioning techniques.

Covering curriculum content

The vast majority of teachers reported that it took longer to cover the curriculum content, but for most this situation was manageable. The extra time invested led to deeper understanding of the topic and was often recovered subsequently through not having to re-explain concepts at a later stage.

Less successful ICLs

Where lessons were less successful, explanations from artists and teachers proposed three inter-related factors: delivering the ICLs to classes with a high proportion of pupils with unusually challenging behaviour; inadequate support from school management; selecting academic goals and/or artistic content that were too difficult for the pupils.

4.2 Impact on pupils

Views of pupils, teachers, artists and parents were sought in relation to the project's effect on pupils' learning and engagement with learning. The many different strands of evidence point in the same direction: the ICLs engaged the pupils; they were effective in enhancing understanding of academic and artistic content; and pupils, including those with social, emotional and behavioural needs, derived a range of benefits from these lessons.

Pupil views on impact on pupils

There was evidence that the pupils clearly understood that the main focus was the curriculum topic but also that there was opportunity to learn about different art forms and art skills. It is clear from surveys that the majority of young people believed that having an artist working alongside the teacher had the following benefits:

- enhanced interest, enjoyment and engagement with learning: for example, the majority thought that the lessons were more interesting, time seemed to pass more quickly and they looked forward to the lessons with the artists; the majority thought it would be a good idea to have artists in more lessons
- it was easier to learn the topic because of the way it was explained and they thought they could remember the ideas better
- the lessons helped them work with other pupils, including people they did not usually work with
- the things they did during the ICLs made them feel more confident.

Pupils' explanations indicated that: they liked having the freedom to make their own decisions about planning and executing tasks; the lessons enabled them to remain 'on task', because ICLs were active and involved less reading, writing and copying; the way the artist explained things and the things they did in these lessons enabled them to remember the concepts they were learning more easily. However, not all lessons with the artist were successful, and in a small number of lessons, they did not see the connections between the art activity and the subject they were learning.

Pupils indicated that they learned about different art forms and some would have been interested in learning more, but opportunities for further development were perceived as limited, both within school and in the wider community.

Teacher, artist and parent views on impact on pupils

Teachers reported increased engagement of the young people during ICLs and said that the interest in the curriculum topic/subject often continued when the artist was not present. They reported children 'loving it' and 'being excited'.

Teachers were also positive about the extent to which the approaches used in ICLs encouraged pupils:

- to work collaboratively
- to work creatively (i.e. to contribute and try out new ideas and take risks), and
- to develop confidence and self-esteem.

In relation to improved achievement and understanding, teachers offered evidence of benefits in the following categories:

- pupils' grades in the subject used for the ICLs
- pupils' grades in class tests for the topic used for a series of ICLs
- pupils' completion of homework connected with a series of ICLs
- pupils' understanding of concepts taught in ICLs – assessed verbally when new, related concepts were being introduced.

Artists reported high levels of interest and enthusiasm amongst pupils, although during interviews some indicated that amongst secondary pupils in particular there were some classes, or a few in each class, who were not 'on board'.

While some of the parents interviewed had only limited awareness of the AAC project, the majority indicated that their children had enjoyed the experience and had spoken enthusiastically and positively about the lessons with the artists. Most believed that the interest generated by the artists would help the children concentrate more and help them learn.

Developing creative approaches and creative thinking skills

Overall, the majority of the pupils thought that ICLs encouraged them to:

- try things they had not done before
- share their ideas with other people
- put new ideas into practice, and
- be more imaginative.

In open questions and focus groups they thought one of the purposes was to help them use their imaginations. However, there was no evidence of any difference in the development of creative thinking skills, between a small sample of AAC pupils and a comparator group of non-AAC pupils, as measured by a set of standardised creative thinking skills tasks. One possible explanation, supported by the data gathered during ICL observations, is that there was insufficient time in ICLs for pupils to practise a range of creative thinking skills. Typically, in ICLs pupils responded to questions and represented ideas in an art form, but there was little time for them to talk about forms of thinking that underlie artistic endeavour (see e.g. Tishman & Palmer, 2006). The standardised tasks reflect the view that creative thinking includes the ability to generate lines of enquiry and to engage in various forms of thinking embedded in particular art forms. Most research suggests that any form of thinking has to be practised quite intensively before a measurable impact occurs, and the nature of the thinking needs to be made explicit.

4.3 Impact on teachers and artists

Evidence from all sources indicates that the majority of teachers and artists were very positive about their involvement in the Arts Across the Curriculum project and most agreed that they would like to continue working in this way.

Initial training and ongoing support

At the outset of the programme a 3-day training event was held, drawing together teachers and artists from the 7 authorities involved in the project and a team from Lakeside Education Arts Partnership, Chicago. This event was generally well received by both teachers and artists, although many of the artists reported that they already had experience of working in an educational context and believed that their talents could have been utilised more in the training event. According to both teachers and artists, an important aspect was the wealth of talented Scottish artists gathered together for the training event and who were participating in the project.

'New' artists and teachers became involved in AAC throughout the life of the project. Induction for such participants varied from authority to authority. Teachers and artists in some authorities reported meetings with CLOs and there were some locally organised induction and planning days. Others

reported little support, with teachers depending on experienced artists, and *vice versa*, to help them with the preparation and delivery of ICLs. More structured induction and clear information about AAC and the ICLs would have benefited all new participants to the project.

From the artists' perspective it was reported that, for the most part, schools had been welcoming and management supportive. This support was less evident in secondary schools, but artists indicated that the relationship with the teachers had been sufficient, although they believed that teachers could have benefited from greater support from management. Artists were extremely positive regarding support from local authority managers, with an apparent increase in appreciation over the course of the project.

Teacher development

One aim of the AAC project is to support and develop the skills of teachers to work 'collaboratively and creatively'. Teachers reported working collaboratively with other adults and with their colleagues prior to involvement in AAC, but some indicated that working with the artist had made them more confident in working with others.

In relation to working creatively:

- almost all the teachers thought that they had developed new approaches to teaching
- most indicated they had tried out the new ideas in other lessons and
- most thought that working with an artist had developed their confidence to try out new approaches and to be less 'controlling' in their classroom practice.

Artist development

While about one-third of the artists indicated that being involved in AAC had not led to further professional or personal development as they were already well experienced in working with schools, the remainder reported that they had:

- developed new awareness and understanding of issues related to schools and young people
- acquired new skills in working with young people, and
- been stimulated to develop new approaches in their art (a few artists).

4.4 Impact on schools

AAC had two aims specifically related to whole school issues: to **encourage links between different areas of learning and erode subject barriers** and to **improve the ethos** of the school.

- Teachers saw the most obvious erosion of subject barriers occurring between art disciplines used in the ICLs and other areas of the curriculum, although some primary teachers suggested that this was not new practice.
- While by the end of the project some secondary teachers were seeing the potential for cross-curricular collaboration (e.g. English and Art, Social Studies and Drama, Maths and Music departments), there were few formal opportunities within schools (e.g. development days that focused on the AAC experience) designed to cascade the approach throughout the school.
- There was no general consensus reached as to whether or not AAC had impacted on the ethos of schools.

4.5 Sustainability

About half the teachers believed that they could continue to implement the delivery of the curriculum through arts media as the experience had given them the ideas and the skills; the remainder believed this was not possible as the expertise and skills of the artists were essential for successful delivery. Sustainability was dependent on schools' commitment to giving time, resources and wider recognition within the school to an arts-infused approach and ongoing CPD/mentoring from artists.

4.6 Efficacy of arts for delivering the curriculum and conditions that support effective delivery

All of the above evidence suggests that the expressive arts can be effective vehicles for carrying school curriculum knowledge and for achieving broader educational targets. The ICLs can be

understood as translating constructivist accounts of learning into practice in a way that is consistent with principles expressed in the *Curriculum for Excellence*. Many ICLs served the functions of illustrating abstract concepts by representing them in another, arts-related, way and providing a vehicle for problem-based and other participative forms of learning implied by the *Curriculum for Excellence*. There is no clear evidence that arts promote understanding of curriculum knowledge *more* effectively than other approaches derived from sound pedagogical research.

Factors contributing to effective delivery of ICLs that emerged from the data and that appear in related research literature include:

- strong leadership and support of the school management team
- the quality of joint artist/teacher planning
- effective communication
- appropriate time slots for lessons with provision for continuity and progression
- suitable locations and resources
- promotion of good artist-teacher relationships and collaboration in both planning and delivery
- projects that are not one-off but have multiple phases.

Features of effective planning include:

- choosing realistic academic and artistic goals
- analysing key concepts connected with lesson goals
- considering strategies for developing pupils' understanding
- using the art form to inject interest into 'difficult' or 'dull' content
- artists' ability to design a vehicle suitable for promoting the academic goals with manageable artistic activities accommodating such constraints as time, teacher/pupil resources and space.

5. Points for consideration

It is recommended that attention should be given to the following points in future attempts to build on the successes reported above in using art forms as a vehicle for enhancing curriculum learning.

- **Teacher/artist opportunities to explore pedagogy**

Representing curricular content in art forms requires more sophisticated pedagogical understanding, particularly of constructivist approaches; the AAC project training needs to address this through a joint approach with senior academic staff in universities who have evidenced their expertise in this area through, for example, publications in peer reviewed journals. Part of the pedagogical understanding relates to the idea that it is through learning to think more effectively that knowledge bases are grasped in ways that enable them to be used as flexibly as seems to be envisaged in the descriptors of the four capacities that capture the aims of the *Curriculum for Excellence*. Viewed in this light, there is little conflict between developing thinking through reflection in the way described in Project Zero (e.g. see Tishman & Palmer, 2006), while also achieving academic learning outcomes.

More constructivist teaching needs to be supported by more open-ended assessment tasks, including more use of what is known as authentic assessment tasks (e.g. see Knight & Yorke, 2003). For example, pupils might be assessed through presenting their work to school and community audiences.

- **Providing time to develop understanding of art forms**

More time might be allocated to opportunities for pupils to explore and analyse art forms, such as films, plays and visual art, in the ways described in Project Zero's *Artful Thinking* (Tishman & Palmer, 2006), if aims relating to creative and other forms of thinking are to be achieved.

- **A whole school approach**

ICLs are likely to work optimally where there is a whole school approach which is actively supported by senior management, and which makes it possible for teachers and artists to identify both ICL and non-ICL lessons where young people can practise 'artful thinking', research knowledge, and engage

with related films, plays, novels, poems, documentaries and visual art. Without a whole school approach, practice in forms of thinking embedded in art forms is restricted to isolated classes and may be insufficient to develop competent thinking. Time for developing creative and other forms of thinking might be found through a whole school approach that re-examines curriculum knowledge to distinguish between fundamental ideas in areas of study and other information that pupils could access themselves through individual work.

A whole school approach would also enable young people to gain experience across the school of working in the constructivist ways that are implied by the *Curriculum for Excellence*.

- **Erosion of subject barriers**

A contribution to the erosion of subject barriers can be made through the use of a systematic approach in which school working groups identify forms of thinking in arts activities and draw up plans to enable pupils to practise such thinking across the curriculum.

Eroding of subject barriers can be promoted through the well researched, very influential approach known as problem based learning (e.g. see Boud & Felletti, 1997), in which the expressive arts could be used as the vehicle. Plainly, this endeavour would need to be supported by the senior management team.

References

- Boud D and Felletti G (1997) *The challenge of problem-based learning*, second edition. London: Kogan Page
- Coutts G and Dougall P (2005) Drawing in Perspective: Scottish Art and Design Teachers Discuss Drawing, *International Journal of Art & Design Education* 24 (2) 138–148
- Knight P T and Yorke M (2003) *Assessment, Learning and Employability*. Maidenhead: Society for Research in Higher Education/Open University Press
- Tishman S and Palmer P (2006) *Artful Thinking: stronger thinking and learning through the power of art*, Final Report by Harvard College to Traverse City Area Public Schools. Cambridge: Harvard Graduate School of Education

Chapter 1 Introduction

1.1 Introduction

This is the final report on the evaluation of the Arts Across the Curriculum (AAC) project, prepared by the evaluation team in the Quality in Education Centre (QIE) at the University of Strathclyde, who were commissioned by the Scottish Government (formerly Scottish Executive) Education Department.

This first chapter presents a brief outline of the background of the project, the aims of the evaluation and the evaluation methods. Appendix A contains details of the phases of the evaluation, an extended description of and rationale for the research methods and information on samples.

1.2 Background to AAC

In Scotland, the National Priorities (SEED, 2004) explicitly promote the development of creativity and ambition. The Scottish Arts Council priorities (SAC, 2005) and the National Cultural Strategy (SEED, 1999) emphasise the role of arts education and promote the notion of a collaborative approach to learning involving artists directly in the learning experience of school students. Creative Partnerships (CP, 2005) and the Artist Teacher Scheme (ATS, 2005) in England have been promoting the role of arts practice in education with the support of the National Society for Education in Art and Design (NSEAD), the Arts Council England and the former Department for Education (now Department for Children, Schools and Families).

Arts Across the Curriculum is a three-year pilot project sponsored by the former Scottish Executive's Future Learning and Teaching (FLaT) programme, The Scottish Arts Council, and the seven local authorities in which the initiative is being piloted and evaluated. In order to be eligible to participate in AAC, local authorities had to have a Creative Links Officer (CLO) in post. The seven CLOs were responsible for the management of the AAC programme in their local authority. The six key aims of the project are to:

1. increase pupils' achievement, particularly in understanding, in identified subject areas across the curriculum
2. increase pupils' motivation to learn
3. support and develop the skills of teachers to work collaboratively and creatively
4. encourage links between different areas of learning and erode subject barriers
5. improve the ethos of the school
6. explore the efficacy of the expressive arts as a delivery mechanism across the curriculum.

The ideas expressed in the project aims are drawn mainly from the Lakeside Education and Arts Partnership (LEAP) approach and their Arts Impacting Achievement (AIA) project. These follow the Chicago Arts Partnerships in Education (CAPE) approach, commonly known as the 'Chicago model'. Evaluation of the Arts Across the Curriculum project offers an opportunity to gather evidence in Scotland.

The Arts Across the Curriculum project sets out to do something quite ambitious and promotes the notion of developing the skills of teachers; encouraging links between different areas of learning and testing the efficacy of the arts as a 'delivery mechanism' across the curriculum.

At the centre of both the Chicago and the Scottish variants is the 'integrated curricular lesson' (ICL), which arts professionals and teachers plan and deliver together. In the AAC project, the schools, artists and structure of ICLs were chosen by the CLOs. The purpose of the ICL is to enhance pupils' understanding of curriculum content through arts activity and for teachers and pupils to gain greater insight into the arts. Artist and teacher integrate their specialist knowledge in designing lessons to achieve this end. Science teachers and dancers, for instance, might teach together to enhance pupils' understanding of molecules.

1.3 The evaluation

Evaluation aims

The evaluation aims in the tender reflect those outlined in the Invitation to Tender, and are as follows:

1. Describe the extent to which the six key aims of the Arts Across the Curriculum (AAC) project (outlined above) have been met and in terms of other benefits that might emerge from the evaluation.
2. Identify strengths and any gaps in the training and support available to teachers and artists involved in the Arts Across the Curriculum project in the participating schools
3. Assess the overall impact of the Arts Across the Curriculum project on teachers, artists and pupils in the participating schools (including any gender differences in relation to outcomes)²
4. Explore how the expressive arts can be used as a vehicle for carrying current school curriculum knowledge and for achieving broader educational targets
5. Establish conditions that support effective implementation and embedding of the Arts Across the Curriculum project.

Evaluation phases

The evaluation comprised two major phases: April – August 2005 and September 2005 – December 2007. In the first phase, the aim was to gain a clear understanding of how the project was being implemented and to firm up research plans for addressing the aims of the evaluation. The aim of the second phase was to track the impact of the project on all stakeholders on matters related to the aims of the project. The work of phase 2 was addressed in 2 stages that paralleled the 2 school years of the pilot implementation.

Outline of research design

During April to August 2005, a picture of the initiative was constructed from interviews, observation of the training event and of planning meetings, and from AAC documents provided from various sources including schools, local authorities (mainly Creative Links Officers but also Cultural Coordinators³) and the Scottish Arts Council.

During the period September 2005 to June 2006 (Stage 1) data were gathered using a variety of instruments which included surveys, structured observation of integrated curricular lessons (ICLs) and interviews with a sample of artists, pupils, teachers and parents.

Between September 2006 and June 2007 (Stage 2) these measures were repeated in order to identify any changes in impact that might have arisen when stakeholders had accumulated experience of implementing ICLs. The original design proposed following up on pupils who had been involved in both years of the project. However, in many of the schools, different classes and different teachers took part during the second year and, therefore, the majority of the pupils in the second year sample were experiencing AAC for the first time in 2006-07.

In addition to these measures, a number of artists provided rich data through the compilation of video diaries and there was an in-depth study in three schools which involved semi-participant observation and an extended exploration of teachers' and artists' understandings of the project aims and how

² At the outset, this aim also included evaluating the impact in the local communities and arts organisations. During the course of the evaluation, it was agreed with the FLaT team that this was beyond the scope of the evaluation as there was little potential for noticeable impact in such a short timescale.

³ Creative Links Officers (CLOs), posts funded through the Scottish Arts Council's Creative Links Programme, work at a strategic level to develop high quality arts practice and creativity in education across Scotland. Cultural Co-ordinators facilitate arts and cultural heritage visits, events and workshops for their local schools.

these might be implemented effectively. The in-depth study included one focus group with the headteachers from the three schools and a further focus group with the artists and teachers. In June 2007, individual interviews took place with key members of the SAC and Creative Links Officers. Finally, the views of project monitors, who had been appointed by the FLAT team as 'critical friends', were sought in August 2007.

1.4 Structure of the report

A detailed account of evidence from all sources (all surveys, interviews, observations and participant observation) is given in the technical appendices. This report, therefore, focuses on the broad outcomes and issues of the evaluation and does not replicate the detailed findings, but provides references to the relevant appendices to support the issues presented and discussed here.

The report presents the findings of the evaluation as follows:

- Chapter 2: Artists' and teachers' interpretation of Integrated Curricular Lessons**
This chapter draws on all data sources to present an account of the processes of developing and delivering ICLs, the meaning given to ICLs by artists and teachers and how they have interpreted the model for their own contexts in the light of the Chicago/LEAP model which underpins the project.
- Chapter 3: Impact on pupils**
This chapter outlines the effect of AAC on pupils, drawing on evidence from pupil, teacher and artist surveys and interviews, and interviews with parents. It addresses project aims 1 and 2, and evaluation aims 1 and 3.
- Chapter 4: Impact on teachers, artists and schools**
This chapter outlines the effect of AAC on the practices of teachers and artists, including the effectiveness of training and support, and addresses a range of whole school issues which might be influenced by interventions such as AAC. It draws on data from artist and teacher interviews and surveys. It addresses project aims 3, 4 and 5 and evaluation aims 1, 2 and 3.
- Chapter 5: Discussion and conclusions**
The discussion section reflects on the findings in relation to each of the project and evaluation aims in the light of findings from other research and the current Scottish educational context. The conclusion raises points for consideration if an arts-infused approach to the curriculum is to be further developed and embedded.

The numbers of respondents to surveys, interviews and other participants in the evaluation are given in the Annexe to this report.

Chapter 2 Artists' and Teachers' interpretation of Integrated Curricular Lessons

Introduction

This chapter describes how Scottish artists and teachers interpreted the Integrated Curricular Lesson (ICL) drawn from the 'Chicago/LEAP model' that informed the project, and considers the affordances and limitations of their interpretation. Since the ICLs are at the heart of the project, substantial evaluation time was invested in finding out how teachers and artists interpreted and adapted the model before going on to examine the impact of the intervention on stakeholders (reported in Chapters 3 and 4). The main purposes of ICLs are to:

- enhance pupils' understanding of curriculum content through arts activity
- foster pupils' inclination and ability to participate in arts activities
- enable teachers and artists to learn from each other so that they can implement their enhanced understandings beyond the AAC project.

The model described to participants at the initial training event in Peebles implies that artists and teachers are to integrate their art form and pedagogical content knowledge in lessons directed towards these purposes. For instance, science teachers might teach with actors or dancers to enhance pupils' understanding of key scientific concepts by representing these in drama or dance. One artist's illustration of purpose captures the essence of the model:

My contribution is like giving acting notes to each child, only the notes are connected to curricula, but the learning is better because I'm like a director focused on improving each individual's performance.

A robust description of ICLs was built and tested by integrating the wide range of quantitative and qualitative evidence set out in Appendices A-F, which includes:

- participants' accounts of practice (including pupils') expressed in questionnaires and interviews
- observational data showing the frequency of teacher/artist/pupil interaction relating to ten purposes connected with the aims of the project (e.g. 'enhancing curriculum content through art activity', 'thinking', 'evaluating' and 'promoting enquiry')
- artists' and teachers' rationales, expressed in more open-ended, extended exploration during semi-participant observation in three schools.

2.2 Diversity in delivery of ICLs

Variation in the delivery of ICLs included the frequency and length of the art input, the length of time a group of pupils participated in AAC, the curricular area chosen and the art discipline involved. There was variation from authority to authority and, in some cases, from school to school. Some of this diversity has been represented in a figure in Appendix B2 which reports on the pupil experience, and further details can be found in Appendices B3, B4, C3 and C4, which report on teacher and artist involvement in AAC. Although there was significant diversity, the classroom observation data show that interaction connected with promoting the project aims appeared in the vast majority of the observed lessons. These data are discussed in the next section.

Examples of how art forms were combined with subject areas included:

- making propaganda posters with rationed arts materials to illustrate life during the war (visual art and history in a primary school)
- pupils writing and incorporating into DVDs the scripts they had written about electricity and about the digestive system (media and science)

- pupils filming French conversations they had practised
- translating musical sound into images (music and art)
- performing poems in a disused shower block dressed in keeping with the theme of the poems (theatre and English).

Other combinations included drama and dance with electricity and chemistry, music with times tables; visual arts with shapes and measurements; drama and history, drama and maths with secondary pupils with social, emotional and behavioural needs, dance with life cycle concepts in science, and environmental studies with film making.

2.3 Artist/teacher/pupil interaction during ICLs

The quantitative analysis of observational data was designed to show the number of times that artist or teacher invited pupils to engage in talk connected with the project aims. Each invitation from the artist or teacher to engage in talk was recorded in a project-related category. Therefore categories of talk recorded included:

- clarifying curricular and artistic goals
- deepening understanding of curricular content through an art form
- developing thinking about the curricular and arts goals.

A similar instrument was used to show pupil responses to teacher and artist invitations to talk or, indeed, pupil initiation of questions. During the observations, only those occurrences of talk concerned with developing the curriculum and related thinking through the art form were recorded; talk relating to classroom administration, behavioural issues and other non-AAC matters was not recorded.

Tables E3 to E8 in Appendix E show, for each category, the total number of interactions initiated and whether teacher or artist initiated the interaction or, in the case of the pupil section of the instrument, whether pupils responded to teacher or artist or initiated the interaction themselves. The interactions were measured in ten-minute cycles when teachers and artists were working with the whole class, and 3 such cycles were recorded during an ICL. Field notes only were made when pupils were working on practical tasks such as painting or taking photographs. It should be noted that the duration of each interaction initiated by teacher or artist was not measured. Therefore a higher number of artist interactions in some categories might reflect a tendency for artists to initiate briefer but more frequent interactions than teachers. Chart 2.1 in Box 1 overleaf illustrates the findings which are explained in section 2.4.

2.4 Overview of findings

The analyses of the observations, in both years of the project, show that, for the most part, the teachers and artists were adapting the Chicago/LEAP model in sensible, productive ways to fit curricula in Scottish schools and in ways that promoted project aims. Taken together, the findings are consistent with other data which suggest that, throughout the project, the arts activities were being used to help pupils to learn other knowledge, and this evidence differentiates AAC from other initiatives that have introduced arts activities into schools.

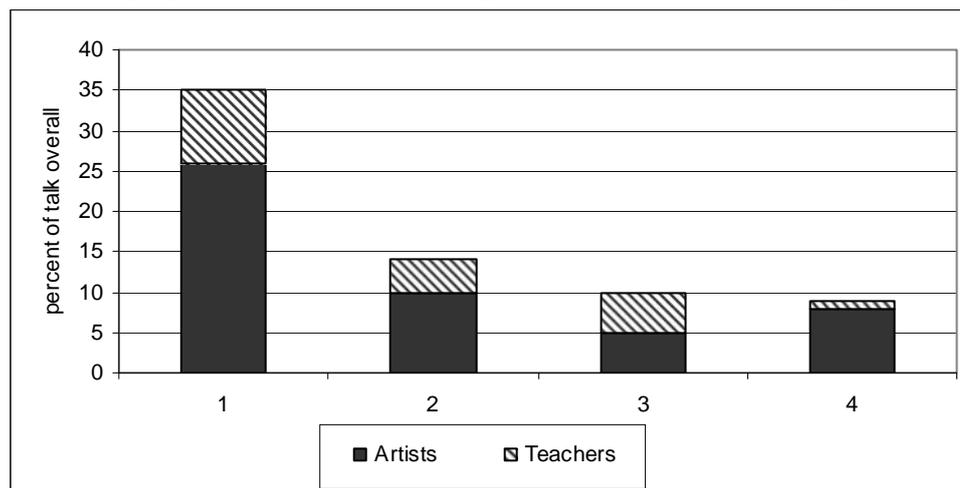
However, the various strands of data suggest that implementation of the Chicago model needs to be elaborated to enable pupils to develop creative thinking as well as content outcomes. What appears to be a conflict between developing creative thinking while also achieving academic learning outcomes might be resolved by building in time for reflection on the forms of thinking embedded in the arts activities (see e.g. Tishman & Palmer, 2006).

Box 1

Overall, artists initiated 70% of the talk related to the art and curriculum content in the 32 ICLs that were observed over the two years of the project evaluation.

Chart 2.1 illustrates the proportion of talk initiated by artists and teachers in relation to arts and curricular objectives, making links to deepen learners' understanding and also to develop thinking about ICL goals. These categories illustrate central aspects of the AAC project aims.

Chart 2.1 The proportion of talk initiated by artists and teachers during observed ICLs



Key:

- 1 = making links between art and curriculum content and enhancing curriculum through art activity
- 2 = thinking about goals and strategies for achieving them and allowing time for thought
- 3 = curricular goals for lesson
- 4 = artistic goals for lesson

Over one-third of talk related to deepening pupils' understanding of the curricular content, while just under 15% of the talk focused on thinking about achieving curricular and arts goals. Just under 20% of the talk was about the curricular and artistic goals; the artist and teacher contributed equally to talk about the curricular goals, but teachers contributed rarely to talk about the artistic goals.

In particular, the analyses show that:

- Although there was significant diversity in delivery of the ICLs, in almost all lessons artists and teachers frequently invited pupils to engage in talk designed to clarify curricular and artistic goals, to link an art form and curricular content in order to deepen their understanding of both and to develop their thinking about the ICL goals.
- Overall the highest proportion of invitations to talk initiated by both artists and teachers fell into the category connected with deepening pupils' understanding of curricular content (including making links between arts and curricular content). This was the case for artists in both years of the project and for teachers in the second year, but in the first year the highest proportion of teacher invitations to talk was in relation to promoting thinking about curricular goals.
- In both years, artists initiated more than twice as many invitations to talk as teachers over the typical 30-minute observation slot. The field notes suggest that the greater frequency recorded for the artists can be explained in part by the following inter-related factors:

1. the artists often led both the recap of curricular content that was to be represented in the art form and the de-briefing of the arts activity;
 2. the majority of artists orchestrated implementation of the lesson plans, possibly because the arts activities usually functioned as the vehicle for implementing the curriculum content;
 3. some artists used many short questions to focus pupil attention; in particular they used questions to maintain pupil focus on tasks and to recap previously taught content.
- In both years of the project, teachers rarely invited talk designed to clarify *artistic goals for lessons* but artists invited talk about *curricular goals* about as often as teachers did.
 - In both years of the project, artists were more likely to be recorded as *allowing time for thought*.
 - Pupils responded to almost all invitations from teachers and artists to contribute ideas.
 - Pupils initiated contributions to both artists and teachers, but pupil initiations were less frequent than responding to questions from teachers and artists.

An interesting finding from the observational data is that artists, many of whom had no teaching qualification, were as skilful as teachers in questioning pupils to promote and check understanding of both curriculum and arts content, and to maintain attention.

Teacher and artist interview data suggest that, when certain categories of project-linked interaction did not occur, this was associated with three inter-related factors:

- delivering the ICL to classes with a high proportion of pupils with unusually challenging behaviour
- inadequate Senior Management Team support for the ICLs
- selecting academic and/or artistic content that was too difficult for the students.

For instance, in one ICL, pupils' difficulties with academic and artistic aims were compounded by the large class size and the presence of many pupils who seemed to have social, emotional and behavioural issues. Adjustments to the size or composition of the class might have enabled the artist and teacher to find out if their ambitious and interesting integration of maths and music might work, but SMT support for such changes was not apparent. The same artist had been observed delivering a very successful maths lesson with another teacher where more realistic maths and musical goals had been worked out with ample senior management support.

Field notes from the observations show artists dealing sensibly with the occasional behavioural issue, and in focus groups pupils mentioned that the artists afforded them a 'respect' that prompted their co-operation and disinclined them towards any inappropriate behaviour. The pupils' view was corroborated during observation of lessons. For instance, when a small minority of pupils did not work hard enough, artists responded as they might do in their workplaces in that they asked pupils to practise more before they went on to the next stage of the activity, such as filming what they had rehearsed. This seemed to work better than reprimands, which tend to invite resentment. Indeed, a small number of pupils reported that they did not like it if 'the artist shouted at them'. Artists were also particularly effective in maintaining younger children's attention by frequent questioning and varied activity.

Plainly, only a sample of ICLs could be observed. Although the observational data provide hard evidence of teachers and artists working together, the interview data suggest that, in the unobserved lessons, a few artists reported some abdication by teachers in the early stages of the project. It is possible that those teachers struggled initially to understand the complex notion of ICLs, but that experience of ICLs helped them to develop insight that enabled their fuller participation.

2.5 Issues arising from observational and related data

Suitability of art forms for different academic content

Since some participants suggested in the semi-structured interviews that the success of the ICL depended on the match between the art form and subject area, the idea of more and less suitable combinations was explored further with artists during planning sessions, post-observation discussion of ICLs and during the more extended discussions connected with the in-depth study. Many artists and teachers understood the 'Chicago/LEAP model' in a more sophisticated way than is implied by the notion of some art forms blending with some curricular areas more easily than others. Some artists believed that most academic concepts could be understood more deeply through representing them in dance, drama and visual arts: one said, 'Representation in any art form involves looking at something from a different perspective'.

By the second year of the project, observational data and post-observation discussion suggested that artists and teachers were acting on understandings that many ideas in school curricula that are difficult for pupils could be illustrated effectively through the available art forms. There was growing evidence that ICLs could be effective for most academic subjects provided that the level of difficulty of the goals was appropriate. With some exceptions, the artists were becoming more able to help the students to represent quite difficult academic concepts through the art activity in ways that deepened understanding of both the academic content and art form. This interpretation was supported by observations of dance, drama and visual arts/media being used effectively to enhance understanding of key concepts in physics, biology, chemistry, maths, history and environmental studies and to encourage effective practice of French conversation.

This is not to say that representation is straightforward, and many teachers reported that realising this ideal presented significant challenge. Exploration of this issue during the in-depth study suggested that using any art form to good effect depended on careful attention to certain aspects of planning by artist and teacher. However, the evidence suggests that this issue is better analysed in terms of pedagogy rather than approaching it in terms of a technicist notion that there might be a formula for matching one thing with another.

Planning for integration

Taken together, the data suggest that teachers and artists collaborated very well with each other.

Factors associated with success included:

- taking time to choose realistic academic and artistic goals
- analysing key concepts connected with lesson goals
- artist efforts to master key concepts in curricular content
- considering strategies for developing pupils' understanding
- using the art form to inject interest into 'difficult' or 'dull' content
- artist and teacher competences: these included a wide repertoire of activities for promoting conceptual understanding
- balancing claims of artistic and curricular goals
- artist ability to design a vehicle suitable for promoting the academic goals with manageable artistic activities
- allowing time for students to digest and practise concepts
- accommodating constraints such as time, teacher/pupil resources and space.

In the more successful planning sessions, once realistic goals for a series of ICLs had been established, the teacher led analysis of concepts learners were to grasp, pointing out previously encountered misconceptions and possible pedagogical strategies. When only perfunctory attention was given to this step, artistic activities were unlikely to contribute optimally to learning. Often, more value was added by artists when 'difficult' or 'dull' content was selected: teachers had tried other ways of injecting interest into such content, none of which had been entirely successful. The following comment was typical:

Electricity is the most boring topic and it's the most difficult to understand because they can't see it. We are using drama to get them to imagine what's happening. We think they understand but when we ask them to imagine it we see they don't understand it.

The success of the planning seemed to be facilitated by artists' ability to suggest ways of illustrating concepts which often appeared at first sight to be unpromising content for artistic expression, and their ability to help pupils to represent challenging curricular concepts through artistic activities that all the pupils could manage quite well with reasonable diligence. The more successful pairs included teachers who could discuss a wide range of pedagogical strategies that had worked, and who were experienced in choosing realistic academic goals. Success was also associated with being able to balance the various constraints in the context and reach compromises acceptable to both artist and teacher.

Sometimes the teacher gave the artist resource materials prepared for non-AAC lessons and sometimes the artist volunteered to do independent research on the content and returned with proposals for arts activities to illustrate concepts that the teachers had identified. The teacher and artist together went on to discuss and refine plans, but developing ideas jointly was more marked in the second than in the first year of the project, possibly because it takes time to develop understanding of the sophisticated notion of integrating two disciplines to enhance learning in both. The sophistication of the endeavour was summed up by an artist's view of the planning sheets provided: 'they are a formality, not a tool'. Other comments included the following:

We exchanged resources and talked by email; I was able to get a lot of advice from artists through email...we worked really well together...it's been a team approach – chatting and discussing.

Some artists reported that they contributed most of the ideas for developing understanding of academic content. Data relating to planning sessions and post-observation discussions suggest that one reason for artist led planning was that teachers, particularly in secondary schools, had so little arts background that they needed to have possibilities described to them before they could participate in the planning. Most teachers reported towards the end of the project that they were much better informed about the potential of expressive arts for promoting subject learning.

How was integration of academic and artistic content interpreted?

In most school lessons, teachers introduce new concepts at some points and at other points they set tasks designed to deepen and elaborate the learners' understanding of these concepts or to enable them to apply the ideas to execute tasks. In one ICL that was used to introduce concepts relating to foetal alcohol syndrome, the secondary teacher and artist helped pupils to represent in dance the various aspects of developmental delay in infants. Teachers and artists reported that they used ICLs for both purposes. However, the vast majority of observed ICLs served the second purpose, i.e. teachers and artists used the ICLs to deepen understanding of concepts that had been introduced by the teachers alone in non-ICLs.

Often, this second purpose was pursued by teachers introducing quite complex concepts in non-ICLs, followed by the artists helping pupils to represent the concepts through drama or dance. Other examples of using ICLs for this second purpose included teachers helping pupils to research a topic before the ICLs, with the artists using the ICLs to help the pupils to organise and present the knowledge gathered through compiling a DVD. In other schools, the primary teacher had explained the mathematical concepts to prepare for ICLs in which a drama or music artist provided activities to encourage pupils to apply the concepts. Sometimes artists contributed to pupils' research endeavours either during the ICL or through specifying homework.

Although the evidence from the various sources suggests that the majority of artists led lessons, it also suggests that decisions about who was to lead the lesson were based on quite complex judgements by artist and teacher. In one observed ICL, the agreed plan was that the teacher would outline the historical context before the ICL but the artist would choose concepts that she judged most appropriate for dramatic illustration. The teacher, artist and pupils believed that this division of labour worked very well.

When artists functioned as directors of lesson plans, teacher involvement was often substantial. Forms of this teacher involvement included:

- participating in the art activity alongside the pupils
- interjecting to clarify difficult concepts
- working with small groups who were preparing/rehearsing scripts
- helping pupils to find information from the internet
- talking with pupils to help them to relate their arts work to subject matter.

Some teachers said that they preferred to take the lead, but since this was not apparent in the ICLs observed, the preference was possibly exercised more in planning than in delivery, particularly in specifying what the pupils had to grasp. The importance of the planning was summed up by one teacher who compared ICLs with many previous experiences of working with artists: 'I liked ICLs because I'm in the driving seat'. An artist commented '[The teacher] contributes when appropriate – it felt very natural the way we did it'.

Other teachers said that they preferred taking a 'back seat' in the delivery of lessons, particularly where the purpose of the ICL was consolidation rather than initial teaching of what had to be grasped, and this preference was reflected in many observed ICLs. Several teachers commented that a flexible approach was most effective, where artists and teachers could share the lead, depending on the circumstances. Probing of this comment revealed that even when teachers did not lead an ICL they contributed effectively in ways described above. Where the teachers' role was so minor that it caused artist dissatisfaction, the teachers seemed to have received insufficient briefing on their role in an integrated lesson.

One reason for artist led lessons is that many drama, dance and media endeavours require an artistic director if they are to contribute to effective learning. Often teachers perceived that the artists had far greater knowledge of the arts activity that was the vehicle for carrying the content. Since most observed ICLs involved using an arts vehicle to work with knowledge previously introduced by the teacher alone, it is not surprising that the data show more frequent classroom interaction by artist than teacher. Nevertheless, in both the post-observation discussions and the survey, many teachers said that they would be able to use some of the arts vehicles when the artist was not present, although they strongly preferred artist support.

Some artists and teachers evolved a more equal sharing of the lessons in the second year of the project, whether the lesson focused on introducing or applying concepts. A drama artist pointed out that, in the early days of the project, neither artist nor teacher had the experience to mount a genuinely integrated lesson. However, the artist later reported that when they had gained experience of ICLs they worked out how they could integrate their delivery, although a more integrated approach involved more extensive preparation. A subsequent observation of this teacher with a different drama artist confirmed that she had continued with this more highly integrated delivery of content and art form. For instance, in a French lesson, both artist and teacher commented on grammatical constructions in a French lyric the teacher had written, and both coached the pupils to perform their scripts in a 'travelogue' video.

Does it take longer to cover curriculum content if ICLs are used?

The main findings from post-observation discussions and related data were:

- The vast majority of teachers reported that it took longer to cover the curriculum content, but they also said that the situation was manageable.
- The extra time invested was often recovered subsequently through not having to re-explain fundamental concepts in the subject. Enhanced understanding of concepts seemed to be connected with qualitatively improved pupil engagement and cognitive effort compared with many non-ICL lessons. This view tended to be expressed by teachers with a more sophisticated pedagogical understanding.

Pedagogical research support for the way in which ICLs were delivered can be found in constructivism, one of the most influential contemporary accounts of learning (Brophy, 2002). Most ways of implementing constructivist approaches will be more time consuming than simply telling learners what is to be learned. However, constructivists point to research that strongly suggests that knowledge cannot be transmitted unproblematically from teacher to pupil. There is strong research support for the idea that people learn more effectively when they engage in activities designed to help them to construct a personal understanding of academic and other knowledge (e.g. see Soden & Maclellan, 2005; Maclellan & Soden, 2004). According to this perspective, learners need to work with concepts in some way: for instance, they might complete a piece of writing, solve problems or represent the concepts in different ways.

The ICLs seemed to provide effective vehicles for working with and transforming knowledge. Plainly, there are other well researched ways of implementing constructivist principles that do not require artists' input (see Brophy, 2002). However, the justification for the AAC project did not lie only in bringing about more effective learning in school subjects: the potential of ICLs for introducing young people to art forms was a second powerful justification. Field notes made during the observations and evidence from pupil focus groups suggest that young people did learn more about art forms through ICLs than in other approaches.

The time that is typically allocated to each topic in the curriculum might well be insufficient for effective use of any constructivist vehicle such as ICLs. As one artist said, 'just as they're catching on, the period is over'. However, although the vast majority of teachers reported that it took longer to cover the prescribed knowledge, they also said that the situation was manageable. Many artists accommodated time constraints through selecting activities that could be mastered fairly quickly. Challenges might well be better accommodated in changes introduced in the *Curriculum for Excellence*, which draws its rationale from constructivist perspectives.

Evidence from post-observation discussion with secondary teachers suggests that, although it often takes longer to cover the same ground, the extra time invested is more than recovered subsequently through not having to re-explain fundamental concepts that permeate future work in the subject. A science teacher said:

Often I teach the same content twice to try to ensure they all understand it; this doesn't work well because some get bored that way if they got it the first time. It's quite usual to have to go back and re-teach. Doing it through ICLs might save time in 2nd, 3rd and 4th years.

This view is supported strongly by evidence from pupil focus groups. A recurring theme in the pupil focus groups was that they were much less engaged by many non-ICL lessons. However, one teacher observed that high achieving science pupils probably could have learned as thoroughly without an arts vehicle, but that lower and middle achieving pupils learned more effectively through ICLs. The view that ICLs enhanced understanding of school knowledge for at least a significant proportion of pupils was echoed in some teachers' responses to questionnaires and interviews, and by pupils. On the other hand, one science teacher mentioned opportunity costs connected with ICLs: in previous years there was time available, after the basic syllabus was covered, to 'take the pupils further in their scientific understanding', by exploring related ideas and procedures.

2.6 Summary

The way in which the ICLs were conducted sheds light on the potential of the expressive arts as a vehicle for carrying school curriculum knowledge and for achieving broader educational targets. The ICLs can be understood as translating constructivist accounts of learning into practice in a way that is consistent with principles expressed in the *Curriculum for Excellence*. Many ICLs served the function of illustrating abstract concepts, which abound in physics and chemistry, for example, by representing them in another, arts-related way. The notion of bridging analogies (see e.g. Bryce & Macmillan, 2005) implies that sufficient attention needs to be given to selecting analogies that are fit for the purpose of bridging understanding.

In future ICLs, attention needs to focus on the following points:

- What appeared to be a conflict between developing creative thinking while also achieving academic learning outcomes might be resolved by building in time for reflection on the forms of thinking embedded in the arts activities (see e.g. Tishman & Palmer, 2006). Time for reflection might be found if curriculum knowledge were to be re-examined to distinguish between essential ideas that pupils need to grasp and information that might be less worthy of time.
- ICLs would work optimally where there is a whole school approach, supported by the SMT, to allocate blocks of time that enable the teacher and artist to design ICLs which include time for young people to practise arts 'skills', to 'research' knowledge, to view and discuss films, plays, documentaries and visual art; a sustained approach (see e.g. Harland *et al*, 2005)
- A future version of AAC should include more open-ended assessment tasks, including more use of what is known as authentic assessment tasks (see e.g. Knight & Yorke, 2003). There were good examples observed of series of ICLs that were assessed in ways that count as authentic, such as pupils presenting their work in drama, dance or media to an audience of other pupils in their schools.
- Representing curricular content in art forms requires more sophisticated pedagogical understanding, particularly of conceptual learning; the AAC project training needs to address this through specialist input: e.g. engagement with constructivist lessons written up in the research literature (e.g. Brophy, 2002).
- Investigation of other models, and evaluations, of arts-infused education (e.g. Catterall & Waldorf, 1999; Cochrane & Cockett, 2007; Harland *et al*, 2005; Tishman & Palmer, 2006; Uptis & Smithrim, 2003).
- Young people need to gain experience across the school of working in constructivist ways to disturb typical conceptions that learning is transmitted by teachers and that teachers will do all that is required to ensure that the transmission has been successful.

Chapter 3 Impact of the AAC project on pupils

3.1 Introduction

The impact of the project on pupils is the main focus of this chapter. The first evaluation aim included establishing the success of the project aims:

- to increase pupils' achievement in subject areas when ICLs were used
- to increase pupils' motivation to learn
- to engage in collaborative working
- to develop a creative approach to learning
- to encourage pupils' understanding of and engagement with the arts.

The third evaluation aim included 'assessing the overall impact of the Arts Across the Curriculum project on ... pupils in the participating schools (including any gender differences in relation to outcomes)'.

This chapter draws on data from the following sources:

- Pupil surveys and focus group interviews in both years of the project
- Teacher and artist responses to survey and interview questions, in both years of the project, about the impact of AAC on pupils
- A study of a small sub-sample of AAC groups and comparator groups on the development of pupils' creative thinking skills and interests and involvement in arts out of school
- Teachers' and artists' contributions to post-observation discussions
- Parents' interviews
- Observational data

Pupil views of impact expressed in surveys and focus groups in the sample as a whole are considered before reporting on differences connected with gender, primary/secondary pupils and years 1 and 2 of the project. This is followed by consideration of the effect on promoting creative approaches and developing creative thinking skills. Teacher, artist and parent perceptions of the impact on pupils are reported and, finally, the observational data is compared with other sources of evidence.

Descriptions of the timing of data gathering, methods of data analyses and justification for methods, the participant samples and return rates appear in Appendix A; detailed information about academic content and art forms in ICLs, analyses of survey and interview responses, observations and the study on creative thinking skills appear in Appendices B to F; the instruments are contained in Appendix H.

The original design proposed following up on pupils who had been involved in both years of the project. However, in many of the schools different classes took part during the second year and therefore the majority of the pupils in the second year sample were experiencing AAC for the first time. As the responses of pupils at both stages of the evaluation were very similar, the data presented in charts in this chapter are drawn from the second survey in May 2007 (see Appendix C2). The results have been combined for all year groups (n = 350).

3.2 Pupil views on the impact of AAC (detailed information appears in Appendices B2 and C2)

What did they think they were learning?

Since the purpose of the project was to integrate academic and artistic learning, questions were posed in the survey and focus groups to shed light on the extent to which pupils noticed this purpose. Overall, there was evidence that the pupils understood that the main focus was the curriculum topic but also that there was opportunity to learn about different art forms and art skills. Pupils who had media and biology said, 'we can put a presentation together now on the digestive system, and we can

edit it to make a DVD'. Younger pupils tended to report either the subject or the art as a focus for learning, although in one P7 class most of the young people identified that they had been learning both about different art forms and curriculum topics. Older pupils provided more complex explanations, including reference to developing learning and personal skills such as being creative, using their imaginations, working together and gaining in confidence. Many pupils spoke about how the art form helped them to learn the subject. (Their comments are in the next section.)

Typically, the young people's description of ICLs was similar to descriptions elicited from teachers and artists during interviews and their descriptions were highly consistent with the evaluation team's observational data. Taken together, the pupil responses support other evidence (e.g. see Chapter 2) that the teachers and artists were interpreting the Chicago/LEAP model in sensible and productive ways.

How effective were the ICLs?

This section focuses on pupil views of how effective ICLs were in terms of motivating them, helping them learn and encouraging them to work collaboratively. Motivation was deconstructed into interest and persistent engagement with tasks; learning was conceived as a change in understanding of ideas. It is clear from surveys that the majority of young people believed that having an artist working alongside the teacher had the following benefits, which are illustrated in charts 3.1 to 3.3 (p15):

- enhanced interest, enjoyment and engagement with learning: for example, the majority thought that the lessons were more interesting, time seemed to pass more quickly and they looked forward to the lessons with the artists
- it was easier to learn the topic because of the way it was explained and they thought they could remember the ideas better
- the lessons helped them work with other pupils, with 60% reporting they worked with people they did not usually work with.

Additionally, over three-quarters thought that it would be a good idea to have artists in more classes, while two-thirds thought that the activities in these lessons made them feel confident.

The focus group data is broadly consistent with the views expressed in the survey and responses illustrate what were perceived as interesting and effective learning experiences. Pupils liked having the freedom to make their own decisions about planning and executing tasks, and the secondary pupils commented that it was better when they could work in this way, rather than have the teacher 'interfere'. Thus, there seems to be a pupil preference for teaching methods derivable from constructivist research on learning (see Soden, 2003, in Bryce & Humes). Such methods encourage students to find questions worth pursuing, to pursue their questions through self-directed search and interrogation of knowledge and to debate their emerging views with others. Such practices are informed by the idea that teaching approaches should encourage learners to be more self-directed and autonomous.

Other pupil evidence suggests that they perceived that constructivist teaching methods helped them to learn. One of the main themes was that the lessons with the artist had helped their performance in the class because they were able to remain on-task for longer than they did in non-ICLs, because there was less listening and writing (e.g. note-taking from texts or completing worksheets), which were perceived as reducing their engagement with content. The general impression from all the groups was that, because the lessons were fun and the artist explained things clearly and made it interesting, they learned and remembered things more easily. Typical comments in open-ended survey items and in focus groups were:

- *In normal classes you lose your concentration but not in these lessons*
- *There wasn't nearly as much listening, listening gets boring after a while, then you cut off.*

Chart 3.1 Pupil perceptions of interest, enjoyment and engagement in lessons in which an artist and teacher worked together

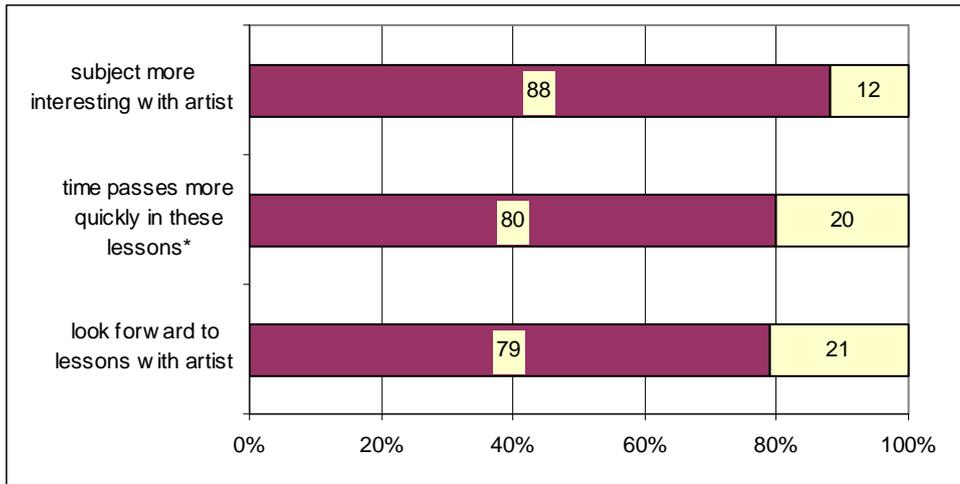


Chart 3.2 Pupil perceptions of help with learning in lessons in which an artist and teacher worked together

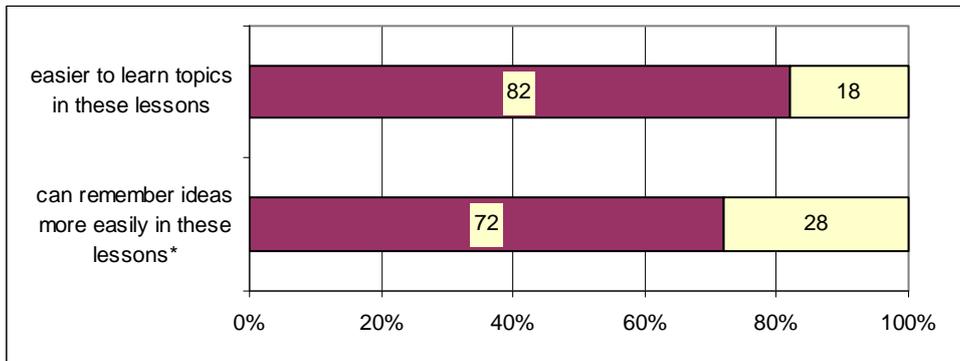
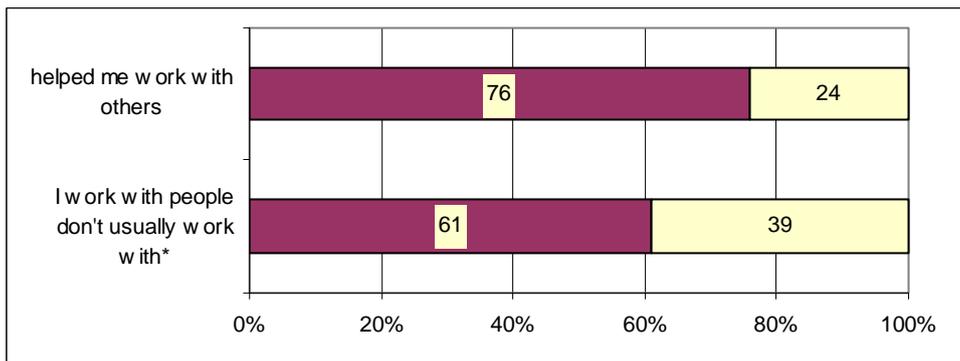


Chart 3.3 Pupil perceptions of working with others in lessons in which an artist and teacher work together



* P4 pupils were not asked these questions; the percentages for these responses are based on P6 to S3 figures (n = 311).

Key: **agree** **disagree or don't know**

In the focus groups, pupils provided examples of constructivist methods that had been particularly effective. For instance, secondary pupils described a particularly effective role play they did which was connected to forensic science. One pupil said, 'it makes you want to go to science'.

The secondary pupils who had media with biology talked about the satisfaction of self-regulation in a DVD they had made of the digestive system: they explained:

- *We were interested in what we were doing so it made it easier to get on and do it – to understand it.*
- *You usually write what you need to revise but this is a different way of revising – you can go back to the DVD.*

However, constructivist methods make heavy demands on teachers' and artists' ability to design lessons. Given that there was the additional challenge of integrating art and curriculum topic, it is not surprising that sometimes the lesson design challenges could not be met adequately. As pupils explained in one focus group, some ICLs worked better than others:

- *When we were mixing chemicals, when we had the artist we didn't have a clue what was going on.*

Some pupils who thought that ICLs worked well in biology thought that it would have been easier to understand physics and chemistry concepts if they had been told about it rather than '...jumping about kidding on we were light bulbs'. 'It didn't make any sense, it was just a laugh.'

The notion of bridging analogies (e.g. see Bryce & Macmillan, 2005) also helps to explain why some ICLs might have been more effective than others. The role of analogies is to help learners to understand abstract concepts, which abound in physics and chemistry. Bryce and Macmillan point out that, if analogies are to be effective bridges between concrete illustration and the abstract understanding that is necessary for progress, they need to be carefully chosen. In the more successful ICLs, aspects of art forms were identified that offered more accessible representations of concepts, whereas in the least successful ICLs, the chosen aspects of the art form obscured understanding. It is possible that, for some concepts, the more effective analogies for bridging understanding will be found in areas other than art forms: for instance, young people might grasp some physics concepts more easily if they are encouraged to relate them to their experience of playing snooker or football rather than representing the concepts through dance or other art forms.

Overall, the features of ICLs that engaged pupils the most are those connected with teaching based on social constructivist views of learning. While working with an artist is only one of many ways of designing constructivist lessons, pupils' responses in surveys and focus groups suggest that it is quite an effective way of promoting constructivist approaches. Such active, experiential learning is characteristic of both arts practice and arts education (see Coutts, 2003, in Bryce & Humes).

While it is clear that the majority of young people believed that having an artist working alongside the teacher had the benefits described above, there were some who did not like doing some of the activities or did not like working with a particular artist or art form and, as happens in non-ICLs, behavioural issues sometimes arose. Similar findings were noted by Harland *et al* (2005) in relation to arts interventions in schools. In any curriculum initiative there are likely to be some dissenting voices.

Pupils' engagement with arts, including out-of-school interests

With respect to children's hobbies and interests out of school, pupils at both stages of the evaluation and in all year groups (P4, P5, P7, secondary) were least likely to be involved in learning music or singing, dance of any kind and drama compared to other activities such as sports, using computers and 'making things'. Less than half of the pupils thought they were good at dance and drama. Music, dance and drama were all art forms used in AAC. That many pupils were not involved in these activities outside school could add to the value and interest of them when introduced in school generally, or through AAC in particular. It may, however, present pupils with greater challenges, as exemplified by a small number reporting 'feeling stupid' or embarrassed by some of the activities.

In the surveys just over three-quarters of the pupils indicated that they had learned something about the art forms introduced in the ICLs (note that when the questionnaires were completed there were clear instructions to ensure that the pupils understood 'art' as being whatever art discipline was being used i.e. craft, dance, drama, media etc):

- 77% agreed that they had learned new things about art
- 77% agreed that they had learned new artistic skills.

However, the opportunity for further development appeared limited. During interviews some pupils said that what they had done with the artists had made them want to take up new hobbies, for example in media and animation, but there was often no opportunity in school to pursue these interests. For instance, there was time for pupils to learn about the camera angles they needed to use to produce a DVD on a science topic, but no time to explore other aspects of film making, and time to engage in a forensic science role play but no time to explore how forensic science is represented in, say, TV or stage drama. The pupils' perception of a lack of suitable opportunities in their local areas was a further limiting factor.

The small study which explored certain aspects of development of a sample of AAC participants compared with a comparator group, found that pupils involved in AAC were no more likely than non-AAC pupils to take up arts activities out of school (see appendix F).

3.3 Differences connected with gender, primary/secondary pupils and stages 1 and 2 of the project

Gender differences

There were no differences in the views of younger boys and girls. At P7 and secondary school levels, boys were less in agreement than girls across a range of items related to engagement, effectiveness of learning, being creative, working with others and being confident.

Differences between P7 and secondary pupils' responses

As the P7 and secondary pupils completed the same questionnaires, it was possible to compare their responses. In an open question, a greater proportion of the secondary pupils referred to the benefits gained in terms of better understanding of the curriculum topic, compared to P7 pupils who commented more on liking the art and learning new skills.

While, on the whole, S1 and other secondary pupils responded positively to the experience of working with the artist, a greater proportion of secondary than P7 pupils recorded negative responses on statements that were concerned with engagement and enjoyment of the learning experiences, learning about the art forms, working creatively and with others, and gaining confidence from participation; figures showing their responses are given overleaf in Table 3.1.

Table 3.1 P7 and secondary pupil agreement on statements where the P7 pupils' responses were significantly* more positive than secondary pupils' responses

	% of P7 pupils agreeing	% of Sec pupils agreeing
Engagement and enjoyment		
I look forward to the lessons when the artist and teacher worked together	90	73
I wanted to work longer on the tasks	76	60
Learning about art		
I learned new artistic skills	91	73
I learned new things about art	86	70
Working creatively		
I tried new things I had never done before	91	76
I was able to put forward my own ideas during the lessons	86	74
It made me want to try out new ideas and be more imaginative	79	60
Working with others		
I think other people in the class had good ideas	94	86
The things we did helped me work with other pupils	86	74
Confidence		
The things we did made me feel confident	84	63

* Questions were rating scales and analysed using the Mann-Whitney test for ordinal data; $p < 0.05$

It is possible that the complexity of the subjects studied in secondary school, and of organising ICLs within the timetable and classroom environment, presented more challenges in mounting interesting and effective ICLs for all classes. Similarly, a more negative response in secondary school pupils was noted in Harland *et al's* (2005) evaluation of arts interventions. They raise the wider issue of engaging that age group more generally and there is the view that when such interventions are managed to take account of this 'dip' in interest, they can indeed increase engagement. This is confirmed by the view expressed by some S1 pupils, in both survey and focus groups, that AAC lessons were enjoyable because they were different from what they usually experienced. Therefore, while more negative than their P7 counterparts about ICLs, they were potentially more positive about ICLs than some other lessons.

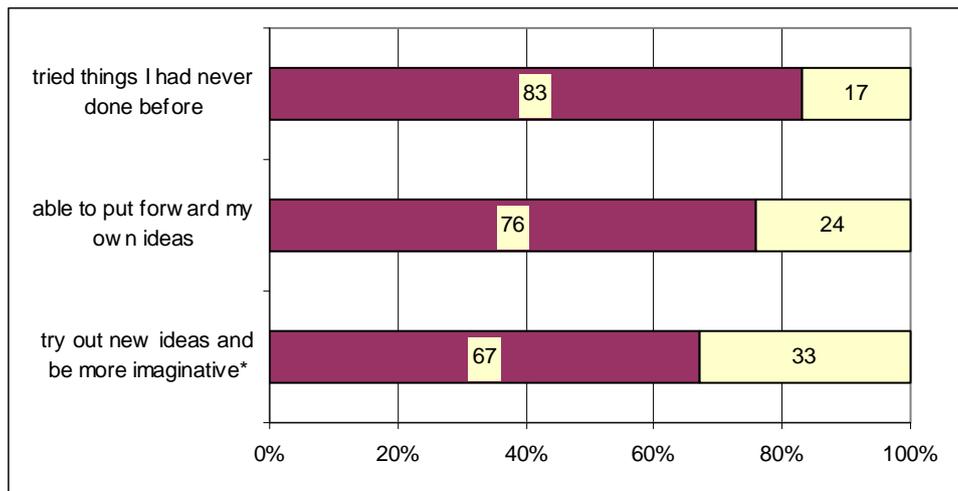
Differences between pupil responses in stages 1 and 2 surveys and focus groups

The views of both cohorts of pupils were largely positive about their experiences of working with the artist and teacher together. There was no consistent pattern of change in pupils' responses over the two years, though some changes did occur on a few items: for example, younger children were more likely to respond that they 'did not know' in response to some of the questions in stage 2 surveys. These minor differences do not reflect any substantial change in pupils' overall positive perceptions (see Appendix D).

3.4 Impact on developing creative approaches and pupils' creative thinking skills (detailed information appears in Appendix F)

For the purpose of the pupil survey, 'creative' approaches were addressed as the opportunities to try things they had not done before, to share their ideas with other people, to put new ideas into practice and to be more imaginative. Responses are illustrated overleaf in chart 3.4.

Chart 3.4 Pupil perceptions of approaches considered consistent with developing creativity



* P4 pupils were not asked this question; the percentages in this case are based on P6 to S3 figures. Wording of statements varied according to age of pupils.

Key: **agree** **disagree or don't know**

Groups of AAC pupils were selected for more in-depth study with respect to the effects of AAC on creative thinking skills. This was carried out by using a repeated measures design, with completion of instruments near the beginning of the pupils' engagement in AAC and after or near the end of their involvement. As other influences might affect pupil progress, comparator groups were identified to take part. The purpose was not to compare the performance of the AAC and comparator groups directly, but to investigate if those involved in AAC were likely to make greater progress than those who were not. The groups included in the study were P5 to P6; P7 to S1 and S1 to S2.

Standard instruments for creative thinking skills – the Torrance Test of Creative Thinking (TTCT) – were used.

The main findings were:

There were no statistically significant differences in the scores obtained on the TTCT for any of the AAC or comparator groups; no differences were found between boys and girls. The three AAC groups were involved with different art forms and different subjects over different lengths of time. Their experiences do not appear to have made a notable difference to their creative thinking abilities as measured by the Torrance Test of Creative Thinking skills.

One possible explanation, supported by the data gathered during ICL observations, is that there was insufficient time in ICLs for pupils to practise a range of creative thinking skills. Typically, in ICLs there was time only for pupils to respond to questions posed by teacher and artist, whereas, in common with other such instruments, the TTCT also measures the ability to generate relevant questions and other forms of thinking embedded in particular art forms. As noted elsewhere in this report, teachers did not have time outside the ICL to develop pupils' thinking about an art form being studied because they had to address curricular demands.

Most research (e.g. see Livingston *et al*, 2004) suggests that any form of thinking has to be practised quite intensively before a measurable impact occurs, and the nature of the thinking needs to be made explicit. In the more successful initiatives (e.g. see McGuinness, 2005), forms of thinking embedded in an art form or academic subject have been identified at a planning stage and the different forms have been systematically and explicitly introduced and practised in each lesson. An example of such an initiative in the arts is the Artful Thinking Program, which was designed and implemented through a relationship between Project Zero at Harvard University and Traverse City Area Public Schools

(Tishman & Palmer, 2006). Taxonomies of thinking (e.g. see Moseley *et al*, 2004) provide a landscape of thinking processes that can be developed. While other aspects of the evaluation indicate that pupils have benefited, it became clear that the overall planning of the project had not incorporated messages in the research literature on developing thinking.

3.5 Teacher views on the impact of AAC on pupils (detailed information appears in Appendices B3 and C3)

Academic achievement and attainment

Information about the project's impact on pupil achievement and attainment comes from teacher views in surveys and individual interviews and from exploration of this issue during in-depth study in three schools. Teachers offered evidence of benefits in the following categories:

- Pupil grades in the subject used for the ICLs
- Pupil grades in class tests for the topic used for a series of ICLs
- Pupil completion of homework connected with a series of ICLs
- Pupil understanding of concepts taught in ICLs – assessed verbally when new, related concepts were being introduced.

These benefits seemed to arise from greater engagement by pupils in learning. A secondary school teacher said: 'they talk about the subject outside class – it's very unusual for them to talk about any class work outside it'. Primary teachers spoke of pupils 'learning new work faster' and 'coping better'. Points that teachers made in connection with each of the above benefits illuminate how the project seems to have impacted on learning.

Pupil grades – end of year or class tests

In one school where pupils had participated in science ICLs for two years, the class teacher reported that, for the first time in several years, all the pupils in the class achieved a grade that qualified them for entry to a Standard grade science subject (physics, chemistry, biology). Typically, in previous years, a significant proportion of pupils had achieved class examination marks that indicated they could not cope with physics, chemistry or biology at Standard grade and such pupils were channelled in S3 and S4 into a less demanding science course from which it is difficult to switch in S5 to Higher grade courses in physics, chemistry or biology. Therefore, by improving pupils' chances of entering a Standard grade physics, chemistry or biology course, the AAC project seemed to help to keep open the prospect of eventual Higher grades in these subjects for pupils who were slow starters in early secondary school science. The teacher of the AAC project class saw more benefits for slower learning and average achievers than for those who coped easily and well with early secondary school science.

Some teachers reported that their AAC project class had higher scores in class tests designed to gauge progress than former classes who covered similar content. Such reports came from primary teachers who had tested children on their knowledge of science concepts such as force, gravity and magnetism. These pupils had experienced ICLs in which they represented these concepts through dance. A secondary teacher reported higher class test scores in Social Studies after the class had represented key concepts (e.g. conflict, communication) concerning World War II battles in drama ICLs.

Higher scores on recall in German were noted by a teacher whose class had been supported by a dance artist. In at least one primary school, pupils' class test scores were higher than previous cohorts for physics concepts. In another primary school where pre- and post-project records had been kept of literacy scores, an increase was recorded in the year the artist worked in the school. Both primary and secondary teachers spoke of improved quality in writing, exemplified in greater use of imagination and better understanding of characterisation.

Completion of homework

A few teachers mentioned that pupils who had been homework avoiders completed quite challenging homework that had been set by the artists or teachers. Avoiders, for instance, consistently responded to artist set homework that required them to respond to factual questions, responses that would be used to advance the artistic goals. This enthusiasm for homework seemed to arise because successful completion of the drama and the media tasks depended on finding out what was to be represented (e.g. historical conditions and events), and often there was not enough time in school to do this preparation. The pupils were very keen to achieve the artistic goals and homework seemed to be valued as a means to achieving these goals, rather than an (uninteresting) end in itself.

Better understanding of concepts

Both primary and secondary teachers saw evidence of greater understanding than in pre-project days of concepts in science and history. Pupils' understanding was enabling them to build on concepts they had learned in ICLs to a much greater extent than before. Abstract ideas such as the nature and behaviour of electricity, for instance, were grasped more accurately through drama and dance. In one secondary class that was observed in depth, the pupils wrote and performed a sketch to illustrate this content. The pupils co-operated more actively than usual with the teacher's and artist's efforts to check their understanding of this content, possibly because they perceived this academic work as necessary preparation for representing their understanding in their sketch. Teachers reported that, for the first time, they did not have to spend substantial amounts of time re-teaching central concepts in subsequent lessons.

Formal assessment data were not analysed because the view expressed by key informants was that such analyses were likely to yield limited information for the following reasons:

- national assessment results were unlikely to be a good way of monitoring the impact of a project; some children made good progress but they still might not have reached the level the government says they should be at for their age
- everything schools did was about raising attainment and improvements could not be attributed to one initiative; the project was one influence amongst many
- there were fluctuations between year groups and some years do have higher attainment.

Perceived benefits likely to impact on attainment

Teachers' views on the benefits to pupils were derived from various sources: in the survey they were asked to rate the extent to which they noted beneficial outcomes to pupils in their situation, their views were elicited during individual interviews, during post-observation discussion and during the more extended explorations that took place during the in-depth study.

Many of the benefits they mentioned, such as improvements in pupil engagement, persistence with tasks and completing homework, are connected with academic attainment.

In the final teacher survey the following percentages of teachers thought there was strong evidence that:

- pupils were more positive towards the subject matter in ICLs – 83%
- pupils showed greater involvement with the topic even when the artist wasn't present – 66%
- pupils persisted with related tasks longer than they would have expected – 51%.

They reported children 'loving it' and 'being excited'. By the end of the project, around half of the teachers indicated that there was strong evidence that the ICL was more effective than other approaches they had used previously to teach the selected topics.

One experienced secondary teacher reported that pupils in the top end of the attainment range learned abstract concepts easily without ICLs. On the other hand, he believed that ICLs did help the majority in the class to learn science concepts. A substantial number of teachers thought that the project was particularly beneficial for lower attaining pupils. A theoretical explanation noted earlier is that arts activities have the potential for generating analogies that help subject matter learning.

Teachers were also positive about the extent to which the approaches used in ICLs encourage pupils to work collaboratively, creatively (i.e. to contribute and try out new ideas and take risks) and to develop confidence and self-esteem.

However, as noted throughout the report, teachers indicated that introducing young people to art forms was an important aim of the project, for all young people, as well as promoting more effective learning of curriculum content. The majority felt that the children valued the art element and around three-quarters thought that children were interested in knowing more about the art forms which had been introduced.

3.6 Artist views on the impact of AAC on pupils (detailed information appears in Appendices B4 and C4)

Artists were largely positive in their views on the outcomes for pupils in terms of engagement in learning, their valuing the art discipline and learning arts-related skills. Some would have liked more opportunity for the pupils to develop better arts-related skills prior to engaging on the ICL, as their lack of skill, say, in dance movements or in use of film-media limited the extent to which the art form could be applied. The artists' perceptions were slightly more negative in relation to secondary pupils. Experience in secondary schools seemed to be more varied, with some pupils and classes engaging with ICLs less well than others.

In both sets of interviews, artists had viewed the aim of AAC as being mainly about engaging pupils in learning by taking account of different learning styles. (The artists seemed to use 'styles' as a way of describing broad preferences in learning activities, such as a preference for learning by enacting rather than by listening or reading). The view was expressed that it was of particular benefit to the less academically able. At the later stage, one artist suggested it was also about raising the profile of arts.

Some artists spoke of the benefits of the arts activities giving children responsibility for their own learning, giving them alternative ways of expressing themselves and also, for some, discovering hidden talents.

3.7 Parent views on the impact of AAC on pupils (detailed information appears in Appendices B5 and C5)

While some of the parents' interviewed had only limited awareness of the AAC project, the majority indicated that their children had enjoyed the experience and had spoken enthusiastically and positively about the lessons with the artists. Most believed that the interest generated by the artists would help the children concentrate more and help them learn. It was particularly beneficial to have another adult in the classroom and some parents spoke of the way in which the artists had taken an interest in the children and had taken time to listen to them. Only one parent reported that her child had not enjoyed the AAC experience and had found that it got in the way of learning about the subject. Most parents had no concerns about integrating arts and other areas of the curriculum – the general view being that if it made it more interesting and kept the children involved then it could only be a good thing. A few expressed reservations that it could be a distraction and they thought that it was probably not suitable as children progressed in secondary school.

3.8 Observational data

For the most part, the analyses of interaction initiated by teachers and artists, and pupils' responses, confirm other stakeholders' accounts of high levels of pupil engagement during ICLs, and all the observers' field notes mention pupil enjoyment of these lessons. The descriptions of ICLs offered in pupil focus groups are also consistent with teachers', artists' and observers' accounts of what went on in ICLs. Most pupils were enthused by the arts activities and, while aptitude and experience of art forms varied, most tried their utmost to do the activities as well as they possibly could. Artists set achievable targets, and were consistently supportive and positive about pupils' output. The time available for ICLs was a serious constraint in deriving more benefits from the art forms.

In a few lessons (media/environmental studies, drama/ history) it was possible to categorise pupil talk when they were planning in small groups how to integrate images with text and how to dramatise key incidents in Operation Barbarossa. The following categories of pupil talk (see descriptions in Appendix E) that are connected with attainment were recorded:

- self-regulates
- generates suggestions for changing direction
- tries to advance/clarify understanding of content
- evaluates

As in other small group work, the pupils were on task most of the time, highly engaged and keen to persist with their task.

3.9 Summary

The many different strands of evidence point in the same direction: the ICLs engaged the pupils, they were effective in enhancing understanding of academic and artistic content, and pupils, including those with social, emotional and behavioural needs, derived a range of benefits from these lessons. There is therefore robust evidence that a similar future project that builds on lessons learned from AAC is likely to engage pupils with curriculum content and with art forms. More generally, the evidence also suggests that a shift towards teaching methods derivable from constructivist research on learning, such as is implied in the *Curriculum for Excellence*, is likely to be acceptable to pupils and teachers.

One limitation of the project is that constraints arising from the need to cover other curriculum content precluded following up the art forms in non-ICL lessons, particularly in secondary schools. Consequently, it was possible for pupils to experience the art forms only in a way that was consistent with learning a topic in an ICL.

Chapter 4 Impact of the project on teachers, artists and schools

4.1 Introduction

The main focus of this chapter is the evidence relating to evaluation aims connected with the project's impact on teachers, artists and schools. The first evaluation aim included establishing the success of the project's aims to 'develop skills of teachers to work collaboratively and creatively', 'to encourage links between different areas of learning and erode subject barriers' and to 'improve the ethos of the school'. The second aim was to 'identify strengths and any gaps in the training and support available to teachers and artists' while the third aim included assessing the overall impact on teachers and artists.

This chapter draws on data from the following sources:

- Participants' perceptions of the training event (April 2005, views from survey in September 2005)
- Survey of teachers and artists new to AAC during the second year of the project, i.e. academic year 2006-07
- Teacher survey and interviews in both years of the project
- Artist survey and interviews in both years of the project

Descriptions of the timing of data gathering, methods of data analyses and justification for methods, the participant samples and return rates appear in Appendix A; detailed information about academic content and art forms in ICLs, analyses of survey and interview responses appear in Appendices B and C and the instruments are contained in Appendix H.

Most teachers and artists completed questionnaires or interviews in either the first or second years of the project. However, only 14 teachers and 11 artists responded to both surveys, therefore the majority of respondents in the first year are different from the respondents in the second year.

For the most part, teacher and artist views remained the same from the initial experience of AAC in Year 1 to the end of year 2. In the second year survey, no statistically significant differences were found in the responses between primary and secondary teachers, and there are few marked differences in interview responses. Therefore, findings for teachers from both sectors are presented together, with any notable differences in interview responses pointed out.

This chapter considers, firstly, views on training and support; secondly, views on the impact on teachers; thirdly, views on the impact on artists and finally, the impact on whole school issues.

4.2 Participants' perceptions of the initial training event and support for new participants (detailed information appears in appendices B1 and C1)

Initial training event

The survey data (September 2005) indicate that the training event was generally well received by both teachers and artists. At interview, teachers used positive terms such as 'highly inspirational', 'growing confidence', 'being put in the position of learner' and having their 'comfort-zones challenged'. The joint sessions where artists and teachers were able to work together in local authority groups were particularly well received. Key benefits, as perceived by the teachers, included seeing how artist and teacher could work together, developing an understanding of the Chicago model and the SAC project and, critically, exploring how the arts might be used to teach non-arts subjects. According to both teachers and artists, an important aspect was the wealth of talented Scottish artists gathered together for the training event. However, both groups reported that the least effective part of the training was about the specific application of the arts into the curriculum and how to apply the principles of AAC to teaching pupils and school subjects.

Overall, the teachers responded more positively than the artists. For the artists, the most positive

aspects of the training were getting to know the teachers with whom they would be working and forming a network for support. Many of the artists reported that they already had experience of working in an educational context and that the artists' talents could have been utilised more in the training event.

Both in response to the surveys and at interview, artists and teachers who had not attended the training event reported receiving limited information about the project and some indicated that they would have found more information and initial support helpful.

Responses to the questionnaire and evidence from the interviews raised issues for consideration. There was a perceived bias towards the 'performing arts' (e.g. dance and drama) at the training. Teachers said that they would have liked more detailed information about the Chicago model, how it could be contextualised for the Scottish education system and to see how it worked with children. In addition, a suggestion was made by an artist to involve a wider range of staff in the training, e.g. principal teachers or members of the senior management team, arguing that this might have been beneficial in developing an understanding of the project in schools. Induction and support, particularly for those starting the project without the benefit of attending the training event, should have been given greater consideration. In a video diary, one artist commented that 'there needs to be more arts training for teachers and more teacher training for some artists.'

New participants

'New' artists and teachers became involved in AAC throughout the life of the project. Induction for such participants varied from authority to authority, with both teachers and artists in some authorities reporting meetings with CLOs and some locally organised induction and planning days. Others had little support, with teachers depending on experienced artists, and *vice versa*, to help them with the preparation and delivery of ICLs.

Some 'new' teachers and artists, in preparation for the second year of the project, had the opportunity to attend the recall day at Livingston in June 2006, and this had helped them gain insight into the project, which they found helpful. Others who were not able to attend, or who joined the project later than that date, appeared to have had less support. Where artists and teachers had taken part in some kind of induction process, this was generally seen to be effective, mainly in relation to understanding how art could be used in different areas in the curriculum and in getting to know the artists and beginning to plan lessons. Most expressed some kind of uncertainty or concern at the outset.

Communication between artists and teachers appeared to be established quickly and was generally effective. The quality of communication with the CLOs varied from very effective to not effective for both artists and teachers, as did the quality of information received about the project, both at local and national levels.

More structured induction and clear information about Arts Across the Curriculum and ICLs would have benefited all new participants to the project and could have allayed some of the initial concerns.

4.3 Teacher views on the impact of AAC on teachers (detailed information appears in appendices B3 and C3)

Teacher development

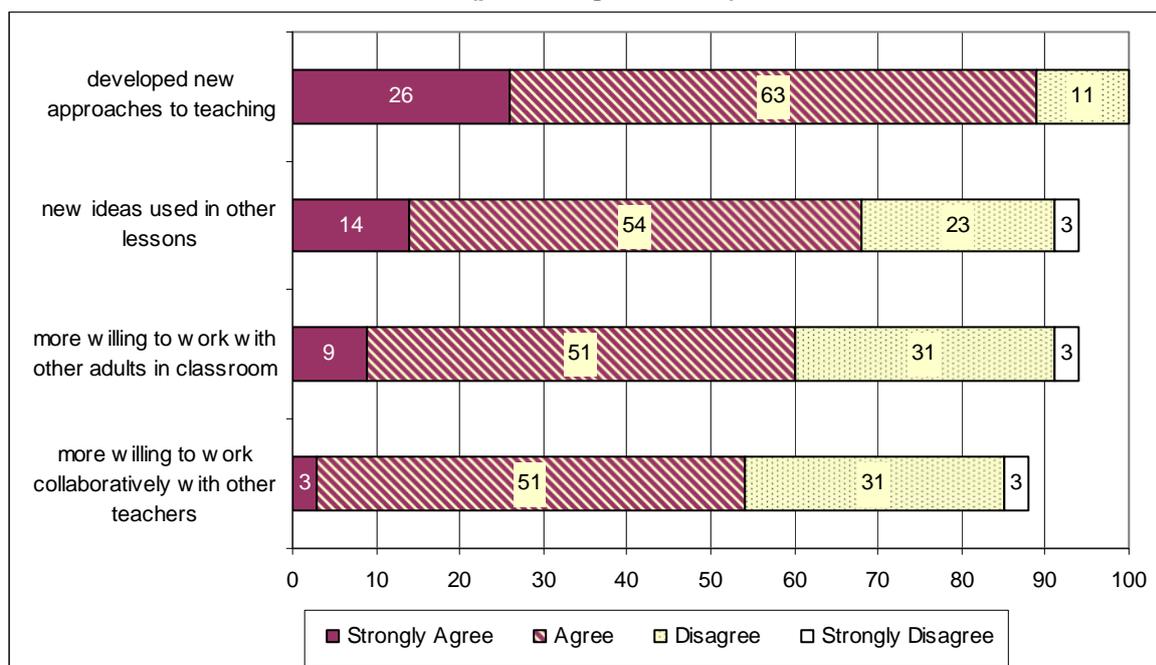
One aim of the AAC project is to support and develop the skills of teachers to work 'collaboratively and creatively'. The purpose of survey and interview questions was to identify if AAC has provided the opportunity for development, regardless of the starting point of the teachers.

In both years of the project, teachers reported working collaboratively with their colleagues and other adults prior to involvement in AAC; some indicated that working with the artist had made them more confident in working with others, and one teacher said that she now had more confidence in suggesting unusual ways to present the curriculum. The majority spoke of the benefits of working

collaboratively with artists but reported not having the opportunity to work with other teachers in developing the ideas of AAC. Survey responses are illustrated in Chart 4.1.

In relation to working creatively, almost all the teachers thought that they had developed new approaches to teaching, most indicated they had tried out the new ideas in other lessons and that working with an artist had developed their confidence to try out new approaches and to be less 'controlling' in their classroom practice. See chart 4.1 for survey responses.

Chart 4.1 Extent to which teachers agreed that working with artists encouraged them to develop creative and collaborative approaches (percentages; n = 35)



Some teachers were rethinking how the classroom was managed, they were more willing to let pupils make mistakes and they encouraged the children to ask more questions (though many said this was already part of their practice). Over 90% of teachers strongly agreed or agreed that they had learned about arts disciplines and gained arts skills from the experience.

Working with artists and implementing ICLs

Teachers who responded to the surveys were unanimously positive about the quality of the artists with whom they worked and valued the skills, expertise and ideas they brought to the ICLs. Their views on the process of implementing ICLs are given in Chapter 2, which provides a description of the ICLs built from observational data, tested against survey and interview data, and includes discussion of issues arising from implementing the Chicago/LEAP model.

4.4 Artist views of the impact on artists and related issues (detailed information appears in appendices B4 and C4)

Artist development

While about one-third of the artists indicated that being involved in AAC had not led to further professional or personal development as they were already well experienced in working with schools, the remainder reported having developed new awareness and understanding of issues related to schools and young people and new skills in working with young people. Some said it had encouraged them to develop new approaches in their art. At interview, one artist spoke of having developed resources that were different from the 'usual things they did in schools' and which they could continue to use. All agreed that they would like to do more of this kind of work.

Working with teachers and implementing ICLs

The artists were positive about the majority of teachers they had worked with, although in a small number of cases it was reported that some primary teachers had been less engaged in the process and less participatory than the artist would have expected. Issues on how roles varied in delivering ICLs are discussed in Chapter 2. Some had felt that the effectiveness of the delivery of their art form had been constrained by the limitations of the classroom setting.

School and authority support

For the most part, schools had been welcoming and management supportive but, in some secondary schools, artists indicated that concentrating on the relationship with the teachers had been sufficient. In these cases, however, they noted that teachers could have benefited from greater support from school management.

On the whole, views were extremely positive regarding support from local authority managers, with an apparent increase in appreciation over the course of the project. For the 11 artists who had been involved in both years of the project, there was a statistically significant shift in their views on the effectiveness of communication with local authority managers, mainly CLOs. In the first questionnaire, 5 out of the 11 had rated the CLOs' communication negatively, with only one giving a strongly positive response. In the second questionnaire, all 11 artists rated communication with CLOs positively.

4.5 Teacher views on the impact of AAC on whole school issues (detailed information appears in appendices B3 and C3)

Eroding subject barriers

As one of the AAC aims is the erosion of subject barriers, secondary teachers were asked if AAC encouraged collaboration between departments and across subjects. As noted in the next section, specific whole school measures need to be introduced to facilitate changes such as erosion of subject barriers or increased collaboration, and the ICL model alone cannot be expected to fulfil this purpose.

While the majority (25: 72%) of teachers thought that AAC had encouraged collaboration between teachers (see chart 4.2) and 8 out of the 12 secondary teachers indicated that they had had the opportunity to discuss developments with other subject teachers, there was little evidence of other cross-curricular working. However, some teachers saw the potential for it, for example, with the art and English departments working together. Generally, the application of AAC was too limited to erode subject barriers. In some schools, cross-curricular developments were unlikely to occur because no one else knew about the project and, in the midst of several other initiatives, often it was not a school priority. At both stages of the evaluation, teachers saw the most obvious erosion of subject barriers occurring between art disciplines and other areas of the curriculum, although some primary teachers suggested that this was not new practice.

In the post-observation discussions and other interviews with teachers, it emerged that there were rarely formal mechanisms designed to facilitate collaboration between AAC and non-AAC teachers, such as AAC teachers leading staff development sessions on ICLs. Without such mechanisms it is difficult to see how one or two artists and teachers working together in a school could collaborate with non-AAC staff, although in some schools there were reports of ongoing informal staff room conversations. Therefore it is not surprising that some teachers commented in interviews that they had enjoyed collaborating with artists, but that the opportunity to cascade this collaboration in other areas of teaching was limited.

Enhancing ethos of schools

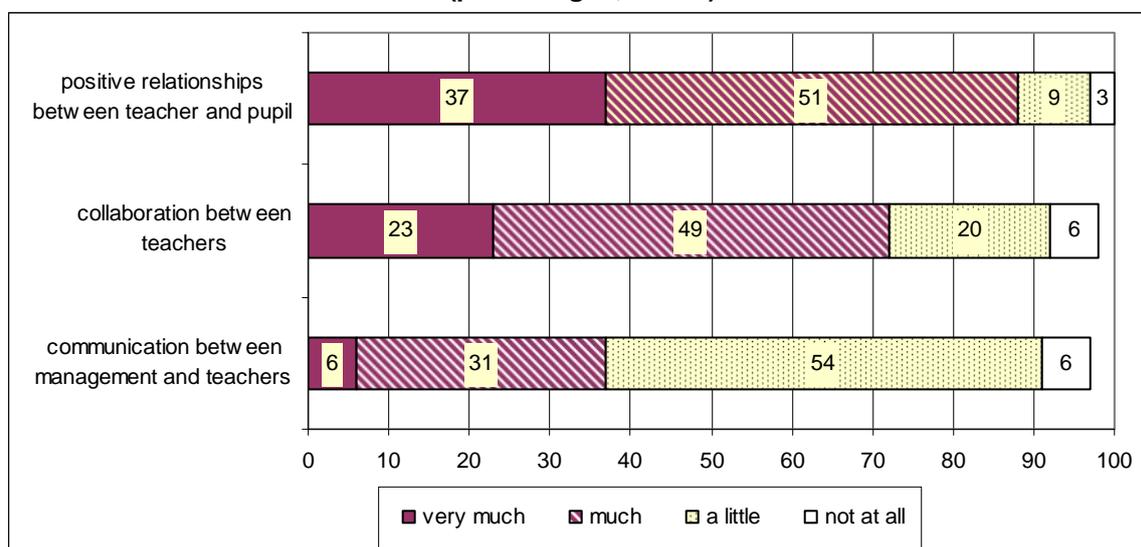
During the in-depth study of three schools, and during observations in many other schools, it was clear that the management teams often communicated to AAC teachers that they valued the project, were interested in what pupils were doing, and provided practical and other support for the project. In some of the project schools however, this sort of communication did not happen.

The majority (24: 69%) of teachers who completed the surveys thought that AAC fitted in with school development planning, with a minority (8: 23%) thinking it fitted in a little and 3 thinking it did not fit in at all. Obviously, where an initiative is in line with what a school is planning, it is likely to be easier for teachers to take it on board. However, where it is something additional to what has already been committed to through the development plan, then additional resource and effort is required.

Views on the extent to which AAC could contribute towards schools' National Priority targets and the aims of the *Curriculum for Excellence* were sought. National Priorities and the *Curriculum for Excellence* are aiming at similar long term outcomes, but were presented separately as they are 2 key frameworks for school and curriculum development. The majority indicated that AAC contributed to the national frameworks for educational priorities, but a minority had reservations about the extent to which it was contributing to achievement and attainment. The majority were also positive about the extent to which AAC fitted in with the aims of the *Curriculum for Excellence*; the primary teachers were more positive about this after the second year of the project. The headteachers interviewed during the in-depth studies were all extremely positive about how approaches such as those developed through AAC contributed to the *Curriculum for Excellence*.

Teachers were largely positive about AAC encouraging more positive relationships between themselves and pupils, though they were less convinced that it could encourage more collaboration amongst teachers or communication with management. Teacher responses are illustrated in chart 4.2.

Chart 4.2 Teacher views on extent to which AAC contributed to aspects of school ethos (percentages; n = 35)



The teacher interview data relating to school ethos are broadly consistent with the survey responses. No general consensus was reached as to whether the inclusion of AAC had impacted on school ethos, with opinion evenly divided between the views that there was either little or no impact beyond the ICLs themselves, or that the effect was difficult to isolate due to the presence of many other initiatives in schools. Some said they thought their school ethos was already very good.

Those who believed that the introduction of ICLs had impacted on school ethos struggled to articulate the ways in which the ethos had changed; however, allusions were made to the adoption of a more open approach to learning, the generation of a positive learning environment and the injection of a

sense of excitement and curiosity into the school. However, other initiatives in the schools at the same time are likely to have encouraged similar features in the learning environment.

One CLO summarised the description that emerged from the teacher data as follows:

... it needed somebody from within the schools to take this forward. Secondary schools in particular work in separate silos and many initiatives and projects are constantly on-going in departments without that experience being shared across the school, so AAC was seen as another of these 'initiatives'.

Parental involvement

Greater involvement of parents in schools and with their children's education is a government priority. Views were sought on the extent to which AAC had provided schools with opportunities to involve parents. Seven teachers reported that parents had been involved in the project in some way, with some indicating that they had received feedback from parents.

They reported that parents had been invited to a presentation, performance or assembly to hear about the project and see what the children had been doing. The feedback received had all been verbal at the presentations or at parents' evening. Comments were all positive – parents had thought it was helpful, unusual and logical to have an 'expert' and were impressed by the quality of the work and the skills of the pupils.

4.6 Challenges, factors for success and sustainability (more detailed information appears in appendices B3, B4, C3 and C4)

Teachers and artists were asked in both surveys and at interviews to indicate what had been the greatest challenges in AAC, what factors contributed to success and the potential for sustainability.

Teacher views on challenges and factors for success

The most frequently stated challenges describe aspects of designing the ICLs. As discussed in Chapter 2, the notion of integrating an art form with academic content to bring about enhanced learning of both is a sophisticated and challenging notion, requiring a sound grasp of the art form and of how people learn. Comments in interviews included being 'less rigid about things' and having a 'better appreciation of the compatibility between topics and certain art forms'. Thus, it is not surprising that frequently stated challenging aspects of this process related to 'ensuring planning time is incorporated from the start of projects' and practical concerns such as reorganisation within school, e.g. timetables for access to gym, other school events, and finding suitable accommodation and adequate resources in the school. The limited time slot in which the ICL took place, especially in secondary schools, was sometimes a problem.

Other challenges mentioned by a small minority included ensuring joint delivery of the lesson with the artist and learning new skills, particularly using technology. Although another challenge mentioned was that some pupils could be disruptive on occasion, this arises in most lessons and is not unique to ICLs. Convincing other teachers of the value of what was happening was mentioned, but again this challenge arises in any new initiative.

Factors contributing to success included support from management, wider awareness in the school of what AAC was trying to achieve, adequate lead-in time for initial planning and adequate time for ongoing planning and review.

Artist views on challenges and factors for success

Artists identified a range of challenges, but these need to be balanced against the very positive views reported in relation to working on the project at both stages of the evaluation, during the in-depth study, and during post-observation discussion.

As with teachers, artists reported that finding sufficient time for initial planning and ongoing review was challenging. There had been challenges in adapting to the project and developing ideas and lessons along with teachers; for example, investing time in understanding the curriculum and developing suitable arts activities. Artists emphasised the importance of the teachers' commitment and their role in establishing connections between the art forms and the learning objectives. For the most part these were challenges which were 'relished'.

Artists also highlighted the importance of the artist and teacher working as a team; as noted above, some artists found some teachers less participative than others and, in a very small number of cases, effective relationships did not develop. The availability of suitable facilities and resources was important for success. Support from school management was indicated as a factor which could make a difference to the success of the project. Additionally, the artists interviewed at the second stage reported the need for the whole school to be aware and involved (even in order to make space and resources available). Further factors suggested were: the willingness of both artists and teachers to be flexible; teachers' willingness to allow pupils to have ownership of the learning; and artists' willingness to try different art forms.

At both stages of the evaluation, a small number of artists thought that better opportunities for artists involved in AAC to liaise with each other and learn from each other would have made the project more effective. At stage 2, the view was expressed that it was disappointing that there had been little media coverage and that the project did not have a higher profile in schools and in local communities.

Sustainability of AAC

The teachers were asked if they thought they could deliver arts-infused lessons without the input of an artist. Just under half of the teachers thought this was a possibility. The teachers were asked to give reasons for their response.

The reasons given by those who thought they could do it without an artist covered the following points:

- They could deliver a modified version as they had always taught art, but extra classroom assistance would be required to manage large classes; some teachers indicated that they had the skill to do it.
- The teachers had gained skills through working with the artist and had gained the knowledge to link art to the curriculum.
- It could be possible as long as there was support for the teacher, e.g. an online forum for sharing ideas and asking questions; examples of a range of ICLs would be helpful.
- One secondary teacher thought that working with other subjects in a cross-curricular way would make it possible.

For those who thought it was not possible, the overwhelming reason given was that the expertise and talent of the artist was essential. The view of many was that the teacher did not have the skills or 'fresh ideas' which the artist brought. Other reasons included: the school did not have the resources; teachers had to deal with too many other things; and, even if the teacher had the skills to do it, the artist was key in motivating the pupils.

Teachers were asked what would help them to deliver arts-infused lessons when the AAC project was over. One primary and one secondary teacher simply said they would not try it without an artist. The following suggestions were made:

- There was a need for resources and materials and a budget to buy them. In many cases it was the artist who had supplied materials and equipment. Linked to this, sharing resources of previously developed ICLs would be helpful – for example, a resource pack with examples and ideas
- Working with an artist as a mentor, to help with planning and ideas
- Time to plan and develop new strategies
- CPD in arts-related activities and skills
- More support from colleagues – a greater belief that it is worthwhile; more sharing and collaboration with others in school

During interviews, teachers also emphasised that a less content-driven curriculum would be required, referring to the issues discussed in Chapter 2, and that better understanding could be achieved, but it took longer to cover the learning objectives. The most significant legacy of sustainability comes from reports that some schools have started to implement plans to continue with elements of AAC. For instance, in one secondary school the headteacher is testing out sustainability by creating a new post towards this end.

For artists, the main issue of sustainability was funding. As they were employed independently, resources had to be found to pay them to continue their work in schools, although, as reported, they had developed teaching and learning ideas and materials that they could use in the future.

4.7 Summary

It is clear that the impact reported by artists and teachers on their own practice was overwhelmingly positive, encouraging many of the teachers to try new approaches beyond the confines of the ICL. There were challenges in terms of finding time, accommodation and resources which impinged on wider school arrangements, although these varied between schools. Contribution towards eroding subject barriers and improving school ethos were constrained by the limited application of the model in schools; the effects were also harder to determine at a whole school level, as they were often compounded with the effects of other initiatives.

Just under half the teachers believed that they could continue to implement the delivery of the curriculum through the arts as the experience had given them the ideas and the skills; the remainder believed this was not possible as the expertise and skills of the artists were essential for successful delivery. Sustainability was dependent on schools' commitment to giving time, resources and wider recognition within the school to an arts-infused approach and ongoing CPD/mentoring from artists.

Chapter 5 Conclusions, discussion and points for consideration

5.1 Introduction

This chapter presents a brief summary of the main findings and conclusions reported in Chapters 2 to 4 of this report. It then goes on to discuss the findings in the light of findings from other relevant research. It addresses, firstly, aims 1 to 5 of the AAC programme and aims 1 and 3 of the evaluation, namely:

- the impact on pupil achievement, motivation and personal development
- teacher and artist development
- the erosion of subject barriers, and
- improving school ethos.

It then considers the final AAC aim, and the final 2 aims of the evaluation, which relate to:

- the efficacy of arts as a vehicle for delivering the school curriculum and other educational outcomes, and
- establishing the conditions which support its effective implementation.

Issues related to aim 3 of the evaluation, the effectiveness of training and support, are addressed in the final section, which proposes some key points for consideration for further development of the model of arts integration indicated by the use of ICLs.

5.2 Main findings and conclusions

- The evidence shows that the artists and teachers were adapting the Chicago/LEAP model in sensible, productive ways to fit curricula in Scottish schools. Throughout the project, the arts activities were being used to help pupils learn other knowledge, and this evidence differentiates AAC activities from other initiatives that have introduced arts activities into schools.
- Evidence from pupils, teachers and artists suggests that ICLs increased pupils' understandings of the concepts being addressed and facilitated remembering of the topics covered.
- Evidence from all participants indicates that pupils were engaging with approaches designed to encourage creativity, but various strands of evidence suggests that more attention needs to be given to developing creative thinking skills as well as content outcomes.
- There is strong evidence from pupils, teachers, artists and parents that the pupils found working with the artist made curricular topics interesting, enjoyable and fun. Participants also reported gains in pupil confidence and self-esteem.
- Pupils reported learning about the art-forms and developing new skills; while some new interests had been cultivated, there was perceived lack of opportunity both in school and in the community to develop them.
- The impact reported by teachers on their own practice was very positive; the experience encouraged many of them to try new approaches beyond the confines of the ICL.
- Many of the artists were already well-experienced in working in schools; however, two-thirds indicated they had developed new understandings of, and skills in, working with schools and young people.
- There were challenges in terms of finding time, accommodation and resources which impinged on wider school arrangements, although these varied between schools.
- Just under half the teachers believed that they could continue to implement the delivery of the curriculum through the arts as the experience had given them the ideas and the skills; the remainder believed this was not possible as the expertise and skills of the artists were essential for successful delivery. Sustainability was dependent on schools' commitment to giving time, resources and wider recognition within the school to an arts-infused approach and ongoing CPD/mentoring from artists.

- The contribution of AAC towards eroding subject barriers and improving school ethos was constrained by the limited application of the model in schools; the effects were also harder to determine at a whole school level, as they were often compounded with the effects of other initiatives.
- Overall, the Arts Across the Curriculum project has been a predominantly successful initiative, due to the commitment and enthusiasm of the majority of teachers and artists who engaged with the ideas and practices of Integrated Curricular Lessons. To build on the successes and to further develop the model, some points for consideration are given in section 5.6 below.

5.3 Meeting the aims of Arts Across the Curriculum

The Arts Across the Curriculum project began with an ambitious set of aims which sought to enhance pupil achievement and motivation, offer development to teachers and bring positive change to schools. This was to be achieved through artists and teachers working together to deliver the school curriculum through integrated curricular lessons, i.e. teaching and learning of the curriculum through the medium of an art form.

This project sits in the context of an extensive and longstanding debate about the value and role of arts in education. At a global level, the UNESCO World Conference on Arts Education (2006) produced a *Road Map for Arts Education: Building Creative Capacities for the 21st Century*. The document aims to promote a 'common understanding of the importance of Arts Education and its essential role in improving the quality of education as a whole' (p1). It endorses two main approaches: arts taught as individual subjects in their own right and what they call 'Arts in Education', i.e. as a medium for teaching and increasing the understanding of curricular subjects (p6). The *Road Map* makes many claims for the benefits of arts in social, cultural and educational terms; in relation to the final point, the claims are for cognitive and creative development and enhancing the relevance of learning to the individual.

Comerford Boyes and Reid (2005), in a review of relevant literature, note that most advocacy and research evidence literature emanates from North America and the United Kingdom. The UK and North American perspectives are acknowledged as being different in that the UK has had a longstanding commitment to arts in schools not found in general across North American education (Cochrane & Cockett, 2007). Claims for the benefits of engaging in arts education and integrating arts in the curriculum include: developing qualitative and flexible forms of thinking (Eisner, 2004), cognitive functioning and affective development (Catterall, 2002) and cognitive, personal and social skills (Comerford Boyes & Reid, 2005).

These claims are in line with the aims of the AAC project and issues explored as part of the evaluation: namely, increasing achievement and understanding, raising motivation, developing collaborative and creative skills and aspects of pupil personal development such as esteem and confidence. The findings are considered below in relation to findings from other evaluation and research. Issues of teacher and artist development and whole school issues are found in the literature and the related project aims are also addressed. It is not possible within the confines of this report to give details of the projects reported in other literature, but an annotated bibliography is provided to allow readers to investigate the issues further.

Impact on pupils' achievement, understanding and attainment

Evidence from pupils, artists and teachers suggests that the ICLs increased pupils' understanding of the concepts being addressed and facilitated remembering the concepts and topics covered. Teachers provided specific examples of where they had noted improvements in test scores and better recall of concepts which reduced the need to 're-teach' topics. This is in line with findings reported elsewhere: for example, Ofsted (2006) stated that teachers involved in arts interventions reported improvements in literacy and numeracy, though they found that there was inadequate tracking of pupil progress.

Evidence that learning gains from specific arts interventions transfer to better learning overall and improved attainment, in terms of improved performance in national testing or examinations, is elusive.

The diversity of practice in AAC meant that any overall tracking of learning gains in such terms was inappropriate. Further, evidence from the literature suggests that such gains might only be expected to occur after consistent, long-term participation in interventions.

The Chicago Arts Programme in Education, the inspiration behind AAC and CapeUK, is often quoted as being successful in this respect. Evaluation of CAPE (Catterall & Waldorf, 1999) revealed that after 4 years CAPE schools began to show significant differences in maths and reading scores compared to non-CAPE schools; after 6 years this was evident especially at elementary levels and by sixth grade (age 12); however, no effect was found at grade 8 (age 14) and although there were positive gains in CAPE high schools, they were not statistically significant. This suggests that impact was likely to occur only after long-term investment and was more likely to be evident with younger pupils.

The evaluation by Uptis and Smithrin (2003) of *Learning through the Arts (LTTA)*, a large-scale arts integration programme in Canada, used standard tests for maths and English on a large sample of pupils from Grades 1 to 6 in LTTA schools and in control schools, tracking progress over three years. This study found no significant differences on most measures and drew the conclusion that 'involvement in the arts for the students in the LTTA schools did not come at the expense of achievement in mathematics and language' (p17).

As part of the evaluation of the Creative Partnerships programme, Eames *et al* (2006) undertook an analysis, using multilevel modelling, of national assessment and qualifications scores in English, maths and science for young people at key stages 2, 3 and 4. The results for 3 groups of young people were investigated: young people who took part in Creative Partnerships activities, young people from Creative Partnerships schools but who did not take part in activities, and young people from similar backgrounds nationally. When compared with national data, the analysis of young people's progress showed no evidence of impact on attainment at key stages 2 or 4 and a very small positive impact at key stage 3. Within the Creative Partnerships schools those who participated in the arts activities outperformed their peers at all 3 stages, but the differences were not large enough to be confident that they were educationally significant; it could not be concluded that Creative Partnerships activities had caused the observed differences.

Impact on development of creative approaches and creative thinking skills

Evidence from pupils, teachers and artists suggests that pupils were engaging with approaches that should encourage the development of creativity and so by extension creative thinking skills, for example, generating their own ideas, working in new ways and with new ideas, solving-problems, working collaboratively and taking risks. However, tasks designed to specifically explore creative thinking skills with a small sub-sample of AAC pupils and a control group, showed for that specific group at least, the AAC intervention had not led to any development in creative thinking skills.

Harland *et al* (2005) found that the development of thinking skills were nominated amongst the least frequent outcomes of arts interventions and Ofsted (2006) found that while most Creative Partnerships programmes were effective in developing in pupils some attributes of creative people, the pupils were often unclear about how to apply them independently to develop original ideas.

More positively, a study into the effect of arts-integrated lessons compared to non arts-integrated units on learners' cognitive processes by DeMoss and Morris (2002) found that learners demonstrated greater analytic interpretation after the arts-integrated units. Analytic interpretation was judged by evidence of interpretation, analysis, synthesis or evaluation of the subject matter in students' writing (pp 9-10). The arts-integrated lessons which produced this result, however, had particular characteristics which they describe as having arts and curriculum content 'tightly coupled'; in these cases arts were used as applied concepts for investigating and expanding content as opposed to summarising or enhancing 'regular' content. Such lessons required careful joint planning with the artist 'clearly attuned to the academic content'.

As discussed in section 3.4, most research suggests that any form of thinking has to be practised quite intensively before a measurable impact occurs, and the nature of the thinking needs to be made explicit. In the more successful thinking skills initiatives (e.g. see McGuinness, 2005), forms of thinking embedded in an art form or academic subject have been identified at a planning stage and

the different forms have been systematically and explicitly introduced and practised in each lesson. Section 3.4 refers to the 'Artful Thinking Program' linked to the work of Project Zero at Harvard Graduate Education School. This project merits further consideration.

Project Zero, focusing on developing learning and understanding, has undertaken development which emphasises the importance of 'making thinking visible' and has concentrated on thinking dispositions and routines. The Artful Thinking Program (Tishman & Palmer, 2006) is one aspect of Project Zero that has concentrated on using visual art as a means for developing thinking. The work of Tishman and Palmer is premised on the view that thinking does not develop by chance, but by clear modelling and practice. After the intervention they explored students' conceptions of thinking, though not their ability to apply or use their understandings. (Research by others indicates that the different beliefs students hold about the nature of thinking and learning are correlated with different outcomes on measures of thinking – p74.) Their work showed that students who took part in the Artful Thinking Program increased the number of conceptions and understandings they had about thinking compared to a control group. Both groups displayed awareness of ways of thinking which increased over time, but the Artful Thinking group showed a statistically significant greater growth in awareness than the control group (pp 85-86). They also found that low-achieving students made greater gains in their reasoning abilities. This supports the view of the benefits of making (and the need to make) thinking explicit and to include practice in thinking as a routine within the classroom environment.

While the presence of the artist along with the teacher is beneficial, the mere presence of a creative person will not help young people develop creativity or creative thinking skills. The creative thought process needs to be made explicit, dialogue and discussion should be built on problem-solving and creative thinking models, and tasks set need to be designed to require the use of such skills and provide the opportunity for pupils' creative expression. This implies the kind of careful planning endorsed by DeMoss and Morris, referred to above.

Impact on pupil motivation and personal development

Achievement is generally understood as going beyond results in attainment tests and other assessments and relates more to children's success in participating in the wider life of the school. Cochrane and Cockett (2007) and Tishman and Palmer (2006) both emphasise that the developments that occur through effective arts interventions go well beyond what can be measured by SATs in England, and high-stakes standardised testing in the USA. Therefore, benefits found in terms of the impact on pupils' engagement with learning and in other aspects of development are important outcomes.

Motivation

Motivation was deconstructed as interest, enjoyment and persistent engagement with learning tasks. There was strong evidence from pupils, teachers, artists and parents that pupils found that the experience of working with artists helped to make curricular topics interesting, enjoyable and fun. Such findings are strongly evident in the literature (e.g. see Catterall & Waldorf, 1999; Upitis & Smithrin, 2003; Harland *et al*, 2005; Ofsted, 2006; Cochrane & Crockett, 2007).

Reasons for the strong motivational impact of arts interventions include:

- having clear and tangible outcomes to work towards
- authentic experiences
- the intrinsic value of the activity
- contact with skilled professionals
- contact with adults who were not teachers, who were not part of 'the system' and who did not take account of their 'school history'
- learning was active and 'hands-on'.

Personal development

There was strong evidence from pupils, teachers and artists that pupils gained in terms of developing confidence. Teachers spoke emphatically of benefits to children's self-esteem. There was also

evidence that the approaches used encouraged the children to work collaboratively and to appreciate the ideas put forward by their fellow pupils. These findings are confirmed in other studies. For example, Harland *et al* (2005) found that the development of self-esteem and social interaction were amongst the most frequently reported outcomes of arts interventions. Ofsted (2006) and Catterall and Waldorf (1999) found similar reports from teachers.

Pupils involved in AAC reported that they had learned new things about art and developed new skills; while some new interests had been cultivated, there was perceived lack of opportunity both in school and in the community to develop them. Harland *et al* (2005) found that art form knowledge, skills and techniques were frequently reported outcomes of arts interventions and more likely to deliver art form appreciation than the normal secondary art curriculum. Tishman and Palmer (2006) found that using art as a means for developing thinking led to changes in pupils' thinking about art; for example, from views that visual art was 'not engaging' to visual art 'inviting enquiry' and being 'beautiful and fun'.

Impact on teacher development

An aim of AAC was to support and develop teachers' skills to work collaboratively and creatively. Teachers, for the most part, reported that they already worked collaboratively, but the experience of working with the artists had helped some to become more open with their classes and had given them more confidence to collaborate. The main collaboration which occurred was that of the teacher and artist and this was generally seen to be very effective and valuable. Harland *et al* (2005) found that the quality of the artist-teacher relationship was one of the factors which most affected the outcomes for both artists and teachers. This was understood as a good working relationship and effective communication rather than personal rapport.

In relation to working creatively, teachers reported being challenged in how they thought about classroom management and some indicated they were willing to be more open and 'less controlling'; many reported trying out new ideas they had learned from working with the artists in other non-ICL lessons. This outcome is reported in other studies (e.g. Werner & Freeman, 2001; Upitis & Smithrin, 2003; Harland *et al*, 2005), although Harland *et al* suggest that 'the extent to which teachers were able to make significant and sustained changes to their practice remained open to question' (px/p102). This links to the issue of sustained and ongoing professional development for teachers (see 5.5 below).

Impact on artist development

Artists were less likely than teachers to report that involvement in AAC had led to professional or personal development as they were already well experienced in working with schools. However, two-thirds indicated they had developed new understandings of issues related to schools and young people and had developed their skills in working with young people. Similar findings were reported by Harland *et al* (2005) and Upitis and Smithrin (2003). Harland *et al* conclude that there appeared to be limited capacity for experienced arts educators to gain outcomes distinctive from those already acquired from previous work.

Impact on schools

AAC had two specific aims in relation to school developments: encouraging links between different areas of learning and eroding subject barriers; and enhancing the ethos of participating schools. Limited impact was reported in both these areas. The literature would support the view that these are most likely to be achieved over the long term and as the outcomes of whole school strategies.

For example, in an evaluation of CAPE, Catterall and Waldorf (1999) report that there were indications that teachers in CAPE schools had more positive perceptions in relation to school climate, quality of relationship with parents, professional development, instructional practices and relationships with the community than non-CAPE schools (p50). However, the influence grew over time and was more likely in schools that had high levels of involvement with all teachers engaging in multiple ways but in at least in one unit per year. It was more likely to become a major part of a school where the principal thought highly of it and nurtured it – in relation to funding, space and professional development.

In the context of developing creative schools, Cochrane and Cockett (2007) view the development of creativity as a 'slow burn'. They reflect on the challenges of funding for schools and distinguish between schools who see funding for arts initiatives as 'providing time and space just as long as the funding lasts' or those who build in arts as part of an overall vision of school improvement (p105).

5.4 Factors which facilitate effectiveness

Factors contributing to effectiveness can be seen from at least two perspectives: firstly, the practical issues which make the project and activities possible; and secondly, and arguably more importantly, the underlying understandings in relation to pedagogy and how the intervention enhances learning.

Practical issues

In line with the views expressed by artists and teachers in AAC, factors identified in the literature as contributing to success (or whose absence hampers effectiveness) are:

- strong leadership and active involvement of SMT
- time for planning; quality of the planning process; interventions which emphasised collaboration and joint planning of the teacher and artist
- effective communication
- projects were not one-off but had multiple phases, or one-off interventions were part of long-term strategy
- appropriate allocation of time (e.g. enough time to complete tasks, but not too long for attention of pupils), with continuity and progression built in
- the role of the teacher during the intervention; 'adventurous, risk-taking teachers'
- positive artist-teacher relationships

(Doherty & Harland, 1995; Catterall & Waldorf, 1999; Harland *et al*, 2005; Tishman & Palmer, 2006; Cochrane & Crockett, 2007)

In relation to planning, it is not only ensuring that time is available that is important, but also the quality of the planning process. The AAC evaluation highlighted the following factors in relation to planning that contributed to effective ICLs:

- taking time to choose realistic academic and artistic goals
- analysing key concepts connected with lesson goals
- artist efforts to master key concepts in curricular content
- considering strategies for developing pupil understanding
- using the art form to inject interest into 'difficult' or 'dull' content
- artist and teacher competences: these included a wide repertoire of activities for promoting conceptual understanding
- balancing claims of artistic and curricular goals
- artist ability to design a vehicle suitable for promoting the academic goals with manageable artistic activities
- accommodating constraints, including time, teacher/pupil resources and space

These points are underpinned by strong pedagogical understandings.

Throughout the literature it is emphasised that benefits accrue over a long-term period of development and there is a learning and growth process in working towards effective practices.

Pedagogy

As noted above, the effectiveness of the planning process is underpinned by pedagogical understanding. Harland *et al* (2005) found that the overwhelming factor leading to effective outcomes for all participants, but for pupils in particular, was the artist's pedagogy. Pupils identified this as the quality of explanation and nature of feedback that the artists gave. Particularly effective were artists who were willing to repeat or offer alternative explanations and who were able to relate to pupils' everyday lives. The AAC pupils were extremely positive about the quality of the explanations given

by the artists during ICLs as contributing to making the topics easier to learn. Ofsted (2006) reported that 'for many pupils, the high quality of the experience was directly related to the unpredictable approaches taken by creative practitioners...and the different relationships that developed' (p2). In the words of some AAC pupils: 'it was different from usual'; 'you were allowed to do cool things without being shouted at'.

The work of Creative Partnerships distinguishes between creative teaching and teaching creativity. Teachers need to distinguish between using 'a wide range of stimulating strategies and teaching that created the conditions for the pupils to express their creativity' (Ofsted, 2006, p13). Cochrane and Crockett (2007) reported that after 18 months of involvement, teachers were focusing on creative teaching and found the shift to teaching for creativity far more challenging. This links to the challenges noted above of approaches which explicitly encourage the development of creative thinking skills, and further development of teachers' pedagogical understandings.

The implications of the importance of pedagogical understandings in relation to the efficacy of arts to deliver the curriculum are addressed in sections 5.5 and 5.6.

5.5 The expressive arts as a vehicle for carrying current school curriculum knowledge and for achieving broader educational targets

The fourth evaluation aim included exploring the potential of the expressive arts as a vehicle for carrying current school curriculum knowledge and for achieving broader educational targets.

It is clear that the impact reported by artists, teachers and pupils was overwhelmingly positive, and there is some evidence of impact on broader educational targets such as engagement with learning. Indeed, by the second year there was growing evidence that ICLs could be effective for most subjects provided that the level of goals was appropriate for the pupils. Throughout this report, a recurrent theme has been viewing the AAC project as one way of translating constructivist accounts of learning into practice in ways that are consistent with principles expressed in the *Curriculum for Excellence*.

The many different strands of evidence point in the same direction: the ICLs engaged the pupils, they were reasonably effective in enhancing understanding of academic and artistic content – but there is not sufficient evidence to say that the ICLs were more effective for these purposes than other approaches derived from constructivist research. Many ICLs served the function of illustrating abstract concepts, which abound in physics and chemistry, for example by representing them in another, art-related way. The notion of bridging analogies (e.g. see Bryce & Macmillan, 2005) helps to explain why some ICLs might have been no more, or even less, effective for this purpose than other approaches to developing understanding. Many writers (e.g. Bryce & Macmillan) point out that, if analogies are to be effective bridges between concrete illustration and the abstract understanding that is necessary for progress, they need to be carefully chosen.

While there were many examples of art forms being used to create more accessible representations of concepts, in a minority of ICLs the chosen aspects of the art form obscured understanding. It is possible that more effective analogies are to be found in areas other than art forms: for instance, young people might grasp some physics concepts more easily if they are encouraged to relate them to their experience of playing snooker or football rather than representing the concepts through dance or other art forms.

However, the justification for the AAC project did not lie only in bringing about more effective learning in school subjects: the potential of ICLs for introducing young people to art forms was a second powerful justification. Field notes made during the observations and accounts from pupil focus groups suggested that young people did learn about and become enthusiastic about art forms through ICLs. The time available for ICLs limited what the young people could learn about art forms, particularly where the stakeholders perceived that curriculum content had to be privileged over in-depth engagement with the art forms. Teachers followed up the curriculum content in subsequent non-ICLs but there was almost no time available for following up the art form.

5.6 What needs attention in future AAC-type projects?

To build on the successes reported, this section proposes points for consideration.

Teacher and artist opportunities to explore pedagogy

If teachers and artists are to reap the affordances of constructivist teaching, they need more opportunities to understand principles arising from this perspective. If the training had included opportunities for teachers and artists to understand such principles, the design of ICLs is likely to have been easier and more satisfying. For instance, the initial training might be extended to include engagement with constructivist lessons written up in the literature (e.g. Brophy, 2002). Sometimes, in the interview data, there was talk of pedagogical notions that have little research support, notions that impeded the design of ICLs. While artists did not often articulate pedagogical notions in interviews, their practice was often consistent with developing what Gardner (2007) characterises as a creating mind, a respectful mind and an ethical mind.

Inherent in constructivist approaches is primacy of dialogue in developing thinking skills and in the construction of knowledge. A fundamental assumption is that talk/dialogue is more than a means for sharing thoughts: it is a tool for the joint construction of knowledge by teachers (and, in this case, artists) and learners (Mercer, 1996). Barnes and Todd (1977) emphasised the importance of learners exploring ideas about what is relevant and having a joint conception of what they are trying to achieve. The purpose of talk is to stimulate students to ascertain and resolve, *for themselves*, what is confusing or problematic (Brophy, 2002). Therefore, while ICLs promoted children working and planning together, and cases of complex dialogue were noted, further opportunities for artists and teachers to understand and develop skills in making thinking explicit and promoting constructive dialogue would have enhanced the learning experience.

It is not suggested that large-scale training events are required to achieve these purposes. Teachers themselves highlighted as elements of sustainability the importance of ongoing mentoring by artists and sharing with other teachers involved in developing integrated curricular lessons. For artists, more opportunities to network with other artists was seen as important. Views in the literature on what constitutes effective CPD emphasises using experts, being part of a sustained process which is relevant to and links directly to teachers' classroom practice, peer support, and dialogue and reflection (Cochrane & Crockett, 2007; Joyce & Showers, 2002; Cohen, 1994). In the Chicago model, the Chicago Teachers' Center played a critical role in bringing artists and teachers together, with the emphasis on the underpinning pedagogy for ICLs.

A whole school approach

Brophy's (2002) illustrations of constructivist teaching suggest that ICLs would work optimally where there is a whole school approach, supported by the senior management team, to allocate blocks of time that enable the teacher and artist to design ICLs that include time for young people to practise arts 'skills', 'research' knowledge, and to engage more widely with the art form – for example, to view and discuss films, plays, documentaries and visual art.

Artists and teachers in the project were effective in introducing tasks and supporting participants in clarifying and performing such tasks, but they simply did not have enough time to include activities that would have enhanced the value of the art forms or to repeat and practise activities as in, for example, the *Artful Thinking* Program (Tishman & Palmer, 2006). Young people need to gain sufficient experience of working in these ways to disturb typical conceptions that learning is transmitted through listening to teachers and that teachers will do all that is required to ensure that the transmission has been successful. Their courses would also depend for their success on more open-ended assessment tasks that are sometimes difficult to design in the present climate. Assessment that rests on prescriptions of a narrow range of acceptable responses to tasks, an approach that delivers high reliability in grading, discourages intellectual risk taking by students. The ICLs did incorporate some elements of what is known in the educational literature as authentic assessment tasks (e.g. see Knight & Yorke, 2003). Such tasks have some use beyond the assessment requirements and generate new knowledge through engaging in disciplined enquiry. Thus, many pupils presented their work in drama, dance or media to an audience of other pupils in their schools.

Erosion of subject barriers

An aim of the project which was less well achieved was the erosion of subject barriers, and promotion of this aim plainly needs a whole school approach, supported by the senior management team. Erosion of subject barriers can be promoted through the well researched, very influential approach known as problem based learning (e.g. see Boud & Felletti, 1997), in which the expressive arts could be used as the vehicle. Like many of the ICLs, this approach starts with a problem, such as representing ideas in a particular art form, rather than with subject knowledge, and thus encourages subject boundaries to be crossed. As was often the case in the ICLs observed, what has to be learned is identified by addressing a problem (for instance, producing a travelogue or writing and performing a sketch about electricity). The problem is clarified by reference to resources, some of which may have been provided, and some of which may have been located by the pupils themselves. Students work in small groups which allocate knowledge gathering tasks and which serve as a forum for discussing progress with their problem. Teachers and artists become designers and facilitators of activities and discussions, as was often the case in the ICLs.

Providing time to develop understanding of art forms

As implied above, far more time needs to be allocated for teachers to follow up what young people have learned about art forms by, for example, providing opportunities for pupils to discuss films, plays and visual art.

References

- Artist Teacher Scheme (ATS) (2005) At <http://www.nsead.org/cpd/ats.aspx> (accessed December 2007)
- Barnes D and Todd F (1977) *Communication and Learning in Small Groups* London: Routledge & Kegan Paul
- Bereiter C (2002) *Education and Mind in the Knowledge Age* Mahwah, New Jersey: Lawrence Erlbaum Associates
- Boud D and Felletti G (1997) *The challenge of problem-based learning* (second edition) London: Kogan Page
- Brophy J (2002) *Social Constructivist Teaching: Affordances and Constraints* Oxford: Elsevier Science Ltd
- Bryce T and MacMillan K (2005) Encouraging conceptual change: the use of bridging analogies in the teaching of action-reaction forces and the 'at rest' condition in physics, *International Journal of Science Education* 27 (6) 737-763
- Catterall J S (2002) The Arts and the Transfer of Learning in R J Deasy (Ed) *Critical Links: Learning in the Arts and Student Academic and Social Development* Washington DC: Council of Chief State School Officers (pp 151-157). At http://www.aep-arts.org/publications/info.htm?publication_id=10 (accessed December 2007)
- Catterall J S and Waldorf L (1999) Chicago Arts Partnerships in Education: Summary Evaluation in E B Fiske (ed) (1999) *Champions of Change: the Impact of the Arts on Learning* Washington DC: Council of Chief State School Officers
- Cochrane P and Cockett M (2007) *Building a Creative School: a dynamic approach to school development* Stoke on Trent: Trentham Books
- Cohen E G (1994) Restructuring the classroom: conditions for productive small groups *Review of Educational Research* 64, pp1-35
- Comerford Boyes L and Reid I (2005) What are the benefits for pupils participating in arts activities? The view from the research literature *Research in Education* 73, pp1-14
- Coutts G and Dougall P (2005) Drawing in Perspective: Scottish Art and Design Teachers Discuss Drawing *International Journal of Art & Design Education* 24 (2) 138-148
- Coutts G (2003) Art and Design Education in TGK Bryce and WM Humes (eds) *Scottish Education. Second edition: Post-devolution* Edinburgh: Edinburgh University Press (pp 471-476)
- Creative Partnerships (CP) (2005) At <http://www.creative-partnerships.com> (accessed December 2007)
- DeMoss K and Morris T (2002) *How Arts Integration Supports Student Learning: Students shed light on the connections* At <http://www.capeweb.org/demoss.pdf> (accessed December 2007)
- Doherty P and Harland J (2001) *Partnerships for Creativity: An Evaluation of Implementation* Slough: NFER
- Eames A, Benton T, Sharp C and Kendall L (2006) *The impact of creative partnerships on the attainment of young people: Final report*. Slough: NFER

- Eisner E W (2004) What can education learn from the arts about the practice of education? *International Journal of Education and the Arts* 5, 4. At <http://www.ijea.org> (accessed December 2007)
- Gardner H (2007) *Five Minds for the Future* Boston: Harvard Business School Press
- Harland J and others (2005) *The arts-education interface: a mutual learning triangle?* Slough: NFER
- Joyce B and Showers B (2002) *Student Achievement through Staff Development* 3rd edition Alexandria, VA: ASCD (Association for Supervision and Curriculum development)
- Knight P T and Yorke M (2003) *Assessment, Learning and Employability* Maidenhead: Society for Research in Higher Education/Open University Press
- Livingston K, Soden R and Kirkwood M (2004) *Post-16 Pedagogy and thinking skills: an evaluation* Guildford: Learning and Skills Research Centre (LSRC)
- Maclellan E and Soden R (2004) The importance of epistemic cognition in student-centred learning *Instructional Science* 32 (3) 253-268
- McGuinness C (2005) Teaching thinking: theory and practice *Pedagogy: Learning for Teaching: British Journal of Educational Psychology: Special Monograph Series II* 3
- Mercer N (1996) The quality of talk in children's collaborative activity in the classroom *Learning and Instruction* 6, pp359-377
- Moseley D and others (2004) *Thinking skills frameworks for post-16 learners* Guildford: Learning and Skills Research Centre (LSRC)
- Ofsted (2006) *Creative Partnerships: initiative and impact* HMI report no. 2517
- Ritchart R, Palmer P, Church M and Tishman S (2006) Thinking Routines: Establishing Patterns of Thinking in the Classroom *AERA Conference, 2006*
- Scottish Arts Council (SAC) (2005) *Arts and Creativity in Education*
At <http://www.scottisharts.org.uk/1/artsinscotland/education.aspx> (accessed December 2007)
- SEED (1999) *Creating our future...Minding our past: Scotland's National Cultural Strategy*. Edinburgh: Scottish Executive
- SEED (2004) *National Priorities in School Education*. Edinburgh: Scottish Executive
- SEED (2004) *Curriculum for Excellence*
At www.curriculumforexcellencescotland.gov.uk (accessed December 2007)
- Soden R (2003) Teaching and Learning in Further and Higher Education in TGK Bryce and WM Humes (eds) *Scottish Education. Second edition: Post-devolution*. Edinburgh: Edinburgh University Press
- Soden R and Maclellan E (2005) Helping undergraduates to use appropriate criteria for evaluating accounts of motivation, *Studies in Higher Education* 30 (4) 445-458
- Tishman S and Palmer P (2006) *Artful Thinking: stronger thinking and learning through the power of art – Final report by Harvard College to Traverse City Area Public Schools* Cambridge: Harvard Graduate School of Education
- UNESCO World Conference on Arts Education (2006) *Road Map for Arts Education: Building Creative Capacities for the 21st Century*. Lisbon, 6-9 March 2006.
At http://portal.unesco.org/culture/en/ev.php-URL_ID=30335&URL_DO=DO_TOPIC&URL_SECTION=201.html (accessed December 2007)

Upitis R and Smithrim K (2003) *Learning Through the Arts: National Assessment 1999-2002: Final Report to the Royal Conservatory of Music Ontario*: Queen's University

Werner L and Freeman C J (2001) Arts for Academic Achievement: Arts Integration – a Vehicle for Changing Teacher Practice. Presentation at the annual meeting of the American Educational Research Association, Seattle, WA, April 2001

Winner E and Hetland L (2000) The arts and academic achievement: What the evidence shows *The Journal of Aesthetic Education* 34, 3/4. Illinois: University of Illinois Press
At <http://pzweb.harvard.edu/Research/Reap/REAPExecSum.htm> (accessed December 2007)

Annotated bibliography for Chapter 5

Chapter 5 took account of a wide range of evaluation studies related to arts interventions, but there was insufficient space to give explanations of these studies. Therefore an annotated bibliography is included here to give an indication of the focus and extent of each work referred to.

Catterall J S and Waldorf L (1999) Chicago Arts Partnerships in Education: Summary Evaluation in E B Fiske (ed) (1999) *Champions of Change: the Impact of the Arts on Learning*. Washington DC: Council of Chief State School Officers

This paper presents a summary of evaluation findings for the Chicago Arts Partnership in Education. CAPE was founded in 1992. It was based on developing artist-teacher partnerships charged with the planning of integrated instruction; joint instruction of an art form with specific instructional goals in other academic subjects. The paper focuses on the first six years of CAPE, up to 1998.

Cochrane P and Cockett M (2007) *Building a Creative School: a dynamic approach to school development*. Stoke on Trent: Trentham Books

This book reports on the experience of developing partnerships between schools and creative practitioners and organisations under the auspices of CapeUK, established in the late 1990s and building on the model of the Chicago Arts Partnership in Education (CAPE). The book explores discussions around the meaning of creativity, considers its application to the curriculum, particularly in relation to science, addresses the issues of inclusion, how creativity develops and how that can be observed, assessment, partnership development and professional development.

DeMoss K and Morris T (2002) *How Arts Integration Supports Student Learning: Students shed light on the connections*. At <http://www.capeweb.org/demoss.pdf> (accessed December 2007))

Research related to the Chicago Arts Partners in Education (CAPE). The study investigated development of cognitive processes of the same 30 students following an arts-integrated unit of learning and a non arts-integrated unit of similar content and level. They investigated depth of knowledge, analytic interpretations and affective connections to learning.

Doherty P and Harland J (2001) *Partnerships for Creativity: An Evaluation of Implementation*. Slough: NFER

Early evaluation of the arts interventions introduced by CapeUK.

Eames A, Benton T, Sharp C and Kendall L (2006) *The impact of creative partnerships on the attainment of young people: Final report*. Slough: NFER

A study related to the evaluation of the Creative Partnerships Programme (2002-2004). The programme-level evaluation focused on measuring the changes in self-confidence, self-esteem and attitudes to learning amongst young people who took part in Creative Partnerships activity (Sharp *et al*, 2005 – note: referenced as unpublished draft report). Eames *et al* looked at progress in national assessments for young people using multi-level modelling to see if there was a difference between young people involved in Creative Partnerships and those who were not, when all relevant background details were taken into account.

Harland J and others (2005) *The arts-education interface: a mutual learning triangle?* Slough: NFER

A research study undertaken between 2001 and 2003 by NFER for the Arts Council England into the effectiveness of different kinds of arts-based interventions in schools and community learning. The purpose was to examine the outcomes for pupils, teachers, schools, artists and arts organisation and to explore factors which affected the range and quality of those effects. This was not particularly focused on integration of art and curriculum but on a range of arts-based interventions, some which were for the purpose of engaging in the art form, some with a personal development focus and some which had a curriculum (other than art) focus.

Ofsted (2006) *Creative Partnerships: initiative and impact*. HMI 2517

Creative Partnerships (<http://www.creative-partnerships.com>) (accessed December 2007), based at Arts Council England, set up by the Department for Culture, Media and Sports in England in 2002 and jointly funded by DfES, is about increasing the opportunities in schools, particularly those in deprived areas, for children to develop creativity and creative skills by enabling children, teachers and creative professionals to work together both in school and in other settings such as museums, galleries and theatres. CP aims to build sustainable relationships between schools and creative individuals and organisations with a view to encouraging a focus on the development of creativity in young people and creative approaches to teaching in all aspects of the curriculum. The Ofsted report is based on evaluation carried out in 6 of the 38 Creative Partnerships areas.

Tishman S and Palmer P (2006) *Artful Thinking: stronger thinking and learning through the power of art* Final report by Harvard College to Traverse City Area Public Schools. Cambridge: Harvard Graduate School of Education.

The goal of the Artful Thinking Program is to 'help students develop thinking dispositions that support thoughtful learning – in the arts, and across school subjects'. It was developed by the Project Zero team at Harvard University, along with Traverse City Area Public Schools. The purpose was to develop an arts-infused curriculum in which the arts were used as entry points for pupils to develop deeper thinking and learning skills. This was addressed through enabling teachers to make rich connections between works of art and curricular topics and helping teachers use art as a force for developing students' thinking dispositions. The art focus for the project was visual arts and the approach was to allow teachers to use the routines without requiring the input of an artist.

Dispositions are explained as predilections or tendencies to use knowledge and skills. 'Dispositions are formed when people routinely engage in specific patterns of behaviour. Accordingly, in the Artful Thinking Program, thinking dispositions are developed through the use of thinking routines – short, easy-to-learn procedures that help students enact thinking dispositional behaviour' in and across six thinking dispositions that 'have special power for exploring works of art and other complex topics in the curriculum' (pp 8-9). Routines not only 'uncover' users' existing ideas and ways of thinking but encourage them to construct ideas in process of applying them. This program is part of the work of the Visible Thinking Team at Project Zero.

Upitis R and Smithrim K (2003) *Learning Through the Arts: National Assessment 1999-2002: Final Report to the Royal Conservatory of Music*. Ontario: Queen's University

Learning Through the Arts is an extensive programme of arts integration in elementary schools in Canada. It was created and developed by the Royal Conservatory of Music and launched in 1994. It is estimated that by 2008 there will be 600 'LTTA' schools in Canada and involvement from schools in 10 countries worldwide. The programme has extensive planning and support mechanisms in place. Distinctive features are that schools agree to engage all teachers over a 3-year period; strong programmes of CPD for artists and teachers are in place, and usually the same artists, representing a range of art disciplines, continue with the school for a 3-year period. It follows the curriculum integration model, where professional artists work directly with students after developing curricula with teachers. For more information on the programme, go to <http://www.lta.ca/>. The research reported in the above document was commissioned by the Royal Conservatory of Music in 1999 and covered a 3-year period.

Werner L and Freeman C J (2001) *Arts for Academic Achievement: Arts Integration – a Vehicle for Changing Teacher Practice*. Presentation at the annual meeting of the American Educational Research Association, Seattle, WA, April 2001

This article reports on the 'Arts for Academic Achievement' project, which introduced art-integration into 37 mid-western schools (Minnesota) based on 'Annenberg' funding, money made available by Walter H Annenberg 'to invest in the survival of public schools'. The focus is on changes in teacher practice in one large urban school district.

Winner E and Hetland L (2000) *The Arts and Academic Achievement: what the Evidence Shows* *The Journal of Aesthetic Education* 34, 3/4. Illinois: University of Illinois Press. At <http://pzweb.harvard.edu/Research/Reap/REAPExecSum.htm> (accessed December 2007)

Output from Project Zero's REAP (Reviewing Education and the Arts Project), Harvard.

Annexe: Number of respondents to surveys and interviews

The sample sizes and response rates for all surveys are given in table 1.

Table 1: Survey samples and response rates

	Target	Achieved	Response rate
Stage 1			
Artist initial questionnaire	26	19	73%
Artist second questionnaire	30	26	87%
Teacher initial questionnaire	49	36	73%
Teacher second questionnaire	50	44	88%
Primary pupil questionnaire	200	175	85%
Secondary pupil questionnaire	220	213	97%
Stage 2			
Artist 'new start' questionnaire	5	3	60%
Artist third questionnaire	35	23	66%
Teacher 'new start' questionnaire	18	15	83%
Teacher third questionnaire	47	35	74%
Primary pupil questionnaire	200	183	92%
Secondary pupil questionnaire	200	167	84%

These represent a good return rate and, although the artist return rate in stage 2 was lower, the responses are sufficient to be taken as representative.

The number of participants interviewed is given in table 2.

Table 2: Number of AAC participants and others who were interviewed

	Number of individuals
Phase 1	
CLOs and SAC staff	9
Headteachers/SMT	22
Phase 2 – stage 1	
Artists (individually)	7
Teachers (13 individually, 14 in 3 groups)	27
Pupils (in 17 groups)	112
Parents (in 6 groups)	14
Phase 2 - stage 2¹	
Artists (individually)	6
Teachers (individually)	12
Pupils (in 9 groups)	68
Parents (individually)	21
CLOs and SAC staff	9

¹ At stage 2, additional artist and teacher interviews occurred as part of the in-depth study. Members of school senior management teams were also interviewed as part of the in-depth study.

Three schools participated in an in-depth study and included 4 artists, 4 teachers, 3 classes of pupils, 3 headteachers and the Creative Links Officer.

In the first year 19 observations matching the observation criteria were completed, with 13 in the second year. Further class sessions with artists were observed in both years but they were either preparatory or follow-up to ICLs and as such did not constitute lessons matching the observation criteria.

Evaluation of the Arts Across the Curriculum Project

Appendices to the Final Report

Dr Rebecca Soden and Liz Seagraves
The Quality in Education Centre

and

Glen Coutts
Department of Sport, Culture and the Arts

March 2008

University of Strathclyde
Faculty of Education
Jordanhill Campus
76 Southbrae Drive
Glasgow
G13 1PP



Contents

Appendix A	Evaluation design and research methods	1
Appendix B	Evaluation stage 1 data collection (2005-06)	17
	B1: views of artists and teachers on initial training and support	17
	B2: evidence from pupil surveys and focus groups	29
	B3: evidence from teacher survey and interviews	58
	B4: evidence from artist survey and interviews	83
	B5: views of parents	100
Appendix C	Evaluation stage 2 data collection (2006-07)	103
	C1: views of new artists and teachers on initial support	103
	C2: evidence from pupil surveys and focus groups	110
	C3: evidence from teacher survey and interviews	139
	C4: evidence from artist survey and interviews	159
	C5: views of parents	181
Appendix D	Differences observed in the data between stage 1 and stage 2 of the evaluation	189
Appendix E	Classroom observations of ICLs	198
Appendix F	Selected AAC classes with comparator groups	207

Available on request

Appendix G	DVD of artists' video diaries – <i>Arts Across the Curriculum: the Way They See it</i>, Glasgow: University of Strathclyde, 2007.	
	Available on request from the Department of Sport, Culture and the Arts, Jordanhill Campus, University of Strathclyde or www.strath.ac.uk/degas	

Available as a separate volume

Appendix H	Evaluation instruments	
-------------------	-------------------------------	--

Evaluation of Arts Across the Curriculum

Evaluation design and research methods

1.	Introduction	2
2.	Background to Arts Across the Curriculum project	2
3.	Aims of the evaluation	3
4.	Research design and schedule of evaluation activities	3
5.	Research methods	5
6.	Sampling	12
7.	References	15

1. Introduction

This appendix outlines the background to the Arts Across the Curriculum project, the aims of the evaluation, the programme of evaluation activities, the methods used and the approach to sampling and the samples achieved during the course of the evaluation.

2. Background to Arts Across the Curriculum project

In Scotland, the National Priorities (SEED, 2000) explicitly promote the development of creativity and ambition. The *Curriculum for Excellence* (SEED, 2004) emphasises the development of the whole child and the provision of rich and varied experiences, including opportunities to develop creativity and participate in the arts. The Scottish Arts Council priorities (SAC, 2005) and the National Cultural Strategy (SEED, 1999) emphasise the role of arts education and promote the notion of a collaborative approach to learning involving artists directly in the learning experience of school students. Creative Partnerships (CP, 2005) and the Artist Teacher Scheme (ATS, 2005) in England have been promoting the role of arts practice in education with the support National Society for Education in Art and Design (NSEAD), the Arts Council England and the Department for Education.

Arts Across the Curriculum is a three-year pilot project sponsored by the former Scottish Executive's Future Learning and Teaching (FLaT) programme¹, The Scottish Arts Council, and the seven local authorities in which the initiative is being piloted and evaluated. The project was funded to commence in November 2004, with the programme 'going live' with the initial training of artists and teachers in April 2005.

The six key aims of the Project are to:

1. increase pupils' achievement, particularly in understanding, in identified subject areas across the curriculum
2. increase pupils' motivation to learn
3. support and develop the skills of teachers to work collaboratively and creatively
4. encourage links between different areas of learning and erode subject barriers
5. improve the ethos of the school
6. explore the efficacy of the expressive arts as a delivery mechanism across the curriculum

The ideas expressed in the project's aims are drawn mainly from the Lakeside Education and Arts Partnership (LEAP) approach and their Arts Impacting Achievement (AIA) project. These follow the Chicago Arts Partnerships in Education (CAPE) approach, commonly known as the 'Chicago model'. Evaluation of the Arts Across the Curriculum project offers an opportunity to gather evidence in Scotland.

The Arts Across the Curriculum project sets out to do something quite ambitious and promotes the notion of developing the skills of teachers; encouraging links between different areas of learning and testing the efficacy of the arts as a 'delivery mechanism' across the curriculum.

At the centre of both the Chicago and the Scottish models is the 'integrated curricular lesson' (ICL), which arts professionals and teachers plan and deliver together. The purpose of the ICL is to enhance pupils' understanding of curriculum content through arts activity and for pupils to gain greater insight into the arts. Artist and teacher integrate their specialist knowledge in designing lessons to achieve this end. Science teachers and dancers, for instance, might teach together to enhance pupils' understanding of molecules. It is purported that, through teaching lessons together, teachers and arts professionals can learn from each other with a view to implementing their new understandings when they teach without their partner.

A three-day training event in April 2005 introduced the project to teachers and artists from seven local authorities, and the evaluation team attended this event.

¹ For information on FLaT projects see <http://www.flatprojects.org.uk/>

The evaluation focuses in particular on the aims of the AAC project and aims for the evaluation as agreed with the FLAT team. In designing the evaluation, cognisance was also taken of issues emerging from existing research and evaluation undertaken in relation to the arts in education, the conditions associated with effective arts-education partnerships and perceived outcomes for pupils, teachers and artists.

3. Aims of the evaluation

The aims of the evaluation, as expressed in the tender document, are to:

1. describe the extent to which the six *key aims* of the Arts Across the Curriculum project have been met in terms of improvements in the following areas:
 - pupil achievement in subjects and depth of understanding of subject matter where integrated curricular lessons are used
 - pupils' reflection on and monitoring of their own learning
 - level of pupil engagement with formal educational targets (motivation)
 - pupil attendance
 - pupils' social interaction skills including their capacity and inclination towards collaborative working
 - pupils' understanding of the beliefs and practices embedded in arts activities
 - pupils' inclination to engage in arts activities outside school hours
 - teachers' capacity and inclination towards working collaboratively and creatively
 - links between different areas of learning
 - erosion of subject barriers
 - a positive and inclusive ethos in the schools
 - parents' satisfaction with pupils' schooling
2. identify strengths and any gaps in the training and support available to teachers and artists involved in the Arts Across the Curriculum project in the participating schools
3. assess the overall impact of the Arts Across the Curriculum project on teachers, artists and pupils in the participating schools (including any gender differences in relation to outcomes)
4. explore how the expressive arts can be used as a vehicle for carrying current school curriculum knowledge and for achieving broader educational targets
5. establish conditions that support effective implementation and embedding of the Arts Across the Curriculum Project

4. Research design and schedule of evaluation activities

The research was carried out over the course of the two years through a carefully planned programme using both qualitative and quantitative research methods, which are outlined in section 5. The work was developed in two main phases: phase 1 covered the period April 2005 to August 2005 and phase 2 covered the period September 2005 to December 2007. Phase 2 had two main stages covering two years of the AAC project.

During the first phase, the evaluation team engaged in a series of events and activities with a view to familiarising themselves with the project, its background and its aims. This enabled them to design research instruments and carry forward the work of evaluation. The research activities as carried out, broadly in line with the proposed work in the tender, are presented in table A1.

Some minor alterations were made to the proposed plan of work with the agreement of the FLAT team. It was originally proposed to seek the views of local community arts organisations regarding the project and its likelihood of increasing involvement of young people in the arts. It was agreed that this was beyond the scope of the evaluation as there was little potential for noticeable impact in such a short

timescale. Instead, an additional series of interviews with the Creative Links Officers at the end of the second year of the project was agreed.

In addition to the activities listed in the table, the evaluation team met with the project Advisory Group on 9 occasions. In June 2006 they met with the Creative Links Officers and SAC staff to explain how the evaluation would be carried out. During the first year they also attended a meeting of the FLAT project monitors to advise them of the purpose of the evaluation; they further attended the Conference in Livingston entitled 'One year on' (June 2006) and presented an overview of the evaluation. In November 2006 they presented findings from the interim report to the Advisory Group and local authority managers (CLOs). In October 2007 they presented a 'snapshot' of the evaluation prior to completion of the final report.

All participants in the evaluation were provided with information sheets or letters explaining the purposes of the research activity and seeking their consent to participate. They were assured of confidentiality and anonymity. Parental permission for the participation of pupils in any aspect of the research was sought by letters from the evaluation team, distributed via the schools.

Table A1: Arts Across the Curriculum evaluation activities

Time	Activity
Phase 1 – April 2005 to August 2005	
April	Undertake structured observation of training event at Peebles (April 2005), supported by a semi-structured interview with the American trainers, led by Jackie Murphy, who has been closely involved in the LEAP model and is Program Director at the Chicago Teachers' Center at North Eastern Illinois University
April – June	Gather and analyse documentary evidence, including the SAC team evaluation of training
May – June	Conduct structured observation of artist and teacher planning sessions, supported by informal interviews
June	Conduct interviews with the Creative Links Officers, Cultural co-ordinators and Scottish Arts Council staff
June	Conduct telephone interviews with headteachers/SMT in participating schools
July – August	Analyse phase 1 data collection and design and pilot questionnaires, interview and observation schedules
Phase 2, Stage 1 – September 2005 to June 2006	
September	Administer initial survey to all artists and teachers to gather data about the training and early stages of development of the project
September	Invite artists to complete video diaries and introduce them to their compilation
October	Administer two standardised instruments (the Self-Description Questionnaire and the Torrance Test of Creative Thinking) to a sample of AAC pupils and comparator groups of pupils
October – April	Administer questionnaires to a sample of pupils as near as possible to the completion point of their first ICL to gain their views on their enjoyment and learning during ICLs
October – April	Administer questionnaires to all artists and teachers as near as possible to the completion of their first ICL to gather data on the development, delivery and outcomes of ICLs
February – May	Carry out series of structured observation visits to gather data on ICLs
February – May	Conduct interviews with teachers, pupils and parents in conjunction with visits to schools for observations and at other times as agreed with schools
May	Conduct telephone interviews with artists
April – May	Analyse all survey data and undertake initial analysis of interview data from interviews with artists, teachers and parents
June	Prepare and submit interim report

Table A1: Arts Across the Curriculum evaluation activities (continued)

Phase 2, Stage 2: July 2006 to December 2007	
July – August	Revise research instruments and continue with analysis of data
September – October	Administer questionnaire to new artists and new teachers involved in the project for the first time to gather data on induction and support
October	Administer follow-up of the two standardised instruments (SDQ and TTCT) to two of the AAC and comparator groups of pupils
February – May	Carry out series of structured observation visits to gather data on ICLs
February – May	Conduct interviews with teachers and pupils in conjunction with visits to schools for observations and at other times as agreed with schools
February – May	Undertake ‘semi-participant’ observation and in-depth discussions with teachers, artists and management in one authority
May	Administer surveys to a sample of pupils
May	Administer follow up of the two standardised instruments (the SDQ and TTCT) to the third AAC and comparator group
May	Administer surveys to all artists and teachers to gather data on development, delivery and outcomes of ICLs in year 2 of the project.
May	Administer surveys to sample of pupils to gain their views on enjoyment and learning during ICLs
May	Telephone interviews with parents who were invited by letter to be interviewed
May – June	Telephone interviews with a small group of artists
June	Interviews with Creative Links Officers and SAC staff
June – November	Analyse all data and interpret findings in relation to pedagogical and arts-education literature; edit and prepare DVD from artists’ video diaries
September	Seek views of FLAT project monitors
December	Submit final report

5. Research methods

5.1 Quantitative methods

Questionnaires were designed to take account of the aims of the Arts Across the Curriculum project, the aims of the evaluation and issues identified in the literature (see 5.4 below). Their purpose was to gain as wide a view as possible on relevant issues.

The design proposed in the tender documents was based on repeat measures, following up in stage 2 on teachers, artists and pupils who had been involved in both years of the project. This was possible to some degree with artists and teachers, although due to changes within schools and authorities not all teachers continued in year 2 and new teachers became involved. In many of the schools, different classes took part during the second year and this limited the number of pupils who could be surveyed at both stages: in our sample schools one P3 to P4 class, one P5 to P6 class and one S1 to S2 class were involved over 2 years of the study.

Pupil questionnaires were designed to suit the age and stage of the children. Three questionnaires were used – one for P3 and P4, one for P5 and P6 and one for P7 to S3. The main differences were that the younger children had fewer questions and they were asked whether they ‘agree’ or ‘don’t agree’ with statements, while P7 and above were asked to rate their agreement on a 4-point scale, from ‘agree a lot’ to ‘disagree a lot’. The questionnaire used the terms ‘art’ and ‘artist’ but during the administration it was emphasised that this was talking about what they were doing with the specific named artist, and it was not about drawing and painting.

To investigate issues of self-esteem and the development of creative thinking skills through the intervention of AAC, two standardised instruments were used with selected groups of AAC pupils and comparator groups. These instruments were administered early in the project and again in year two of the evaluation with the same groups of pupils. Data relating to the pupils’ self-esteem were gathered through a standardised instrument known as the Marsh Self Description Questionnaire (SDQ-I and

SDQ-II). The instrument includes scales that assess pupils' self-concept in relation to verbal and reading skills, social interaction and citizenship (Marsh, 1990). The potential development of creative thinking skills was investigated through the use of a recognised set of tasks – The Torrance Test of Creative Thinking (Torrance, 2000). The Torrance Test is a well validated instrument that has been used extensively to evaluate the impact of arts activities on creative thinking skills (see, for example, Burton, Horowitz & Abeles, 2000). It focuses in particular on the capacities of fluency, originality and flexibility in thinking. More details of the SDQ and TTCT instruments are contained in Appendix F, where this aspect of the evaluation is reported.

Teacher and artist questionnaires were sent by post. In some schools the pupil questionnaires were administered by research assistants, while in others they were administered by class teachers. This allowed the questionnaires to be completed at a time that suited the teacher without having to set aside time when a researcher could be at the school; in these cases teachers were provided with guidance on completion of the questionnaires and were able to contact a member of the research team if they had any concerns or questions. The SDQ and TTCT instruments were administered either by members of the evaluation team or other QIE research assistants.

Note on statistical analyses: Associations and differences were investigated using inferential statistics. Of particular interest were gender differences in pupils, differences in respondents in primary and secondary schools, and differences that emerged between stage 1 and stage 2 views of the same participants and all participants at both stages. Differences pre- and post-intervention for the AAC and comparator groups were investigated.

For nominal data (for example, yes/no or agree/disagree responses), chi-square was used. For rating scales, where conditions for the use of parametric tests were present, t-tests were used. While there is debate that rating scales are ordinal data and should be analysed using only non-parametric tests, there is the view that the assumption of equality of intervals within rating scales is justified and therefore using t-tests and ANOVA is appropriate (Calder & Sapsford, 2006). However, using t-test assumes sample size of at least 30 with roughly equal sub-groups when numbers are around 30, though variation in group size is acceptable with larger groups; it also assumes a normal distribution of the data – although the view is also that these are 'robust' tests and some deviations from these conditions will not reduce the power of the tests. Within our datasets these conditions were sometimes not met, as groups were small or unequal in size. In these cases, non-parametric tests were used (e.g. Mann-Whitney U-test). For within-groups analysis (e.g. the pre- and post-analysis of the AAC and comparator groups of pupils), where group sizes were large enough, within-groups t-test was used; where numbers were small the Wilcoxon Signed Ranks test was used. The significance level was set at $p < 0.05$. (For conditions of use of statistics see Barnes & Lewin, 2005 and Dancy & Reidy, 2002.) While statistical differences may be identified in the data, they have to be interpreted in the light of what is meaningful in educational terms.

The details of the inferential statistics are noted as a final section of each appendix as relevant.

5.2 Qualitative methods

Interviews

The purpose of the interviews was to gain richer data than could be gathered via questionnaire, although the questionnaires did have open questions which allowed for comment.

In all interview contexts, semi-structured interviews were used. The questions were framed around the aims of the project and the evaluation (see 5.4 below for rationale) and the major questions were asked in the same way with each interviewee, thus setting a first level of themes for the analysis. However, the semi-structured approach allows both interviewers and interviewees the freedom to pursue interesting lines of inquiry developing out of the interviewees' own experiences of the project and to change the order of the questions, if necessary (Fielding & Thomas, 2001). This flexibility was particularly important in relation to parent interviews, where levels of awareness and understanding of the project varied and the interviewers sometimes had to give considerable elaboration of the questions.

A mixture of individual and group interviews was held:

- Teachers were interviewed both individually and in groups. They were interviewed in groups when this was the arrangement that suited the school in terms of time commitment and availability of staff.
- At both stages, artists were interviewed by telephone. This was primarily a logistical decision as the artists were located widely across the country and had commitments other than AAC, which meant that arranging face-to-face interviews was extremely complex. Additionally, of course, some artists made video diaries.
- Group interviews with pupils was the preferred arrangement as this gave pupils the security of being with their class mates rather than meeting with a 'stranger' on an individual basis and would therefore increase their willingness to contribute their views.
- In stage one, schools were asked to contact parents and invite them to attend a meeting with the research team and so parents were interviewed in groups. One of the consequences of this is that it is often parents who already have a close link with the school who agree to participate and views of less involved parents are not accessed. In the second stage of the evaluation parents were sent letters inviting them to participate in telephone interviews. This approach was adopted to try to gain the views of parents who might not be able to come to the school to meet with one of the research team and also to reduce the organisational burden on the school.

The teacher group interviews were not designed as focus groups, although in some cases, where teachers in a school had not previously met to discuss their work on AAC, the interview situation did generate discussion and exploration of ideas between the members of the group as well as responses to the interview questions, which provided additional insights into the situation for the interviewer and exemplified some of the issues raised around the question of collaboration. This is one of the key advantages of focus groups, which are designed to allow interaction and the group forces and dynamics allow participants to respond to and build on the views of others in the group (Litosseliti, 2003).

The pupil group interviews were designed to give the children a non-threatening situation to allow them to talk about their experiences of AAC, to explore their understandings of why they had an artist in the classroom, what they were learning and, in particular, in what ways the art and artist helped them learn their curricular topics. So the interviews were about exploring their understandings and the meanings they gave to the situation. Allowing them to interact with each other and to respond to each other was encouraged, but in some groups the interaction was more focused on interviewer and pupil questions and answers. Litosseliti (2003) notes that the essence of focus groups is that they rely primarily on interaction and stimulation among group participants themselves around the topics introduced by the researcher, as opposed to group interviews, where the emphasis is on exchanges between the researcher and the participants. Therefore in the appendices, while the interviews with pupils are referred to as focus groups, they were in fact more often group interviews. The children nonetheless gave quite extensive descriptions of their understanding of AAC, as can be seen from the rich accounts reported in the relevant appendices.

While telephone interviews may be limited due to the lack of 'presence' and establishing of relationship through eye contact and body language, they do have the benefit of having limited distractions, which enables both interviewer and interviewee to remain focused (Fielding & Thomas, 2001; Wilson & Sapsford, 2006). The artists were, on the whole, used to communicating by telephone and were happy to be interviewed in this way, with no loss of quality of data or communication. Communication with parents did not appear to be diminished through using telephone interviews. The fact that they had been invited first by letter and they had taken the time to send a reply to say that they were willing to be interviewed removed any initial awkwardness of telephone contact; they were keen to give their views.

Interviews and group discussions were recorded with the permission of the interviewees. They were listened to by the interviewer and transcribed using a 'partial transcription' approach, i.e. they were not transcribed verbatim, but the main points were transcribed, sometimes in summary and sometimes using the interviewees' own words. As, most of the time, it was the interviewers who prepared the notes (as opposed to having them transcribed by assistants unfamiliar with the project) and the analysis was looking for key themes, with illustrative quotes, it was considered unnecessary to have verbatim transcriptions.

The interview data were analysed by comparing and contrasting themes that emerged in each interview. Summarised accounts of the interviews are provided in the appendices.

Video diaries

Semi-structured interviews or 'talking heads' on camera have been employed successfully by Coutts (Coutts & Hart, 2000; Coutts, 2004) to explore other issues in the arts and education. The artists were provided with a semi-structured shooting schedule with prompts designed by the research team and agreed with the participants. This approach was seen as a cost-effective way of gathering data from the artists across a number of local authorities, and it allowed them a degree of autonomy and flexibility.

Semi-participant observation/in-depth study

The purposes of the in-depth study were to:

- explore the subjective dimensions of artists' and teachers' experience, i.e. the meanings that participants have developed of the aims and nature of the AAC project and the ways in which these meanings influence their delivery of the project
- probe what lies behind views expressed in questionnaires and in the semi-structured interviews
- understand the project's constraints and affordances from the stance of a semi-participant

The methods employed were:

- Semi-participant observation of planning sessions (for the ICLs to be observed). The teacher and artist agreed that one or two members of the evaluation team would participate in planning discussions. The teachers and artists structured the discussion but the evaluation team member helped to deepen the discussion by asking questions and contributing ideas where appropriate (e.g. in one meeting a drama artist was taking over from a dance artist and the teacher appeared to be assuming that the drama, like the dance, would not involve speaking: a question about whether this was a reasonable assumption led to the teacher and artist coming up with much better quality ideas)
- Extended and unstructured discussion with teacher and artist pairs on the ICLs observed, aimed at uncovering:
 - the teachers' and artists' understandings of the project taken as a whole
 - how the project is impacting on their 'normal role',
 - their ideas about how the project could be justified other than in terms of its impact on other school learning
- Two sets of semi-structured group discussions to include project participants from each school; namely, teachers, artists, CLO, SMT and one 'non-AAC' staff representative from each school:
 - 1st group – artists and teachers
 - 2nd group – headteachers from each of the three schools, CLO

All discussions were facilitated by one of the three members of the evaluation team.

Notes from all discussions were either audio recorded or taken in shorthand, and were fully transcribed. These transcripts were used to confirm or otherwise interpretations from the larger data sets and to elaborate earlier interpretations.

5.3 Observation

Rationale

Since the ICLs are at the heart of the project, substantial evaluation time was invested in building a robust description of how artists and teachers interpreted the Chicago integration model into Scottish

practice, and of the affordances and limitations of their interpretation. A total of 32 ICLs were observed, using research instruments designed to gather a range of quantitative and qualitative data.

Method

In order to provide a systematic, fine-grained, quantitative description of how teachers and artists interacted with pupils during whole class teaching and of how teachers and artists shared this interaction, the evaluation team constructed a category system. The method of constructing the categories is described below. This category system was designed to show the number of times that the artist or teacher invited pupils to engage in talk connected with the project aims, and the pattern of pupil responses. Therefore categories included clarifying curricular and artistic goals, deepening understanding of curricular content through an art form and developing thinking about the curricular and arts goals. Thus, each invitation from the artist or teacher to engage in talk (usually by posing questions) was recorded in one of the categories shown below. Pupil responses to the teacher and artist invitations to talk, or indeed pupil initiation of questions, were recorded in similar categories. A full description of each category can be found in Appendix E. The interactions were measured in ten-minute cycles when teachers and artists were working with the whole class, and 3 such cycles were recorded during an ICL that lasted between one and two hours.

Qualitative data was gathered through field notes when pupils were working on practical tasks such as painting or taking photographs. In addition, qualitative data was gathered from teacher and artist immediately after the observation, using a semi-structured interview schedule (see Appendix H).

Construction of the categories

The development of this category system began with preliminary observation of ICLs. The three members of the evaluation team carried out these preliminary observations independently and devised an initial set of categories that were influenced by what was happening in the ICLs, AAC project aims and arts education research literature (outlined in sections 2, 3 and 5.4 of this appendix). They then met to compare and refine the initial categories. Thus, the category system was developed and refined through a process of iteration between ICLs, project aims and research literature until agreement was reached on appropriate categories. The researchers and research assistant then applied these refined categories to an ICL to check that they were appropriate for the observation task and that an acceptable reliability could be achieved in categorising interactions. The categories derived from this process were:

- curricular goals for lesson
- artistic goals for lesson
- link between arts and curriculum content
- choice within activity
- enhancing curriculum content through art activity
- thinking about goals and alternative strategies for achieving them
- encouraging evaluation
- encouraging students to tolerate ambiguity
- focusing pupils on improvements
- promoting enquiry
- allowing time for thought

Cohen's Kappa was calculated to assess the degree of inter-rater reliability in applying the category scheme and the value of 0.8 was above the generally accepted threshold of 0.7. Therefore, the results of this reliability test indicated that the coding could be carried out reliably by the three members of the evaluation team.

In view of the wide diversity of ICLs over the duration of the project (see Chapter 2 of the report), statistical comparisons between the ICLs in each of the two years would not have yielded meaningful comparisons.

Analysis of pupil small group discussion

A theory driven category system was developed to describe pupil talk when they were working collaboratively in small groups. The categories described aspects of pupil talk that are known to correlate with various educational gains (Ogden, 2000; Christie *et al*, 2004). Thus, the categories described types of pupil talk connected with better understanding of ideas. Such pupil talk includes asking each other questions, offering each other explanation or illustration of ideas, encouraging each other to generate fresh ideas and to represent their ideas in non-verbal ways. This quality of talk is connected with enhanced social interaction, collaborative planning and self-regulation of learning (e.g. through pupils asking questions about plans and checking progress against task requirements). Gains on these measures have influenced attainment in many studies (Ogden, 2000; Christie *et al*, 2004). Within a pre-determined time window, each pupil utterance was allocated to one of the categories. By adding up the number of utterances in each category it was possible to find out how many times pupils asked each other questions, offered explanation or illustration or encouraged each other to generate ideas. Since only one member of the evaluation team found classroom opportunities to use this schedule there was no need for a statistical check on the reliability of the coding of the pupil talk.

The categories (a full description is given in Appendix E) used were:

- Expresses positive feelings
- Expresses negative feelings
- Expresses intolerance of ambiguity
- Self regulates
- Generates suggestions for changing direction
- Tries to advance/clarify understanding of content (both curricular and art-related)
- Evaluates: judges ideas/products, refers to criteria for judging
- Minimal comments
- Off task

5.4 Rationale for questions asked in surveys and interviews

When devising the evaluation instruments, the research team sought to cover the main aims of the AAC project and the aims of the evaluation as agreed with the FLAT team. Cognisance was also taken of issues emerging from research and evaluation previously undertaken in relation to the arts in education; the conditions associated with effective arts-education partnerships and perceived outcomes for pupils, teachers and artists. This section represents the literature that was taken account of at the outset of the evaluation during the period April to August 2005.

The questionnaires and interviews asked questions about the early stages of the project, the processes involved in making it happen and the perceived outcomes for participants.

Planning and implementation

Doherty and Harland (2001) identified that the quality of planning and the planning process impacted on the effectiveness of partnerships. For the particular partnerships they were investigating, planning took place at several levels: national, regional, local partnership and the actual activity. Within AAC, planning was required at national (Scottish Arts Council), regional (CLOs) and associated school group levels, and at the level of the artist and teacher working together in the classroom. Quality indicators for artists working in partnership with schools (Orfali, 2004) highlight the importance of planning and preparation time for both artist and teacher: for example, the artist needs to have the opportunity to understand the school's needs, develop a relationship with the teacher and bring his/her ideas to the situation; the teacher needs to have time to tie the art into the curriculum work, and make sure that materials and resources are available; both require time for review, reflection and evaluation. Harland *et al* (2005), in their evaluation of art-education initiatives reported in *The arts-education interface*, state that the nature and extent of planning emerges as the highest profile factor for achieving teacher and artist outcomes. The extent of prior planning and opportunity for mutual discussion and review were again emphasised.

Conditions associated with successful implementation identified by Doherty and Harland (2001) included:

- effective communication

- the effective targeting of the creative activities (matching the skills available to pupils' abilities, resources, time constraints)
- strong leadership and the active involvement of the school SMT
- the extension of activities beyond a narrow curriculum base or a location identified with the arts.

These are also found, and explored in greater depth, by Harland *et al* (2005).

Participants in AAC were asked questions about support from the Creative Links Officers, which reflects planning at local authority level. Additionally, artists were asked about the effectiveness of a range of practical issues, including the arrangements for contract, payment and awareness of legal issues, which also relate to effective planning. A set of questions was included for both artist and teacher on aspects of communication, including the usefulness of information received in the early stages about the project and the quality of working together with other participants in the project. They were also asked questions on the opportunities for and effectiveness of the planning process at school and individual class level.

In relation to the implementation of ICLs in AAC, both teachers and artists were asked a series of questions about integrating the arts activities into the curriculum, the suitability of the art discipline for the curriculum topics and for the children in terms of interest and level, as well as the appropriateness of the environment and resources.

Harland *et al* (2005) reported that the role of the teacher during the intervention was seen as important, having an effect on outcomes. This includes the role of the teacher within the classroom when the artist is present, and also their contribution of ideas in preparing the ICL. Views were therefore sought on the roles of teacher and artist in devising and delivering the lessons.

Harland *et al* (2005) found that, in the view of pupils, teachers and artists, the artists' pedagogy was one of the most important factors affecting pupil outcomes. In their conclusion, they emphasised that the quality of the learning experience depends on the artist's approach to teaching and learning. This includes the quality of the artist's explanations and feedback, the use of resources, the provision of opportunities for creativity, pupil ownership of activities and the artist's flexibility to pupil needs. The relationship of the teacher and artist is also important. They suggested that previous studies had focused on organisational and managerial dimensions of arts-education partnerships; this more recent work placed emphasis on pedagogical and relational dimensions. For AAC, the artists' prior experience of working in education was investigated, as was the teachers' prior experience of and involvement in arts. Teachers were also asked to comment on working with an artist and give their view of the artist's capabilities and *vice versa*. Pupils were asked questions about working with the artist in the classroom.

Harland *et al* (2005) also found that particular pupil factors affected the pupil outcomes: for example, their previous experience of the art form and its relevance to their interests, as well as their own personal attributes, such as gender, ethnicity, and aptitude for the art form and special needs. In the AAC pupil questionnaires, a section was included on the pupils' hobbies and interests, as well as how competent they thought themselves in arts-related activities. This information was used to investigate relevant interests and prior dispositions.

In the same study, Harland *et al* (2005) found that the art product was important for the pupils – the quality of the product or performance as an outcome of the art activity. In earlier work (Harland *et al*, 2000), this had been found important for some pupils, while others valued the process of being creative. While, in AAC, the key purpose is to achieve the curricular outcomes, a question was included for the artist about the quality of the art outcome; teachers and artists were asked their views on how much they thought the pupils valued the art product or performance, where relevant.

Outcomes

The aims of the AAC project include increasing pupil achievement and motivation to learn. Another aim is to support and develop the skills of teachers to work collaboratively and creatively. There is no specific aim relating to outcomes for artists.

A number of studies focus on the outcomes or effects for pupils, teachers and artists of arts-education collaboration (Upitis & Smithrin, 2003; Harland *et al*, 2000 and 2005; and Orfali, 2004).

Pupils: Amongst the claimed outcomes for pupils, there is a major emphasis on enjoyment and a sense of achievement. There are claims that it should enhance pupils' interest and engagement in the topics to be learned and in the learning process. Analyses focus on the development of creativity, thinking and problem-solving skills, communication skills and skills for working collaboratively. Further claimed outcomes for pupils are enhanced self-esteem and increased confidence.

Teachers were asked their views on the effect on pupils, as were artists, though in a more limited way, reflecting the likelihood of their ability to comment on pupil development: for example, how pupil behaviour in the ICL compares with 'normal classes', and growth in self-esteem. Pupils were asked to respond to a similar range of issues. As noted above, data relating to pupil self-concept were gathered using the Marsh Self Description Questionnaire (section 5.1).

Teachers and Artists: Claimed outcomes for teachers include enhanced knowledge and skills, particularly in relation to the art discipline, but also in changed classroom practice (e.g. through modelling themselves on the artist). Outcomes for artists could include new awareness of teaching and classroom management styles and understanding of pupil capabilities.

The potential for outcomes in these areas relates to the starting point of both artists and teachers, hence the importance of knowing teachers' and artists' prior experiences and dispositions (as noted above). Both artists and teachers were asked to respond to a question about whether or not AAC in particular had had an effect on their knowledge, skills and practices.

Creativity: One of the expressed aims of AAC is that teachers will work more creatively. Beyond that, there is the hope and expectation that working with artists (creative people) making use of artistic (creative) approaches to deliver the academic curriculum would enhance the creativity of both teachers and pupils. Creativity is a quality which is highly sought after and a priority for Scottish education, but it is a concept that has been challenging to define in practice (IDES, 2004; Copley, 2001; Csikzentmihalyi, 1996; Greene, 1995). For the purpose of the questionnaire survey, five recognised 'dimensions' of creativity were explored in relation to opportunities for pupils to work creatively: asking questions, trying out new ideas, taking risks, learning from mistakes and contributing their own ideas. Teachers were asked about their willingness to adopt new approaches and strategies. Additionally, as mentioned above (5.1), the development of creative thinking skills was investigated through the use of the Torrance Test of Creative Thinking.

Other aims: Further aims of the AAC project include encouraging links between different areas of learning, the erosion of subject barriers and improving the ethos in schools. Teachers were asked questions on these topics in the surveys and in interviews.

6. Sampling

Details of the samples targeted and achieved for each stage of the evaluation are given in the appendices which follow. This section presents an overview of these.

6.1 Selection of schools for the evaluation

The tender documents proposed that one secondary and one of its associated primary schools from each of the 7 authorities would be included as the focus of the evaluation activities. At the outset of the project, there were 8 secondary schools and 15 primary schools participating in the project across the 7 authorities. In 2 authorities, only secondary schools were taking part. In the other 5 authorities, there were variously 2, 3 or 4 primary schools taking part. It was therefore decided to include the 8 secondary schools and in 3 of the authorities to include 2 primary schools, giving 8 primary schools in total. In the first year of the evaluation, observations were carried out, pupil questionnaires were completed and teacher interviews and pupil focus groups were held in each of these schools. In the second stage of the evaluation, the data collection focused on the same schools, although 2 secondary schools were no longer participating in the project and one primary school had only limited involvement and thought it not appropriate to be included.

6.2 Survey samples

Teachers and artists

Due to the fairly limited focus of the AAC project, all teachers and artists from the schools involved at the start of the project were invited to complete questionnaires. While some authorities introduced additional schools and artists who worked only in these schools during the course of the project, the evaluation did not include these additional participants but focused on artists and teachers in the original schools. The evaluation team were dependent on the Creative Links Officers updating them on what was happening in schools. The information that the evaluation team had was that 50 teachers took part in year 1 and 47 teachers in year 2; 30 artists took part in year 1 and 35 in year 2 (although numbers were lower for the initial questionnaires that were sent out).

Pupils

From the information supplied by the CLOs, it was estimated that during the first phase of development over 350 secondary pupils were involved, with around 270 (77%) of these in S1; around 420 primary pupils were involved, with 225 (53%) in P7. Sampling for the first stage of the evaluation was based on these numbers. A target sample of pupils was selected, based on all 8 secondary schools and 8 of the primary schools, with a sample from each stage which reflected the make-up of the participating pupil body. Within the sample a range of subjects and art disciplines was included. It was decided to include in the secondary sample the only S3 group involved at that time. As a result, the target sample for secondary pupils was 220 and for primary pupils it was 200. At the second stage of the evaluation, samples of 200 pupils for each sector were targeted. Details of year groups sampled are given in appendices B2 and C2.

The sample sizes and response rates for all surveys are given in table A2.

Table A2: Survey samples and response rates

	Target	Achieved	Response rate
Stage 1			
Artist initial questionnaire	26	19	73%
Artist second questionnaire	30	26	87%
Teacher initial questionnaire	49	36	73%
Teacher second questionnaire	50	44	88%
Primary pupil questionnaire	200	175	85%
Secondary pupil questionnaire	220	213	97%
Stage 2			
Artist 'new start' questionnaire	5	3	60%
Artist third questionnaire	35	23	66%
Teacher 'new start' questionnaire	18	15	83%
Teacher third questionnaire	47	35	74%
Primary pupil questionnaire	200	183	92%
Secondary pupil questionnaire	200	167	84%

These represent a good return rate and, although the artist return rate in stage 2 was lower, the responses are sufficient to be taken as representative.

6.3 Interviews

The number of participants interviewed is given in table A3.

Table A3: Number of AAC participants and others who were interviewed

	number of individuals
Phase 1	
CLOs and SAC staff	9

Headteachers/SMT	22
Phase 2 – stage 1	
Artists (individually)	7
Teachers (13 individually, 14 in 3 groups)	27
Pupils (in 17 groups)	112
Parents (in 6 groups)	14
Phase 2 – stage 2¹	
Artists (individually)	6
Teachers (individually)	12
Pupils (in 9 groups)	68
Parents (individually)	21
CLOs and SAC staff	9

¹ At stage 2, additional artist and teacher interviews occurred as part of the in-depth study. Members of school senior management teams were also interviewed as part of the in-depth study.

6.4 In-depth study

The schools invited to take part in the in-depth study (and who agreed) were from East Ayrshire and participation is shown in Table A4

Table A4: Involvement of schools in the in-depth study

East Ayrshire	Semi-participant observation	ICL observation and post-observation extended discussion	Group discussion
Doon Academy	planning session	ICL(s)	All schools
Dalmellington Primary	planning session	ICL(s)	
Bellsbank Primary	planning session	ICL(s)	

Four artists, 4 teachers, 3 headteachers, pupils from 3 classes and the Creative Links Officer contributed to the in-depth study.

6.5 Observations of ICLs

The aim was to carry out 20 to 25 observations of ICLs in each year of the project. In the first year, 19 observations matching the observation criteria were completed, followed by 13 in the second year (including those carried out as part of the in-depth study). Further class sessions with artists were observed in both years, but they were either preparatory or follow-up to ICLs and therefore did not constitute lessons matching the observation criteria. Additionally, arranging occasions that were suitable for all parties concerned was challenging and it was decided that sufficient evidence had been gathered and that further intrusion on schools' time and good-will was not warranted.

References

- Artist Teacher Scheme (ATS) at: <http://www.nsead.org/cpd/ats.aspx>
(accessed: June 2006)
- Barnes S and Lewin C (2005) 'An Introduction to Inferential Statistics' in B Somekh and C Lewin (2005) *Research Methods in the Social Sciences* London: Sage Publications
- Burton J M, Horowitz R and Abeles H (2000) Learning in and through the Arts: The Question of Transfer
Studies in Art Education 41 (3) 228-257
- Calder J and Sapsford R (2006) 'Statistical Techniques' in R Sapsford and V Jupp (2006) *Data Collection and Analysis* London: Sage Publications
- Chicago Arts Partnerships in Education (CAPE) at: <http://www.capeweb.org/classroom.html> (accessed: June 2006)
- Christie D and others (2004) The impact of collaborative group work in primary classrooms and the effects of class composition in urban and rural schools. *TLRP Annual Conference*: Cardiff, November 2004
- Coutts G (2004) The art and design Directory: Reaching the parts? *International Journal of Art and Design Education* 23 (1) 81- 90
- Coutts G and Hart D A (2000) Developing a multimedia resource on evaluating and appreciating in art for Scottish schools. *Art Education* 53 (1) 18 –24
- Creative Partnerships (CP) at: <http://www.creative-partnerships.com>
(accessed: June 2006)
- Cropley A J (2001) *Creativity in education and learning*. London: Kogan Page
- Csikszentmihalyi M (1996) *Creativity: flow and the psychology of discovery and invention*. New York, NY: Harper Collins
- Dancey C and Reidy J (2002) *Statistics without Maths for Psychology* Harlow: Pearson Education Limited/Prentice Hall
- Doherty P and Harland J (2001) *Partnerships for Creativity: An Evaluation of Implementation*. Slough: NFER
- Fielding N and Thomas H (2001) 'Qualitative interviewing' in N Gilbert (2001) *Researching Social Life* London: Sage
- Greene M (1995) *Releasing the imagination*. San Francisco, CA: Jossey-Bass Inc
- Harland J, Kinder K, Lord, P, Stott A, Schagen I and Haynes J (2000) *Arts Education in Secondary Schools: Effects and Effectiveness*. Slough: NFER
- Harland J, Lord P, Stott A, Kinder K, Lamont E and Ashworth M (2005) *The arts-education interface: a mutual learning triangle?* Slough: NFER
- The IDES network (2004) *Creativity Counts: A report of findings from schools*. Scotland: LT Scotland
- The IDES network (2004) *Learning, thinking and creativity: A Staff Development Handbook*. Scotland: LT Scotland
- LEAP *The Lakeview Education and Arts Partnership* at: <http://www.neiu.edu/~ctc/leap/menu.html>
(accessed: June 2006)

- Litosseliti L (2005) *Using Focus Groups in Research* London: Continuum
- Marsh H (1990) *Self-Description Questionnaire – I and II – Manuals*. Macarthur, NSW: University of Western Sydney
- National Advisory Committee on Creative and Cultural Education (1999) *All our Futures: creativity, culture and education*. London, DfEE/ DCMS
- Ogden L (2000) Collaborative Tasks, Collaborative Children: an analysis of reciprocity during peer interaction at Key Stage 1. *British Educational Research Journal* 26 (2) 211-226
- Orfali A (2004) *Artist working in partnership with schools: Quality indicators and advice for planning, commissioning and delivery*. Newcastle: ACE, North East
- Robinson R (2001) *Out of Our Minds: learning to be Creative*. Oxford: Capstone
- Scottish Arts Council (SAC) *Arts and Creativity in Education* Available at: <http://www.scottisharts.org.uk/1/artsinscotland/education.aspx> (accessed: June 2006)
- SEED (1999) *Creating our future...Minding our past: Scotland's National Cultural Strategy*. Edinburgh: Scottish Executive
- SEED (2000) *National Priorities in School Education* at: <http://www.scotland.gov.uk/education/nationalpriorities/priorities.asp> (accessed: June 2006)
- SEED (2004) *A Curriculum for Excellence* at: www.acurriculumforexcellencescotland.gov.uk (accessed: June 2006)
- Torrance, EP (2000) *Research Review for the Torrance Tests of Creative Thinking*. Bensenville, Illinois: Scholastic Testing Service
- Upitis R and Smithrim K (2003) *Learning Through the Arts: National Assessment 1999-2002: Final Report to the Royal Conservatory of Music*. Ontario: Queen's University
- Wilson M and Sapsford R (2006) 'Asking Questions' in R Sapsford and V Jupp (2006) *Data Collection and Analysis*. London: Sage Publications

Evaluation stage 1 data collection

Views of artists and teachers on initial training and support – Autumn 2006

1.	Training for Arts Across the Curriculum	18
2.	Data, other than training, from the first survey issued to artists and Teachers, mid-September 2005	24

Views of artists and teachers on initial training and support – Autumn 2006

1 Training for AAC

1.1 The training event at Peebles

A key aspect of the planning and training for the AAC project was the provision of a three-day training event, which took place at the Macdonald Cardrona Hotel in Peebles on 18-20 April 2005. This event was designed by the project managers in order to bring as many of the participants together as possible to introduce the ideas underpinning the project – the ‘Chicago model’. Twenty-one artists and thirty-one teachers attended the event and each participating local authority was represented, but some of the artists and teachers who were subsequently involved in the project were not present.

The event was attended by the American trainers, led by Jackie Murphy, who has been closely involved in the LEAP model and is Program Director at the Chicago Teachers’ Center at North Eastern Illinois University. The event was planned by the project manager in collaboration with the Creative Links Officers, Cultural Coordinators, local authority personnel and staff at the Scottish Arts Council. Before the event, participants were sent an outline of the day, together with a letter of invitation. Members of the evaluation team also attended the training sessions.

Broadly, the aims of the event were to: explain the background and context of the project; reflect on the US experience and how it could be tailored to the Scottish context; allow artists and teachers to meet and plan together and to engage in training sessions, some of which were led by the American trainers. As this was the first, and perhaps only, time that the group would meet together, the project managers aimed to ‘build a community’ or to allow people to ‘get to know each other’ as central aims of the events. The first day comprised an introduction from the Scottish Arts Council, introductory training sessions and practical sessions led by the American trainers. The second day included practical training sessions led by the American and Scottish trainers, modelled on the US approach, which focused on the roles of the artist and teacher in the classroom. This part of the training introduced the idea of the ‘Integrated Curricular Lesson’ with a presentation based on the Great Depression, a topic covered at ages 12 and 15 in US schools. It was explained that although the topic was taught in schools, the American trainers felt young people had little real understanding. The challenge was to ‘engage’ young people more in learning.

As part of the evaluation, the training sessions were observed and semi-structured interviews with the trainers from Chicago were conducted. In the later survey of the teachers and artists, questionnaires sought views on the training event and the results of that exercise are presented in section 2.2. In addition, participants were invited to make comments and pose questions at the end of the first and second days, to which the CLOs responded. The Scottish Arts Council made a video record of the training event which was later distributed to participants and local authorities.

A second event was organised on 1 June 2006, entitled ‘One Year On’, which allowed for reflection on the first year of the project.

1.2 Participants’ perceptions of the training event

A survey of artists and teachers was carried out in September 2006. The focus of the questionnaires was on background information about participants, their views on the training event at Peebles and the early stages of development of the project. The responses in relation to the Training Event are reported in this section, and the remainder of the data in section 2.

Twenty-one artists and 31 teachers attended the training event at Peebles in April 2005. Responses to the survey were received from 15 artists (71%) and 24 teachers (77%).

Meeting of training aims

The evaluation team drew up a set of statements which reflected the aims for the training event, based on reading background material and interviews with the Scottish Arts Council, the Creative Links Officers and the trainers from the Chicago Teachers' Centre, North-Eastern Illinois University. Respondents were asked to indicate how effectively these aims had been met by rating the statements on a scale from 1 to 5 (1 = not effective and 5 = highly effective).

The mean scores for both artists and teachers are presented in table b1.1.

Table B1.1 Participants' views on how effectively training aims were met

(min = 1; max = 5)

	Artist m (n=15)	Teacher m (n=24)
a. Developing an understanding of the Chicago model	3.40	4.08
b. Developing an understanding of the Scottish Arts Council's project	3.53	4.00
c. Developing an understanding of the structure of an Integrated Curricular Lesson	3.14	3.70
d. Developing an understanding of how arts generally could be used in different curricular areas/subjects	3.08	3.83
e. Seeing how my particular art discipline could be used in different curricular areas/subjects Seeing how arts could be used in my particular subject (secondary teachers)	2.23	3.36
f. Seeing how ICLs could be developed (teachers: with my pupils)	2.93	3.52
g. Seeing how arts can be used to teach non-arts concepts	3.08	4.00
h. Seeing how the artist and teacher can work together	3.07	4.33
i. Getting to know the teachers/artists I would be working with	3.87	4.29
j. Beginning to plan and work with teachers/artists	3.13	3.58
k. Getting to know other artists/teachers	3.80	3.87
l. Forming a network for support between artists, teachers and CLOs	3.47	3.71

The responses have been rank ordered and presented graphically in Charts B1.1 and B1.2. Overall the teachers responded more positively than the artists, though both groups were, for the most part, positive. For the artists the most effective aspects were getting to know the teachers with whom they would be working, getting to know other artists, developing an understanding of the SAC project and forming a network for support. For the teachers the most effective aspects were seeing how the artist and teacher could work together, getting to know the artists, developing an understanding of the Chicago model and the SAC project, and seeing how arts can be used to teach non-arts subjects. As the artists had prior experience of working in education, they were already familiar with the issues of working with teachers and integrating arts into the curriculum. For both groups, at this stage, the least effective part was in relation to the specific application of their art into the curriculum or how to apply the principles of AAC into the teaching of their pupils and their subjects.

Chart B1.1 Artists' mean scores on meeting of training aims

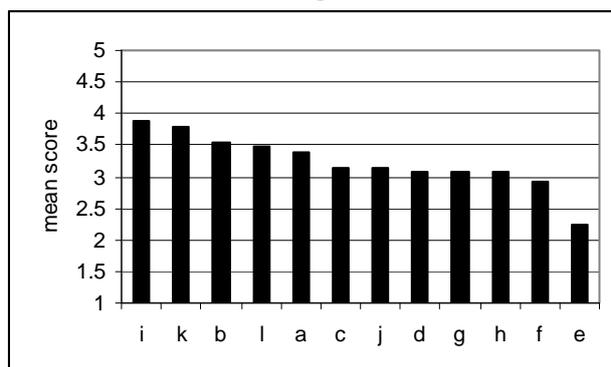
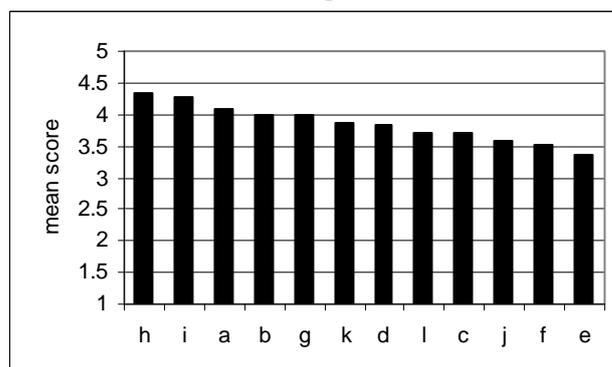


Chart B1.2 Teachers' mean scores on meeting of training aims



There was the opportunity to add comments. The artists' comments confirmed their experience of working in this context, for example:

'The reason for my responses being on the low side is because I had already worked quite a lot with schools and teachers. I felt it was assumed I had no experience'.

Other comments related to the items scored more negatively, for example, 'very strong performing arts bias, visual arts virtually non-existent in the training' (several commented along these lines). The teachers did not add many comments at this point. Some indicated that it was worthwhile and enjoyable and they would have liked more time planning with the artist and getting to know other teachers.

Usefulness of aspects of the training

Teachers and artists were asked to rate how useful they had found certain aspects of the training days (5 = very useful and 1 = not at all useful). The mean scores for both artists and teachers are given in Table B1.2.

Table B1.2 Views on usefulness of aspects of the training event

(min = 1; max = 5)

	artist m (n=15)	teacher m (n=24)
a. Icebreaker sessions, eg making badge, warm-up	2.80	2.83
b. Presentations by US trainers	3.20	3.79
c. Workshop session on teaching about the Depression	3.27	3.96
d. Role plays by US trainers on teacher and artist working together	2.73	3.38
e. Joint local authority sessions with artists and teachers	4.21	4.21
f. Creativity challenge – promoting a school that uses arts across the curriculum	2.40	3.63

The responses have been rank ordered and are illustrated in charts B1.3 and B1.4

Chart B1.3 Artists' mean scores on usefulness of training activities

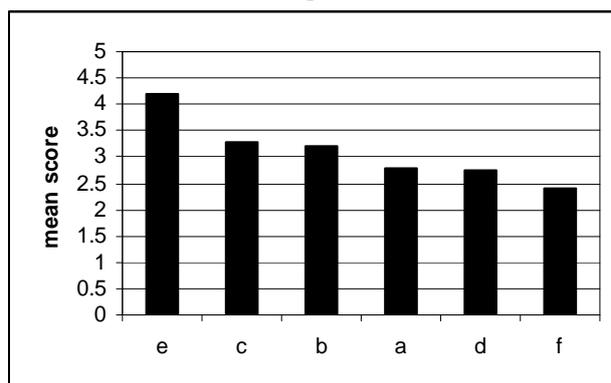
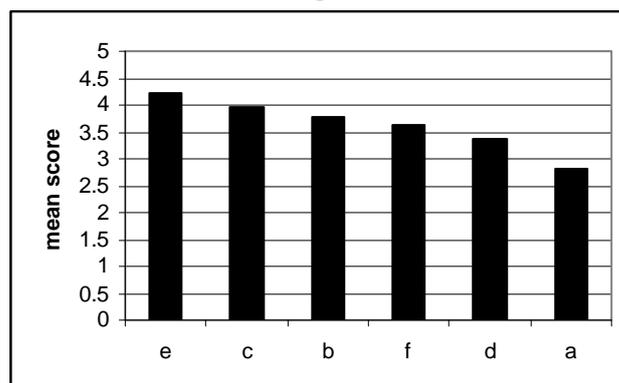


Chart B1.4 Teachers' mean scores on usefulness of training activities



Both artists and teachers agreed that the joint sessions with teachers and artists from the same authority was the most useful aspect of the training event, which reflects the strong agreement of the benefits of working with each other, as reported above. On the other items the teachers were more positive than the artists.

In the open-ended comments, the artists again mentioned that there had been too much emphasis on performance aspects, with insufficient emphasis on the process. Some suggested that more use could have been made of the Scottish artists who were present, for example:

'There was a staggering amount of creativity and talent that was not utilised to its maximum. We could have created and achieved so much more.'

Another comment emphasised the benefits of working with the teachers:

'I thoroughly enjoyed the sessions working with designated teachers to experience their concerns, fears and enthusiasm.'

The teachers also referred to the joint sessions, indicating that they helped remove reservations.

Outcomes of the training event

The respondents were asked to agree/disagree with statements in relation to the outcomes at the end of the training event (strongly agree = 4 to strongly disagree = 1). As numbers of respondents are low, the results have been presented as mean scores rather than percentages. The results are given in table B1.3 and in charts B1.5 and B1.6.

Table B1.3 Agreement with achievement of outcomes of training

(min = 1; max = 4)

At the end of the training, I felt that	artist m (n=15)	teacher m (n=24)
a. I was well equipped to start working on the project	2.85	2.96
b. evidence of the effectiveness of the arts-infused curriculum had been well presented	2.47	2.79
c. the theoretical underpinning of how such interventions supported teaching and learning had been explored	2.27	2.83
d. there had been sufficient opportunity to discuss questions and issues	2.21	3.13
e. questions I had about the project had been adequately answered	2.43	3.12
f. my perceptions of teachers/artists had changed	2.00	2.48
g. I had discovered I had talents and skills of which I was not previously aware	1.73	2.43

Chart B1.5 Artists' mean scores on agreement of achievement of outcomes of training

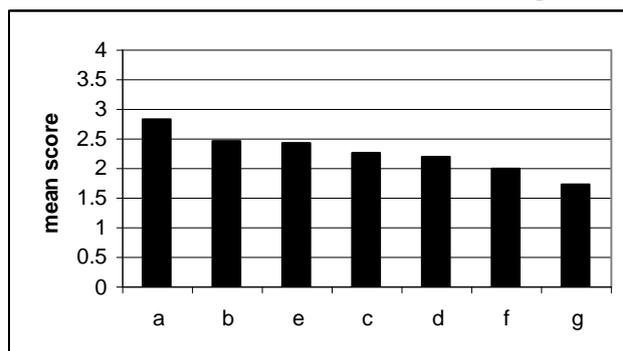
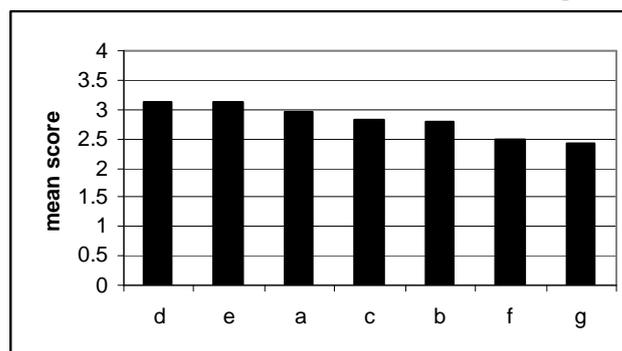


Chart B1.6 Teachers' mean scores on agreement of achievement of outcomes of training



Overall, the teachers were more positive about achieving the outcomes of the training event. Notably, they agreed more than the artists that there had been opportunity to discuss questions and issues (d) and that questions had been answered (e). While, for both artists and teachers, the last two items – (f) changed perceptions of each other and (g) raised awareness of talents and skills – produced less agreement than the other items, teachers were more in agreement with these than the artists. Artists' comments on teachers were split between those who said they had worked before with teachers and did not find anything surprising and those who indicated they had gained new insight. For example:

- *'teachers are often very creative themselves and I would see the creativity in the project as a joint role as opposed to the territory of the artists'*
- *'... their openness and vulnerability about the project was good to hear and see'*
- *'... my teachers were very open and fearless'*
- *'... much more creative than I had previously recognised'.*

The teachers who indicated that their perceptions had changed explained that anxieties had been alleviated when they met the artists, for example

- *'My perception was that the artists would be "the experts", where in fact they had similar questions to myself. I felt more positive about being able to work truly co-operatively.'*
- *'They were actually more concerned about how the relationship would work than the teachers. Would the teachers' expectations be too great about what they could deliver?'*
- *'I felt comfortable with artists and appreciated their points of view and their apprehension about teachers and involvement in schools.'*

The majority commented that they valued the input of artists. Observations were that the artists were 'highly inspirational' and 'enthusiastic', able to 'quickly create good ideas out of the simplest concepts in science'.

1.3 Interview data on views on training at Peebles

Teachers and artists were interviewed between February and May 2006. They were asked to reflect on the training retrospectively, in the light of their experience of putting ICLs into practice. They were asked to focus on benefits of the training and what had been lacking.

In addition to the benefits of meeting artists and other teachers, as emphasised in the questionnaire data, teachers spoke of being inspired, gaining confidence, being put in the position of a learner and having their comfort-zones challenged. It was suggested that it had been reassuring to have seen, in the US artists' presentations, some of the snags that the Americans had come across and which, in practice in Scotland, they had also come across, such as 'artists and teachers tip-toeing around each other, not wanting to tread on each others' toes ... and as a result things didn't work at first.'

Views on what had been lacking included:

- detailed information about how the programme was applied in Chicago, eg, the age of the children, how many schools were involved, whether all the classes in a school took part

- seeing it working with children – some teachers suggested that they would have liked to see videos of the US trainers working with children.

The views already expressed in response to the questionnaire about the limited range of art forms presented and the lack of opportunity to relate the ideas to a wider range of subjects were re-emphasised. For example, one teacher expressed the view that questions about the practical application of certain approaches within the confines of the classroom 'were swept under the carpet'. Several spoke of not being clear at the end of the training as to how it was all going to work – they just had to go away and try it! One reported that it was '6 months into the project before I got a clear idea of what it was about.' One teacher expressed disappointment: the training had provided expectations of having a range of artists and a variety of art forms, but the reality had been working with the same art form all the time.

A small number indicated that they had been uncomfortable being videoed, apparently without permission being sought. One described the event as 'Big Brother meets Fame Academy and you didn't know why you were on it'. Similar views were expressed by the artists, who felt the videoing had been intrusive. Clearer explanation of everything that was happening would have been appreciated.

At interview, the artists re-emphasised the benefits already identified about the opportunity to meet teachers and other artists, being put in the position of a learner, and seeing how the Chicago team planned and worked with teachers. One commented '... normally I would not allow myself the time to meet artists from across Scotland'. The message about making greater use of the Scottish artists to run workshops was again emphasised, as was the point about giving more time to plan how they were going to apply the approach in the Scottish context.

One further suggestion was made by an artist, in the light of the experience of working in schools. It was proposed that it would have been beneficial if headteachers or secondary heads of departments/principal teachers could also have attended the training, or have been given the opportunity to gain a better understanding of the project.

'Some principal teachers were really good and supportive but other PTs did not want to know. So the teachers were left on their own with us to try to organise rooms and timetables and that's difficult for them.'

1.4 Other training and support

In the first survey, artists and teachers who had not attended the event at Peebles were asked what training they had received to prepare for taking part in the project. (Four artists and 12 teachers who responded to this survey had not attended the event.)

Most of the artists indicated that they felt that their existing experience prepared them and they were already well equipped to take part. One artist indicated that more training would have been helpful at this stage – for example, video clips of an ICL in action and reading materials. Most of the teachers had had a brief introduction, usually from a teacher or teachers who had attended the training.

Throughout the year more artists and teachers joined the project and these had clearly not attended the initial training nor completed the first questionnaire. The second survey did not specifically address this issue, but in the open-ended comments a small number of artists indicated that they had not been part of the initial training and they would have benefited from more detailed information about what the project was aiming to achieve. Some examples of this are:

- *'I had no idea about what to do before the lessons started. Neither myself nor the teachers involved had any training. Trying to work out what and how to deliver has been my biggest challenge. It has all worked out but I would definitely have preferred training before sessions and clearer explanation on how to assess and evaluate groups.'* (Artist)
- *'Involvement in initial training days would give an awareness of the overall theory of the project.'* (Artist)
- *'More support (real contact). Felt very much as if we were staggering along rather blindly at first.'* (Artist)

All of the artists interviewed had attended the training event. Most of the teachers who were interviewed had also attended. However, a small number had not, and they reported having received limited information about the project. Some had had individual meetings with the CLO to explain the project; for others, their main source of information was other teachers. Some had been given the DVD of the event, but not all had looked at it. Although these points were raised by a small number of participants, they suggest that more time spent on helping new participants understand what the project is about would be helpful.

1.5 Summary of participants' perceptions of training

The survey data indicate that the training event was generally well received by both teachers and artists. At interview, teachers used positive terms such as 'highly inspirational', 'growing confidence', 'being put in the position of learner' and having their 'comfort-zones challenged'. The joint sessions where artist and teachers were able to work together in local authority groups were particularly well received. Key benefits as perceived by the teachers included seeing how the artist and teacher could work together and developing an understanding of the Chicago model and the SAC project and, critically, exploring how the arts might be used to teach non-arts subjects. According to both teachers and artists, an important aspect was the wealth of talented Scottish artists gathered together for the training event. However, both groups reported that the least effective part of the training was about the specific application of the arts into the curriculum and how to apply the principles of AAC to teaching pupils and school subjects.

Overall, the teachers responded more positively than the artists. For the artists the most positive aspects of the training were getting to know the teachers with whom they would be working and forming a network for support. Many of the artists reported that they already had experience of working in an educational context and that the artists' talents could have been utilised more in the training event.

Both in response to the surveys and at interview, artists and teachers who had not attended the training event reported receiving limited information about the project and some indicated that they would have found more information and initial support helpful.

Responses to the questionnaire and evidence from the interviews raised issues for consideration. There was a perceived bias towards the 'performing arts' (e.g. dance and drama) at the training. Teachers said that they would have liked more detailed information about the Chicago model, how it could be contextualised for the Scottish education system and to see how it worked with children. In addition, an artist suggested involving a wider range of staff in the training, e.g. principal teachers or members of the senior management team, arguing that this might have been beneficial in developing an understanding of the project in schools. Induction and support, particularly for those starting the project without the benefit of attending the training event, should also be given some consideration.

2. Data, other than training, from the first survey issued to Artists and Teachers mid September 2005

The responses of participants at the training event have been included in Chapter 2 of the report. This appendix presents the data from the other questions.

2.1 The Teachers

Thirty-one teachers attended the Peebles event but by time of issuing the questionnaires the list had grown to 49, based on information from schools and CLOs. Therefore 49 questionnaires were sent out. Returns were received from 24 of the 31 at Peebles (77%); in total 36 responses out of 49 were received (73%). Eight of the non-respondents had not been at the training, nor had they started on the project, so the real target was 41, giving a return of 87%.

Fourteen of the respondents were secondary teachers and 22 were primary teachers. There were 3 male teachers – 2 secondary and 1 primary. The main subject areas taught by the secondary teachers were:

- Science – 5

- English – 3
- Maths – 3
- Music – 1
- Art and Design – 1
- SEN – 1

The length of time they had been teaching was wide ranging, with teachers from both sectors represented in each time-span:

- 11 had been teaching for 5 years or less
- 7 had been teaching for between 6 and 10 years
- 7 for between 11 and 15 years
- 14 for more than 15 years.

Teachers were asked to comment on their own skills and participation in the arts. This question was asked to try to identify the extent to which those who had been selected to take part or who had volunteered were ‘arts-oriented’. This might indicate the ease with which they adapt to working with an artist.

Table B1.4 Teachers’ perceptions of their skills/participation in arts activities

	SA	A	D	SD	m (sd)
I think I am a creative teacher and like to try out new ideas with my pupils	14	19	3	0	3.31 (0.62)
I think of myself as being a creative person	9	20	7	0	3.06 (0.67)
I have strong artistic abilities	5	15	14	1	2.69 (0.76)
I participate in the arts on a regular basis (eg attend theatre, concerts, art galleries, exhibitions)	3	21	9	3	2.67 (0.76)
I actively participate in the arts in a support role (eg I help with a drama group, music group)	2	7	15	11	2.00 (0.87)
I actively participate in the arts as a performer (eg I am a member of a drama group, music group, art group)	1	10	12	13	1.97 (0.88)

Comments made by teachers in relation to this question were:

- *‘I try to use a kinaesthetic approach in some lessons to consolidate previous work. I have found this to be both successful and unsuccessful’*
- *‘I enjoy involvement in the arts and have piloted new schemes but I have to be ‘fed’ material’*
- *‘I do not think I’m a creative teacher but I do like to try out new ideas along with my old ones’*
- *‘I don’t think that I’m particularly creative within the ‘Expressive Arts’ of 5-14. However, at times I do consider myself quite creative in other areas of the curriculum’.*

When asked about their first impressions on being invited to participate, teachers’ responses were similar to those of artists: ‘intrigued’, ‘excited’, ‘looking forward to it’, ‘interested to find out more’, ‘anticipating the challenge positively’, ‘intrigued mostly and open minded as almost no info was forthcoming’. Others expressed initial reservations: ‘intrigued by concept, worried about logistics’, ‘terrified! I feel this area to be a weakness of mine and was worried that I might be seen as inadequate’, ‘I was excited and a bit apprehensive as to what it would involve. I worried that it might involve much more work’ and ‘the information I received was vague but the project sounded interesting and I was willing to get involved’.

Communication and networking

Note: as some teachers had not yet started working on the project, there are missing responses in both of the following tables.

Respondents were asked to indicate how effective they considered certain **aspects of communication** across the project had been (5 = highly effective; 1 = not effective). Teachers’ views are given in table B1.5.

Table B1.5 Teachers’ views on effectiveness of communication in early stages

	Highly Effective		←————→			Not Effective	
	5	4	3	2	1	m (sd)	
Establishing regular contact with the artists(s)	11	10	5	1	2	3.93 (1.16)	
Ongoing communication with Creative Links Officers (CLOs) or Cultural Co-ordinators (CCs)	7	13	7	0	2	3.79 (1.05)	
The information received about the training event, prior to the event	3	9	9	3	2	3.31(1.09)	
The information received about AAC in the introductory stages	3	9	14	2	4	3.16 (1.11)	
Information and publicity circulated by SAC	0	8	10	5	4	2.81 (1.04)	
Information about AAC developments in other local authorities	0	1	8	7	12	1.93 (0.94)	

Comments included:

- *'Info had not been passed through proper channels'*
- *'I have not heard about AAC in other schools in my authority, let alone in others'*
- *'My particular artist is a brilliant communicator. I see her the day for my classes and she pops in later in the week to discuss/plan next lesson'*
- *'I have not seen or read about publicity from SAC'.*

An important aspect of AAC is **working together with other people**. Respondents were asked to indicate how important each of the following people had been in taking the project forward in the early stages (5 = very important; 1 = no role to play).

Table B1.6 Teachers' views on importance of others' roles in the early stages

	Very Important		←————→			No role to play	
	5	4	3	2	1	m (sd)	
Artists from own authority area	20	4	5	0	1	4.40 (1.00)	
CLO/CC from own authority	15	8	4	1	1	4.21 (1.05)	
HT/other school management	6	7	10	5	3	3.26 (1.24)	
Fellow teachers in own school	4	4	8	8	6	2.73 (1.31)	
Other local authority staff from own authority	3	4	4	3	12	2.35 (1.45)	
Teachers from other schools	1	5	4	7	12	2.17 (1.27)	
Artists from other authority areas	2	3	4	2	17	1.96 (1.38)	
CLO/CC or other authority staff from other authority areas	0	2	3	3	20	1.54 (0.96)	

Sector differences

Data were analysed using the Mann-Whitney non-parametric test to see if there were any differences between respondents in primary and secondary sectors. No significant differences emerged.

2.2 The Artists

26 questionnaires were sent out to artists: 19 of the 26 were returned = 73%.

The art disciplines represented by the artists who responded were: dance (4), drama/acting (3), music (2), film/media (2), crafts, eg silversmithing (2), visual arts (1), writing (1). Four artists reported that they worked in combinations of art forms, eg drama and media, performance and visual arts, mixed media and textiles.

There were 11 female and 8 male respondents. The length of time they had been practising their art discipline varied:

- 2 indicated 5 years or less
- 5 indicated between 6 and 10 years
- 4 between 11 and 15 years and

- 8 more than 15 years.

All had already worked in a school context.

When asked about their first impressions on being invited to participate, most recorded that they were excited and challenged by the project; other terms used were 'delighted', 'excited, intrigued, nervous, enthusiastic'.

Communication and networking

Respondents were asked to indicate how effective they considered certain *aspects of communication* across the project had been (5 = highly effective; 1 = not effective).

Table B1.7 Artists' views on effectiveness of communication in early stages

	Highly Effective		←————→			Not Effective	
	5	4	3	2	1	m	
Ongoing communication with Creative Links Officers (CLOs) or Cultural Co-ordinators (CCs)	5	6	5	0	3	3.53 (1.35)	
Establishing regular contact with the teacher(s)	3	8	4	1	3	3.37 (1.30)	
The information received about AAC in the introductory stages	1	7	8	2	1	3.26 (0.93)	
The information received about the training event, prior to the event	1	4	9	2	3	2.89 (1.10)	
Information and publicity circulated by SAC	0	1	9	5	4	2.37 (0.90)	
Information about AAC developments in other local authorities	0	0	2	8	8	1.67 (0.69)	

Additional comments were:

- *'At the point of attending the training event in Peebles I knew very little about the project. I do not feel I was given enough information beforehand to seriously consider if I wanted to be involved or not'*
- *'Only aware of AAC developments through speaking to friends – nothing official'.*

An important aspect of AAC is *working together with other people*. Respondents were asked to indicate how important each of the following people had been in taking the project forward in the early stages (5 = very important; 1 = no role to play). Note: 5 of the artists did not respond to this question as they had not yet started work in schools.

Table B1.8 Artists' views on importance of others' roles in the early stages

	Very Important		←————→			No role to play	
	5	4	3	2	1	m (sd)	
Teachers in the school(s)	10	4	0	0	0	4.71 (0.47)	
CLO/CC from authority/ies in which I work	8	5	0	0	1	4.36 (1.08)	
HT/other school management	5	3	4	0	2	3.64 (1.34)	
Other artists involved in the AAC project	6	1	3	0	4	3.36 (1.74)	
Other local authority staff from authority/ies in which I work	1	3	2	3	5	2.43 (1.40)	
CLO/CC or other authority staff from authority areas with which I do not work	0	0	3	3	8	1.64 (0.84)	

Further comments included:

- *'I am very happy so far with the communication and collaboration on a local scale, but since the Peebles event have had no contact outwith this'*
- *'It would be wrong to say individuals outwith the area I am working in have completely no role to play. It is always useful to discuss projects with individuals outside project, something useful may come out of it'.*

2.3 Summary

The teachers at the outset of the project considered, for the most part, that they were creative teachers and people and around half thought they had strong artistic abilities. The artists all had previous experience of working in schools.

In the early stages of the project, both artists and teachers were, on the whole, positive about the role of CLOs, with the majority indicating that ongoing communication with CLOs had been effective. Three-quarters of the teachers thought that the CLOs had played an important role in taking the project forward in the early stages, although only around two-thirds of the artists thought this.

A few artists and teachers had found establishing effective communication with each other difficult in the early stages but, understandably, each found the other the most important partner in introducing the project, followed closely by the CLOs. Very few were aware of what was happening in the project in other authority areas.

Evaluation stage 1 data collection

Evidence from pupil surveys and focus groups

1.	Introduction to stage 1 pupil surveys	30
2.	The pupil sample for stage 1 surveys	31
3.	Overview of results from pupil surveys	33
4.	Results of pupil surveys	35
5.	Pupil focus groups	48
6.	Summary	56
7.	Note on inferential statistics	57

Evidence from pupil surveys and focus groups

1. Introduction to stage 1 pupil surveys

A sample of pupils (see section 2) was asked to complete a questionnaire that was aimed at capturing the pupils' views soon after their first experience of ICLs. These were phased in at different times across the authorities and, in some cases, with different teachers and classes being introduced during the course of the year. As a result some pupil questionnaires were administered soon after the October holiday 2005 and others in January 2006. One class was surveyed in April 2006.

The questionnaires were designed to suit the age and stage of the children. Three questionnaires were used – one for P3 and P4, one for P5 and P6 and one for P7 to S3. The main differences are fewer questions for the younger children and they were asked whether they 'agree' or 'don't agree' with statements, while from P7 on they were asked to rate their agreement on a 4-point scale from 'agree a lot' to 'disagree a lot'. The questionnaire used the terms 'art' and 'artist' but during the administration it was emphasised that this was talking about what they were doing with the specific named artist, and it was not about drawing and painting!

All were asked an open question about what they thought they were learning when the artist and teacher were working together in the classroom. The purpose was to elicit the degree to which the children thought they were learning about their school subject, the art discipline or both.

Pupils were then asked to respond to a set of statements about the lessons, which covered the broad themes of:

- engagement with, and enjoyment of, learning (these terms are used in preference to the term 'motivation' in order to focus more clearly on what we understand 'motivation' to mean in this context)
- effectiveness of the learning experience
- working creatively
- working with others
- developing confidence

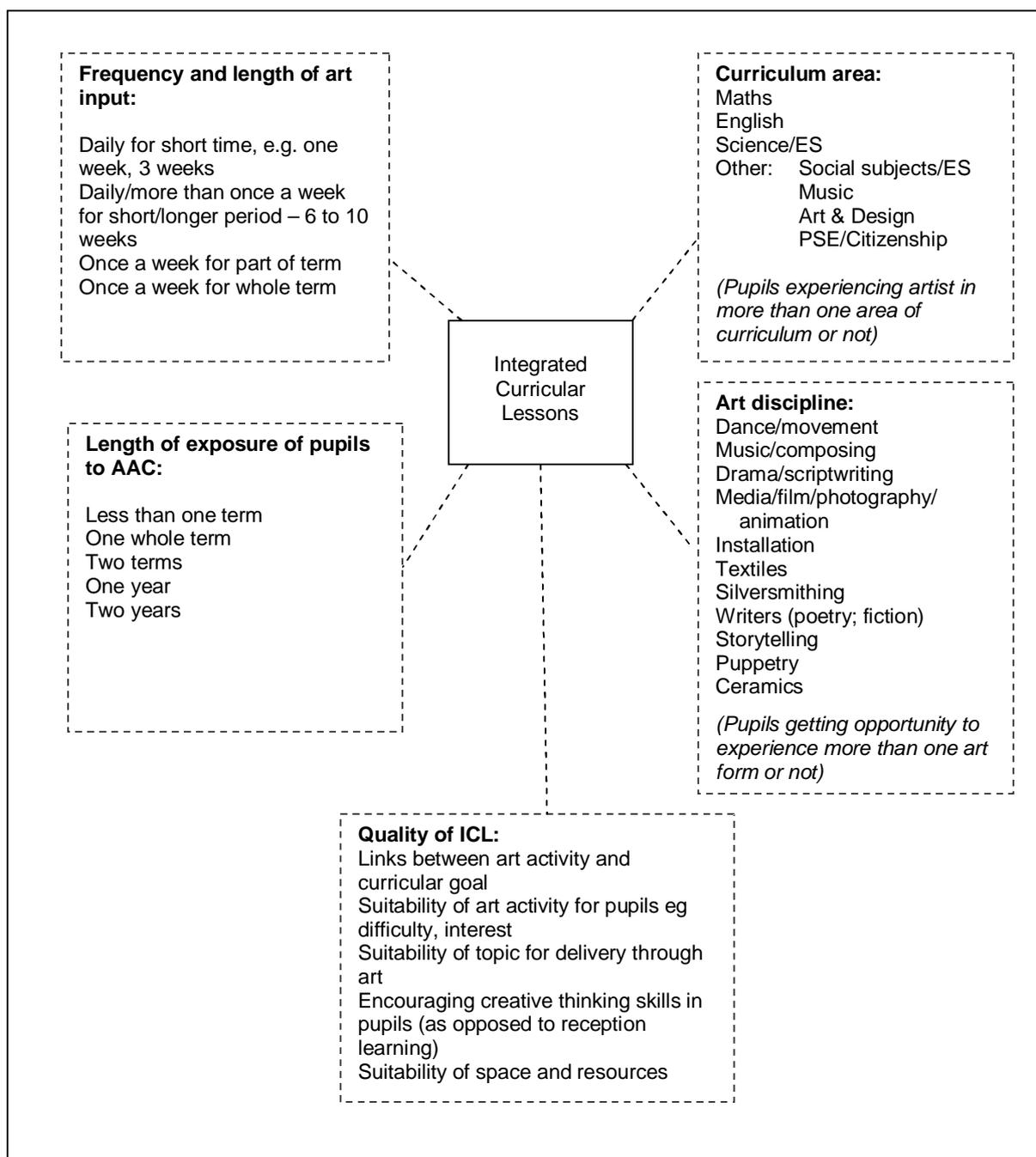
The older pupils were asked to comment on what they liked most and, if relevant, what they liked least about these lessons.

Diversity of implementation of ICLs

The way in which ICLs were implemented varied from authority to authority and, in some cases, from school to school. The variables included the frequency and length of the art input, the length of time a group of pupils participated in AAC, the curricular area chosen, the art discipline of the artist(s) engaged by the authority and the inherent qualities of the ICL. Some of this diversity has been represented in figure B2.1 on the next page.

As a result of this variety, pupils across the country have had very different experiences. This considerable diversity also means that, at this stage of the evaluation, the task of identifying which combination of factors might be most effective was difficult. The common element was that teachers and artists had worked together with pupils to explore some aspects of the curriculum.

Figure 2B.1 ICL variables



2. The pupil sample for stage 1 surveys

At the outset of the project there were 8 secondary schools and 15 primary schools participating in the project across the 7 authorities. In 2 authorities, secondary schools only were taking part. In the other 5 authorities there were variously 2, 3 or 4 primary schools taking part. In the secondary schools (except one), more than one teacher and class were involved; in most primary schools one teacher and one class was involved, although in at least 2 more than one teacher became involved from the outset. As the project progressed, in one authority, several teachers and classes within each primary became involved.

In 7 of the secondary schools the work focused on S1 classes; in the eighth secondary S2, S3 and S4 classes took part. Between August and December 2005, in the primary schools there were 9 P7 classes involved and 8 other classes including P3, P4, P5 and P6. The number of pupils in each class was made available for most, but not all, classes. It was estimated that during the first phase of development over 350 secondary pupils were involved, with around 270 (77%) of these in S1; around 420 primary pupils were involved, with 225 (53%) in P7. (During January to April 2006 more classes at both primary and secondary level became involved, particularly in the local authority mentioned in the last paragraph. However, these numbers have not been included in the above figures, which served as the base for the survey sampling.)

Several school subjects were addressed. In secondary schools the focus was mainly on English, maths and science, although there were occurrences of modern studies, music and art and design. In primary schools the focus was on maths and a range of environmental studies topics, with some aspects of language included.

The arts disciplines included dance, drama, crafts (such as ceramics and jewellery making), visual arts (such as installation and representation) and media-related activities (such as video-making, photography and animation). Dance artists commented that they would describe what they were doing as 'movement' rather than dance, as they were not creating 'dance pieces'. Also, observations of lessons and descriptions from pupils, artists and teachers suggest that, in some instances, the ways in which dance and drama practitioners applied their art to the curriculum may have been similar.

A target sample of pupils was selected, based on all 8 secondary schools and 8 of the primary schools, with a sample from each stage which reflected the make-up of the participating pupil body. Within the sample a range of subjects and art disciplines was included. The different aspects of the sample are given in Tables B2.1 to B2.4.

Table B2.1 Pupil target and achieved samples by year group

	Target	Achieved	Return
S1	200	195	97.5%
S3	20	18	90%
Total secondary	220	213	97%
P7	100	86	86%
P6	31	23	77%
P5	26	26	100%
P4	23	15	65%
P3	20	20	100%
Total primary	200	170	85%

Table B2.2 Pupil responses received in the different subject areas

	English ¹	Maths	Science	Art	ES: Soc ¹	PSE	Tot
S3				18			18
S1	72	75	48				195
Total secondary							213
P7		19	20		47		86
P6					23		23
P5		26					26
P4						15	15
P3			20				20
Total Primary							170

¹ No separate treatment of aspects of English in primary classes was included in the survey. However, writing was included along with social subjects in some cases.

Table B2.3 Pupil responses received by art discipline

	Dance	Drama	Media	Craft	Visual arts	Dance and media	Total
S3		18					18
S1	59		28	22		86	195
Total secondary							213
P7	19	15		20	32		86
P6			23				23
P5	26						26
P4		15					15
P3	20						20
Total primary							170

Table B2.4 Pupil responses received by the combinations of subjects and art disciplines

	S3	S1	P7	P6	P5	P4	P3
Art and drama	18						
English and craft		22					
English and dance & media		50					
Maths and dance		47	19		26		
Maths and media		28					
Science and craft			20				
Science and dance		12					20
Science and dance & media		36					
ES soc and drama			15				
ES soc and media				23			
ES soc and visual arts			32				
PSE and drama and ICT						15	
Total	18	195	86	23	26	15	20

3. Overview of results from pupil survey 2006

This section provides an overview of some key points across all year groups. A more detailed analysis of the survey findings is given in sections 3.5 and 3.6.

What they thought they were learning

Over the whole sample the following responses were given:

- subject only mentioned 40%
- art only mentioned 16%
- both mentioned 26%
- other responses 18%

The majority of pupils had a clear view that they were learning their curriculum topics, with about a quarter mentioning learning about both the art and the subject. Overall 66% mentioned the subject and 42% mentioned the art. Only 16% focused solely on learning about the art. Other responses encompassed those who said they didn't know or were not sure what they had been learning and a range of comments about learning to use their imaginations and be creative, working with others and learning that learning could be fun.

Views about the classes with the teacher and artist working together

A selection of the statements from the questionnaire on which pupils were asked to indicate their agreement is presented here, drawing from the whole sample. The percentage agreement (combining 'agree a lot' and 'agree a little' for the P7 to S3 questionnaires) with these statements is:

- **Interest, enjoyment and engagement with learning**

- 90% I think having the artist in the classroom made the subject more interesting
- 81% I looked forward to the lessons when the artist and teacher worked together
- 86% I found that the time seemed to pass more quickly in these lessons*

- **Help with learning**

- 84% I found it easier to learn the topic because of the way it was explained
- 73% I found I could remember the ideas more easily*

- **Encouragement to be creative**

- 73% It made me want to try out new ideas and be more imaginative*

- **Feeling confident**

- 67% The things we did made me feel confident*

(* P3/P4 pupils were not asked these questions, therefore these percentages are based on P5 to S3 figures.)

These suggest a strongly positive response to the ICLs, in terms of pupils' perceptions of enjoyment and help with learning. Fewer pupils agreed that the activities made them feel confident: this could be because they already felt confident, or in some cases they may not have liked participating (see page below on comments about what they did not like).

Open-ended comments

Pupils from P7 to S3 were asked what they liked most about working with the artist and the teacher and what they liked least, if anything. Almost all the pupils wrote in something that they liked, while less than 40 (13%) of the P7 to S3 group indicated that there were things that they did not like.

The largest number of comments (over one-third) referred to the work being fun, interesting, exciting or different, which reflects the findings of other studies (Harland *et al*, 2002; Harland *et al*, 2005).

Examples of comments are:

- *It made things easier and more fun (P7 boy)*
- *All the lessons seemed more fun (P7 girl)*
- *We did fun things and time flew (P7 girl).*
- *It was really fun (S1 girl)*
- *We got to learn science in a more fun and active way (S1 girl)*
- *I looked forward to it more than normal lessons, people were better behaved and it was fun with all the actions (S1 girl)*
- *It was exciting and more fun to learn (S1 girl)*
- *That it was fun and [the artist] was cool (S1 boy)*
- *You were allowed to do cool things without being shouted at (S1 boy)*
- *I liked having more excitement in the class (S1 boy)*
- *We could do more things in class, giving more ideas to people and having fun (S3 boy).*

About a quarter referred to enjoying the specific art activity like dancing, doing drama, making things or using cameras and equipment.

A number of references were made to the benefit of having two or more adults in the class to help, for example:

- *When the artist and the teacher worked together they came up with good ideas (P7 girl)*
- *I thought I learned more with two people (S1 boy)*
- *There were more teachers to help and encourage me with my ideas (S3 girl).*

Several pupils, especially in S1, indicated that they liked not having to do 'ordinary work' like sitting writing. Several suggested that 'you didn't need to work' – you 'just danced' or 'ran about' or 'you talked about things' or 'you got to carry on and jumped about'.

A small number indicated that what they liked most was that they thought they had learned better. For example

- *It was easier to understand what they were meaning* (P7 girl)
- *In my test I thought about the different things we got and it helped me* (S1 girl)
- *It was easier to understand the topics* (S1, gender not given)
- *I liked that I was better at maths* (S1 girl)
- *I learned more about science* (S1 boy).

However, one declared: *'I didn't understand it but it was good'* (S1 girl).

Of those who indicated that there were things that they didn't like, six said 'everything' and, indeed, some of them had said that what they liked best was 'when the bell went'. The others fell mainly into three categories: dancing, movement, exercise and acting because they felt stupid; the artist reprimanding them; and when other pupils showed disruptive behaviour. For example:

- *I felt pure STUPID* (S1 boy)
- *She made us do 'stuff' we did not like* (S1 boy)
- *When he shouted at us* (S1 girl)
- *There were 2 people to give us into trouble* (S1 girl)
- *When the artist 'gave us into trouble'* (P7 boys and girls)
- *When others in the class talked and didn't listen* (S1 girls).

Further comments included:

- *We spent too much time having fun and not learning enough* (S1 girl)
- *Not getting on with normal work* (S3 boy).

It is evident that a small number of pupils did not enjoy or gain as much from their experience as their classmates.

4. Results of pupil surveys

4.1 P3 and P4 pupils

Questionnaires were returned from 35 P4 and P5 pupils. There were 13 (37%) boys and 22 (63%) girls. They represented 2 classes from 2 schools. One group had worked with a dancer on a science topic and the other had combined drama with a PSE topic and ICT. The results are presented together, but where differences were noted between the two classes they have been reported. However, any differences need to be treated with caution as factors other than the art or curriculum topic may underlie them.

What they thought they were learning

All the children completed this question. Their responses were

- subject only mentioned 12 (34%)
- art only mentioned 8 (23%)
- both subject and art 10 (29%)
- other 5 (14%)

A small majority had a clear focus on the curricular learning, but a similar number indicated that they had been learning about both subject and art. Other comments were 'not to be shy' (girl) and 'to get better at group working' (girl/boy).

Views about the classes with the teacher and artist working together

The concept of 'engagement with learning', as we have used it in this evaluation, draws together the ideas of being interested, on task and enjoyment. Behaviour is included, as disruptive behaviour by some can diminish the enjoyment of the learning for others and be a distraction.

Table B2.5 P3 and P4 pupil views on engagement with and enjoyment of learning²

	Agree	Disagree	Don't know
I looked forward to the lessons when the artists and teacher worked together	33 (94%)	1 (3%)	1 (3%)
I think that having the artist in the classroom made the topic more interesting	31 (89%)	3 (9%)	1 (3%)
I wanted to work longer on the tasks in these lessons	31 (89%)	3 (9%)	1 (3%)
Pupils were better behaved when we had an artist and a teacher in the classroom	29 (83%)	3 (9%)	3 (9%)
We should have artists in more classes	26 (74%)	5 (14%)	2 (6%)
Some pupils did not like working with the artist	14 (40%)	15 (43%)	6 (17%)

Note: the statements were customised to refer to the specific topic covered and the artist's discipline.

The pupils reported strong agreement that working with the artist was interesting and something they enjoyed. It is interesting that 83% agreed that behaviour was better. During the pupil focus groups some commented that it was good to have extra adults in the class to help them learn, and this may have had an impact on their perceptions of behaviour in the class.

Table B2.6 P3 and P4 pupil views on the effectiveness of the learning experience

	Agree	Disagree	Don't know
I found it easy to learn about (topic) because we had the artist helping us	27 (77%)	5 (14%)	3 (9%)
I think my work was better in these lessons	27 (77%)	5 (14%)	3 (9%)
I learned new things about drama/dance	31 (89%)	2 (6%)	2 (6%)
I learned what I could do better	29 (83%)	5 (14%)	1 (3%)
I learned what I was good at	23 (66%)	7 (20%)	5 (14%)

The majority indicated that they thought they were learning better, which may reflect their enjoyment of the experience. Their responses indicated slightly less certainty about discovering what they were good at, though more felt they had learned what they could do better.

Table B2.7 P3 and P4 pupil views on working creatively

	Agree	Disagree	Don't know
I tried new things I had never done before	30 (86%)	2 (6%)	3 (9%)
I was able to talk about my own ideas	29 (83%)	3 (9%)	3 (9%)

Again, the majority identified that they had the opportunity to try new things and that they had the opportunity to talk about their own ideas.

The P3 and P4 pupils were presented with one statement about **working with others** – 'The things we did help me to work with other pupils in the class'. Their responses were:

- agree 26 (74%)
- disagree 5 (14%)

² In the tables in the chapters reporting survey results, missing responses are not reported, but account for cases where the total responses do not equal the number of respondents. Percentages may not add up to 100 because of this and because of rounding.

- don't know 4 (11%).

The class working on drama, PSE and animation all agreed that they worked with others in the class. Therefore, the disagreement or not knowing came from pupils who had been involved in dance and movement. This may reflect the way in which the dance and movement were introduced as a more individual or whole class, rather than a group, activity.

Gender

The responses were analysed by gender (using chi square) and there were no differences between the boys' and girls' responses.

4.2 P5 and P6 pupils

Questionnaires were returned from 49 pupils in P5 and P6. There were 24 boys (49%) and 25 (51%) girls. They represented 2 classes. One group had worked with a media artist on a history topic and the other had been learning maths with a dancer. The results are presented together, but where differences were noted between the two groups they have been reported.

What they thought they were learning

Forty-four of the 49 children in P5 and P6 answered this question. Their responses were

- subject only mentioned 10 (23%)
- art only mentioned 11 (25%)
- both subject and art 20 (45%)
- other 3 (7%)

The majority had a clear perception of learning both about their curriculum topic and the art form. When the two classes were considered separately, about a half of those who had the dancer mentioned both the subject and the 'dancing', while about one-third of the other class mentioned both. The other things learned were: 'learning how to concentrate' (girl), 'how to get ready to do things and not be lazy' (boy) and 'keeping fit' (boy).

Views about the classes with the teacher and artist working together

The responses to the series of questions about ICLs are given in Tables B2.8 to B2.11.

Table B2.8 P5 and P6 pupil views on engagement with and enjoyment of learning

	Agree	Disagree	Don't know
I think that having the artist in the classroom made the topic more interesting	42 (86%)	2 (4%)	4 (8%)
I found that the time seemed to pass more quickly in these lessons	40 (82%)	5 (10%)	4 (8%)
I looked forward to the lessons when the artists and teacher worked together	39 (80%)	3 (6%)	5 (10%)
We should have artists in more classes	39 (80%)	3 (6%)	7 (14%)
I wanted to work longer on the tasks	38 (78%)	8 (16%)	3 (6%)
Pupils were better behaved when we had an artist and a teacher	29 (59%)	12 (25%)	8 (16%)
I would like a different kind of artist to work with us	28 (57%)	12 (25%)	9 (18%)
Some pupils did not like working with the artist	15 (31%)	21 (43%)	11 (22%)

For the majority of the pupils, the experience of having the artist appeared to make the lesson interesting and enjoyable, with a strong feeling that they would like it in more classes.

The pupil responses are more ambivalent about improved behaviour and interest in having a different kind of artist. It is interesting to note that almost 60% thought behaviour was better, while some 25% disagreed. A negative response can mean that there is no need for improved behaviour or it can mean that they thought the behaviour was worse; this requires further investigation to understand the pupil perceptions. It is difficult for the children to judge what having a different artist would be like and responses may depend on the closeness of the relationship they have developed with the existing artist; however, 57% did agree that they would like a different kind of artist. Almost one-third thought that others did not like working with the artist; unsurprisingly 22% said they didn't know. Some of the pupils were, therefore, aware that some of their classmates did not seem to enjoy the experience.

Table B2.9 P5 and P6 pupil views on the effectiveness of the learning experience

	Agree	Disagree	Don't know
I found it easier to learn the topic because of the way it was explained in these lessons	38 (78%)	3 (6%)	8 (16%)
I found I could remember the ideas more easily	33 (67%)	7 (14%)	9 (18%)
I learned what I was good at	33 (67%)	5 (10%)	10 (20%)
I learned what I could do better	32 (65%)	7 (14%)	10 (20%)
I think my work was better in these lessons	31 (63%)	7 (14%)	10 (20%)
I learned new artistic skills	38 (78%)	6 (12%)	5 (10%)
I learned new things about art	34 (69%)	11 (22%)	4 (8%)

Around two-thirds reported positive views in response to the statements about remembering, self-assessment and the quality of work they did. Underlying the slightly lower level of agreement on the self-assessment comments were the responses from the pupils who had done dance. They were more likely than the other group to indicate they disagreed or didn't know.

The pupils who had been learning through media were more likely to agree that they had learned new artistic skills and new things about art than the group learning through dance. This may partly be due to the understanding of what 'art' is; they may, however, have been introduced to a new range of skills and knowledge compared to the 'dance' group, as dance and movement is something that children may be more familiar with, although, unlike art and music, dance is not a subject in its own right in the school curriculum.

Table B2.10 P5 and P6 pupil views on working creatively

	Agree	Disagree	Don't know
I tried new things I had never done before	44 (90%)	2 (4%)	3 (6%)
It made me want to try out new ideas	41 (83%)	5 (10%)	3 (6%)
I was able to talk about my own ideas	35 (71%)	8 (16%)	5 (10%)

The pupils clearly found the lessons to be an opportunity to explore new ideas and activities. The pupils who were involved in dance were less likely to agree that they could talk about new ideas, but that is perhaps to be expected given that the focus was more likely to be on action rather than talking.

Table B2.11 P5 and P6 pupil views on working with others

	Agree	Disagree	Don't know
I think that other people in the class had good ideas	40 (82%)	2 (4%)	7 (14%)
I worked with pupils I don't usually work with	38 (78%)	9 (18%)	2 (4%)
The things we did help me to work with other pupils in the class	37 (76%)	5 (10%)	7 (14%)

Most of the pupils were positive about getting the opportunity to work with others. There were no differences in the responses between the classes on the first 2 items, although about half of those who had experienced dance said that it hadn't helped them work with others or that they didn't know, while the class who had worked on media all agreed with this statement. As with the P3 and P4 pupils, this may reflect the different ways in which the artists worked and the different art forms.

The majority (36/74%) thought that the things they did in these lessons made them feel confident, with 8 (16%) disagreeing and 5 (10%) choosing 'don't know'.

Gender differences

All of the above items were analysed for differences between boys and girls (using chi-square) but no significant difference emerged – in fact, for the majority of items, the boys' and girls' responses were almost the same.

4.3 P7 pupils

Questionnaires were returned from 86 P7 pupils – 37 (43%) boys and 49 (57%) girls. These pupils represented 4 schools. The classes had taken part in maths with dance, and 3 environmental studies topics: science with craft, history with visual arts and geography with drama.

What they thought they were learning

The responses across the 4 classes were:

- subject only mentioned 43 (50%)
- art only mentioned 13 (15%)
- both mentioned 20 (23%)
- other responses 10 (12%).

The pattern varied slightly across the schools, with the majority in 2 of the classes mentioning only the subject (78% and 60%), while in another school 60% mentioned only the art. It seems that the majority of P7s had a clear focus on the curriculum topics being learned, with 73% overall mentioning the subject; 38% in total mentioned learning something about the art. Other responses included: 'I learned that I used my imagination a lot' (girl); 'about being careful when using different types of tools' (girl); 'how to be very creative' (girl); and 'working together' (girl). Several mentioned using their imagination and being creative.

Views about the classes with the teacher and artist working together

The responses to the series of questions about the ICLs are given in Tables B2.12 to B2.15. The questionnaire had the option 'don't know' but few chose this, so these figures have been omitted from the tables. This, combined with a small number of missing responses, explains why percentage totals do not add up to 100%. Where there was a higher 'don't know' response it has been noted.

Table B2.12 P7 pupils views on engagement with and enjoyment of learning

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that having the artist in the classroom made the subject more interesting	64 (74%)	18 (21%)	--	2 (2%)
I looked forward to the lessons when the artist and teacher worked together	62 (72%)	16 (19%)	2 (2%)	2 (2%)
We should have artists in more classes	64 (74%)	11 (13%)	4 (5%)	5 (6%)
I wanted to work longer on the tasks	51 (59%)	25 (30%)	5 (6%)	4 (5%)
I found that the time seemed to pass more quickly in these lessons	59 (69%)	11 (13%)	9 (11%)	4 (5%)
Pupils were better behaved when we had an artist in the classroom along with the teacher	31 (36%)	37 (43%)	9 (11%)	3 (4%)
I would like a different kind of artist to work with us*	40 (47%)	19 (22%)	6 (7%)	10 (12%)
Some pupils did not like working with the artist*	10 (12%)	16 (19%)	10 (12%)	34 (40%)

* These were the only two statements with fairly high 'don't know' responses: different artist: 11 (13%) and views on other pupils' liking: 15 (17%)

The P7 pupils clearly enjoyed working with the artist and agreed that it made the subject more interesting. Some were less strong in their agreement about wanting to work longer on the tasks during these lessons and that time seemed to pass quickly. Disagreement on these statements came from all groups except those who had been involved in drama. It is probable, therefore, that they reflect individual preferences and perceptions rather than any difference in the art form. Although a higher number of the pupils recorded 'don't know' responses with respect to their perception of others' enjoyment, nearly one-third agreed. Of those that chose to express a view, more than half of those involved in dance and half of those involved in drama thought their class mates did not like this. In the open comments and at interview a small number indicated that they 'felt stupid' doing dance and drama, so the expression of reluctance may have led others to observe that some pupils did not like the experience although, in reality, the majority did enjoy it.

Table B2.13 P7 pupil views on the effectiveness of the learning experience

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I found it easier to learn the topic because of the way it was explained in these lessons	55 (64%)	27 (31%)	--	1 (1%)
I learned what I was good at	50 (58%)	22 (26%)	4 (5%)	5 (6%)
I learned what I could do better	45 (52%)	29 (34%)	5 (6%)	5 (6%)
I found I could remember the ideas more easily	39 (45%)	33 (38%)	6 (7%)	2 (2%)

Table B2.13 contd	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think my work was better in these lessons	31 (36%)	37 (43%)	10 (12%)	3 (4%)
I learned new things about art	58 (67%)	21 (24%)	3 (4%)	2 (2%)
I learned new artistic skills	60 (70%)	19 (22%)	6 (7%)	1 (1%)

While general agreement was strong as to the effectiveness of the learning experience, the P7 pupils were less likely to say they 'agreed a lot' compared with their responses in relation to enjoyment. There was agreement that they found learning easier because of the way it was explained, though fewer were confident that they could remember things more easily. They agreed that their experience supported self-assessment, although the strength of agreement varied, with just over a half agreeing 'a lot'.

All but 2 of the pupils who had been in the class working with craft 'agreed a lot' that they had learned new artistic skills, while the others were more evenly split between 'agreeing a lot' and 'agreeing a little' and a few disagreeing. This may reflect the particular craft being introduced and pupils' prior experience or awareness of the art form.

Table B2.14 P7 pupil views on working creatively

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I tried new things I had never done before	68 (79%)	14 (16%)	2 (2%)	1 (1%)
It made me want to try out new ideas and be more imaginative	50 (58%)	21 (24%)	6 (7%)	5 (6%)
I was able to put forward my own ideas during the lessons	40 (47%)	36 (42%)	5 (6%)	2 (2%)

The pupils in all groups were in agreement that they were doing new things and for the most part it encouraged them to want to try out new ideas. They agreed that they had opportunities to contribute their own ideas, though slightly fewer 'agreed a lot'.

Table B2.15 P7 pupil views on working with others

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
The things we did help me to work with other pupils in the class	41 (48%)	33 (38%)	6 (7%)	2 (2%)
I worked with pupils I don't usually work with	41 (48%)	18 (21%)	13 (15%)	10 (12%)
I think that other people in the class had good ideas	70 (81%)	14 (16%)	1 (1%)	--

The P7 pupils agreed that the lessons did give them the opportunity to work with others but there was less agreement about working with people they didn't usually work with. Those working with drama or visual arts were slightly less likely to disagree, so it is possible that within these classes a greater mixing of groups took place.

The P7 pupils agreed that their experience gave them confidence, although the strength of agreement varied, with 45 (52%) agreeing a lot and 24 (28%) agreeing; 8 (9%) disagreed a little and 4 (5%) disagreed a lot.

Gender

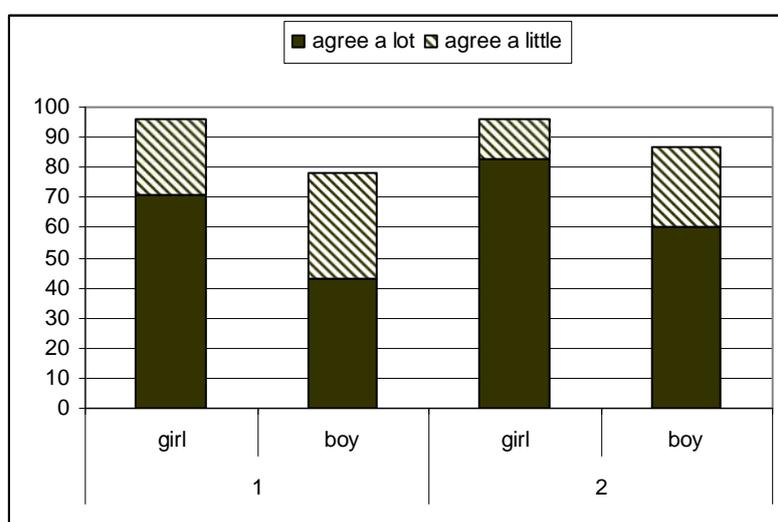
The data were analysed using t-test ($p < 0.05$) to identify differences in the responses between boys and girls. On the whole, boys and girls responded similarly, but there were 2 items where girls responded more positively than boys; the differences were due, mainly, to the girls choosing 'agree a lot' more than the boys, although slightly more boys than girls chose to disagree. The percentage responses are given in table B2.16 and are illustrated in chart B2.1.

Table B2.16 P7 gender differences in responses on certain statements

	Girls (n = 49)		Boys (n = 37)	
	Agree a lot	Agree a little	Agree a lot	Agree a little
I wanted to work longer on the tasks	71%	25%	43%	35%
I looked forward to the lessons when the artist and teacher worked together	83%	13%	60%	27%

In particular, more girls 'agreed a lot' about wanting to work longer and having artists in more classes.

Chart B2.1 P7 gender differences in responses on certain statements (%)



Note: gap up to 100% represents 'disagree and 'don't know' responses
 1 – wanted to work longer
 2 – looked forward

4.4 Secondary school pupils – S1 pupils

Questionnaires were returned from 195 S1 pupils – 98 (50%) boys and 98 (50%) girls. These pupils represented 7 schools and 9 different classes. The classes had taken part in English with craft, English with dance and media, maths with dance, maths with media, science with dance and science with dance and media.

What they thought they were learning

Not all pupils completed this question and 150 comments were given. The responses across all classes were:

- subject only mentioned 56 (37%)
- art only mentioned 20 (13%)
- both mentioned 34 (23%)
- other responses 40 (26%).

The majority of the S1 pupils focused on the subject to be learned, with 60% overall mentioning the subject and 36% mentioning the art. More S1s than the other groups gave 'other responses'. Fourteen boys and 2 girls indicated that they 'didn't know' or 'weren't sure' what they had been learning. These were spread across a number of classes but were all from groups who had been involved in dance/movement. Several suggested that they were 'learning to have fun', or that there were 'fun ways to learn' or that 'learning could be fun' or that 'boring subjects could be fun by using art'; some suggested that it was about learning to express themselves, to work with other people and also to use their imagination. Other responses included: 'to interact and become intelligent and keep fit' (boy); 'how to get used to two people and their ways and how to compromise and learn different things' (girl); 'I learned that we could achieve something good' (boy) and 'I learned how to hear other people's opinions' (boy).

Views about the classes with the teacher and artist working together

The responses to the series of questions about the ICLs are given in Tables B2.17 to B2.20. The questionnaire had the option 'don't know' but few chose this, so these figures have been omitted from the tables. This, combined with a small number of missing responses, accounts for percentages not adding up to 100%. Where there was a higher 'don't know' response it has been noted.

Table B2.17 S1 pupil views on engagement with and enjoyment of learning

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I found that the time seemed to pass more quickly in these lessons	129 (66%)	48 (25%)	8 (4%)	7 (4%)
I think that having the artist in the classroom made the subject more interesting	116 (60%)	56 (29%)	9 (5%)	5 (3%)
We should have artists in more classes	101 (52%)	45 (23%)	20 (10%)	13 (7%)
I looked forward to the lessons when the artist and teacher worked together	100 (51%)	52 (27%)	14 (7%)	19 (10%)
I wanted to work longer on the tasks	94 (48%)	43 (22%)	25 (13%)	21 (11%)
Pupils were better behaved when we had an artist in the classroom along with the teacher	40 (21%)	44 (23%)	55 (28%)	39 (20%)
I would like a different kind of artist to work with us*	54 (28%)	37 (19%)	19 (10%)	44 (23%)
Some pupils did not like working with the artist*	32 (16%)	31 (16%)	27 (14%)	51 (26%)

* These were the only two statements with fairly high 'don't know' responses: different artist: 38 (20%) and views on other pupils' liking: 51 (26%)

There was general agreement that working with the artist was engaging, with an emphasis on time passing quickly and the subject being interesting. The S1s showed slightly less strong agreement than P7 pupils but, nonetheless, the majority agreed on the first 5 items. Disagreement that behaviour was better came from all schools, with over two-thirds of pupils in 3 of the schools disagreeing. This may mean that there was no difference from classes than when the artist was not present. However, there is evidence to suggest that in some classes, where pupils were out of their normal environments, some pupils displayed more unruly behaviour than normal. This is supported by the open-ended comments on questionnaires, what pupils said during interview and also from classroom observations.

The negative response to working longer on the tasks came mainly from 2 classes, both of whom were involved in dance: over half of those pupils disagreed, while in the other classes less than a quarter disagreed.

Table B2.18 S1 pupil views on the effectiveness of the learning experience

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I found it easier to learn the topic because of the way it was explained in these lessons	82 (42%)	79 (41%)	12 (6%)	11 (6%)
I think my work was better in these lessons	76 (39%)	64 (33%)	20 (10%)	14 (7%)
I found I could remember the ideas more easily	68 (35%)	75 (39%)	29 (15%)	10 (5%)
I learned what I could do better	69 (35%)	82 (42%)	20 (10%)	14 (7%)
I learned what I was good at	60 (31%)	82 (42%)	29 (15%)	14 (7%)
I learned new things about art	72 (37%)	55 (28%)	33 (17%)	23 (12%)
I learned new artistic skills	64 (33%)	60 (31%)	35 (18%)	21 (11%)

Overall, the majority of responses indicate that the combination of the curriculum topic with art made it easier to learn, encouraged better work and helped them remember, though their views were split between whether it helped a lot or a little. The majority agreed, at least a little, that they had identified strengths and weaknesses. The majority of pupils also indicated that they had learned about the art discipline and learned some new skills. The responses were similar across the different classes.

Table B2.19 S1 pupil views on working creatively

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I tried new things I had never done before	101 (52%)	55 (28%)	15 (8%)	18 (9%)
I was able to put forward my own ideas during the lessons	61 (31%)	83 (43%)	24 (12%)	17 (9%)
It made me want to try out new ideas and be more imaginative	59 (30%)	71 (36%)	30 (15%)	20 (10%)

Those involved in dance on its own (i.e. not in combination with media) were more likely to disagree that they had the opportunity to put forward their own ideas.

Table B2.20 S1 pupil views on working with others

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that other people in the class had good ideas	109 (56%)	57 (29%)	2 (6%)	8 (4%)
The things we did help me to work with other pupils in the class	71 (36%)	69 (35%)	24 (12%)	19 (10%)
I worked with pupils I don't usually work with	70 (36%)	45 (23%)	38 (20%)	32 (16%)

Responses across the different classes were similar. Working with the artists had involved working with others for the majority of pupils, but around a third did not appear to work with a wider group than normal.

Overall, 122 (62%) agreed that the things they did made them feel confident, split equally between agreeing a lot and agreeing a little; 34 (17%) disagreed a little and 24 (12%) disagreed a lot.

Gender

There were only 2 differences between the responses of the boys and the girls. The data were analysed using t-test and the following differences were statistically significant ($p < 0.05$):

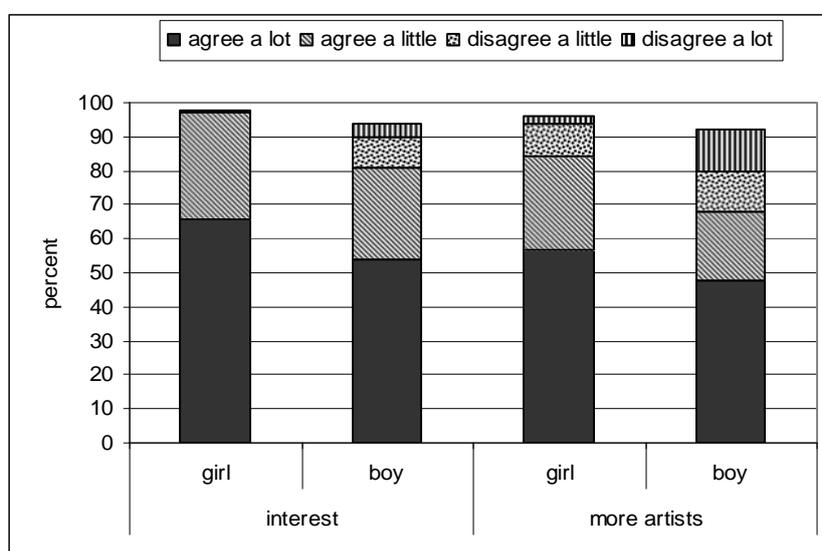
- having the artist made the subject more interesting
- we should have artists in more classes.

The difference can be attributed to more boys disagreeing.

Table B2.21 S1 gender differences in responses on 2 statements

	Girls (n = 96)				Boys (n = 96)			
	agree		disagree		agree		disagree	
	a lot	a little	a lot	a little	a lot	a little	a lot	a little
interest	66%	31%	1%	0	54%	27%	4%	9%
more artists	57%	27%	2%	10%	48%	20%	12%	12%

Chart B2.2 S1 gender differences in responses on 2 statements



Note: gap up to 100% represents 'don't know' responses.

4.5 S3 pupils

Questionnaires were received from 18 S3 pupils – 7 boys and 11 girls. They all represented one class which had combined art and design with drama.

What they thought they were learning

Nearly all the pupils in this group indicated that they were learning to express themselves or their ideas in different ways – some mentioning through drawing and painting or their own art work. Two specifically mentioned drama. One commented: 'We were learning about how to describe ourselves by doing drama and we found out that everyone is different'.

Views about the classes with the teacher and artist working together

As the number in the S3 sample is small, actual numbers as opposed to percentages are reported.

Table B2.22 S3 pupil views on engagement with and enjoyment of learning

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that having the artist in the classroom made the subject more interesting	10	6	1	1
I found that the time seemed to pass more quickly in these lessons	10	4	2	1
Pupils were better behaved when we had an artist in the classroom along with the teacher	5	10	2	1
We should have artists in more classes	9	3	3	1
I would like a different kind of artist to work with us*	2	9	2	1
I wanted to work longer on the tasks	4	5	6	2
I looked forward to the lessons when the artist and teacher worked together	3	4	9	1
Some pupils did not like working with the artist*	2	4	1	1

* 4 indicated that they didn't know if they would like a different artist and 5 responded 'don't know' to the statement about other pupils' liking working with the artist.

There is agreement that having the artist made the subject more interesting, and the majority seem to think it would be good to have artists in more classes. However, more than half disagreed that they looked forward to the lessons, with only half saying they wanted to work longer on the tasks; this may reflect a more general attitude to school at this stage rather than being a contradiction of their more positive views on working with the artist.

Table B2.23 S3 pupil views on the effectiveness of the learning experience

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I learned new things about art	6	9	3	0
I learned new artistic skills	6	6	4	0
I found it easier to learn the topic because of the way it was explained in these lessons	3	9	3	1
I learned what I could do better	3	9	4	1
I think my work was better in these lessons	4	7	5	2
I learned what I was good at	4	5	8	1
I found I could remember the ideas more easily	3	4	5	2

The S3 pupils agree that they had learned new things about art and gained new artistic skills. It is possible that they are responding here in relation to the curriculum topic as opposed to the 'art activity' as understood in the context of the ICLs, which in this case would have been drama. At interview, some indicated that the drama had helped them to look at art in a different way and that just as everyone is different, so their art will be different. They said that they learned that art is 'not just about painting and drawing'. They also said they had had 'done art' in a different way by putting objects together. Thus the emphasis appears to be on the art and design learning.

The majority found the combination of drama and art made it easier to learn and some thought their work was better; less than half thought that they could remember things more easily. They were split as to whether they had identified strengths through the process of the ICL but a few more suggested they had identified areas for improvement.

Table B2.24 S3 pupil views on working creatively

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I was able to put forward my own ideas during the lessons	9	6	3	0
I tried new things I had never done before	7	7	3	1
It made me want to try out new ideas and be more imaginative	5	7	3	3

The experience appears to have provided opportunities for the pupils to work creatively. As the comments from interview show, the activities introduced by the drama artist were provoking new ways of thinking about art and design.

Table B2.25 S3 pupil views on working with others

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that other people in the class had good ideas	10	5	1	0
The things we did help me to work with other pupils in the class	3	6	4	3
I worked with pupils I don't usually work with	7	7	4	0

Less than half thought it had made them feel confident: two agreed, 5 agreed a little, 4 disagreed a little and 3 disagreed a lot; 4 indicated they didn't know.

Gender

There were no differences between the responses of the boys and girls, except on one item: I worked with pupils I don't usually work with. (The data were analysed using the non-parametric Mann-Whitney U test due to the small sample and sub-group sizes.) The boys agreed more strongly than the girls that they worked with different people from usual.

4.6 Differences between primary and secondary pupils' responses

The views of the P7 pupils were compared with those of the S1 pupils. The P3/P4 and P5/P6 questionnaires were slightly different from the P7 to S3 questionnaires; in particular, they were only asked to agree or disagree with statements, while the older children were asked to indicate strength of agreement on 4 points from 'agree a lot' to 'disagree a lot'. It did not make sense, therefore, to compare all primary with all secondary pupils. As there was only one fairly small S3 group they were not included in the comparison.

On the whole, the P7 were more in agreement with the statements. This was not only because fewer S1s 'agreed a lot' but more actually 'disagreed a little and a lot'. The data were analysed using t-test ($p > 0.05$). The P7 pupils responded more positively, at a statistically significant level, to the following statements:

Engagement and enjoyment

- I look forward to the lessons when the artist and teacher worked together*
- We should have artists in more classes*
- I wanted to work longer on the tasks*

Effectiveness of learning experience

- I found it easier to learn the topic because of the way it was explained in these lessons
- I learned new things about art
- I learned new artistic skills
- I learned what I was good at
- I learned what I could do better

Working creatively

- It made me want to try out new ideas and be more imaginative
- I was able to put forward my own ideas during the lessons
- I tried new things I had never done before

Working with others

- I think other people in the class had good ideas
- The things we did help me work with other pupils

Confidence

- The things we did made me feel confident

* The data were analysed for the effects of both gender and year and in the first 3 statements, in addition to differences between year groups, gender played a role. Although the boys were more negative than the girls at S1, the girls at S1 were significantly more negative than the girls at P7.

While, on the whole, S1 pupils responded positively to the experience of working with the artist, a greater proportion of S1 than P7 pupils recorded negative responses. There does seem, therefore, to be something about the S1 experience that is less satisfying for the pupils, or something about S1 pupils that makes them less responsive.

5. Pupil focus groups

5.1 Introduction

Focus groups were held between February and May 2006 with groups of pupils from 15 schools (7 primary and 8 secondary) participating in the evaluation. Pupils were all interviewed in groups. There were 7 primary group interviews and 10 secondary group interviews. More were included from P7 and S1 to reflect the greater numbers of pupils participating at these stages.

Numbers are:

	Boys	Girls	Total
P4 to P6	10	7	17
P7	11	9	20
Total Primary	21	16	37
S1	25	29	54
S3 and S4	10	11	21
Total Secondary	35	40	75
Overall Total	56	56	112

Pupils who were interviewed had a variety of experiences: for example, one ICL with one artist, several ICLs with the same artist, two or more ICLs with different artists. Some had experienced fairly short, intensive periods of working with the artists; others had had the artist in the class once a week for several weeks.

5.2 Primary focus groups

The pupils were asked about what they had been doing when the artist and teacher worked together with a view to 'getting them talking' and to give specific examples of tasks and activities. They were then asked what they had been learning and how the art had helped them learn the subject. They were asked what they had learned about the art form. General questions about what they liked and did not like about having lessons with the artist were asked and, finally, whether having any of the artists had encouraged them to be more interested in the art and if they had taken up any other activities because of this.

Subject and art combinations

- Dance and story telling with maths and environmental studies
- Dance and music with maths
- Clay modelling with World War II topic
- Drama with English
- Drama with PSE (bullying)
- Drama and poetry with English
- Computer work and drama with environmental studies

Few of the pupils made any specific comments relating to the subject and art combinations that they had had. Those who did comment on this area were very positive and in general found that the art had helped them to understand the lessons better and had made the learning 'more fun'. For example, the pupils who had computer and drama lessons said, 'Everything we do on the computer makes environmental studies more interesting and we like doing it this way, making movies with the computers and cameras'. Similarly, pupils who had music and dance lessons said that 'learning maths through dance and rap was fun'.

What they learned about the subject

The responses from the pupils were very positive and in most cases they were very detailed. In general, the responses were also quite varied, and this was particularly apparent for the pupils who did drama. For example, one class who had drama in their PSE class focused on how the drama had taught them 'how to stop bullying' and how to resolve problems by finding solutions: 'Like, if you are a bad sport then you need to be happy for the winner'. A number of the pupils across the various subjects commented on how the drama helped them to learn to express themselves and how to use and understand their feelings.

One of the classes doing dance and maths said that they had learned that maths could involve games and that times tables are easier to understand now because 'you just add on another number each time'. In general, the pupils who had the lessons in their maths class claimed that they made maths more fun and easier to understand. The pupils who learned about World war II with clay modelling lessons gave quite a detailed account about what they had learned about the subject and talked about the rationing: 'We're better off than them folk because we get a proper meal, they only got small portions and they had to make it last'. Most of the groups were able to recall a lot of detail about what they had learned about the various subjects. The groups who had the lessons with the artist in maths, however, were the least detailed in their accounts of what they had learned.

How the art form helped them to learn the subject

Again, all the groups gave a lot of detail here and they were all very positive. All the groups described a number of different ways in which they felt the art form had helped them to learn the subject. For example, the majority of the groups said that the lessons with the artist made the subject more interesting and fun. The majority of the pupils also commented on the fact that the lessons with the artist encouraged them to work in teams and to work together, one pupil said, 'we got separated into groups so we worked with other people, and it was good to get to know other people because you usually work with your best friend'. A pupil from the same group also said, 'It helped us to work with people that we don't like'. One group talked about how they had worked as a team and had worked with other schools and shared ideas, 'we had some ideas and one of the other schools did it'.

The two groups who had lessons with the artist in their maths classes were also very positive and varied in their responses to this question. For example, both groups found it easier to understand the subject and found that the art helped them to 'get all the answers in your brain' and made the maths easier because 'it stays in your brain more, you can remember it'. They felt that it was 'a more fun way to learn and it was better to move around rather than sitting all the time'. One group commented that the lessons with the artist were 'not like maths at all' and 'you can use your imagination' and the other group said that the lessons 'made us think about how we understand things' and were 'a different way of learning'.

The three classes who did drama gave responses that mirrored a number of the comments made by the pupils who did dance. For example, one of the groups commented on the fact that they liked being able

to move around rather than sitting at a desk all the time. Two of the groups also highlighted that the artists had taken time to explain everything to the class, for example, 'the artist took a long time to explain it and that helped us learn better' and, 'you understand the work better after [the artist] explains it'. One pupil also pointed out that 'the artist and the teacher are doing the same thing but in different ways'.

The class who did computer work and drama with environmental studies were very positive about the lessons with the artist and demonstrated a clear understanding of how the art form had helped them in their environmental studies. This was commented on by the interviewer, who stated: 'Accounts of acting out ideas with [the artist] were interspersed with rehearsal of what they had learned about the EU – the children were plainly proud of their learning in both the art forms and the content areas'. One pupil explained, 'I got a phone number from the internet about energy and I phoned them to ask if they would send me information – my teacher said I was good on the phone'. This group also commented on the effect the lessons had on their homework. For example, one pupil claimed that 'the artist got us to do far more homework than we normally do, and we didn't mind at all'; another pupil from the same class added, 'My teacher said she had never seen such good homework from me – it's usually rubbish – I just put anything down'.

Finally, the class who did clay modelling felt that learning this way was better than learning using sheets and that 'you paid more attention because it was something that you wanted to do'.

What they learned about the art discipline

The groups did not say very much about what they had learned about the actual art form. The classes doing dance gave the most detailed accounts. For example, the group who had the dance and story telling lessons said that they had learned how to tell a story properly and that 'lots of stories can make one big story'. This group also said that they learned how to make up their own stories and that they now understood that 'pictures in your head that you think of when you read are not the same as when the book appears in a film'. The other group who had dance and music in their ICLs talked about the different types of dancing that they had learned about, such as 'hip hop', and said they learned about the history of instruments.

The other groups did not give very much detail about what they learned about the actual art discipline. For example, the groups doing drama mentioned that they had learned how to change and project their voice and how to express themselves. Similarly, the clay modelling group briefly mentioned that they had learned how to use the clay better so that it did not crack and the computer group said that they had learned that 'there are three different ways to do everything on the computer'.

What they liked

All the groups talked about a number of different aspects of the ICLs that they enjoyed. Most of the groups had very similar answers: for example, they liked the fact that the lessons were more active, different from their other classes and more exciting. The groups doing drama liked the fact that they had to work in teams, rather than just working with their group of friends. They also felt that the lessons had improved their confidence in different ways: 'Most of us were too shy and with the artist we became more confident and able to speak out'; 'I have always liked drama but now I feel more confident'. They also felt that the lessons with the artist 'make you want to try to enjoy other subjects'. The groups who had the computer lessons liked them because they didn't have to write a lot down. They also pointed out that, 'we could teach our teacher things she doesn't know about on the computer'. The responses from the other groups were very similar to those comments already highlighted.

What they didn't like

All of the groups were very positive in their attitudes towards the lessons with the artist and there were very few negative comments. The comments that they did make were subject specific and there were no general complaints or overlapping between the different art forms. The computer group felt that their teacher didn't know very much about computers and that it would have worked better if she had had a greater understanding of what they were doing. The group doing clay modelling said that they didn't like 'getting my hands messy' or 'making the plates of food'. The groups who had the dance lessons didn't

like doing worksheets with the dance artist as 'it seemed like our usual work' and they also preferred the dance to the music lessons. When questioned further, this group claimed that they would like to have the lessons with the artist again but only if it was the dance ones, not the music. Finally, one pupil commented that, 'I would prefer the usual way of learning'.

Impact on their interests

All of the groups listed a number of different hobbies that they have outside school and the clubs and groups of which they are members. In the majority of cases, these were interests that they had had before the ICLs with the artist started at school and therefore the lessons had not really influenced their interests outside the classroom. A few pupils, however, did mention some ways in which their interests had changed since participating in AAC. For example, two of the pupils who had the drama lessons said that they were trying to get into 'PACE' and they thought that someone else in the class had already joined this. One pupil who had the computer lessons said that they had started drawing with their grandmother since the lessons had started at school. Pupils who had had the dance and story telling lessons reported that they had started telling stories since they had the lessons and that they are now not scared or embarrassed to sing and dance. Finally, one pupil stated, 'I used to hate maths but I like it now'.

5.2 Secondary pupil focus groups

Subject and art combinations

- Drama with art
- Dance with music
- Dance with French
- Dance with maths
- Music with social subjects
- Dance with science
- Dance and media with science
- Dance and media with English
- Textiles and poetry with English and modern studies

Few of the pupils made any specific comments relating to the subject and art combinations that they had had. The pupils who had dance with science were the only group who specifically addressed this point. They were very positive about this combination and felt that the dance moves had helped them to understand more about the movement of atoms.

What they leaned about the subject

The responses from the pupils were very positive, but varied greatly in the amount of detail given. For example, the pupils who had drama in their art class gave relatively detailed responses as they explained that they had learned about different types of art and that 'art is not just about drawing and painting'. They also discussed the way in which the lessons had helped them to understand that everyone is different and therefore their art work will be different as well: 'art does not need to be perfect because people are not perfect'. The pupils who had dance and media with English focused mainly on the different types of punctuation that they had learned about and briefly mentioned that they had read and made a video about the poem, 'Tam O'Shanter'.

Four of the groups had dance with various subjects but there was very little detail given by any of these groups on what they had learned about the subject. For example, the maths class listed a number of mathematical topics that they had covered, such as fractions and decimals, but they did not expand or give any detail on these. The French class touched briefly on the types of words that they had learned, such as words for people and moods, and the music class said that they had learned about inventing and rhyming games and 'how to walk into exams with more confidence'. Again, however, they did not give any further detail on this. The class who had music with social science gave a similar amount of detail as they said that they had learned about the cities and towns in Scotland and, 'what they do in court in Scotland'. The group who had poetry and textile lessons mentioned that they had learned about the different habitats of animals around the world and that 'we did this thing in poetry with the artist when

we took a line out of the poem and completely twisted it around so it had a completely different meaning’.

Finally, the groups who did dance with science were the most detailed in their explanations. All three groups were very positive and gave the impression of being very interested in the subject and the dance lessons. For example, one group discussed learning about the movement of atoms: ‘atoms can go awful fast with gas, and liquids go about medium speed. They go very slowly when they’re in solids; they just jig about a bit’. The second group talked about what they had learned about the food chain, ‘it comes to sun, to grass, to cow, to humans’ and again about the movement and diffusion of atoms: ‘we learned to communicate with each other because we had to form a solid, we had to work together’. This group also found that the lessons had helped the performance of all the pupils in the class in tests: ‘We got higher marks, the person with the lowest mark was just three marks behind the other classes’ highest, it was unreal!’. The third group in this category touched on a number of different topics: for example, how to separate sound waves and how to separate sand and alcohol from water. ‘We had coloured ribbons on sticks and we had to separate out from each other. It was about dyes’. On pupil in this group, however, was not quite as positive as the rest of the pupils, ‘we didn’t learn anything from it, it was just meant to be fun!’

How the art form helped them learn the subject

As with the previous section, the amount of detail supplied by the different groups varied considerably. The pupils who had drama and dance in their classes gave the least detailed responses. For example, the group who did drama said that the lessons had taught them to look at art in different ways, ‘it’s not just about drawing’. Their discussion of the lessons focused mainly on how they had learned that you can use objects to make art – ‘you don’t need to do a self-portrait to represent yourself because you can use objects to do it’ – and one pupil stated, ‘at first the drama lessons didn’t really make a difference but because we had lots of lessons over a period of time you could see a difference by the end’.

The groups who had the dance lessons gave similar responses in this section and were generally quite positive in their views towards the lessons with the artists. For example, the pupils in the French class felt that the lessons had made the subject easier to understand and one pupil said, ‘I’ve learned French in every school I’ve been in and I learn the same things over again but it is more interesting this way’. The pupils in the social science class again said that the lessons with the artist made the subject more interesting: ‘you are enjoying it, you are not just sitting there listening and saying, yeah, yeah’. One pupil in this group, however, did not find the lessons very helpful: ‘it is supposed to be helping you to remember it better but it doesn’t help me!’ The music pupils found that the classes were more active and there was greater interaction between the pupils. Finally, the pupils in the maths class didn’t understand the connection between the lessons with the artist and the subject: ‘it wasn’t much to do with dance/music, it was more to do with maths’.

The pupils who had the poetry and textile lessons were very positive and talked about a number of different ways that the lessons with the artist had helped them to learn about the subjects. For example, one pupil said, ‘some people are visual learners and this way helps you to remember things better, it kind of sticks in your brain better than a bunch of words’. The general consensus from this group was that the lessons helped them to remember the information better and it made the lessons more enjoyable: ‘In a way it was like disguising English, it was easier because for the first time in my life I was like, yay, we are going to English! It made me kind of enjoy it more’. They also commented that these lessons were advantageous for pupils who are slow at writing as they are able to ‘keep up’ with the rest of the class.

The two groups who had dance and media lessons also gave very positive responses and clearly recognised the ways in which the lessons with the artist helped them to learn the subject. For example, the pupils generally felt that the lessons made English easier to understand – ‘It’s easier to take in when you are doing all the mad dances’ – and made it more enjoyable. They also felt that the lessons had improved their abilities in this class: ‘I wasn’t very good at capital letters but now I can remember it; and commas – I used to just put them anywhere – but now I remember where to put them’. The pupils also explained how the different movements and actions helped them to remember the poem better through visualisation: ‘When you were trying to remember it you were thinking about what action you had done’.

The pupils who had dance lessons in their science class also gave very detailed and positive responses. Again the pupils mentioned that the lessons with the artist made the class more enjoyable and the subject matter easier to understand – ‘it gets it in to your mind better’ – and to remember – ‘you don’t really notice that you are learning but when the teacher asks you about it you realise you have learned and when he asks us a question we can actually picture ourselves doing it’. One pupil said that the lessons had helped them to look at science in a different way: ‘I thought that in science you had to remember difficult names and that it was boring and difficult, but now it’s easier to remember the names and it’s fun’. A number of the pupils also commented on the fact that they felt their marks had improved because of the lessons. One pupil, however, did not feel that the lessons had made any difference to the subject: ‘You are learning the same as in class. You are still talking about the same things. It isn’t much different except you are moving about’. But the rest of the pupils were very positive and clearly enjoyed learning in this manner: ‘I don’t know how to explain it, it is fun, but, see, the way you remember it, they just put it in your head somehow and you think, “How do I remember that?” because at the time you think it is just fun’.

What they learned about the art form

Very little was said regarding what the pupils learned about the actual art form and one interviewer commented that it was difficult to get the groups to focus on this area. The pupils who had the drama lessons simply repeated that they had learned that art was not just about drawing and painting and the pupils who had the textile and poetry classes said that it had made them more aware of different types of materials: ‘It made me think different about art’. The pupils who had dance lessons were equally lacking in detail here. The groups said that they had learned more about rhythm and beats and inventing music: ‘We ended up with more ideas about how to be more creative and inventive’. They also learned about different types of dance: ‘We got to know different types of dance to different types of music that we had never done before’. The pupils who had the dance and media lessons with their science class focused on what they had learned about cameras – ‘Why the tripod has three legs’ – and animation – ‘It took a whole period to do an animation of twenty seconds or less; it’s really hard to make it work’. Finally, other pupils who had dance and media with English learned how to put ideas together and how to write scripts. These pupils also used cameras and they learned ‘how to use the pole thing... the boom pole’. They also discussed what they had learned about dance and how to express themselves without talking.

What they liked about the lessons with the artist

There was a lot of variation in their responses to this question. In general all the groups were very positive about the lessons with artists and they all came up with a number of different aspects that they enjoyed and would like to do again. The majority of the groups said that they would like to have the lessons with the artist again, possibly in other subjects. All of the groups said that they liked the lessons because they were different from their normal classes and they were more enjoyable, i.e. they were more interesting than writing or reading books.

The pupils who had the drama lessons enjoyed doing an assembly at school about the AAC project and telling the rest of the school about what they had been doing in the lessons. They also really enjoyed having an exhibition of their pictures for their parents and they felt that the lessons with the artist would ‘make the current art topic more interesting!’ This group also enjoyed the lessons because of the variation in what they were doing: ‘it was better than working on the same thing all the time and doing the same piece constantly’. The pupils who had the textile and poetry lessons liked ‘doing the arty things’ and enjoyed the interaction between the pupils in the class: ‘it was good because you got to discuss things with your class’.

The pupils who had the dance lessons discussed a number of different aspects that they enjoyed. For example, one pupil from the maths class said: ‘When you were working in this way you didn’t have to think hard for the answers, they just came to you’. This group also liked the fact that they were the only class in the school to get the lessons with the artist. The pupils in the French class enjoyed the trip to the Victorian school and making a DVD and this group also said that they would like to have more lessons with the artist, ‘because it was fun’. The social science class liked being able to listen to music and felt that being able to do that in class would make other lessons more enjoyable as well. They also liked making music: ‘the teacher set up noises for different industries and there was one like a duck noise’.

which was used for cows and farming. I really liked that one'. The group who had the lessons in their music class felt that the lessons had improved their confidence – 'it was a real confidence builder for exams and stuff' – and they enjoyed the experience of working with someone other than the teacher.

The pupils who had the dance lessons in their science class were very positive and discussed a number of different aspects that they had enjoyed. For example, one pupil commented on the fact that no one in the class was left out as they all had a part to play and another pupil liked the interaction with the other class members: 'I got to know more folk in the class that I don't normally talk to. I had never worked with [name of pupil] before the lessons'. Another pupil enjoyed the lessons because 'you feel like you are skiving but you know you are not'. The groups also felt that the lessons had changed their attitudes towards the actual subject – 'more folk want to choose science for standard grade now' – and they also found that it influenced their attitude towards their performance in school in general: 'It makes us want to try harder in the other subjects now and to enjoy them'. A number of the pupils also enjoyed using the cameras in the class and, in particular, one pupil said that they liked the fact that they were allowed to use the equipment and they were trusted with it. Finally, as with the other groups, these pupils also enjoyed being able to move around in the class: 'You can run around like a dafty and no one says anything about it, even the teachers are doing it'.

The pupils who had the dance and media lessons liked being able to act things out: 'It used to be really boring but now we are dancing and moving about'. They also felt that the lessons made the subject easier to understand and learn: 'It is easier to take in, it's not just the teacher writing on the board and you are trying to take it in, they are explaining it to you'. The pupils also commented on a number of specific areas in English that they felt they had improved in as a result of the lessons, such as full stops and verbs, and they felt that they would get better marks in English now. One of the pupils also felt that 'it would be good to get the lessons in other classes as well, like maths and science'. Two of the pupils, however, stated that they already knew the things that they had done so the lessons with the artist had not made any difference to them.

The two groups were questioned further by the interviewer as to whether they felt that having the special lessons on Monday made English more enjoyable the rest of the week. The responses from the pupils, however, were not overly positive and they didn't think that they would still be as interested if the lessons with the artist stopped. As with the other groups, these pupils also enjoyed interacting with others in the class and enjoyed having someone different working with them.

What they didn't like about the lessons with the artist

All of the groups were very positive about the different lessons they had and there were very few negative points. The pupils who had drama in their lessons felt that there wasn't enough acting involved: 'It wasn't what you would usually associate with drama'. Some also said that they felt 'stupid' doing the acting and they were worried that people walking past the classroom would see what they were doing and make fun of them. One pupil said, 'I'm not a drama person and I would rather sit and do the art work without all the other bits'.

The pupils who did textiles and poetry in their ICLs said that the only thing they didn't like was that afterwards the teacher had to go back to normal and they had to do the 'normal' work in class, 'because she won't, like, stop the lesson and then do some drawing or anything'.

The four classes who did dance gave quite similar responses here. For example, the maths class felt that the artist did not explain how the music related to maths properly and the instructions they were given were not always clear. This group also commented that the artist sometimes got the maths wrong. One pupil said, 'We would probably have got on better in class just doing the work like the other classes'. One pupil in the French class said that they didn't like being filmed and some of the dances they did were really 'corny'. The only complaint from the social science class was that after the lessons they had to go back to 'boring work'.

Finally, the music group felt that the lessons were too short, and one pupil said, 'It would have been better if it was all dance and not playing instruments'. The pupils who had the dance and media lessons felt that some of the things they were doing didn't seem to be relevant and 'it would have been better to have more things that are to do with English'. This group also didn't like having to go up to the front of

the classroom and write things on the board and they felt embarrassed when other pupils looked into the classroom. One pupil said: 'The camera is not always fun when it's pointing at you'. The majority of the pupils from the science classes were still very positive, even though they were being asked to explain what they didn't like. For example, one pupil said that the only thing that would make it better would be to have the lessons all the time. One pupil, however, was quite negative and said, 'I don't think its fun; it's better than science classes but not much fun'.

Impact on their interest

As with the primary schools, the secondary pupils listed a number of clubs and groups that they belonged to or sports that they played, but these were all interests that they had before the lessons and therefore the lessons had no direct impact on them. One of the pupils said that the lessons with the artist had made them more interested in the subject (art) now because it had made it different and shown them different aspects of it. Another pupil said that he had started break dancing lessons with his brother after having dance lessons with the artist.

5.3 Summary of the main points from the analysis of the primary and secondary school focus groups

In general, all the pupils had something positive to say about the lessons with the artists and there was only a small group of pupils who really did not seem to enjoy the experience.

Most responses from the focus groups were very detailed, with the exception of what the pupils had learned about the actual art form. In some cases this was because the pupils were unable to separate the art form from the subject matter, but the rest of the pupils were not able to give as much detail here as with other areas.

The majority of the pupils said that the lessons with the artist made the subject or class work easier to understand. This was a universal comment across both primary and secondary classes. A number of pupils said that the lessons helped 'get the work in their heads' and that they didn't realise they were learning until they were asked a question and realised that they knew the answer. A number of pupils commented that they felt the lessons with the artist had had a positive effect on their performance in the class and some of the secondary pupils mentioned that marks in class tests had improved since the lessons with the artist. Several of the pupils found that things they had struggled with before, such as where to place commas or full stops, now made sense to them because the various art forms helped them to visualise the answer or helped them to look at it in a different way. The secondary pupils also commented that the lessons were beneficial to those who usually found it difficult to keep up with the class as there was not as much writing.

The pupils liked being able to move around rather than sitting at a desk constantly. They also liked the fact that there wasn't much writing or reading involved in the lessons.

One of the main points that came up several times was that the pupils got to interact with other members of the class that they didn't normally talk to rather than always working with their friends. This was the case for both primary and secondary pupils. A number of pupils also said that one of the advantages of the lessons was that they involved all the pupils in the class: everyone had a role to play and so no one was left out.

Several of the pupils said that they would like to have the lessons with the artist in other subjects as they felt it would make these more interesting and enjoyable and they also said that they felt that they wanted to try harder now in other classes. The pupils liked the experience of working with someone other than their teacher. However, it is also interesting to note that one group was asked whether the lessons they had with the artist at the start of the week made their English classes interesting for the rest of the week – the pupils were not very positive here and admitted that if the lessons stopped, they felt the subject would be 'boring' again.

The main drawback for the secondary school pupils was the element of embarrassment. In particular, they were concerned that other pupils in the school would see them and make fun of them.

The final question looked at the pupils' interests and how the lessons with the artist had influenced or changed them. It was found that very few of the pupils had started a new hobby or interest as a result of the lessons and the majority of pupils just listed clubs or teams of which they were already members and which had no relation to the lessons.

6. Summary of evidence from pupil surveys and focus groups

The common element that the pupils were questioned on was the integrated curricular lesson (ICL), but the way in which the project has been implemented varied from authority to authority, from school to school. This diversity means that pupils across the country had very different experiences of AAC and ICLs. The common factor, therefore, was the fact that the pupils experienced an artist and teacher working together to teach an aspect of the school curriculum. ICLs were implemented in a fairly wide range of school subjects, with a predominance of the dance art form present within the sample. Because the local authorities and schools implemented the project at different times, the administration of the questionnaires was phased, but it was always timed to capture the views of the young people as soon as possible after they had completed an ICL.

The pupils were very strongly positive in their ratings about enjoyment or help with learning. In any written comments on the questionnaires, there were many references to the ICLs being 'fun' 'interesting' and 'different', a feature also noted in other studies (Harland *et al*, 2001; 2005). This was also expressed strongly in the focus groups.

In answer to a question about what they thought they were learning, the majority understood that they were learning about a curriculum topic; this was reflected in the focus groups, where pupils talked in greater detail about what they had learned about their curriculum topic/subjects than what they had learned about the art. This implied that the 'integrated' nature of the ICL was working effectively.

Learning was facilitated through activities which helped the pupils to understand better and also to remember more easily. Some commented in positive terms on the benefits of having two or more adults in the classroom.

It was noted that S1 pupils rated their experiences more negatively than P7 pupils across aspects of enjoyment, engagement with learning, working creatively, working with others and in relation to developing confidence. In the open comments, a small number said they disliked everything, without further explanation; other open comments and focus group discussions referred to 'feeling stupid' and, for some, a preference for 'normal' lessons.

7. Note on inferential statistics

Table B2.16 P7 gender differences (t-test) (n: boys = 37; girls = 49)

Item	mean (sd)	t*	df	sig
wanted to work longer on tasks	boys: 3.05 (1.10) girls: 3.67 (0.56)	3.127	49	p=0.003
looked forward to lessons with artist	boys: 3.30 (1.13) girls: 3.75 (0.70)	2.145	57	p = 0.04

* equal variances not assumed

Table B2.21 S1 gender differences (t-test) (n: boys = 96; girls = 96)

Item	mean (sd)	t*	df	sig
artist made subject more interesting	boys: 3.21 (1.11) girls: 3.57 (0.75)	2.660	167	p=0.009
artists in more classes	boys: 2.88 (1.35) girls: 3.31 (1.02)	2.422	175	p=0.016

* equal variances not assumed

Section 4.5 S3 gender differences (Mann-Whitney U) (n: boys = 7; girls = 11)

Item	mean rank	U	sig
work with pupils don't normally work with	boys: 14 girls: 6.6	7.00	p=0.002

Section 4.6 Differences between P7 and S1 (t-test) (n: P7 = 86; S1 = 193)

Item	mean (sd)	t	df	sig
look forward to the lessons	P7: 3.55 (0.93) S1: 3.14 (1.14)	3.360*	195	p=0.002
artists in more classes	P7: 3.51 (0.99) S1: 3.10 (1.21)	2.981*	198	p=0.003
wanted to work longer	P7: 3.41 (0.89) S1: 3.02 (1.20)	3.027*	217	p=0.003
easier to learn the topic	P7: 3.51 (0.81) S1: 3.11 (1.06)	3.089	277	p=0.002
learned new things about art	P7: 3.56 (0.78) S1: 2.81 (1.21)	6.243*	239	p<0.001
learned new artistic skills	P7: 3.60 (0.67) S1: 2.74 (1.21)	7.580*	263	p<0.001
learned what I was good at	P7: 3.24 (1.16) S1: 2.89 (1.06)	2.500	277	p=0.013
learned what I could do better	P7: 3.28 (0.98) S1: 2.98 (1.06)	2.190	277	p=0.029
want to try out new ideas and be more imaginative	P7: 3.29 (1.07) S1: 2.73 (1.21)	3.743	277	p<0.001
able to put forward my own ideas	P7: 3.26 (0.94) S1: 2.89 (1.08)	2.716	277	p=0.007
tried new things I had never done before	P7: 3.71 (0.69) S1: 3.20 (1.06)	4.825*	242	p<0.001
other people in the class had good ideas	P7: 3.77 (0.59) S1: 3.33 (0.99)	4.606*	255	p<0.001
helped me work with other pupils	P7: 3.22 (1.01) S1: 2.91 (1.15)	2.194	276	p=0.023
made me feel confident	P7: 3.20 (1.10) S1: 2.69 (1.23)	3.446*	179	p=0.001

* equal variances not assumed

Evaluation stage 1 data collection

Evidence from teacher survey and interviews

1.	Introduction to teacher survey	59
2.	Teacher sample	59
3.	Range of ICL practice	60
4.	Results of teacher survey	61
5.	Teacher interviews	74
6.	Summary	81
7.	Note on inferential statistics	82

Evidence from teacher survey and interviews – Stage 1

1. Introduction to teacher survey

The teacher survey was aimed at capturing the views of the teachers as soon as possible after their first experience of working with an artist on delivering integrated curricular lessons (ICLs). The programme was phased in at different times in different authorities; for example, some authorities commenced ICLs during the first term between August and October, while others used that time for preparation and commenced the first ICLs after the October holiday. During the course of the year, new teachers became involved at different times. As a result the second survey was administered in 3 stages: after the October break for those who were actively involved between August and October; in January for those who had become involved between October and Christmas; and in April for those who had become involved for the first time between January and Easter.

Most teachers had been involved in only one ICL when they were asked to complete the questionnaire. A few had already delivered more than one and, where this was the case, they were asked to respond in relation to the first one they had developed. Four reported on more than one ICL. Therefore, the main focus of this survey is on early experiences, with a view to this serving as baseline data for comparison with data which will be collected at a later stage. Questions gave the respondents the opportunity of indicating that the issues asked about were not relevant or if it was too early to have a view. Each question had a section for further comment.

The questions included in the survey were based on the explicit aims of the AAC project and also on issues from literature on arts-infused curricula. For a detailed explanation of the rationale, see Appendix A. Most of the items sought teachers' agreement or disagreement with statements related to relevant issues and themes.

The themes addressed were:

- Planning and delivering an ICL with the artist
- Impact on pupils in relation to engagement with learning, creativity, confidence and self-esteem
- Impact on teachers in relation to approaches to teaching and learning, and working creatively and collaboratively
- Whole-school issues in relation to school ethos and educational priorities.

Additionally, at the end of the questionnaire teachers were asked to identify what had been the greatest challenges they had encountered in delivering ICLs and also what would make them more effective; these responses have been summarised in section 4.5 (p72) but are referred to where relevant following the report on each set of questions.

The data were investigated for differences between primary and secondary teachers using the non-parametric Mann-Whitney Test (because of small and uneven sample sizes groups sizes within the teacher sample). A very small number of statistically significant differences were found. Therefore, the results have been presented without distinguishing between primary and secondary teachers. Where differences were found, they have been reported and marked in the tables with an asterisk.

2. Teacher sample

The aim was to include all teachers who had taken part in AAC between August 2005 and April 2006. Fifty questionnaires were issued: 20 to secondary teachers and 30 to primary teachers; 44 (88%) were returned: 17 from secondary teachers and 27 from primary teachers.

The subjects taught by the secondary teachers were:

- English (4)
- mathematics (3)
- science (5)
- learning support/SEN (2)
- modern studies (1)

- art and design (1)
- music (1)

3. Range of ICL practice

The diversity of ways in which ICLs were implemented was noted in relation to the pupil surveys and this diversity obviously applies also to the experience of the teachers, who worked on a variety of topics with a range of artists.

The subject areas in which ICLs were developed during the first phase of development were:

	Primary	Secondary	Total
Env Stud: Science/Science	3	6	9
English	4	4	8
Mathematics	5	3	8
Environmental Studies (primary)	7		7
Social subjects (secondary)		1	1
Art & Design		1	1
Music		1	1
Other eg PSE/citizenship/RE	4		4
Combinations of subjects	4	1	5

Science, English and mathematics were the 3 subject areas where most development took place, with primary teachers also working within aspects of environmental studies.

The arts disciplines involved were:

	No. of occurrences reported
Dance	18
Drama	10
Combinations ¹	8
Craft	1
Visual arts	1
Media	2
Puppetry	1
Music	1
Literature ²	1

¹ eg dance and media; drama and media; craft and visual arts

² poetry, storytelling

Dance and drama were the most frequently occurring art disciplines, with drama being found mainly in the primary sector (8 occurrences, compared with 2 in the secondary sector).

Where there were combinations of art forms reported, this included one artist operating in more than one discipline, but more often it represented more than one artist working with one teacher, sometimes in the class at the same time and sometimes at different times of the week. These instances have not been investigated separately, but it is important to note that both teachers and artists, in the open sections of the questionnaire and at interview, indicated that this complicated both the planning and the delivery of the ICLs.

There were 23 variations in combinations of subject and art discipline, with 16 occurring only once. The most common combinations were maths and dance (7) and science and dance (5).

In response to a question about how many sessions the artist had been involved in, some said 'lots' or 'too many to count'. Of those that gave a figure, the range was from 5 to 16 sessions, with 6, 8 and 12 sessions being the most frequently reported.

All reported using the art activities to consolidate concepts already learned, while 15 (58%) of primary teachers and 14 (82%) of secondary teachers had used arts activities to introduce new concepts.

Therefore, in responding to the questionnaire, teachers were not reporting on equivalent experiences, and as with the pupil survey, the main common factor is that the teacher worked with an artist or artists to deliver some aspect of the curriculum.

4. Results of teacher survey

4.1 Planning and delivering ICLs

The quality of planning and the planning process is highlighted in the literature as having an impact on the effectiveness of partnerships in the implementation of an arts-infused curriculum (Doherty and Harland, 2001; Orfali, 2004).

The number of planning meetings held varied from 1 to 13. However, the most frequently reported number of meetings held were two (12 teachers) or one (9 teachers). The disparity may be due to interpretation, with some reporting formally arranged meetings only and others reporting all opportunities to discuss lessons with the artist.

The extent of teachers' agreement with factors related to planning is reported in table B3.1. A small number indicated that some items were not relevant. These have been omitted from the tables that follow but explain, along with the occasional missing response, why figures do not add up to the total or to 100%.

Table B3.1 Teacher views on planning

	SA	A	DA	SDA
We were able to establish a good working relationship during the planning meetings	30 (68%)	13 (30%)	--	--
The artist planned and reviewed the ICL effectively	27 (61%)	15 (34%)	1 (2%)	--
I was able to reflect on progress with the artist and review plans as we went along	27 (61%)	14 (32%)	1 (2%)	1 (2%)
We came up with most of the ideas for the ICL together*	21 (48%)	14 (32%)	8 (18%)	--
Planning meetings were easy to schedule	12 (27%)	24 (55%)	5 (11%)	3 (7%)
There was sufficient time available at each meeting to plan effectively	7 (16%)	24 (55%)	10 (23%)	2 (5%)
We devised ways of assessing the arts outcomes ¹	5 (11%)	16 (36%)	10 (23%)	2 (5%)
We devised new approaches to assessing the curricular content ¹	3 (7%)	13 (30%)	19 (43%)	1 (2%)

* Statements marked with an asterisk in the tables that follow showed statistically significant differences between respondents from primary and secondary sectors.

¹ The questions addressing assessment had a higher number of 'not relevant' and missing responses than other questions: 11/25% re assessing arts outcomes and 8/18% for curricular content.

There is clear agreement on the planning meetings being a good opportunity to develop good working relationships and on being able to reflect on progress as they went along; teachers considered that the artist's role in this was effective. Most agreed that meetings were easily scheduled and that there was time for effective planning, though agreement was less strong, and a considerable minority disagreed regarding scheduling meetings (18%) and having sufficient time (28%). There was also less strong agreement and some disagreement about coming up with the ideas for the ICL together.

In the open comments, some teachers explained that they had had management support which allowed time for planning and review, for example:

- *'my head teacher was helpful and facilitated meetings to suit artist's timetable and covered my class' (primary)*

- *'there were 2 planning meetings before the start of the unit. Meetings have been scheduled for Fridays to allow teachers to assess and evaluate lessons conducted during that week. Planning for next lessons also takes place during this meeting'* (secondary)

Others found effective opportunities at the end of the lesson:

- *'our planning meetings happened at the end of each lesson while children were focused on a job'* (primary)
- *'Time at the end of each lesson was set aside for self- and peer-assessment from the children and the adults. This worked well, so was maintained throughout the block'* (primary)

Only one mentioned overcoming time limitations by using email contact.

Most comments related to the problem of finding time to plan the lessons. Review, on an ongoing basis, appeared to happen for a number of teachers during and immediately after lessons, very much 'on the run'. Some just said it was difficult to find sufficient time to 'plan properly' and 8 reported that meetings took place in 'their own time'. Sometimes the lack of opportunity was due to secondary teachers being timetabled with other classes immediately before and after the ICL and sometimes it was due to the artist having to leave for other commitments. This was also one of the most frequent points raised as a challenge in being part of AAC.

A further issue related to planning was raised in the open sections and also at interview. For primary schools, in particular, arrangements had involved timetable changes to accommodate the times the artist was available. While it may be assumed that primary schools have greater flexibility in timetabling than secondary schools, this was limited by setting, when children were not in their main primary class, visiting specialist teachers and other school initiatives.

In relation to coming up with ideas for the ICLs, a few explained that it was the artist who came up with all the art ideas. Seven (25%) of the primary teachers and only one secondary teacher disagreed that they came up with the ideas together. Strong agreement was recorded by 11 of the secondary teachers (69%), while only 10 (37%) of the primary teachers strongly agreed. It therefore appears that some of the primary teachers felt they were less involved in sharing the developing of ideas for the lessons than the secondary teachers.

In the open comments an example was given of the idea-sharing process:

'I gave the artist my thoughts on how I might do the topic and the errors or misconceptions the children make or have and what I considered the core target. She devised the new approach/fresh style through her art' (secondary)

In relation to what had been most challenging about being involved in AAC, one primary teacher responded:

'Knowing what was going to happen in each session. I was not supplied with lesson plans prior to each session'

Less than half agreed to assessing the arts outcomes and developing new approaches to assessing the curriculum. As noted, these items were also considered 'not relevant'. Further investigation as to the relevance and appropriateness of assessment would be required.

Delivering the ICL

A number of questions were asked about the process of delivering the ICL, based on key factors in the literature which are considered essential for effectiveness in an arts-infused curriculum (Doherty and Harland, 2001). Teachers' agreement with the statements is given in table B3.2.

Table B3.2 Teacher views on aspects of delivering an ICL

	SA	A	DA	SDA
The arts activity was suitable for the children	31 (71%)	13 (29%)	--	--
The arts outcomes were at an appropriate level for the children	26 (59%)	18 (41%)	--	--
The arts discipline was a good match for the curriculum content	24 (55%)	19 (43%)	1 (2%)	--
The artwork or performance was an important part of the ICL	22 (50%)	19 (43%)	1 (2%)	--
There were sufficient suitable resources to deliver the ICL	19 (43%)	22 (50%)	2 (5%)	--
The timescale over which the ICL was delivered fitted in well with forward planning	11 (25%)	26 (59%)	6 (14%)	--
The classroom was a suitable environment to deliver the arts element of the ICL*	2 (5%)	15 (34%)	11 (25%)	12 (27%)

While almost all the teachers agreed that the art had been a good match for the curriculum, matching the arts activities to the curriculum was raised by a number of teachers in the section on what they had found most challenging. At interview, teachers gave examples both of where the art fitted well with the curriculum and where they had found it difficult to make the links between the art and the curriculum.

The majority of teachers found that the classroom was not a suitable environment for delivering ICLs. This had been of greater concern to secondary teachers: twelve (75%) secondary teachers thought the classroom was not suitable, while only 11 (42%) primary teachers thought this.

Some had overcome it:

'The rest of the staff were very accommodating and allowed us access to the gym at times to suit us. This is typical of my school' (primary)

This was an issue for schools involved particularly in dance and drama – finding sufficient space at the time it was needed – and such space was not always available. This was a focus of comment in both the 'challenges' and 'what would make ICLs more effective' sections of the questionnaire. Also during interviews, teachers spoke of having to move classroom furniture, or of using other open spaces, which some of the children did not like, because it was public. Within the limited time span of a single-period secondary lesson, the management or accessing of space led to loss of time.

However, it was not only in dance and drama that the classroom was found to be unsuitable:

'It was difficult to do activities involving clay in the English classroom. The floor got messy and wet and I had to arrange for janitors to lay a floor covering on Monday evening ready for Tuesday. It stayed down all day Tuesday which meant other classes were standing on it and some pupils tripping. Real health and safety issues'

Two further statements were included in this question, both referring to the possibility that it took longer than normal to cover the curriculum content but that (a) this was manageable or (b) it was disruptive. Analysis of these two statements show that 12 (27%) disagreed with both, suggesting that it had not taken any longer to cover the curriculum content than normal. Therefore, for the remainder (over 70%) it had taken longer, but 24 (54% of the sample) said this was manageable and only 5 (11%) said it was disruptive.

This was highlighted both in the section on challenges and at interview. Two primary teachers commented on it, but their view was that although less content was covered, the understanding of what had been done was possibly better and the children had had a lot of fun doing it.

While teachers found aspects of delivering the ICLs challenging, it did not mean these challenges were insurmountable, and overall they strongly agreed that key aspects of the ICLs were being effectively addressed. This suggests that teachers and artists had got off to a very good start.

Working with the artist

In the evaluation of two arts-education initiatives by NFER, Harland (2005) emphasised the importance of the pedagogy of the artist. The questionnaire for the evaluation of AAC asked the teachers to comment on the quality of the work of the artist. This is not, of course, meant to be a way of judging of the artists' pedagogy, but if the teachers perceive that the artists are effective contributors to their classroom, it is a strong endorsement of the artist.

Table B3.3 Teachers views on working with the artist

	SA	A	DA	SDA
The artist got on well with the children	36 (82%)	8 (18%)	--	--
The artist was skilled at presenting the arts activities	34 (77%)	10 (23%)	--	--
The artist had a good understanding of working with the children	33 (75%)	11 (25%)	--	--
The artist brought fun and humour to the classroom	33 (75%)	11 (25%)	--	--
The artist gained a good grasp of the curriculum area/subject	26 (60%)	16 (34%)	--	--
The artist was skilled at presenting the curriculum area through art	19 (43%)	22 (50%)	1 (2%)	--

The teachers' positive views on the quality of the artists need little further comment, except to note that agreement was less strong in relation to the artists' understanding and presentation of the curriculum.

A further statement was: 'The artist took the lead in most lessons'. As the emphasis is on arts and curriculum integration in an 'integrated curricular lesson' where the artist and teacher teach together, one might expect that 'leadership' would be shared. The response from teachers was that 21 (48%) strongly agreed that the artist took the lead, 14 (32%) agreed and 9 (21%) disagreed.

One teacher commented that the lead was shared and they 'took turn about' during the lessons. It was suggested that this could be made more effective by more time being made available for the artist and teacher to prepare together so that the teacher could understand the art better and the artist could gain a better understanding of the curriculum, reflecting views already expressed about the planning process.

4.2 Pupil outcomes

The aims of Arts Across the Curriculum include improving pupils' attainment and understanding and increasing their motivation to learn; the evaluation aims as specified by the FLAT Team also include identifying improvement in pupil attitudes to learning, self-esteem and in developing more creative approaches to learning. In the literature there is a strong emphasis on enjoyment and a sense of achievement for pupils as an outcome. Analyses focus on the development of creativity, thinking and problem-solving skills, communication skills and skills for working collaboratively. Further claimed outcomes for pupils are enhanced self-esteem and increased confidence (Harland *et al*, 2000 and 2005; Orfali, 2004).

Teachers were asked to comment on a series of statements regarding the outcomes for pupils that parallel the themes addressed in the pupil questionnaire, namely:

- engagement with learning
- effectiveness of learning
- encouragement to engage in creative ways of working
- working collaboratively
- development of confidence and self-esteem.

The issue of the potential for raising attainment was not addressed in the questionnaire but it was a topic discussed during the interviews, and views from teachers are reported below.

Teachers were asked to rate on a scale the extent to which they noticed evidence of the various outcomes in their situation (1 = no evidence and 5 = considerable evidence). There was the opportunity to choose 'too early to say', but across all items only one or two chose this option, with the exception of a question about learning the topic more effectively than pupils did previously. Eight teachers felt it was not possible to express a view.

The categories have been collapsed for presentation of the data into 'considerable evidence', 'some evidence' and 'little or no evidence'; the mean score is also reported. The rating of evidence as '3' has been taken to mean that teachers are possibly still ambivalent at these early stages; there may be a sense of the outcome, but evidence is not yet clear. 'No evidence' does not imply that the presence of the artist had a negative effect, but rather that the pupils were, for example, as engaged (or possibly disengaged) as with all other learning opportunities.

Table B3.4 Teacher views on pupil engagement with learning

	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were more involved in learning with the artist in the class	28 (64%)	11 (25%)	3 (7%)	3.76	.90
The pupils were more positive towards subject matter because of arts activities*	31 (70%)	7 (16%)	5 (11%)	3.72	1.14
The pupils persisted with tasks for longer than I would have expected	21 (48%)	13 (30%)	9 (20%)	3.26	1.09
The pupils showed greater involvement with the topic even when the artist was not present	19 (43%)	14 (32%)	11 (25%)	3.23	1.24

The majority of teachers perceived that children were more involved because of art activity and the presence of the artists, though continued engagement when the artist was not there was less strongly noticed. A greater proportion of the primary teachers thought that pupils were more positive toward the subject than secondary teachers: primary – 22 out of 26 (85%) as against secondary – 9 out of 17 (53%).

During the interviews, teachers were very positive about the extent to which pupils were motivated by the experience, which was evident in: excitement at having an expert; being really keen to take part; looking forward to lessons – *'it has ignited something in them'*; not wanting to be off *'in case they miss things'*; telling their parents and other teachers about what they are doing. There were a few references to instances when certain activities had not worked particularly well and pupils had lost interest or not participated.

Table B3.5 Teacher views on effectiveness of learning experience for the pupils

	Considerable evidence	Some evidence	Little or no evidence	m	SD
Curriculum					
Pupils were able to reflect on and identify what they had learned	29 (66%)	10 (23%)	4 (9%)	3.61	1.24
Pupils were better able to remember the ideas they had learned	28 (64%)	8 (18%)	7 (16%)	3.44	1.38
Pupils thought more carefully about their work*	20 (45%)	12 (27%)	12 (27%)	3.18	1.20
Pupils learned the topic more effectively than pupils previously did using other methods ¹	17 (39%)	11 (25%)	12 (27%)	2.72	1.65

Table B3.5 (continued)	Considerable evidence	Some evidence	Little or no evidence	m	SD
Art					
Pupils learned new things about the art form	41 (93%)	2 (5%)	1 (2%)	4.45	0.69
Pupils valued the art product/performance	41 (93%)	1 (2%)	2 (5%)	4.41	0.95
Pupils developed new arts-related skills	36 (81%)	7 (16%)	1 (2%)	4.34	0.83
Pupils showed an interest in knowing more about the art discipline*	30 (68%)	8 (18%)	6 (14%)	3.73	1.06
Pupils were able to critically reflect on the art work they produced	24 (56%)	14 (32%)	5 (11%)	3.58	1.11
General					
Integrating arts activities with other learning suits most pupils	34 (77%)	6 (14%)	4 (9%)	3.91	1.09

¹ 7 of the 12 recorded as 'no evidence' on this item indicated it was too early or that they were not able to make comparisons as they had not taught the specific topic before. On the whole question, some indicated it was difficult to respond as they had just started teaching the pupils. Primary teachers were more likely to say they had evidence of this than secondary teachers.

Early impressions were that working with the artist was enhancing learning. In additional comments, teachers pointed out that their pupils, especially at primary school, were already well-motivated, thoughtful learners. Primary teachers were more likely than secondary teachers to indicate that pupils thought more carefully about their work done as part of AAC.

In the process of addressing the curriculum, teachers thought that pupils had learned about the art, had developed new art-related skills and that the pupils valued this. More than half indicated that the pupils were able to reflect critically on the art work. Over three-quarters of the primary teachers thought that the pupils showed interest in knowing more about the art, while around half of the secondary teachers thought this.

One teacher commented:

'The art benefited both boys and girls – they were all very motivated and engaged. The peer- and self-evaluations at the end showed a good degree of critical reflection and perception of what they had learned about the subject and themselves' (primary)

Table B3.6 Teacher views on encouraging pupils in creative ways of working

	Considerable evidence	Some evidence	Little or no evidence	m	SD
Pupils were able to contribute their own ideas to the activities	36 (81%)	5 (11%)	3 (7%)	4.16	0.88
Pupils were willing to try out new ideas	35 (80%)	7 (16%)	2 (5%)	4.14	0.93
Pupils were willing to take risks	36 (82%)	4 (9%)	4 (9%)	3.98	1.15
Pupils asked more questions than usual	14 (32%)	14 (32%)	16 (36%)	2.80	1.21

Teachers perceived that their pupils were willing to work in ways that encouraged creative approaches to working, though only a third thought that pupils asked more questions than usual. Other approaches to teaching and learning encourage the generation of questions and it is likely that pupils are used to asking questions and so this is an aspect less likely to be influenced.

Table B3.7 Teacher views on the opportunity for pupils to work collaboratively

	Considerable evidence	Some evidence	Little or no evidence	m	SD
Pupils developed skills in working with each other*	34 (77%)	8 (18%)	2 (5%)	4.02	1.06
Pupils worked together in groups	33 (75%)	7 (16%)	4 (9%)	3.98	1.51
Pupils valued other people's ideas	31 (70%)	10 (23%)	3 (7%)	3.80	0.87
Pupils showed a sense of responsibility to each other	25 (57%)	14 (32%)	4 (9%)	3.49	1.03
Pupils worked with pupils they would not normally work with	23 (52%)	13 (30%)	8 (18%)	3.48	1.32

As with pupils, those teachers who had had classes involved with dance were most likely to choose 'neutral' or 'no evidence' in relation to working collaboratively. In some classes where dance and movement were used, pupils were asked to form shapes and patterns as groups or pairs, but in most the activity focused on individual movements within whole class activities. Secondary teachers were more likely than primary teachers to indicate they had evidence of pupils developing skills of working together.

Teachers commented:

- *'The pupils in my class who usually find it extremely hard to join in and work in groups were able to produce work of a good standard'* (primary)
- *'The focus on working together brought a new sense of community to the class'* (primary)
- *'The biggest impact seemed to be that warm-up routines, noisy and giggly, actually settled the children down. They then became a cohesive group, working together in activity, then singly on work task'* (secondary)

Table B3.8 Teacher views on the opportunity for pupil development of confidence and self-esteem

	Considerable evidence	Some evidence	Little or no evidence	m	SD
Pupils have increased in confidence	31 (70%)	8 (18%)	5 (11%)	3.61	1.20
Pupils have gained in self-esteem	29 (66%)	9 (20%)	6 (14%)	3.57	1.24

Teachers had observed opportunities for pupils to gain in confidence and self-esteem. Comments included:

- *'Some pupils responded well and grew in confidence as they became used to the artists and the art-related skills. They talked about particular lessons they had enjoyed to other teachers and peers outside of class'* (secondary)
- *'The... enthusiasm of the class has been high. This has helped develop more self-esteem particularly among the less able pupils'* (secondary)
- *'My class has changed over the session, gaining in confidence and showing maturity, but it is hard to ascertain how much is affected by the ICL and how much by other factors'* (primary)

This was reinforced during the interviews, when many teachers spoke of the confidence that had been generated, with children who would not normally participate being willing to stand up and present their work to others in the class or to take part in drama.

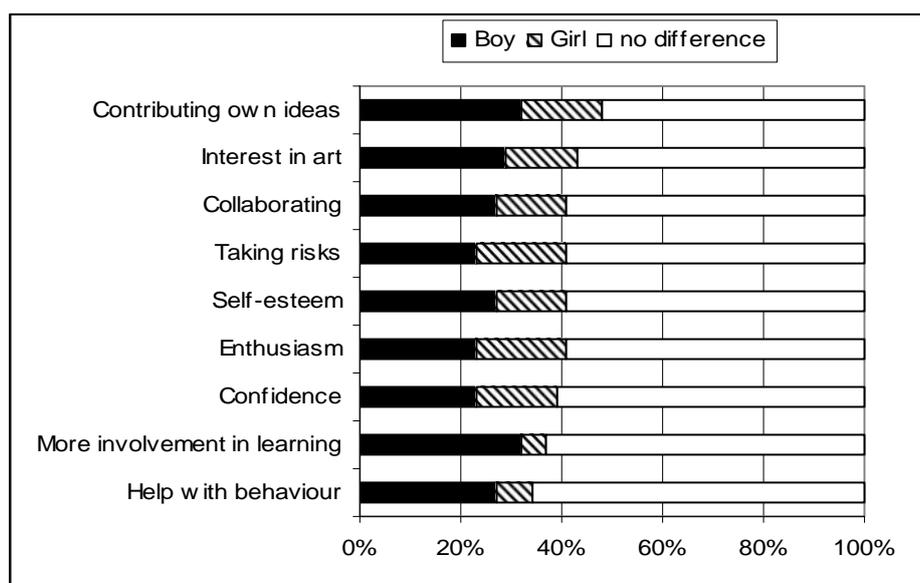
A statement was included about behaviour, but only 2 teachers agreed that behaviour had improved because of involvement in AAC. Many teachers commented that behaviour was not an issue as pupils were already well-behaved. A small number, both at primary and secondary level, indicated that some of the activities gave children who had the tendency to be disruptive a licence to misbehave. Some reported excluding, or threatening to exclude, individuals from working with the artist, or curtailing activities due to 'irresponsible behaviour' on the part of pupils. On the other hand, some reported that they had been surprised and pleased about how well children with behaviour issues had been managed and had developed through their involvement.

Gender differences

Teachers were asked to indicate whether they thought there were any differences between boys and girls on a number of issues, such as enthusiasm, gaining in confidence and self-esteem, asking questions, taking risks, helping with behaviour, collaborating with others, showing interest in the art discipline, general increase in involvement in learning.

On most items, around 60% of teachers indicated that there were no differences between boys and girls. Where differences were noted, a greater number of teachers suggested that boys had gained more than girls, though some did indicate that girls gained more than boys. Chart B3.1 illustrates the percentages indicating some gender difference. More teachers reported gains for boys in relation to most of the items, but notably in relation to increasing involvement in learning generally (32% v 5%), the opportunity to contribute their own ideas (32% v 16%) and helping with behaviour (27% v 7%).

Chart B3.1 Teacher views on gender difference on impact of AAC



Comments in relation to gender differences included:

- *'The boys in this class are always lively and dominate the girls. As a rule they are more outgoing and willing to take part in the ICL. The girls, however, are often reluctant and clearly lack confidence, feeling they will look silly'* (secondary – dance/movement)
- *'Girls were more keen than boys overall. Possibly as boys may have thought dancing not "cool"'* (secondary – dance/movement)
- *'Although both boys and girls benefited greatly from the project, the impact upon the boys was more noticeable in terms of motivation and general involvement in lessons'* (primary – drama).

4.3 Teacher development

One aim of the AAC project is to support and develop the skills of teachers to work collaboratively and creatively. Another aim is to encourage links between different areas of learning and to 'erode subject barriers', which is dependent on the way that teachers work and what is possible within the constraints

of existing priorities for education and management practices. This issue is therefore addressed both as part of teacher development and also as part of whole-school issues (section 4.4).

It is recognised that many teachers are already using a wide range of approaches to teaching and learning in their classrooms and that other initiatives in recent years have developed approaches that might also be expected in AAC. The questions on approaches to teaching and learning were not designed to be a measure of how well a teacher does or not does not teach, nor do they make the assumption that AAC is introducing teachers to completely new approaches in their classroom practice. Teachers were asked to focus on the extent to which involvement in AAC has developed their practice. Clearly, we cannot differentiate between teachers who do not do these things and have not changed, and teachers who already do everything and have no need to introduce anything new. That is not the point of the questions – they are simply to identify if AAC has provided the opportunity for development, regardless of the starting point of the teachers.

However, from interviews with headteachers at the outset of the project, it is clear that the teachers who had been approached by their school management to take part were in fact those most likely to be open to new ideas and already showing an interest in art or similar interventions. Also, in the initial questionnaire, teachers were asked if they thought they were creative teachers who liked to try out new ideas with their pupils: of the 36 who participated in that survey, 14 (39%) strongly agreed; 19 (53%) agreed and only 3 (8%) disagreed that they were creative teachers. Just over half (56%) thought of themselves as having artistic abilities.

Teachers were asked to indicate the extent of their agreement with a range of statements about ways in which AAC might have influenced their approaches to classroom practice and working with others. Their responses are reported in tables B3.9 to B3.12.

Statements about the opportunity and readiness to adopt new approaches and to encourage children to learn from mistakes and ask questions sought to investigate the extent to which teachers fostered creativity in their classrooms (Cropley, 2001).

Table B3.9 Approaches to teaching and learning

	SA	A	DA	SDA
Working creatively				
I have been able to use new approaches to teaching	11 (25%)	22 (50%)	10 (23%)	--
I use the new ideas I have learned when teaching other parts of the curriculum (primary) or other classes (secondary)	8 (18%)	14 (32%)	15 (34%)	4 (9%)
I have changed the way I think about classroom organisation	5 (11%)	12 (27%)	19 (43%)	5 (11%)
Encouraging creative approaches in pupils				
I am more willing to let pupils make mistakes	5 (11%)	16 (36%)	16 (36%)	5 (11%)
I now encourage the children to ask more questions	3 (7%)	14 (32%)	18 (41%)	5 (11%)

The majority (75%) had been introduced to new approaches to teaching and half had tried out the new ideas in other lessons. Over a third were rethinking how the classroom was managed. Almost half indicated they were more willing to let children make mistakes and almost two-fifths encouraged children to ask more questions.

In the open comments, and at interview, many teachers pointed out that they already encouraged children to learn from mistakes and to ask questions.

Some teachers reported ways in which they thought the experience had changed them:

- *'I enjoy the challenges that come with AAC and do admit that it forces me to be more organised in terms of forward planning'* (secondary)
- *'I have had to be more open to other people's ideas. Doing it differently is good because you can get too set in your own ways'* (secondary)

- *'I have learned from the artists' ideas and their different approaches to dealing with children. It has possibly made me more creative. I like to be really well planned and get the children to plan before they do anything. With the artists it was different. It was more open – not throwing caution to the wind – but different'* (primary)
- *'It gave me confidence to try – I love music and dance but I am not a dancer and I wouldn't have done it, but to have someone there who is really good at it, it gives you confidence'* (primary)

Table B3.10 Working collaboratively

	SA	A	DA	SDA
I have been able to discuss arts developments with other teachers	8 (18%)	27 (61%)	9 (21%)	--
Collaborating with the artist has enhanced my readiness to work with other adults in the classroom	11 (25%)	17 (39%)	12 (27%)	2 (4%)
I am now more willing to work collaboratively with other teachers	9 (21%)	14 (32%)	16 (36%)	2 (4%)

In the open comments, and at interview, the majority of teachers indicated that they already worked collaboratively. A small number, however, reported that the experience of working with the artist had encouraged them to be more open to this, where previously they had liked to work on their own. At interview, many of the teachers emphasised the benefits of working collaboratively with the artists, but indicated that there had not been opportunity to collaborate with other teachers. All the secondary schools, except one, had more than one teacher involved. However, in only one school was it reported that the 2 teachers had assisted each other when planning lessons. Opportunities for networking and collaboration were mentioned as one way in which the delivery of ICLs could be made more effective.

Table B3.11 Other development opportunities for teachers through AAC

	SA	A	DA	SDA
I have developed new understanding of the arts topic(s)	18 (41%)	24 (55%)	2 (4%)	--
I have developed new skills in arts	9 (21%)	22 (50%)	11 (25%)	1 (2%)
I have been able to use the AAC development work as CPD	8 (18%)	23 (52%)	7 (16%)	2 (4%)

Teachers reported learning about the art disciplines from the experience, just as they had reported for their pupils.

Two further statements were directed at secondary teachers in relation to **'eroding of subject barriers'**:

- I have been able to discuss developments in my subject with teachers of other subjects
- I have been able to include ideas from other subject areas in my classes.

Two-thirds (11 out of 17) of the secondary teachers indicated that they had had the opportunity to discuss developments with other subject teachers; 10 agreed that they had included ideas from other subject areas.

One final statement asked if teachers would like to do more of this kind of work. All except 3 agreed or strongly agreed. Of the three who disagreed, two were primary teachers and one was secondary.

4.4 Whole-school issues

Further aims of AAC are to encourage links between different areas of learning, to erode subject barriers and to improve the ethos of the school. A series of questions asked about whole-school issues: how well AAC fitted into curricular priorities and ways in which it might influence school ethos.

A question asked whether AAC fitted in with **school development planning**. The majority (32/72%) thought it fitted in, but a small number from both primary and secondary schools thought it did not; indeed, 2 responded 'not at all'. Obviously, where an initiative is in line with what a school is planning, it is likely to be easier for teachers to take it on board. However, where it is something additional to what

has already been committed to through the development plan, then additional resource and effort is usually required.

Views on the extent to which AAC could contribute towards schools' National Priority targets and the aims of *Curriculum for Excellence* were sought. National Priorities and *Curriculum for Excellence* are aiming at similar long term outcomes but were presented separately, as they are 2 key frameworks for school and curriculum development.

Table B3.13 National Priorities and *Curriculum for Excellence*

	Very much	Much	A little ¹	Not at all ¹
National Priorities				
Achievement and Attainment	9 (21%)	23 (52%)	8 (18%)	1 (2%)
Framework for Learning	7 (16%)	25 (57%)	8 (18%)	1 (2%)
Inclusion and Equality	15 (34%)	22 (50%)	4 (9%)	1 (2%)
Values and Citizenship	13 (30%)	21 (48%)	7 (16%)	1 (2%)
Learning for life	13 (30%)	21 (48%)	8 (18%)	1 (2%)
<i>Curriculum for Excellence</i>				
Develop successful learners	13 (30%)	21 (48%)	8 (18%)	1 (2%)
Develop effective contributors	17 (38%)	18 (41%)	7 (16%)	1 (2%)
Develop responsible citizens	10 (23%)	20 (46%)	9 (21%)	3 (7%)
Develop confident individuals	23 (52%)	15 (34%)	5 (11%)	--
Enhance provision of rich and varied experiences	28 (64%)	13 (30%)	2 (4%)	--

¹ One teacher recorded 'not at all' throughout; several different respondents recorded 'a little' throughout.

The majority indicated that AAC contributed to the national frameworks for educational priorities. The fact that a small number recorded less positive responses suggests that for them the experience had been less effective.

Respondents were asked to indicate the extent to which they thought AAC would contribute to enhancing the school ethos. As with other questions, negative responses need to be interpreted cautiously: they may mean that the school ethos is good and does not need enhancing, or they may mean that AAC is unlikely to have an impact on contributing to aspects that need improvement.

Table B3.14 School ethos

	Very much	Much	A little	Not at all
Encourage more positive relationships between teachers and pupils	18 (41%)	15 (34%)	10 (23%)	1 (2%)
Encourage collaboration between teachers	11 (25%)	19 (43%)	10 (23%)	3 (7%)
Encourage openness between teachers	8 (18%)	19 (43%)	14 (32%)	3 (7%)
Provide opportunities for other members of the community to be involved	9 (21%)	13 (30%)	14 (32%)	8 (18%)
Encourage communication between management and teachers	6 (13%)	14 (32%)	22 (50%)	2 (4%)
Provide more opportunities for parents to be involved in their children's learning	--	12 (27%)	18 (41%)	13 (30%)

Early experiences of working on AAC allowed around three-quarters of the participants to suggest that the project had the potential to encourage more positive relationships with pupils and over half to suggest that it might encourage collaboration and openness between teachers. They were less positive about it contributing to communication between management and teachers.

As one of the aims is the erosion of subject barriers, secondary teachers were also asked if AAC would encourage collaboration between departments and across subjects: the 17 secondary teachers were evenly split, with 3 selecting 'very much', 6 'much', 5 'a little' and 3 'not at all', suggesting a diversity of experience amongst the teachers in different schools. This reflects the views expressed above (following table B3.11), where two-thirds of secondary teachers indicated they had been able to discuss what they were doing with teachers of other subjects – though this may have been informally in the staff room. At interview teachers had reservations about the erosion of subject barriers. Certainly 'art' was being used in other subjects, but barriers between other subjects were not as yet being considered. As noted above, different subject teachers involved in the project in the same school rarely had time to collaborate, let alone engage with teachers from other departments not involved in the project.

Parental involvement

The figures in Table B3.14 show that the teachers were slightly negative about the potential for AAC helping parents to be more involved in their children's learning. As the project was still in its early stages, many schools had not sought to involve parents. Nine teachers reported parents having been involved in some way in the project and 11 reported that parents had given feedback.

Parental involvement, for the most part, had consisted of receiving information either by letter or newsletter or at a specially arranged parents' evening to explain the project. Some had been involved by helping their children find resources; others knew about the project through children taking home artefacts they had produced and through their children talking about it. Formal feedback had not been sought, but feedback at parents' evenings had all been positive.

4.5 Final questions

Teachers were asked to indicate up to 3 of the things they had found most challenging and 3 things which would make delivery of ICLs more effective. Unsurprisingly, the things which would enhance effectiveness paralleled the challenges. The issues raised related mainly to time and scheduling, resources and space, and developing the art and the curriculum.

Time and scheduling

Finding time for planning and preparation with the artist and on their own was mentioned 17 times. Some indicated that planning a whole unit of work ahead of time was not always effective, as the children's pace of learning varied and plans had to be adapted with 'some quick thinking' and 'planning on the hoof'. For some, 'grand planning' was the issue: that is, more time was needed to think through the curriculum to identify suitable aspects for delivering through arts activities and to plan how to prepare the children and reinforce their learning following the arts input. Part of that 'grand planning' process was the choice of artist or art discipline. Some teachers indicated that they would like to have some say in this aspect of the project and felt that they were being forced to work with a particular art discipline when something else would have been more helpful. In their view, a longer planning process with more discussions around curricular choice and what different artists can contribute would lead to more effective ICLs.

A further 8 comments were made about finding time to deal with the extra paperwork associated with ICLs, meeting deadlines, or simply that they had not been allocated any extra time to fit in the work of AAC.

Seven teachers referred to problems of scheduling both in primary and secondary schools. The short 40 to 50 minute period was a challenge in secondary schools, but in primary schools changes were reported as necessary to accommodate the time the artist was available and affected arrangements for setting and other school initiatives.

Resources and space

Eight teachers in both primary and secondary schools commented on the unsuitability of the classroom for some arts activities and the difficulty of finding suitable space. When classes were large, e.g. 30 pupils, this compounded the difficulties. Lack of storage space for materials and equipment was raised by 2 teachers.

Developing the art and the curriculum

This related to 3 aspects – coming up with suitable ideas that both artist and teacher were happy with and that would work (10 comments); making the links between the art and the curriculum (9 comments), and also ensuring that curricular outcomes were covered (7 comments). For example:

Coming up with ideas together:

- *'agreeing with the artist on how to achieve the learning outcomes that we need to cover'* (secondary)
- *'planning and collaboration between teacher and artists so that all of us are happy with the lesson content'* (secondary)
- *'agreeing within the subject what should be the core target for a non-specialist to develop'* (secondary)
- *'thinking up ideas that would work'* (primary)

Making links between art and the curriculum:

- *'integrating curriculum objectives with art objectives'* (primary)
- *'persuading and explaining the relevance of drama activities to visual arts'* (secondary)
- *'linking ideas to learning outcomes'* (primary)

Cover the curriculum:

- *'meeting deadlines for curriculum coverage'* (secondary)
- *'condensing 3 periods of work into 2 so that 1 period can be given to project'* (secondary)
- *'trying to get through class work that should be done'* (secondary)
- *'there was a feeling of not covering the necessary content'* (primary)
- *'missing out on maths and language time which was difficult to make up again'* (primary)
- *'fitting in rest of curriculum around arts'* (primary)
- *'amount of time spent on learning intentions – slightly long, yet the children enjoyed it'* (primary).

Other challenges suggested by a few related to getting used to working with another person (2 comments) and 'letting go control' in the classroom and allowing another person to work with the children (5 comments). Three mentioned some difficulties with pupil behaviour and 2 thought that other teachers in their schools were negative or unaware of the project.

Improve effectiveness of ICLs

Generally, for many, having more time and more organised planning would make delivering ICLs more effective although, as one teacher pointed out, 'time is always the issue!' More suitable accommodation would also have helped.

Thirteen teachers made suggestions around the benefits of more training and more networking. Some teachers (5) thought they would gain from training from the artists in the art form; two thought the artists would benefit from being given more time and help to be informed about the curriculum; two suggested that having examples of ICLs which had already been delivered would be helpful. Finally, 4 thought that opportunities to share with other AAC teachers (and also non-AAC teachers) would be beneficial.

5. Teacher interviews

A sample of teachers was interviewed between February and May 2006; some were interviewed individually; others took part in group interviews. In total, 13 primary teachers and 14 secondary teachers were interviewed. Seven had only had the opportunity to work with an artist on one ICL, but the remainder had been involved from the outset and therefore spoke from greater experience.

5.1 Teachers' background and interests

Both primary and secondary teachers had a wide range of teaching experience, from those who were in their third year of teaching to two who had been teaching for 28 years.

Most of the teachers indicated that they had a moderate interest in the arts, often expressed through attendance at theatre and concerts, with a small number who were more involved, participating, for example in orchestras or choirs. Several supported voluntary organisations which involved craft work and playing music for those organisations. Few thought they were talented in the arts (with the exception of music and former music teachers), but they thought they used creative approaches in their teaching, and many expressed their willingness and interest in trying new ideas and different approaches with their classes. This willingness and interest in the arts had encouraged some to volunteer to be part of AAC when they heard about the project.

However, most had become involved because they had been approached by their school management – some indicating that at first they had not really understood what they were being asked to do, and when they went to the training at Peebles they were not aware they were committing themselves to the project. One reported: 'I didn't realise that by doing that 3 day course I would be tied into a 3 year project. That just wasn't made clear to me at any time'.

5.2 Chicago model and contextualising it for the Scottish context

The teachers had heard about the Chicago/LEAP model through the training at Peebles or through information supplied by the CLOs, but apart from that knew little about it. Some, who had joined the project later had watched the DVD of the Peebles event. Almost all said they were not aware of other models of arts-infused curricula; one teacher reported having taken part in a similar project in England; one had done some personal research on the internet and referred to work in Norway and Germany; one spoke about Artists in Residence programmes.

When asked what they thought the aims of AAC were, the majority spoke about raising attainment, motivating pupils by making it more interesting for them, and raising pupils' confidence and self-esteem. Another less emphasised aim related to encouraging teachers to find different ways of teaching difficult concepts through the arts; this was expressed as teachers delivering the curriculum more creatively, using different approaches and also letting children see that there were different ways of learning. Further suggestions included breaking down subject barriers, allowing children to see how their learning applied in different contexts, making children aware of different kinds of jobs such as artists and dancers and, finally, making pupils more appreciative of art.

Teachers were in agreement that an approach like AAC fitted well with *Curriculum for Excellence*, especially as CfE allowed for more flexibility and had proposals for reducing the amount of curriculum content to be covered. The main issues in contextualising the Chicago/LEAP model, as presented at Peebles, were about making it fit the curriculum. It was important to identify the areas of the curriculum and the subjects where it would be most beneficial. It was also important to ensure that it was aligned to existing expressive arts guidelines and in some of the schools it had to be planned in alongside other arts-based initiatives.

5.3 Implementing ICLs

Teachers reported a wide range of curriculum topics and art forms that had been used, which represent the mix of subjects and artforms reported above (section 3).

Developing ideas and delivering ICLs with the artist

Teachers spoke of situations where they told the artist the curricular topics to be covered and the artist did all the thinking of alternative ways and then applied it in the class without further discussion; other teachers spoke about having lengthy discussion with the artist about the appropriateness of what the artist proposed and changes being made. Different factors influenced this: on the one hand, some teachers said they trusted the artist and that they did not have enough knowledge of the art to make suggestions and, on the other, there was the fact that the teachers knew the curriculum and their pupils and wanted to ensure the art was genuinely enhancing the curriculum. An essential part of an effective partnership was that the teacher and artist had shared objectives and an understanding or appreciation of each other's methodology – the teacher understanding the art activities and what they were to achieve and the artist understanding the curriculum. A major inhibiting factor was, of course, lack of time to discuss in this depth.

How the art helped the pupils learn the curriculum

Teachers were mixed in their views on how the art had helped pupils learn, with some saying they were not sure or indicating that it hadn't helped at all. Where teachers were positive and confident that it had helped learning, the main theme which emerged was that art emphasised and supported visual and kinaesthetic learning, which was more conducive to engaging some in learning than watching or writing; they were also more likely to remember what they had learned because they could visualise what they had been doing. A maths teacher suggested that it helped because it showed them different applications of their maths topics – it let them see it applied in a different context. However, it was dependent on how well the art and the curriculum matched.

Teachers reported instances of where the art fitted well, for example:

- *'All the arts activity helped. It reinforced the content. It was all reinforced through the arts activity "exactly what I asked". The artist tailored the activities to reinforce the content. This is very important, this tailoring, or it doesn't work'* (primary – environmental studies)
- *'Everything the artist did was linked to their multiplication tables'* (primary – maths).

Several science teachers working with dance/movement spoke of experiments being done in class and then the pupils became the experiment and acted it out. These teachers said that pupils reported that they found it easier to understand and it also helped them remember it better as they could think back to the dance they had done (secondary – science).

On the other hand, experiences were also reported which suggested that making the link between what the artists had been doing and the curriculum was more difficult, for example:

- *'Sometimes I think the things are too far removed or the links are too tenuous to be able to say they can do that in maths now.'* (secondary – maths)
- (in reference to a particular activity) *'... It had become so complex – I am left at the end of lessons wondering what we have achieved, why we did it and how much effect it had ... I think sometimes we have to work very hard at making the arts fit the curriculum, so hard it is almost artificial'* (secondary – English)
- *'Some art activity helped, but others it is difficult to make the link'* (primary – maths).

Another way in which the art had helped was through making the learning more interesting for the children. It was suggested that the children were more committed to the task, they had more purpose in their learning and they enjoyed it.

Promoting thinking skills and problem solving

For many, promoting thinking skills and problem solving was carried out in the same way 'as normal', i.e. through setting the pupils tasks and allowing them to work out how to do them, through questioning, asking them to play roles and to think what it means to be that person. Many of the arts activities encouraged that and several teachers commented on how effective the artists were at asking questions and engaging the children in discussion.

Differences between ICLs and 'normal' lessons

The most frequent response was that there was another person alongside the teacher in the classroom – adjectives used to describe the 'person' were 'expert', 'fresh face with talent', 'quality', 'a real artist'. One teacher said: 'I could not achieve such a high level of arts activity myself'.

Otherwise, the lessons were described as being more active, more practical, busier, less written work, no 'pencils and jotters'. For some teachers engaged with visual arts and crafts it had meant more mess and more work in clearing up.

In relation to this question, teachers talked about adopting different approaches during delivery of the lessons. As noted, some teachers reported that the artist had skills and abilities that the teacher did not, and they wanted to maximise the time that the artist had in the classroom. They, therefore, took a back seat and gave the lesson over to the artist. They then worked on making links or reinforcing the learning at other times. Others were uncertain about their role and how much they should intervene. Examples of teachers' views are:

- *'When we started it was [the artist] doing the lessons, sometimes I was a participant, sometimes I was helping ... I then did some of the things when [the artist] wasn't there and brought it all together'* (primary)
- *'As the teacher I laid the groundwork first, then the artist, then the next lessons I'd build on it. Integration was happening but not in the same lesson'* (primary)
- *'I take more of a back seat. I find it quite difficult to know how much control to give over – when do I come in or not. With [one artist], he did 2 lessons and I did 2 lessons'; with [another artist] it is mainly led by the artist and I take a back seat'* (secondary)
- *'I stand back a lot and let them get on with it and try not to interfere too much. I come in at times, summarise what we have done, see if the kids have understood what the lesson is about. But it has been hard taking a back seat'* (secondary).

Gathering evidence of curricular understanding and for 5-14 expressive arts

Understanding could be determined through questioning the children or observing them as they worked; the arts activities therefore supported formative assessment at both primary and secondary levels. Some primary teachers indicated that the art activities had led to output that could be used as evidence for writing levels in, for example, instructional writing and creative writing, but for the most part teachers did not report using any of the arts activities to contribute to summative assessment.

With respect to the 5-14 expressive arts levels, one teacher reported that the AAC programme had been linked to expressive arts planning, while another indicated that the decision had been made to keep them separate. Some teachers reflected that maybe they could do this, that the potential for it was there, although it had not been done. Two primary teachers reported keeping output from the arts activities as evidence for expressive arts outcomes.

A further issue that emerged during exploration of this topic related to **covering the curriculum**. Some of the secondary teachers expressed concern about the amount of time that had been 'lost' to the teaching of their subject. Working on AAC had, in some respects, proved disruptive. For example:

- *'They do it with the artist, but I've got to go back and do it again and it takes longer and it is detrimental to everything else'* (secondary – maths)
- *'The fractions and decimals took ages, about a third longer than it should have so I was behind on the rest of that term's work and spent the new term doing last term's work'* (secondary – maths)
- *'We cover far more material in the classroom than we do in an AAC lesson. There are too many pauses and gaps between transitions and we lose time'* (secondary – science).
- *'Some days you think they have got the concept (through the arts activity) and you go back into the classroom next day to go over it and nothing has gone in at all, so you have to re-teach what you have done to get the points across because they have seen it as a "jolly"'* (secondary – science).

5.4 Meeting the aims of AAC

Achievement and understanding

In relation to views on the extent to which involvement in AAC might raise attainment, many spoke in terms of 'feelings' and 'impressions' based on their experience. However, most said they had no hard evidence to substantiate their views.

Most also commented that it was difficult at this early stage to know if it was going to have an impact, in particular since AAC was 'a very small part of a larger picture'. It was considered that there was no way of 'measuring it in isolation' and that everything that was done in schools was about improving performance and raising attainment. Even where parallel classes existed, one of which was not involved in AAC, it was difficult to make a judgement because 'they are very different personalities, different abilities and so you are still not comparing like with like'. One commented that, while it may not be increasing marks, 'some of our less able pupils have been able to express themselves through the project helping to raise confidence and self esteem'.

Some 'impressions' of better learning were:

- *'One aim is to improve writing ... having a writer in is wonderful and I can see it happening ... I can see improvements. The extra stimulus is important – it's the different approach that's important'* (primary)
- *'They may be learning new work faster, they may have coped better'* (primary – maths)
- *'Their ideas for imaginative writing have been better than I might have expected'* (primary – writing/story-telling)
- *'I think it has – they are understanding simile better. The pupils themselves say they feel they have understood it'* (secondary – English)
- *'It has certainly raised retention – that's my "gut-feeling". It might lead to better test results – some of my boys will be able to answer questions better on the national assessments than they otherwise would have'* (secondary – maths)
- *'In science we have done an exam this week and we were doing revision last week (with 2 classes). It was obvious that the AAC class, which is the weaker of the 2 classes, were remembering far more than the other class. It is a possibility that it is an effect of AAC. But to try to measure it is like grabbing a bar of soap – in a unit in science a pupil might score level E or level F on the first units and then take a nosedive because they don't like the topic, and then pick up again'* (secondary – science)
- *'Pupils have a significantly deeper understanding of science concepts. They are also better at doing written work in science. There was a particularly marked difference in the written work of the poorest achievers'* (secondary – science)
- *'We worked on a novel and it was about characterisation and the essay was focused on that and I felt there were elements from AAC that came out in the essay and it had really increased their understanding of it'* (secondary – English).

Pupil motivation

Primary teachers were of the view that working with the artist had motivated the children, using terms like 'being excited', 'loving it', 'looking forward to it', 'asking when they'll get it again', 'being more open' and 'it has ignited something in them'. One said that it was difficult to say as her class was always motivated to work well, but that they had enjoyed having the artist. Another commented that some had found it (drama) difficult in the beginning and had not wanted to take part, but progress had been made and they had gained confidence to participate.

Secondary teachers were more mixed in their views. Some forms of art motivated pupils more than others, for example for one group making a DVD had engaged them more than dance; in another case dance and movement had been enjoyed more than music. The enthusiasm while the artist is present does not necessarily carry forward into the subject at other times. However, one teacher reported that working with the artist had involved them more in the topic and that some pupils took part and answered in class where they had not done this before, revealing greater engagement with the subject. One maths teacher commented:

'It is all very well for them to enjoy it but it is not just about that if they are not getting as much maths as they should be getting. There is other stuff you can do and they enjoy it and it is more maths'.

Teachers working collaboratively and creatively

Many of the teachers reported that it was their normal practice to work collaboratively with other teachers, particularly in primary schools. Some of the secondary teachers indicated that they worked collaboratively within their own departments and some were used to working with a wide range of other support staff in their classes. In at least 3 of the secondary schools it was noted that while the teachers had worked collaboratively with the artists they had not met or worked with the other teachers involved in AAC.

The majority agreed that working collaboratively with an artist had been a very positive experience, encouraging them to develop new skills. Some indicated that this experience had encouraged them to be more confident in working with others – for example, 'to be less shy', 'less possessive of own pupils', to 'trust others', to go beyond the 'tendency to be in one's own world'. One primary teacher said 'I could now team-teach with anyone'.

Working with artists had helped some of the teachers to think differently about the curriculum and to adopt more creative approaches which they applied to other areas of the curriculum when the artist was not there.

Eroding subject barriers

The most obvious erosion of barriers was between art disciplines and other areas of the curriculum, although some in primary schools, particularly longer serving teachers, suggested that for them this was not new practice. In secondary schools teachers spoke more speculatively. No cross departmental working had occurred as yet but there was potential for it, for example, in joint ventures between departments. It was suggested that the role of an in-school co-ordinator, liaising between departments and identifying suitable areas of the curriculum for cross-curricular activities with arts, would enable this to happen. However, most departments did not have time to develop such things.

Ethos of schools

The general view in both primary and secondary schools was that the project had, at this stage, no effect on the ethos of the school. Most primary teachers suggested that, while some other teachers were interested, it was almost unnoticed in the midst of everything else. Likewise in secondary schools, it was felt that few people knew about it and where they did they were either 'suspicious', 'negative' or 'thought it was odd'.

Arts as way of delivering the curriculum

Primary teachers thought that arts was an effective way of delivering other areas of the curriculum, but some were sceptical about further use of it due to curriculum overload. Some were confident that it could be applied to any area of the curriculum, while some thought that it was more suited to topics in Environmental Studies and language, but less suited to maths. One more cautious primary teacher said that it was 'as effective as the person delivering it', and indicated that she had found working with one artist more effective than another.

Secondary teachers expressed a wider range of opinions, for example:

- *'100% effective'*
- *'effective so far'*
- *'it depends on the subject ... on the art form and on the artist'*
- *'some art forms more suitable than others'*
- *'suits some parts of the curriculum more than others'*
- *'it could be better if we had a wider range of artists'.*

5.5 Reflection and evaluation

Evaluation

Most of the teachers, both primary and secondary, indicated that they had a brief meeting with the artist after each lesson to review the lesson and plan for the next one. However, this had not been possible in all cases as sometimes artists had to move on to other commitments or the teachers had to go immediately to another lesson. This was reported as being frustrating. Some completed the evaluation section of the ICL planning documents as supplied for the project, but most indicated that these were very time-consuming. Some indicated that they had not completed these at all.

For many, evaluation was an informal, continuous activity through observing the children and making 'mental notes' about what worked and what could be done differently. Some teachers discussed what was happening with colleagues to get their view and one teacher reported discussing it with the classroom assistant.

Teachers at both primary and secondary schools discussed what was happening with pupils to get their views, with two saying they had devised their own questionnaires for pupils to complete.

What teachers would do differently

Teachers were asked what they would do differently if they were to be involved in a similar project in the future. Three of the primary teachers said they would probably not do anything differently.

The dominant theme, from both primary and secondary teachers, was to have a longer lead-in time, with more opportunity to discuss with the authority what kinds of artists would be suitable and then to discuss with the artists what was appropriate. Such discussion would have led to clearer objectives for the project.

Another theme was to schedule the artists' involvement differently. There was no clear pattern to this as teachers had experienced different approaches, e.g. an artist once a week for the term, artists in several days a week over a short period of time, half-days, whole-days, single lessons... whatever they had, some teachers would have liked it to be different. Perhaps the lesson is that a variety of approaches to scheduling would be appropriate even within one school – but decided according to the particular focus of the ICLs. Some wanted more variety in the artists they had to work with; others would like to have had the same artist for longer!

Impact on teaching strategies

About half of the teachers reported learning and applying some new strategies to their classroom practice. For most, it was about learning 'new activities' and 'techniques' from the artist which they had tried with other classes; some used drama and movement where they had not done so before. One specifically spoke about gaining skills in using video-cameras and related technology which she could now use more widely. Some spoke of having gained confidence to try new and different activities and taking a more relaxed approach to classroom organisation.

Whole school conditions

Teachers were asked what they thought were the 'best' whole-school conditions to allow an arts-infused approach such as AAC to be successful.

Without exception, teachers said that the support and enthusiasm of the senior management team was important. This was to assist in issues like timetabling, availability of space and resources, raising awareness across the school about the project and, sometimes, someone to commiserate with when things were difficult. The SMT need to be:

'100% aware of project aims as it affects everything – accommodation, space, rooms, time for planning and meetings with artists and CLO'.

Primary teachers reported that they had that support, although this did not necessarily resolve the challenging issues of time and space. However, some of the secondary teachers felt less supported. For example:

- *'We feel isolated, left on our own to do it and very little support from management'*
- *'PT is not convinced so isn't much help. SMT said "find your own space"'*
- *'PT is supportive but no one else is interested. People need to be interested and take it seriously, not just see it as another Scottish Executive initiative where they throw money at it and cancel it 2 years later'*
- *'There needs to be an in-school co-ordinator, not just an LA co-ordinator, to arrange the artists and administer the timetable'.*

These comments reflect the views expressed by artists, as noted in appendix B1 on the AAC training programme, where it was suggested that managers should also have attended the training to understand what the project entailed; they are also further emphasised by the artists in response to practical arrangements for their work in schools.

A further role for senior management, or for an in-school co-ordinator, as suggested above, is school-wide information or communication about the project. Some teachers felt that other teachers were 'suspicious' about, or 'bemused' by, the activities they sometimes observed, but this was because they didn't understand the project. One of the greatest challenges faced by one teacher was 'negativity from other staff'.

Other comments

A few teachers were beginning to think about effective wider implementation. Some were sceptical about the sustainability of the project, but a variety of ideas were beginning to emerge as to how school-wide approaches could be developed. These were embryonic in nature and are issues to be explored by schools and local authority co-ordinators as the project progresses. One point to note, however, is that teachers thought it was important to develop a resource base of successful ICLs for re-use and for wider dissemination.

5.6 Summary

On the whole, the teachers interviewed were positive about the benefits of Integrated Curricular Lessons. Introducing and consolidating learning was enhanced by using art as a medium because of the emphasis on visual and kinaesthetic approaches, although this was dependent on how well the art form and activity matched the curricular objectives. Teachers spoke of where this had been effective, but also gave examples where making the links between art and curriculum had been difficult. It was also dependent on the quality of the artist and, for the most part, teachers were delighted with the quality of the artists and their contribution, many indicating that they themselves could not as teachers provide such high quality.

Teachers generally 'felt' that ICLs would contribute to raising attainment along with other initiatives. It was difficult to give hard evidence of raised attainment but teachers gave examples of where they thought the children had gained greater understanding through the ICL. Pupils had been motivated by working with an artist and high levels of enthusiasm and excitement were reported amongst primary pupils in particular. Secondary pupils were more likely to be selective in the art form that enthused them; it was also noted that there was little evidence of enthusiasm extending into other lessons without the artist.

Teachers reported personal gains from working collaboratively with the artists. While most said they normally worked collaboratively, some indicated that it had encouraged them to be more confident to work with others; teachers also reported being more willing to try out new approaches in their lessons. About half said they had learned new strategies or techniques which they would use in other areas of the curriculum.

A longer lead-in time to the project, with more detailed initial discussion with all parties would have been beneficial. Support from school management was highlighted as being key to the success of the project (illustrated both by the advantage of its presence and the drawbacks of its absence).

6. Summary of evidence from teacher survey and interviews

The questionnaires and interviews show that, while teachers found some aspects of delivering ICLs challenging, the challenges were not insurmountable and overall they strongly agreed that the key aspects of the ICLs were being effectively addressed. Most teachers agreed that both planning and delivery of ICLs had been effective, and that pupils had greatly benefited from the experience. For the majority, involvement in the project has started positively.

The evidence also indicates that teachers perceive that the project is in tune with the National Priorities (SEED, 2000) and accords with the rationale and aims of *Curriculum for Excellence* (SEED, 2004). At interview, many teachers reported that there were a number of initiatives taking place in their school concurrently with AAC, making it difficult to separate out the effects which can be directly attributable to AAC from those that may be the result of other initiatives or some other factor.

There is a relatively wide variety of arts disciplines represented in the ICLs reported by the teachers with, as noted previously, a predominance of dance and relatively few instances of visual arts. There is also a spread in terms of the areas of the curriculum that are addressed, but with a higher incidence of science, English and mathematics. In terms of pairing arts discipline with school subject, the most common combinations were mathematics and dance and science and dance. As with the pupil experience, the variety of methods of implementation across the country and the number of variables impacting on the delivery of an ICL mean that teachers have also had very different experiences of AAC in action.

Teachers reported that they felt pupils were highly 'motivated' about the ICLs and having an artist and teacher work together, though primary teachers thought pupils were more motivated towards the ICLs than their secondary colleagues. Early indications were that working with the artist was enhancing learning, but this was based mainly on 'feelings' and 'impressions', with most reporting that it was too soon to have definite evidence. As noted above, teachers reported that AAC was only one initiative amongst many focused on raising attainment. Teachers were also positive about the extent to which the project had contributed to developing pupil confidence and self-esteem.

Teachers were very positive about the skills and attributes of the artists they had worked with, and of their ability to work with the pupils.

The quality of planning before and during the implementation is highlighted in the literature as impacting on the effectiveness of partnerships in arts-infused education initiatives (Doherty and Harland, 2001; Orfali, 2004). While the teachers thought initial planning meetings were an opportunity to develop a good working relationship with the artist and to plan ahead, issues arose about finding time for ongoing planning and review meetings. Related to the issue of planning at school level, many teachers cited the support of the SMT or manager in schools as a significant factor in the effective running of the project and ensuring a wider understanding of the project in the school.

A further issue which emerged in relation to planning was who came up with ideas for the ICLs – teacher, artist, or both as a joint exercise? The majority of teachers also noted that the artist took the lead in most lessons where they were present. The extent to which the ICL is integrated from inception to delivery merits further investigation, as does the teacher's understanding of the art activity and the artist's understanding of the curriculum.

While almost all teachers agreed that the art discipline had been a good match for the curriculum, some reported during interview that making the link was difficult. Teachers reported that the classroom was not always a suitable place for delivering ICLs and at interview some (secondary) teachers expressed concern about the amount of time 'lost' to teaching the subject.

7. Note on inferential statistics

Differences between primary and secondary teacher responses were investigated, using the Mann-Whitney U test. (Number: primary = 27; secondary = 16)

Table B3.1 Teachers' views on planning ICLs with artist

Item	mean rank	U	sig
came up with ideas together	primary: 19.13 secondary: 26.84	138.5	p=0.034

Table B3.2 Teachers' views on aspects of delivering ICLs

Item	mean rank	U	sig
Classroom is suitable environment	primary: 23.44 secondary: 15.60	114.0	p=0.030

Table 3.4 Teachers' views on pupil engagement with learning

Item	mean rank	U	sig
Pupils more positive towards subject	primary: 25.27 secondary: 17.00	136.0	p=0.022

Table 3.5 Teachers views on effectiveness of learning experience for pupils

Item	mean rank	U	sig
pupils interested in knowing more about art	primary: 25.61 secondary: 17.56	145.50	p=0.032
pupils thought more carefully about their work	primary: 25.80 secondary: 17.26	140.50	p=0.026

Table 3.7 Teachers' views on opportunity for pupils to work collaboratively

Item	mean rank	U	sig
Pupils developed skills in working with each other	primary: 19.07 secondary: 26.84	137.0	p=0.017

Evaluation stage 1 data collection

Evidence from artist survey and interviews

1.	Introduction to artist survey	84
2.	Artist sample	84
3.	Range of ICL practice	85
4.	Results of artist survey	85
5.	Artist interviews	93
6.	Summary	97
7.	Note on inferential statistics	98

Evidence from Artist Survey and Interviews – Stage 1

1 Introduction

The artist survey aimed at capturing views soon after the first experience of working with a teacher on delivering integrated curricular lessons (ICLs). As explained in appendices B3 and B4, the programme was phased in at different times in different authorities. Authorities also varied in the way in which they employed artists, with some working with the same artists throughout the whole year and others employing artists for short periods such as one term or, indeed, for periods of, say, 3 to 5 weeks to deliver a short, intensive series of ICLs.

At the time of completion of the questionnaire, some artists had been involved in several ICLs in more than one school, while others had worked on only one ICL in one school. Where respondents had been involved in several ICLs and schools, they were asked to focus on only one series of lessons, possibly the ICL that they thought was most advanced in development. The majority of respondents did this, though 2 artists responded in relation to experiences across ICLs, teachers and schools. While they were able to give valuable comments on some of the questions which focused on working with a specific teacher in a specific school, their responses have been recorded as missing. It is recognised that this approach does not capture the diversity of experiences of artists who worked in several schools, but it was taken to allow some equivalence of response to those who worked on only one ICL.

The questions in the survey were based on the aims of the AAC project and issues from the literature on arts-infused curricula. The AAC project, while outlining aims for schools, teachers and pupils, did not specify aims for artists, though issues identified for teachers and pupils are relevant to artists. Other issues identified in the literature as relevant to artists have been included, such as the artists' personal and professional development and practical considerations in relation to contractual arrangements. (For an explanation of the rationale for the survey questions, see Appendix A.)

The themes addressed are:

- planning and delivering an ICL with the teacher
- perceived impact on pupils
- impact on artist in relation to pedagogy and practice
- practical issues.

2 Artist sample

The aim was to include all artists who had been involved between August 2005 and April 2006. Thirty questionnaires were issued and 26 (87%) completed. Seventeen of the 26 had been at the Peebles training event.

The disciplines of the artists were:

- Craft 4
- Dance 6
- Drama 5
- Music 3
- Photography/media 1
- Visual arts 1
- Literature 4
- Combination¹ 2

¹ drama and media; textiles and craft.

3 Range of ICL practice

Fourteen of the artists responded in relation to ICLs developed in primary schools and involving all stages from P3 to P7; 10 responded in relation to ICLs developed in secondary schools involving all years from S1 to S4; and 2 responded in relation to both sectors. Seven responded in relation to work with P7 and 4 with S1, the years on which most of AAC activity focused.

The curricular areas/subjects the artists reported covering were:

	Primary	Secondary
Social subjects	8	-
English	4	4
Maths	2	3
Env Stud: Science/Science	2	1
Art & Design	0	2
Music	0	1
RE	1	-

There were 19 variations of combinations of subject and art discipline, with maths and dance being most frequently mentioned (4 times). When broken down into the topics covered, each one was unique. This reinforces the picture of diversity of work which has emerged within the AAC project.

In relation to the number of sessions delivered jointly with the teacher (excluding those who responded to working on several ICLs), a wide range of responses was given – from 3 to 18. However, half the artists reported between 6 and 12 sessions.

Therefore, as with pupils and teachers, artists were not reporting on equivalent experiences; the main common factor is that they worked with a teacher to deliver some aspect of the curriculum.

4. Results of artist survey

In the tables which follow, as the numbers are low, actual responses are given rather than percentages. An occasional 'not relevant' was recorded, but these have been omitted from the tables; these, along with some missing responses, account for the figures not adding up to the total.

Differences between sectors were investigated using the non-parametric Mann-Whitney test. (M-W was used due to the small sample size and unequal groupings.) Where differences were found between artists working in the primary sector and the secondary sector, they have been noted and marked with an asterisk in the tables.

Comments from open-ended sections of the questionnaire have been inserted as appropriate.

4.1 Planning and delivering ICLs with teachers

Doherty and Harland (2001) emphasised that the quality of planning and the planning process has an impact on the effectiveness of delivering an arts-infused curriculum.

Eleven of the artists reported taking part in one or two planning meetings, with a further 7 reporting 3 or 4. The remainder reported 5 or more.

The extent of artists' agreement with statements about the planning process is given in table B4.1.

Table B4.1: Artist views on planning

	SA	A	DA	SDA
We were able to establish a good working relationship during the planning meetings	11	15	--	--
The teacher planned and reviewed the ICL effectively	4	15	2	1
Planning meetings were easy to schedule	3	17	4	1
I was able to reflect on progress with the teacher and review plans as we went along	5	16	2	3
The AAC planning meetings fitted easily with my other work commitments	1	19	5	1
There was sufficient time available at each meeting to plan effectively	4	12	8	1
We came up with most of the ideas for the ICL together	2	16	6	1

As with the teachers, the only aspect on which there was overall agreement was that the planning meetings provided the opportunity to establish good working relationships between the artist and the teacher. There appears to be broad agreement that the planning process was effective; however, for a minority this was not satisfactory.

Comments made by the artists indicate that for some there had only been one scheduled planning meeting with the teacher, and that ongoing planning happened in class while the pupils were working on something else, or during lunchtimes or briefly before a lesson. Such *ad hoc* opportunities made further planning and review of lessons difficult. One of the challenges identified was 'planning an 11-week project in half a day'; a different artist commented: 'One meeting for initial planning was disastrous, but none of us knew how long all this would take, especially the first time round'. In response to the open question about what would make delivering the ICLs more effective, unsurprisingly the majority of artists suggested that more time for planning, both on their own and along with the teacher, would be helpful; also 'unhurried time' to review after a lesson. This parallels the views expressed by teachers.

A particular issue raised by seven artists was sufficient time to research and gain an understanding of the curriculum in order to be able to generate appropriate arts activities to support the topics. One artist reported that 'preparation time involved in 5 projects made a 3-day week into a 4-day week', and that was in addition to the initial scheduled planning meetings. Three suggested that paid preparation time would be extremely valuable.

Some suggested they needed a longer 'run in time', with one indicating that this was not possible because she had been a 'last minute appointment'. At interview another artist indicated that a lengthy lead in time had been available and detailed planning had taken place.

Delivering

In addition to the issues identified as key elements of an arts-infused curriculum from the perspective of teachers and pupils, the literature also identified that for artists the valuing and success of the arts outcomes are important (Harland *et al*, 2000; Orfali, 2004). Therefore, in addition to items included in this question for teachers, there were statements about the arts outcomes.

The extent of artists' agreement with the statements reflecting key elements of an arts-infused curriculum is given in table B4.2.

Table B4.2: Artist views on aspects of delivering an ICL

	SA	A	DA	SDA
The arts activity was suitable for the children	14	10	--	1
The arts discipline was a good match for the curriculum content	13	10	2	--
There were sufficient suitable resources to deliver the ICL	8	17	--	--
The arts outcomes were at an appropriate level for the children	7	16	2	--
The artwork or performance was an important part of the ICL	8	11	3	1
I was satisfied with the quality of the arts outcomes	5	16	2	1
The timescale over which the ICL was delivered fitted well with school planning	4	15	5	--
There was sufficient time to develop the arts outcomes*	3	12	8	3
The classroom was a suitable environment to deliver the arts element of the ICL*	3	8	3	9

* Statements marked with an asterisk in the tables which follow showed statistically significant differences between respondents reporting on working in primary and secondary schools.

Artists' responses about the process of delivering the ICL are positive, with disagreement emerging more strongly only in relation to fitting in with other school planning, time for the arts outcomes and the suitability of the classroom environment. In relation to the other items, two of the artists commented that in the initial stages some of the activity had not been suitable or at an appropriate level, but that lessons had been learned from this and adjustments made. It was also noted that in some lessons an art product or performance was not intended and that 'the process in creating art was the most important element'.

The negative responses to the last two items in the table were due mainly to artists responding about their involvement in secondary schools: 7 out of 9 secondary artists disagreed that there was sufficient time to develop the arts outcomes, while all disagreed that the classroom was a suitable environment. The lack of time was linked to the 40- to 45-minute time slot; lack of suitable space, both for delivery and for storage of materials, was an issue especially in relation to dance, drama, crafts and visual arts. For some, alternative spaces were available but, as noted by the evaluation team on visits to schools, this added to time constraints in the secondary schools by further reducing the single-period slot as children needed to be 'redirected'. The issues of lack of time and appropriate space were further exacerbated when classes of 25 to 30 pupils were involved.

Lack of suitable space was also an issue for a small number of those who were working in primary schools. Two artists reported that this led to the artist working with groups while the teacher continued to teach the rest of the class, and one in particular noted that this meant that the ICL was not 'as integrated as shown by the Chicago people'.

Working with teachers

The artists involved in the project had all been involved in education and school work prior to involvement in AAC. At interview, one of the questions was about how AAC differed from other school work they had done, and in the section on the questionnaire asking respondents to identify challenges, a number referred to some of the differences. The key difference was, understandably, the focus on the curriculum: artists reported being more used to going in to deliver their own particular discipline and teach aspects of it such as film or drama. In such cases the teacher 'is there for discipline only'. AAC is 'much, much more about the curriculum rather than about the final art work'. Consequences of this were: needing to work more closely with the teacher; working as a team; and being involved over a longer time period rather than just being 'in and out'. While this was seen as challenging, it was not viewed as a negative challenge, indeed it was reported by one as being 'a challenge I relished'. Artists' views on working with teachers are given in table B4.3.

Table B4.3: Artist views on working with the teachers

	SA	A	DA	SDA
The teacher was willing to try out new ideas	11	15	--	--
We were able to work well as a team	12	9	1	1
The teacher gave a good explanation of the curriculum outcomes	10	13	3	--
The teacher had a good grasp of the art objectives	11	10	4	1
The teacher encouraged the pupils to try out new ideas	9	13	4	--
The teacher took the lead in most of the lessons	--	4	16	5

Artists, on the whole, agreed that working with teachers had been positive. A small number had less positive experiences.

While 3 recorded disagreement that they had received a good explanation of the curriculum outcomes, in the open-ended comments 6 indicated that they would have benefited from clearer explanations from the teacher about what they hoped to achieve in terms of learning outcomes and what the children found difficult about the topic(s) selected for the ICL. Two comments which reveal difficulties in this area are:

- *'Teachers need to plan before meetings instead of waiting for the information to be handed to them on a plate'*
- *'I was given a copy of the topic and I just tried to come up with something. The teacher hadn't said what she most wanted help with; she just wanted to work on [named topic]'.*

With respect to teachers' understanding of the arts outcomes, one artist thought that, had there been more planning and preparation time, the teacher would have gained a better understanding and would then have contributed more to the joint lessons. Another artist thought that teachers could not be expected to understand their art discipline.

The most obvious point of disagreement was about teachers taking the lead in the lessons. As noted in relation to the teacher responses, as the emphasis is on integration, one might expect that 'leadership' would be shared. However, nearly 80% of the teachers agreed that the artist took the lead.

As with teachers, some artists described how they took turn about in the lesson and shared the responsibility of teaching and learning, with the teacher reinforcing the links to the curriculum, either during the ICL or as a follow-up activity. One artist who had worked in different situations, one where the teacher was always present and one where the teacher was not, commented:

'Where the teacher was there helping to apply the art to the curriculum, the children got a better all round experience – they understood how the artwork, the abstract concepts that we were working with, tied in with the topic work. They really got it'.

Across the open comments (including the challenges question at the end of the questionnaire), about one-third of the artists referred to the seemingly 'less than active' role of the teacher. Some referred to a desire for teachers to be more involved within the joint lessons. (See section 4.5 for examples of comments made.)

Some of the teachers had expressed uncertainty about their role while the artist was present. While the majority of both artists and teachers seem satisfied with many aspects of the ICLs developed in the first phase, the role and relationship of artist and teacher was still developing. Further exploration and clarification of what is meant by an integrated curricular lesson and the role of artist and teachers should occur as the project progresses.

4.2 Pupil outcomes

The artists were asked their views on some pupil outcomes, but only those that artists might be expected to observe while engaged on the project. It is appreciated that without prior knowledge of the children, it is difficult for the artist to make judgements on pupil development. The questions followed the same pattern as in the teacher questionnaire, namely a 5-point scale where 5 = 'considerable evidence' and 1 = 'no evidence'. The categories have been collapsed into 'considerable evidence', 'some evidence' and 'little/no evidence'.

Table B4.4: Artist views on pupil engagement with learning*Min = 1; max = 5*

	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were enthusiastic about learning about the art*	21	3	1	4.48	1.00
The pupils persisted in the tasks they were given*	21	4	1	4.27	1.00
The pupils were highly involved in the learning during the ICL*	21	3	2	4.12	1.03

The artists had very positive perceptions about the pupils' engagement with the learning process. One artist (working with primary pupils) reported that 'their enthusiasm would bowl you over – they were very excited'. This reflects the views reported by both teachers and pupils, that for the most part pupils were excited, and highly engaged by the learning experience.

However, there were differences between artists reporting on their experiences with primary and secondary pupils. Those involved with primary pupils all recorded 4 or 5 on the scales, indicating that they believed they had evidence of these things; the responses showing less certainty are all from artists involved with secondary pupils. Four of the artists commented on the difficulty of poorly behaved pupils in S1 classes, who appeared to lack interest in learning. Artists who were interviewed felt that the majority of children were interested and motivated during the lessons, but that some classes were more difficult than others and that, in most classes, there were one or two children who 'weren't appreciating it'.

Table B4.5: Artist views on the effectiveness of the learning experience for pupils*Min = 1; max = 5*

	Considerable evidence	Some evidence	Little or no evidence	m	SD
Art related learning					
The pupils developed new arts-related skills	21	4	--	4.31	1.16
The pupils valued the art product/ performance*	19	2	3	3.96	1.39
The pupils showed an interest in knowing more about the art discipline*	17	3	5	3.84	1.34
Pupils were able to critically reflect on the art work they produced	12	5	5	2.88	1.64
General					
Integrating arts activities with other learning suits most pupils	16	4	4	3.65	1.67

The majority of the artists were confident that pupils learned new arts-related skills and that they valued the outcomes related to the art activities. About two-thirds of the artists felt that the pupils would want to know more about their discipline; they were less likely to feel they had evidence that pupils were thinking critically about the art work they produced. Differences between the artists working in primary and secondary schools on pupils valuing art and showing interest in knowing more were again because some involved in secondary schools responded more negatively.

Table B4.6: Artist views on encouraging pupils to work creatively*Min = 1; max = 5*

	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were willing to try out new ideas*	23	2	1	4.38	.94
The pupils were able to contribute their own ideas to the activities*	20	4	2	4.12	1.21
The pupils asked lots of questions*	20	2	3	4.04	1.21
The pupils were willing to take risks	16	6	3	3.38	1.17

The artists are largely positive about the outcomes which might contribute to working in creative ways, though fewer felt that pupils were willing to take risks. As before, differences between artists working in

the different sectors were accounted for by less positive responses from those working with secondary pupils. It may have seemed to the artists that the children asked lots of questions but, as noted in Appendix B3, for many of the teachers this was seen as normal for many pupils.

Table B4.7: Artist views on the opportunity for pupils to work collaboratively

Min = 1; max = 5

	Considerable evidence	Some evidence	Little or no evidence	m	SD
Pupils worked together in groups	19	4	1	4.37	.92
Pupils showed a sense of responsibility towards each other*	19	5	2	3.85	.97
Pupils developed skills in working with each other	18	5	1	3.81	1.41
Pupils valued other people's ideas	16	6	3	3.68	.90

Group working was an important aspect of many of the lessons, and in agreement with teachers, the majority of artists thought that pupils developed skills in this. On the whole, they perceived that children did behave responsibly towards each other, though once again the artists working with primary children were more positive than those working with secondary school children.

Twenty indicated that they thought there was evidence that the children had gained in **confidence**, 3 were neutral and one indicated no evidence. One of the artists interviewed reported that the class teachers had said that children had become more confident with regard to speaking to the whole class; another artist emphasised that this was one of the key benefits of the project – children who would not normally contribute had found a way of expressing themselves with confidence.

4.3 Artist development

Within the literature, some possible areas of development for artists have been identified (Harland *et al*, 2005). As with the teachers, it is recognised that artists already have knowledge and experience of these aspects; the question asks artists to consider if AAC has led to any further developments of their knowledge and understanding of working in the school context.

Table B4.8: Artist views on aspects of personal development

	SA	A	DA	SDA
I have developed new understanding of the school curriculum	9	14	3	--
I have developed new understandings of how classrooms are managed	10	10	6	0
I have developed new skills in working with children and young people	7	14	4	1
I have developed a greater awareness of the capabilities of young people	7	12	5	2
I have developed a greater awareness of the needs of young people	7	10	8	1
I have changed the way I think about using my art	6	9	8	3

While all the artists had prior experience of working with schools, for many the approach taken in AAC appeared to have provided opportunities for further development. As noted earlier, understanding the curriculum had been perceived as a challenging aspect of the project and one to which artists would like to have devoted more time, but 23 out of the 26 artists who responded to the survey acknowledged that they had gained new understandings. The majority of artists agreed that they had gained new understandings of classroom management, they had developed their own skills and had greater awareness of both the capabilities and needs of young people. Disagreement does not, of course, necessarily mean that the AAC experience was negative, but that some of the artists brought that kind of experience with them to the project.

Three-fifths agreed that the project had changed the way they thought about using their art.

Other comments on what the artists themselves gained from working in this way were:

- *'I've really enjoyed this process and am currently using some of the skills I developed [in this ICL] in 2 other AAC programmes in [another authority]. It has been very useful to build on this experience and I look forward to developing more and more'*
- *'I feel I have learnt a lot from the first two projects. Putting a teacher and an artist together to look at new teaching approaches should always create a rich learning environment'*
- *'I feel I learnt a lot from an extended period of working with the same group of children'*

There was an additional statement: 'I would like to do more of this kind of work': 24 artists agreed – one disagreed and one did not respond, because he/she 'wasn't sure'. The one artist who disagreed indicated that the response was framed in the context of the ICL that had been the focus for the questionnaire; other ICLs in other contexts had been a good experience and the artist was, in reality, happy to do more AAC-type work.

4.4 Practical issues: local authority and school

As the artists were being engaged by local authorities to work on the project, a series of questions about practical and contractual issues was asked. However, some of the artists were already employed by their respective authorities and therefore some of the statements were not relevant to them.

The Arts Council document on quality indicators for effective partnerships (Orfali, 2004) emphasises that from the artists' perspective the following are important: financial arrangements (enough money and prompt payment); good communication between school and artist, with HT/SMT present at the initial meeting and a main contact for liaison purposes; and awareness of school needs. As noted in relation to the views of teachers, leadership and active involvement of the SMT is seen as a condition for effective implementation of creative partnerships.

The artists were asked to rate the effectiveness of various arrangements on a 1 to 5 scale with 1 being 'not effective' and 5 'highly effective'.

Table B4.9: Artist views on local authority arrangements for AAC

	<i>Min = 1; max = 5</i>		
	n	mean	SD
Arrangements for payment (sufficiency)	24	4.00	1.10
Day-to-day communication with authority staff	25	3.84	.94
Facilitation of meetings and planning sessions	25	3.80	.86
Arrangement of contract	24	3.75	.79
Arrangements for payment (promptness)	24	3.50	1.22
Information about legal aspects related to working with children in schools	24	3.17	.96

Contractual arrangements for the amount of pay was the most satisfactory element of these practical concerns, though one artist did point out that the payment was less than that recommended by the Scottish Arts Council for writers working in school through the "Live Literature Scotland" scheme. It has already been noted above that artists would have found additional paid preparation time helpful. Some artists had experienced delays in payment:

'local authorities are notoriously slow at processing invoices, which can be frustrating and inconvenient when productions cost and other outlay precede payment'.

The issue of local authorities not receiving invoices from self-employed artists was raised, which resulted in artists having to pursue the Inland Revenue and National Insurance for refunds. On the whole, the other arrangements were seen as effective, with some artists commenting that 'everything seemed to run smoothly', that there had been 'no problems' and that the authority had been 'very supportive'.

Artists were also asked about general arrangements with schools.

Table B4.10: Artist views on school arrangements for AAC

	SA	A	DA	SDA
I was made to feel welcome in the school*	16	10	--	--
The scheduling of the lessons fitted well with my other work commitments	6	17	1	--
I feel the management was supportive of my role*	8	13	3	2
I received the information I felt I needed about the school.	7	14	2	2
The headteacher or other member of the school management was present at first/early planning meetings*	5	6	10	3

All artists agreed that they were made welcome. However, 10 of those involved in primary schools 'strongly agreed', while none of those involved in secondary schools 'strongly agreed' – they just 'agreed'.

The difference in perceptions of support from management and their presence at early stages of development was again because those working in the secondary schools were less positive. Of those who had meetings with the senior management present, 9 were working in primary schools and 2 in secondary. Artists suggested that greater commitment from school management would help make the project more effective; one commented, 'in some schools, there's no real seriousness about it; I don't think they take us as seriously as they should'

4.5 Final questions

Artists were asked to indicate what they had found to be the greatest challenges to date and also what they thought would make delivering ICLs more effective.

As with the teachers many of the suggestions for improvement paralleled the challenges. The issues raised also were similar to those put forward by the teachers, namely, time, space and resources, developing the art and the curriculum, and additionally challenges around working with teachers and pupils.

Time

Artists made 15 comments about factors related to time being a challenge, while 21 comments were made about more time being made available would increase effectiveness. As with teachers, there was the view that there was insufficient time to plan and prepare sufficiently, both together and independently. The paperwork involved in the planning documents was mentioned as was the difficulty of the secondary timetable and short periods.

Space and resources

Seven comments were made about the unsuitability of classrooms and finding suitable spaces to work in; some artists also spoke of the difficulty of moving equipment around and lack of storage space.

Developing the art and the curriculum

Twelve comments were made in relation to finding ideas which suited both the art and the curriculum with 5 comments being given about the artists finding it difficult to adapt their art to suit. One artists commented on finding it a challenge to learn about the curriculum, and as noted above at section 4.1, linking this with the issue of adequate time, paid time for preparation was suggested as being a way that would help artists to research the curriculum and make the ICLs more effective.

Working with teachers and children

As noted above in section 4.1 around one-third of the artists commented on the 'less than active' role of some teachers. Examples of comments are:

- *'We need to work more closely as a team'*
- *'Teachers participating in delivery of sessions would make it more effective'*
- *'The teacher needs to be more pro-active in the sessions'*
- *'Some teachers seem a little reluctant to treat it as a collaborative activity, to plan accordingly and make this a priority to work side by side in the classroom. Sometimes I felt like a replacement teacher. There needs to be clarity that we are not playing the part of the teacher'*

- *'The planning and delivery was led by myself ... I came prepared to the meetings and the teacher agreed with my suggestions ... the teacher never took the lead in the lessons and felt inhibited'*
- *'I was not made fully aware of the teacher's important role in this process. I was occasionally disappointed by some tasks not being completed in class between sessions. Although the teacher was very enthusiastic and helpful during the sessions themselves, they did seem detached from the class-based learning'.*

Nine comments were made about the challenge of working with children who had short attentions spans or who were poorly behaved. Some artists commented that they thought the teacher should have stepped in more to discipline the children.

Other issues

There were some additional points made by a small number of artists in relation to what would help them deliver ICLs more effectively. These were:

- the opportunity to meet with other artists involved in the project to discuss the ICLs and to share ideas. This would help artists know that they 'were all on the same line of thought' whether they were of the same or different art disciplines. It was also suggested that having more artists working on the project (within a cluster) to give a broader range of approaches would be beneficial
- the opportunity for the pupils to learn more about their art discipline before using it to support the curriculum. More awareness or better skills would then enable them to use the art more effectively in relation to the curriculum.

5. Artist Interviews

Seven artists were interviewed between April and June 2006, representing each authority. Two were 'craft' related artists; one was media and drama; one was media; one was a dancer and one was an installation artist. The artists were asked about their views on the Peebles training event and early stages of development of the project. Their responses are reported in appendix B1.

5.1 Personal and professional background

The interviewees had varied backgrounds including freelance educational project work, jewellery design, textiles, TV production and media. They had been practising as artists for between 5 and 20 years and typically became involved in AAC because they had relevant contacts and experience. They all had some experience of working in education and previous projects that some had participated in included the Holocaust Project, Creative Partnerships in England, various residencies, and film making for educational purposes.

5.2 The Chicago/LEAP model and key issues to be addressed

Most interviewees attended the event at Peebles and therefore had knowledge of the LEAP model based on that. One interviewee commented that whilst the LEAP model was very similar to AAC, a difference was that AAC places more emphasis on learning as opposed to the final art product. Another commented that the two models did not match well due to differences between the American and Scottish educational systems.

Artists were asked if they were aware of other models of the arts-infused curriculum. Three other models were noted (by 3 separate interviewees): Mus-e, Creative Partnerships and the work of Scottish Screen.

With respect to the aims of AAC, interviewees mentioned its function as a vehicle for learning but the most common response related to the aim of engaging pupils with different learning styles and learning needs, such as lower academic achievers.

In relation to issues to be addressed in the Scottish context, common responses related to deficiencies in resources, namely, space and time constraints and out of date equipment. The importance of having the full involvement and interest of the teacher was also mentioned (this appeared in response to other questions too). For example:

'The key issue ... is the importance of the involvement of the teacher within the actual project ... it is encouraging the teacher to be involved in each lesson to teach the way they would normally teach, without taking a step back and allowing the artist to come forward and say "we are doing art today".'

One interviewee mentioned his lack of teaching experience as an issue to be addressed and another raised concerns about the link between the curriculum topic and art discipline not always being obvious.

5.3 Initial hopes and fears for the project

Commonly reported hopes included promoting learning in a productive way that would engage pupils of all abilities. Other hopes included that the project would encourage more precise lesson planning and one interviewee admitted that his hopes had been initially too unrealistic and that consequently he had to simplify his approach.

Typically reported fear related to the artists' doubts about their own abilities in terms of having adequate experience, being able to find ideas and most commonly, being able to demonstrate the link between the art form and the curriculum topic, or that the pupils wouldn't make the connection. Other fears included not having sufficient resources (for example, space); that the relationship between the artist and teacher may lack strength; and difficulties associated with fitting lessons into the more rigid structure of the secondary school timetable.

5.4 Implementing AAC – the ICLs in action

All interviewees gave examples of work they had done with the pupils which included using artwork to demonstrate devastation caused by extreme weather; making Velcro animals to enhance learning about animal classifications and habitats; using movement to demonstrate the process of converting fractions; and using 3D animation to demonstrate scientific principles.

Contribution of arts activity to learning

All interviewees responded favourably, with some stating that there was a strong link between the topic and art form and that it was successful in consolidating learning. Artists again emphasised the importance of the role of the teacher in making the links between the art and the curriculum. One spoke of each stage of the 'designing and making' being built into the theme by the teacher either in preparation for the artist's visit or after, so that when the artist was there the children were able to take from what they had been doing with the teacher and build it into the artwork. The dance artist spoke of 'making fractions fun' with the movement emphasising the processes of working with fractions; the children then remembered the movements and remembered the process of doing fractions. Another artist, who felt the teacher had not given sufficient information about what she wanted to do with the topic decided for herself what concepts the children might find difficult to grasp and provided visual and practical ways of learning and classifying concepts.

Critical or 'turning' points

Responses to this question were varied, with two interviewees stating that they could not identify any turning points. One interviewee recalled when pupils demonstrated their enthusiasm for the fractions class and the teacher noted that the less able pupils had become more involved in lessons. Another mentioned a difficulty related to the teacher being off work and loss of planning time due to Christmas festivities. Finally, one interviewee recalled how the link between the art form and curriculum topic was revealed at a later stage when 'it all comes together', which she considered a turning point.

Promoting thinking skills/problem solving/creative thinking skills

Various responses were given including teaching a design process that incorporated thought from creative and pragmatic perspectives; making links between art and abstract concepts by asking pupils to imagine themselves in specific situations; asking pupils to identify features of footage work on popular TV programmes; setting tasks without full instructions (thereby promoting problem solving); and by offering lots of choice and questioning responses.

Have any ICLs been more effective than others (for those who have worked with different year groups or in different schools)

Four interviewees were able to respond to this question. One respondent noted that most of the work was effective whilst others commented that the level of involvement and creativity of the teacher was an important factor in addition to good facilities and the support that the teacher receives from other/managerial staff. One interviewee reported that teaching in deprived areas was more of a challenge due to poor collaboration skills among pupils.

Difference between ICLs and other ways of working

One interviewee claimed not to have adapted his approach, however, others typically commented that they undertook more teamwork or became more collaborative (with the teacher). In other projects they were more likely to work on their own with pupils. For example:

'... the way AAC has been done, every stage of it has been planned together; we sit down together before it even starts. The one I'm doing now started in April; the first meeting I had was in December, so we sat down and agreed a topic months and months in advance. Now we've come together again to discuss what aspects of this topic are appropriate for AAC, which bits are a bit dry, which bits need a bit of life.'

Other issues that emerged included greater emphasis on the learning outcome rather than the art work, the potential for AAC to continue (unlike other projects) and the potential for creative thinking to be exchanged and disseminated between the teacher and artist.

One interviewee reported that she drew upon a broader range of activities while another indicated that she worked more closely with pupils in a teacher role.

Assessment of art outcomes/activity

Two interviewees reported that they had conducted their own evaluations by asking pupils for feedback on the classes and one claimed that the teacher issued evaluation questionnaires at the end of the project. Two interviewees reported that their work was not evaluated and one added that she did not see it as her role to make assessment judgments.

Quality of the art produced

Most of the interviewees reported being very pleased with the quality of the art work, stating that it was very high. One interviewee, however, stated that the quality of the art work was not especially high due to the emphasis on learning rather than the artistic product.

5.5 Meeting the aims of AAC

Motivation

Pupils were generally perceived to be very motivated, although one interviewee noted problems in more deprived areas. Two of the artists spoke about children being excited by the work and one said '... their enthusiasm would bowl you over'. One artist spoke of the 'kids being great' even though there had been some initial problems relating to resources and equipment. Artists working with secondary pupils were more reserved in their judgements and were more likely to indicate that some pupils were less motivated than others. One thought about three-quarters of the classes had been engaged and motivated, with some finding it difficult to relate to the art. Another suggested that the majority were motivated but that in each class there were one or two who were not appreciating it.

Pupil interest in art

All interviewees reported that the majority of pupils demonstrated a strong interest in their art; comments included: 'very interested', 'they love it, it excites them', 'probably the novelty value'. The two media artists noted that in particular the children were very keen to use the equipment and learn about cameras and film-making.

Effectiveness of art as means of delivering the curriculum

All interviewees commented that the arts discipline was an effective way of delivering the curriculum topic. Evidence provided included observations of the pupils' enthusiasm, their grasping of principles and positive feedback from the teacher. It was also noted that the classes often engaged pupils in learning without them realising they were learning. One interviewee commented that different art disciplines will lend themselves better to particular subjects or topics, for example, dance suits some topics, animation for others.

5.6 Reflection/ evaluation

How evaluate?

Varied responses were given to this question. Some reported using written evaluations and self-reflections/discussions with the teacher. Two interviewees reported the conclusions of their evaluations, with one stating that the ICLs were 80% positive and 20% negative and another, who kept a day-by-day diary concluding that the ICL was useful through its demonstration of how art can turn abstract concepts into meaningful artefact.

Lessons to be learned and advice for the future

The most common feedback related to the relationship between the artist and teacher, that is, there must be strong collaboration, mutual respect for each other's expertise and the full support/ involvement of the teacher. A selection of such comments are:

- *'It is critical that the teacher covers the [subject]. Our remit is to take the principles of the [subject] and then make them understandable by using our art form. That relationship is critical in the whole thing. There has to be a lot of involvement on both sides. The teacher can't stand back and let the artist work and vice versa.'*
- *'I think the teacher and artist need to have a very strong team ... they need to know exactly who is doing what ... that's all to do with preparation.'*
- *'... the important thing is when the children actually see the teacher getting involved in doing the artwork, rather than sitting back.'*
- *'There were some instances where we were left alone in the classroom, or it was expected we would deliver the entire lesson, which is not what I thought the project was about. Some teachers were more flexible than others. Some were definitely not on board, and it really reflected in the way that the kids responded as well.'*

Other comments from single interviewees included the need for an equal balance between the art and the curriculum topic and a sense of flow between lessons; having an overall goal but with flexibility for changes to be made to lesson plans; the need for awareness to be raised across the whole school about the AAC activity; and the potential for integration of ideas to make learning more interesting.

Advice for the future repeated points already made, for example, openness to collaborative teaching. Other responses included ensuring adequate facilities and planning time, considering practicalities and ensuring expectations are clearly communicated by teachers.

Benefits for pupils

A number of benefits were reported and related to positive psycho-social outcomes (for example, enhanced confidence, self-esteem, attention span) and behavioural outcomes (improved collaboration) among pupils. The interviewees also spoke of consolidation of learning through new learning

experiences, greater responsibility for learning and the ability of ICLs to reach all pupils, regardless of their learning abilities.

Ingredients for success

Many interviewees felt that they had already answered this question and referred to their responses to previous questions. Those who responded to the question reiterated ideas such as the need for teamwork, collaboration and communication between the artist and teacher and the need for open-mindedness, commitment and recognition of the principle behind the AAC among teachers. Support from school management was also important. One artist commented:

'In some schools the headteacher knew me on a first name basis and welcomed me in, others wouldn't have a clue that I had stepped into the school and out of it. This speaks volumes about the school and shows those that are genuinely interested and whole-heartedly involved in the project'.

Impact on artist

Artists were asked if they had worked differently in this project compared with other projects. Again, a few interviewees mentioned stronger collaboration efforts. Other comments from single interviewees included greater diversity of methods used and making more links with the curriculum.

They were also asked if this work had any impact on their approach to working in schools generally. One interviewee claimed that her practice had not changed but other feedback included professional development through having learned how to use different equipment, and rekindled interests in specific art forms. One artist said:

'It has given me enthusiasm to take up different aspects of my art, and to keep on learning different techniques that I can use in my own work and to use within the school, to keep coming in with a fresh approach'.

One interviewee also reported that her involvement in the project had prompted her to investigate becoming a teacher.

Finally

Finally the artists were asked to sum up their impression of working on AAC in three words. All interviewees selected positive words such as challenging, rewarding, fun, exciting...

6. Summary of evidence from artist survey and interviews

The artists assembled for the AAC project represented a wealth of contemporary Scottish artistic talent. They covered a wide variety of arts disciplines, but there was a high incidence of dance and drama in the first year of the project. All of the artists had worked in an educational context at some point in their previous careers, though often in different roles from the one required by AAC. At the time of completing the questionnaires, experience of delivering ICLs varied widely amongst the cohort of artists between 3 and 18 sessions. Therefore, as with the pupils and teachers, the artists were not reporting on equivalent experiences. The common factor was that they had worked with a teacher to deliver some aspect of the curriculum using their art form.

Artists were very positive about the working relationships they had developed with the teachers and there was broad agreement that the planning process was effective, though for a minority this had been less than satisfactory. The artists reported that the children had engaged well with the learning in the ICLs, though those working with pupils in secondary school were less certain about this, and some had reported the behaviour of some of the children as challenging.

Artists generally felt that they 'took the lead' in delivering most of the ICLs and some expressed the view that some teachers could take a more active role during the lesson. Some felt they needed a clearer understanding of what the curricular aims were. Related to this, many artists reported that they would

have liked more time (perhaps paid time) to be made available to research and gain insight into curriculum content. A small number of artists reported that the apparent level of commitment to and awareness of the project could be improved in some schools, particularly amongst the SMT.

7. Note on inferential statistics

Differences between the responses of artists working in primary and secondary schools were investigated, using the Mann-Whitney U test. (Number: primary = 14; secondary = 10)

Table B4.2 Artists' views on aspects of delivering ICLs

Item	mean rank	U	sig
sufficient time to develop arts outcomes	primary: 15.29 secondary: 8.60	31.00	p=0.014
classroom suitable environment	primary: 15.95 secondary: 5.55	0.500	p<0.001

Table B4.4: Artists' views on pupil engagement with learning

Item	mean rank	U	sig
pupils enthusiastic about art	primary: 15.50 secondary: 6.56	14.00	p<0.001
pupils persisted in tasks	primary: 15.11 secondary: 8.85	33.50	p=0.02
pupils highly involved in learning during ICL	primary: 15.61 secondary: 8.15	26.50	p=0.006

Table B4.5: Artist views on the effectiveness of the learning experience for pupils

Item	mean rank	U	sig
pupils valued art outcome/performance	primary: 15.00 secondary: 7.30	18.00	p=0.003
pupils interested in knowing more about art	primary: 15.19 secondary: 7.85	23.50	p=0.007

Table B4.6: Artist views on encouraging pupils to work creatively

Item	mean rank	U	sig
Pupils willing to try out new ideas	primary: 15.25 secondary: 8.65	31.50	p=0.011
Pupils contribute own ideas	primary: 15.47 secondary: 7.58	23.00	p=0.003
Pupils asked lots of questions	primary: 15.73 secondary: 7.15	16.50	p=0.001

Table B4.7: Artist views on the opportunity for pupils to work collaboratively

Item	mean rank	U	sig
pupils showed sense of responsibility towards each other	primary: 14.93 secondary: 9.10	36.00	p=0.032

Table B4.10: Artist views on school arrangements for AAC

Item	mean rank	U	sig
made to feel welcome in school	primary: 16.07 secondary: 7.50	20.00	p=0.001
management was supportive	primary: 14.25 secondary: 8.50	31.50	p=0.024
management present in early	primary: 13.58	31.50	p=0.05

meetings	secondary: 8.50		
----------	-----------------	--	--

Evaluation stage 1 data collection

Views of parents

1.	Introduction	101
2.	Parents' views	101
3.	Summary	102

Views of Parents

1. Introduction

The evaluation team asked 5 of the secondary schools and 5 of the primary schools, representing all 7 authorities, to invite parents of the children involved in AAC to participate in a group discussion about the project. The team were willing to meet with parents at a convenient time, for example, in the evening or during the day or at a pre-arranged school event such as a parents' evening.

Some of the schools highlighted that they normally had difficulty getting parents to attend anything at the school and, as with other work involving parents, the final sample was small. In the end 14 parents from 6 schools were interviewed – 5 from 2 secondary schools and 9 from 4 primary schools. These represented 5 of the 7 authorities. Three of the schools were in rural locations and 3 in urban settings. It is recognised that those who came to the discussions were probably those who usually came to school events and as such would be supportive of the school and seriously interested in their children's education.

The discussions focused on what the parents knew about AAC and its aims, what their children told them about it, what impact they thought it had had on their children and their views on the importance of the arts.

2. Parents' views

The parents varied in how much they knew about the project, with some indicating that they had come along to our discussion to find out more. Others had attended a meeting arranged by the school to introduce the project and indicated that the class teacher had given them as clear an idea as possible at that time, although at the start 'it was a bit unknown'. Most indicated that they mainly knew what their children had told them.

Views on what the aims of the project were varied from generally 'making school more interesting' and 'helping them to learn better' to fairly insightful descriptions of introducing academic topics in different ways to help children who learn better through being active.

The parents reported that their children were entirely positive about the project and that most of them talked very enthusiastically about what they were doing with the artists. A typical comment was: 'All I ever hear about is ... [name of artist]'. None had spoken of anything that they did not like. One parent of a secondary pupil indicated that her son had not really spoken about the project but that was not unusual. Her concern would be if he came home and said he was having to do things he did not like, and this had not happened.

The parents were asked if they thought the project had had any impact on their children's enthusiasm for school work, attending school, homework or on their behaviour. For the most part, parents reported that doing school work and attending school was not a problem; some reported that at times the children were very keen to go to school, 'even when sick', but could not specifically link that to AAC. However, others were aware of increased enthusiasm for the AAC project. For example:

- *'B is always enthusiastic, but she has been really excited about this'* (P3 girl)
- *'They say that [artists' names] have made them want to do more things; they take it in more if it's fun, if it's practical, and it is, it's been sinking in better'* (P6 boys)
- *'Because she's getting involved in this creativity stuff at school, she'll sit at the computer and make things up herself, leaflets and flyers. That's maybe something that would have just happened anyway ... but she didn't do it before'* (S1 girl)
- *'She was really into that [specific project] ... she couldn't wait to get in to school to do that'* (S1 girl).

For most parents, behaviour was not generally an issue. However, one parent reported that her son was 'hot headed', but that the artists 'tell him how to be calm and express himself in a different way so that he is not just hitting out' (P6 boy).

Other examples of evidence of enthusiasm and involvement with learning included:

- 'E has been teaching her 3-year old brother some of the things from the artist' (P3 girl)
- 'They make up stories for the kids at home and act them out – using different voices' (P6 boys).

One parent reported that her daughter had so much enjoyed having drama in the class that she had joined a drama club (P5 girl).

All parents were very positive about their children being involved in arts activities and saw it as an important way of developing confidence, finding different ways of expressing themselves and having fun. However, parents in rural locations identified that there were few opportunities out of school. There were sports clubs, but arts-oriented clubs were rare and it was good that this could be done through the school. Some also thought that working with artists in school helped them see beyond the usual stereotypes of jobs that they might do when they were older.

Only one of the parents reported active involvement in arts activities and that included the whole family – going to theatre, brothers and sisters involved in youth music and theatre, amateur dramatics, parents playing musical instruments, singing and involved in choirs. Others reported involvement in different kinds of groups such as support groups and church activities. Those in rural settings again mentioned the lack of opportunity and that they would welcome more clubs and activities. For some, involvement in anything outwith the home required the additional resource of childminding.

All were equally positive about arts being used as a means to deliver the academic curriculum. The general view was that anything that enhances learning and makes it more interesting for the children has to be 'a good thing'. One secondary parent stated:

'I don't see it can do any harm. It can only enhance the curriculum provided it is done in a structured fashion and is relevant to the subject being taught. I would be concerned if it was happening in an unstructured way and that doesn't seem to be the case'.

Parents all thought it was too early to know if AAC could have a wider impact on the school or on the community. However, one group of parents emphasised that if an initiative happening in a school was to influence the wider community, then resources needed to be available to the community for related out of school activities.

Another group of parents asked about the longer term plans for AAC. They knew that the current project was a pilot but they indicated that they thought it was so valuable that funding needed to be found to continue it – one even proposed lobbying the local MSP for support. As an alternative they wondered if the school and PTA could raise funds to support an artist in the school. While the views reported here are those of only a very small group of parents, they are an indication of the effectiveness of AAC in the eyes of parents.

3. Summary

In seeking the views of the parents of young people involved in the project, the evaluation team hoped to explore any wider impact that involvement in the project might have. The team were interested in any perceived increase in motivation and enthusiasm that parents may have observed. Almost inevitably, given the difficulties of organising such group interviews, the sample was small. However, the parents who agreed to meet with the members of the research team provided some valuable insights about how the project seemed to be engaging their children.

The parents reported, without exception, that their children were entirely positive about the project and that they talked enthusiastically at home about the experience of having an artist in the classroom. Some reported that their children had expressed a desire to join an art or drama club and attributed this to involvement in the AAC project.

However, they also reported that it was too early to say if the project could have wider impact and had some questions about the sustainability of the project.

Evaluation stage 2 data collection

Views of new artists and teachers on initial support

(i.e. those who joined in the second year of the project – academic year 2006-07)

1.	Introduction	104
2.	The teachers	104
3.	The artists	107
4.	Summary	109

Views of new artists and teachers on initial support (i.e. those who joined in the second year of the project – academic year 2006-07)

1. Introduction

The purpose of these questionnaires was to investigate how teachers and artists felt about any training or introduction to the project they had had (if any) and their views on the early stages of their involvement. This parallels a survey undertaken in September 2005 for teachers and artists involved in year one of the project and reported in Annexe B1.

Twenty-nine 'new' teachers became involved during the course of 2006-2007 but the research team did not become aware of many of them until late in the academic year. Eighteen were sent questionnaires and 15 responses were received.

At the time of sending out the questionnaires, the evaluation team were aware of 5 new artists joining the project, though another 5 or 6 became involved during the course of the year, but again information about these were not received until later in the academic year; as the purpose was to 'catch' participants early in their experience, these were not pursued. Therefore, 5 questionnaires were issued and 3 were returned.

2. The teachers

2.1 Teacher survey

Five of the respondents were secondary teachers and 10 were primary teachers. The secondary teachers taught English (2), social subjects (1), science (1) and modern languages (1). There were 13 women and two men.

The length of time they had been teaching was wide-ranging:

- 6 had been teaching 5 years or less
- 2 had been teaching between 6 and 10 years
- 2 had been teaching between 11 and 15 years
- 5 had been teaching for more than 15 years.

Teachers were asked to comment on their own skills and participation in the arts. The question was asked to identify the extent to which those who had been asked to take part or who had volunteered were 'arts-oriented'. This might indicate the ease with which they adapt to working with an artist.

Table C1.1: Teachers' perceptions of their skills/participation in arts activities

Key : SA = strongly agree, A = agree, D = disagree, SD = strongly disagree

	SA	A	D	SD	m (sd)
I think I am a creative teacher and like to try out new ideas with my pupils	5	8	1	1	3.13 (0.83)
I think of myself as being a creative person	3	10	2	0	3.07 (0.59)
I participate in the arts on a regular basis (eg attend theatre, concerts, art galleries, exhibitions)	1	9	4	0	2.79 (0.58)
I have strong artistic abilities	2	6	7	0	2.67 (0.73)
I actively participate in the arts as a performer (eg I am a member of a drama group, music group, art group)	1	1	6	6	1.79 (0.89)
I actively participate in the arts in a support role (eg I help with a drama group, music group)	1	2	4	6	1.85 (0.98)

Most teachers saw themselves as creative teachers and creative people and yet a half did not think they had strong artistic abilities. Whilst seven of the teachers participated in the arts on a regular basis, only three participated in a more active role (as performer or supporter). The teachers' comments provided an insight as to some of the reasons why they were unable to take part, for example living in rural areas limited access to the theatre; family responsibilities took priority and left less time to be actively involved in arts activities. One commented that the project had already given them new skills and had given them the confidence to try new things.

Involvement in AAC

Seven of the 15 had heard that they would be taking part in the project before the summer holidays; 4 knew they were going to be involved just after the summer holiday and the remaining 4 after the October holiday.

Teachers were asked to comment on their first impressions on being asked to participate.

Ten out of the 15 used the adjective 'excited', with other positive responses being 'enthusiastic' and 'interested'. Alongside the excitement however, there were other qualifying views, eg 'sceptical', 'unsure', 'apprehensive', 'concern over planning' and one in particular perceived that involvement meant extra paperwork. One secondary teacher, having been aware of the project in the school in the previous year had asked to be involved, and one primary teacher spoke of having been impressed by the artists work with the children during the first year of the project.

Induction

The teachers were asked to describe the training they received before starting the project. There was considerable diversity in the experiences of the teachers. Five teachers, from 3 of the authorities, mentioned attending the 'recall day' at Livingston along with the others who had been involved during 2005-06. In one authority, teachers spoke of attending an induction day with the authority co-ordinators and artists; in another authority, teachers mentioned not really receiving training but attending planning meetings and receiving materials; in a third authority, the new teachers appeared to be dependent on the artists helping them to develop their lessons. One teacher mentioned speaking to teachers who had been involved before.

Teachers were asked to indicate the effectiveness of the training or induction they had received. Two did not respond to this question, saying it was not applicable as they had had no training.

Table C1.2: Teachers' perceptions on usefulness of their training/induction in relation to aspects of AAC

	Highly Effective		←————→			Not Effective	
	5	4	3	2	1	<i>m (sd)</i>	
Developing an understanding of how arts could be used in different curricular areas/subjects	3	8	2	0	0	4.08 (0.64)	
Seeing how the artist and teacher can work together	5	4	3	1	0	4.00 (1.00)	
Seeing how arts could be used in my particular subject (secondary teachers)	2	1	2	0	0	4.00 (1.00)	
Beginning to plan and work with artists	6	4	0	2	1	3.92 (1.38)	
Developing an understanding of the Scottish Arts Council's project	2	6	4	0	0	3.83 (0.72)	
Developing an understanding of the structure of an Integrated Curricular Lesson	2	7	1	2	0	3.75 (0.96)	
Seeing how arts can be used to teach non-arts concepts	3	5	3	1	1	3.62 (1.19)	
Seeing how ICLs could be developed with my pupils	2	4	3	3	1	3.23 (1.23)	
Developing an understanding of the Chicago model	0	4	3	2	2	2.82 (1.67)	

Most of the teachers felt that the training was at least partly effective in the areas identified; however, for some teachers introduction to the 'Chicago model' was limited (or even unheard of, according to comments in the open section of the question).

The introduction to AAC had been strongest in relation to understanding how arts could be used in different curricular areas generally, the artist and teacher working together and also, for secondary teachers, how arts could be used in teachers' specific subject areas. Induction has also given most of the teachers the chance to start planning with the artist – though for 3 teachers this had not been the case.

Some of the teachers responses indicated that greater emphasis could have been put on how the arts can help teach non-arts concepts and how ICLs can be developed with their pupils. Where one day training had been provided, one person suggested that 2 days would have made it 'highly effective' as opposed to 'effective'.

Teachers were then asked to indicate how much they agreed that certain outcomes had been met by their training/induction.

Table C1.3: Agreement on meeting of outcomes of training/induction

At the end of the induction meeting(s), I felt that ...	SA	A	D	SD	m (sd)
there had been sufficient opportunity to discuss questions and issues	4	8	1	0	3.23 (0.59)
questions I had about the project had been adequately answered	3	9	1	0	3.15 (0.55)
evidence of the effectiveness of the arts-infused curriculum had been mentioned	1	12	0	0	3.08 (0.28)
the theoretical underpinning of how such interventions supported teaching and learning had been explored	3	6	1	3	2.85 (0.89)
I was well equipped to start working on the project	1	9	1	1	2.83 (0.72)
I had concerns about how I could apply this in my classes	0	7	3	3	2.31 (0.85)

Overall, teachers were positive about the outcomes of their induction experience. All agreed that there had been evidence of the effectiveness of the arts-infused curriculum and the majority felt that they had had the opportunity to discuss issues and have their questions answered. However, around a half agreed they had some concern about applying it in their classes. Four thought that theoretical underpinnings related to learning and teaching had not been explored. In the open comments, it was suggested that better provision needed to be made for teachers coming into the project 'blind'.

Aspects of communication

Finally, teachers were asked their views on how effective communication about the project had been during the early stages of their involvement. Their responses are given in table C1.4 (next page).

The most effective aspect of communication, rated by teachers, appears to be regular contact with the artist, followed by the information received about the project. They were less certain about the role of the CLOs, with one, in the open comments section, indicating that he/she did not know who the CLO was. There appeared to be little communication about how the project was developing in other local authority areas, though those who attended the event at Livingston had some awareness of this.

Table C1.4: Teachers' views on effectiveness of communication in early stages

	Highly Effective ←————→ Not Effective					<i>m (sd)</i>
	5	4	3	2	1	
Establishing regular contact with the artist(s)	5	8	2	0	0	4.20 (0.67)
The information received about AAC in the introductory stages	3	2	9	0	0	3.56 (0.85)
Ongoing communication with your Creative Links Officer (CLO) or Cultural Co-ordinator (CC)	2	3	7	1	2	3.13 (1.19)
Information and publicity circulated by SAC	1	2	7	1	3	2.79 (1.12)
Information about AAC developments in other local authorities	0	1	7	4	2	2.50 (0.85)

2.2 Teacher interviews

Twelve teachers in total were interviewed in June 2007, towards the end of the second year of the project. Five of these were new to the project in 2006 to 2007. They were asked about what they knew about the Chicago/Leap model and other approaches to an arts-infused curriculum. They were also asked about any training they had received and how effective it had been, particularly in terms of understanding the aims of AAC and how it fitted in to Scottish education.

Their knowledge of the Chicago/LEAP model and other arts-infused approaches to learning was limited and typically consisted of what they had 'heard from CLOs and chats with artists'. These teachers had received very little training, although planning activities with artists was seen to be 'good training' by one teacher while another, who was asked specifically about the utility of the planning document, commented that it was 'good to get her started.'

Despite their limited training, teachers demonstrated that they were sensibly adapting concepts integral to the LEAP model to their own contexts and were knowledgeable about the main aims of AAC. In terms of fitting the educational aims of SEED and SAC, AAC was viewed to connect learning in the classroom with real life situations, to make learning more accessible for those with different learning styles and to increase pupils' motivation and enjoyment of learning. One primary school teacher also commended the holistic approach of AAC, linking it specifically to the Curriculum for Excellence:

'They're very admirable aims... instead of pigeon holing subjects and people they're very, very useful in developing the whole person, taking a holistic approach to the curriculum...very much in line with the Curriculum for Excellence.'

Those involved in the second year of AAC had received limited refresher training with most development being done 'on the ground.' Two primary school teachers did, however, report taking up the opportunity to share their experiences by attending a meeting with AAC practitioners across Scotland (Livingston 'recall day') and one secondary school teacher reported attending a 'catch-up' session with CLOs and other teachers.

3. The artists

3.1 Artist survey

As indicated in the introduction, the evaluation team were only aware of 5 new artists starting in the academic year 2006 to 2007 and so only 5 questionnaires were sent out, with 3 responding.

Two of the artists had been practising their art for over 15 years with one having practised for between 6 and 10 years. Two had worked in schools previously, while one had not. One indicated that he had been involved in 'too many things' to describe and the other had been involved in a number of 'brief projects' associated with public art in both primary and secondary schools. One had first heard about involvement in AAC around August, one in October and the other in November 2006. On first hearing about the project, one indicated that he was 'curious', another felt 'excited and creatively challenged' and the third was a 'last moment' replacement for someone who cancelled and so did not have 'much time to reflect on the project'.

Induction

For two of the artists there had been no induction – only meetings with the teaching staff. They were therefore dependent on the teachers they were working with to explain the project. The third artist reported having meetings with the CLO and reading some background information. Two of the artists were not therefore able to complete the questions on the effectiveness of the induction process, other than comment positively on getting to know the teachers and planning work with them. The artist who had meetings with the CLO and additional information as well as meetings with teachers, likewise was positive about getting to know the teachers and working with them; the only additional benefits were developing an understanding of how arts could be used in different curricular areas and of the structure of and ICL.

Two of the artists indicated that at the outset they had some concerns about how they would apply their specialisms in the classroom.

Communication

The information received about the project had not been very effective; establishing regular contact with teachers had been effective for 2 of the artists, both of whom worked with one schools, but not the third who was working with 3 schools. Their experience of communication with CLOs varied from very effective, through fairly effective to not effective.

3.2 Artist interviews

Six artists were interviewed in June 2007 towards the end of the second year of the project; 4 of these were new to the project in 2006-2007, although the two who were not new to the project had not attended the training event at Peebles at the outset of the project. All except one had attended the 'get together day' in Livingston where they had shared their experiences of AAC with other artists and 'picked up a few things'. One reported having discussion with the local authority arts education team and being able to get resources from them. Therefore, 3 of the 4 artists new to the project had been at Livingston and had gained insight into the project there.

They were asked about their initial hopes and fears with regard to their involvement in the project. The artists spoke about their aspirations to achieve the aims of AAC in terms of inspiring pupils to learn in different ways. They hoped that pupils would 'get it' and that they would 'do it right'. Two artists also mentioned their hopes that the sessions would generate an interest in the particular art form. A musician, for instance, stated:

'I hoped to introduce different ways of thinking about music and help pupils connect with their musical selves.'

Artists' initial fears centred on perceived demands of the project such as finding suitable ideas, planning and getting one's 'head round' the curriculum area being taught. Two artists also recollected their fears that the sessions might not work well or that they might somehow impede pupils' educational progression. Another fear concerned the idea that the art form and curriculum topic may not be fully compatible. The following quotes illustrate these concerns:

- *'...perhaps a fear that it was a bit demanding – having to come up with lots of different ideas and see them through and what if some of them don't work and I suppose it's a challenge mentally to try and strategically work out how it's all going to go'* (visual artist).
- *'My main fear was that you were trying to put two things into one in terms of the art form and subject area and I think one of them would always have to be subservient, I don't see how they could co-exist happily together'* (musician).

4. Summary

'New' artists and teachers became involved in AAC throughout the life of the project. Induction for such participants varied from authority to authority, with both teachers and artists in some authorities reporting meetings with CLOs and some locally organised induction and planning days. Others had little support with teachers depending on experienced artists, and vice versa, to help them with the preparation and delivery of ICLs.

Some 'new' teachers and artists, in preparation for the second year of the project, had the opportunity to attend the recall day at Livingston in June 2006, and this had helped them gain insight into the project, which they found helpful. Others who were not able to attend, or who joined the project later than that date, appeared to have had less support.

Where artists and teachers had taken part in some kind of induction process this was generally seen to be effective mainly in relation to understanding how art could be used in different areas in the curriculum and in getting to know the artists and beginning planning lessons. Most expressed some kind of uncertainty or concern at the outset.

Communication between artists and teachers appeared to be established quickly and was generally effective. The quality of communication with the CLOs varied from very effective to not effective for both artists and teachers, as did the quality of information received about the project.

More structured induction and clear information about Arts Across the Curriculum and ICLs would have benefited all new participants to the project and may have allayed some of the initial concerns.

Evaluation stage 1 data collection

Evidence from pupil surveys and focus groups

1.	Introduction to stage 2 pupil surveys	111
2.	The pupil sample for stage 2 surveys	111
3.	Overview of results from pupil surveys	112
4.	Results of pupils surveys	115
5.	Pupils' hobbies and interests	126
6.	Pupil focus groups	128
7.	Summary	138
8.	Note on inferential statistics	139

Evidence from Pupil Surveys and Focus Groups 2007

1. Introduction to stage 2 pupil surveys

A sample of pupils involved in Arts Across the Curriculum during 2006 to 2007 was surveyed in May 2007.

As in the first stage of the evaluation, the questionnaires were designed to suit the age and stage of the children. Three questionnaires were used – one for P3 and P4, one for P5 and P6 and one for P7 to S3. The main differences are fewer questions for the younger children and they were asked whether they 'agree' or 'don't agree' with statements, while from P7 on they were asked to rate their agreement on a 4-point scale from 'agree a lot' to 'disagree a lot'. The questionnaire used the terms 'art' and 'artist' but during the administration it was emphasised that this was talking about what they were doing with the specific named artist, and it was not about drawing and painting!

All were asked an open question about what they thought they were learning when the artist and teacher were working together in the classroom. The purpose was to elicit the degree to which the children thought they were learning about their school subject, the art discipline or both.

Pupils were then asked to respond to a set of statements about the lessons, which covered the broad themes of:

- engagement with, and enjoyment of, learning (these terms are used in preference to the term 'motivation' in order to focus more clearly on what we understand 'motivation' to mean in this context)
- effectiveness of the learning experience
- working creatively
- working with others
- developing confidence

The older pupils were asked to comment on what they liked most, and if relevant, what they liked least about these lessons.

2. The pupil sample for stage 2 surveys

The sample was drawn from the schools that had been the focus of the evaluation in the first year of the project, although 2 secondary schools were no longer participating in the project, and one primary school had had limited involvement and thought it not appropriate to be included.

The original design proposed following up on pupils who had been involved in both years of the project. However, in many of the schools different classes and different teachers took part during the second year and, therefore, the majority of the pupils in the sample were experiencing AAC for the first time in 2006-07. One P4 class, one P6 class and one S2 class were involved over 2 years of the study. Where appropriate their results will be compared with pupils who have only been involved for one year.

As in the first stage approximately 200 primary and 200 secondary pupils were targeted for the survey. The questionnaires were sent to the schools with instructions to allow teachers to administer them at a time that suited them.

Response rates are given in Table C2.1.

Table C2.1: The pupil target and achieved samples by year group

	Target	Achieved	Return
S1	120	105	88%
S2	60	46	75%
S3	20	16	80%
Total secondary	200	167	84%
P7; P6/7	90	85	94%
P6; P5/6	65	59	91%
P4	45	39	87%
Total primary	200	183	92%

In the first stage of the evaluation, questionnaires were completed when pupils had taken part in one ICL with the teacher and artist and so it was possible to identify the subject topic and the art form(s) they had experienced. In the second stage, most pupils had experienced several ICLs (or at least two) covering different topics and experiencing different artists and art forms. For example, classes had experienced variously, drama and visual arts; storytelling, dance and crafts; ceramics and drama; drama and dance; dance and media; drama, dance and media; writing, textiles and drama. Curricular areas taught in primary schools through the art medium included renewable energy, World War II, citizenship topics, health, writing, energy, forces and friction, Mary Queen of Scots, China; in secondary schools the subjects included English, Modern Languages, Modern Studies, History, Geography, Science and Art & Design. This presents a complex picture and it is not possible to map out the experience in terms of subject and art combinations as in the first stage of the evaluation. Pupils were asked to respond to a more general experience of an artist working with the teacher than to any specific artist or art form.

3. Overview of results from pupil survey 2007

This section provides an overview of some key points across all year groups. A more detailed analysis of the survey findings is given in section 4.

What they thought they were learning

Out of the whole sample of 350 pupils, 61 (17%) did not answer the question or made comments like 'it was fun' or 'I liked the artist'. The rest responded as follows:

- art only mentioned 84 (24%)
- subject only mentioned 81 (23%)
- general learning 57 (16%)
- subject and art mentioned 47 (13%)
- subject and general learning 10 (3%)
- art and general learning 9 (3%)

Overall 39% mentioned the subject, 30% mentioned the art and 22% mentioned some aspect of enhancement of learning. Around one-quarter focused only on art and one-quarter focused only on the subject. Many of the pupils appear to have an understanding that the lessons are about learning the curriculum, with over one-fifth recognising that the approach helped improve their learning skills and other aspects of personal development.

Views about the classes with the teacher and artist working together

A selection of the statements from the questionnaire on which pupils were asked to indicate their agreement is presented here, drawing from the whole sample. The percentage agreement (combining 'agree a lot' and 'agree a little' for the P7 to S3 questionnaires) with these statements is:

- **Interest, enjoyment and engagement with learning**

- 88% I think having the artist in the classroom made the subject more interesting
- 79% I looked forward to the lessons when the artist and teacher worked together
- 80% I found that the time seemed to pass more quickly in these lessons*

- **Help with learning**

- 82% I found it easier to learn the topic because of the way it was explained
- 72% I found I could remember the ideas more easily*

- **Feeling confident**

- 69% The things we did made me feel confident*

- **Encouragement to be creative**

- 66% It made me want to try out new ideas and be more imaginative*

(* P4 pupils were not asked these questions, therefore these percentages are based on P6 to S3 figures.)

These suggest a very positive response to the ICLs, in terms of pupils' perceptions of enjoyment and help with learning. Slightly fewer pupils agreed that the activities made them feel confident: this could be because they already felt confident, or in some cases they may not have liked participating. Around one-third did not think it made them want to be more imaginative (or they did not know) – though again perhaps some thought they already used their imaginations well.

Open-ended comments

Pupils from P7 to S3 were asked what they liked most about working with the artist and the teacher and what they liked least, if anything. All the P7 pupils, except 2 and 140 (87%) of the secondary pupils wrote in something that they liked. Four P7 pupils and 29 (17%) secondary pupils indicated that there were things that they did not like.

The range of comments was similar to those made at stage 1. The broad themes and examples of typical comments are presented in table C2.2. This table also present the overall contribution of each category to the total comments made.

Table C2.2 Summary of open responses about what pupils liked about working with an artist and teacher together

Category of comment	Primary responses	Secondary responses
	83 pupils made a total of 99 comments. % is based on 99.	140 pupils made 167 comments. % is based on 167.
1. Enjoyment and interest <i>e.g. it was fun; it was less boring; it was enjoyable</i>	28 (28%)	50 (30%)
2. Why enjoyable?		
a. Different from usual <i>e.g. more relaxed; not doing work; not reading and writing and using workbooks; not copying; not sitting still</i>	10 (10%)	48 (29%)
b. extra help in class <i>e.g. extra person gives help; don't have to wait to ask a question</i>	10 (10%)	5 (3%)
c. working with others <i>e.g. work with different people; get to know others better</i>	2 (2%)	4 (2%)
d. liked the art <i>In this case the pupil named the specific art form e.g. I like drama; I enjoyed dancing; making films and videos.</i>	20 (20%)	14 (8%)
e. liked the artists <i>e.g. good at listening; good at doing their art; spends time explaining; 'nice person'</i>	3 (3%)	8 (5%)
3. Learning outcomes		
a. better learning of topic <i>e.g. helped with subjects; easier to understand; explained better; gave new ways to learn.</i>	6 (6%)	22 (13%)
b. learning new 'things' and skills <i>e.g. learned new 'things', 'stuff', 'skills'</i>	16 (16%)	9 (5%)
c. personal learning and development <i>e.g. increased confidence; less nervous; better at listening; becoming creative; using imagination.</i>	4 (4%)	7 (4%)

While the greatest proportion of responses for both P7 and S1 pupils was the 'fun' factor, the secondary pupils put greater emphasis on the fact that it was different from usual, which may reflect the more rigid structure of class organisation in secondary schools. While some P7 commented on it being different the experience may be more like the normal primary classroom experience. A greater proportion of the secondary pupils referred to the benefits gained in terms of better understanding of the curriculum topic, the P7 pupils commented more on liking the art and learning new skills.

The things that the 4 P7 pupils did not like were:

- it was boring sometimes (2)
- dancing with others
- rushing to finish by lunchtime

The secondary dislikes fell mainly into 3 categories, with a few individual comments:

- not liking something about the artist, eg the artist telling you what to do, being 'bossy' or 'strict', or being 'big-headed' (11 comments = 38% of comments made)
- having to do things you don't want to, e.g. not working with your friends; performing in front of others; rolling on the floor (9 comments = 31% of comments)
- finding it 'boring' (5 comments = 175 of comments)
- other: 'didn't learn anything'; some people 'made fun of others'; and teacher 'wasted time talking'

The more negative responses from secondary pupils is reflected in the quantitative data with them responding more negatively than P7 pupils in particular, as reported in section 4.5.

4. Results of pupil surveys 2007

This section presents the results of the pupil surveys by year group for the primary pupils as different questionnaires were used for different age groups. The secondary pupils are presented as one sample, but where there are differences in response between year groups they are noted.

4.1 P4 pupils

A total of 39 questionnaires were completed by P4 pupils, from 2 schools. There were 15 boys and 24 girls in the sample. One of the groups had been involved in the project for two years, while the other group had only been involved for one year.

What they thought they were learning

All the children completed this question. Their responses were:

- topic only mentioned 18
- art only mentioned 18
- general learning 3 (eg learning different things; how to do things better).

The pupils were evenly split on their main focus being on learning about the curriculum and learning about art. This split was found in both classes and so does not represent the experience of one group.

Views about the classes with the teacher and artist working together

The concept of 'engagement with learning', as we have used it in this evaluation, draws together the ideas of being interested, on task and enjoyment. Behaviour is included, as disruptive behaviour by some can diminish the enjoyment of the learning for others and be a distraction.

Table C2.3: P4 pupil views on engagement with and enjoyment of learning³

	Agree	Disagree	Don't know
I think that having the artist in the classroom made the topic more interesting	37 (95%)	0	2 (5%)
I looked forward to the lessons when the artists and teacher worked together	32 (82%)	1 (3%)	6 (15%)
We should have artists in more classes	31 (80%)	2 (5%)	6 (15%)
I wanted to work longer on the tasks in these lessons	25 (64%)	5 (13%)	9 (23%)
Pupils were better behaved when we had an artist and a teacher in the classroom	24 (62%)	6 (15%)	9 (23%)
Some pupils did not like working with the artist	3 (8%)	20 (51%)	15 (39%)

Note: teachers were asked to refer to the specific topics covered and the artists' disciplines or the artist by name, to help the children recognise what the questions related to.

The pupils reported strong agreement that working with the artist was interesting and something they enjoyed. Almost two-thirds agreed that behaviour was better, though about a quarter felt they could not comment. Generally, the pupils perceived that their class mates were also enjoying working with the artist, though, this was the item they were most likely to say that they did not know.

³ In the tables in the sections reporting survey results, missing responses are not reported, but account for cases where the total responses do not equal the number of respondents. Percentages may not add up to 100 because of this and because of rounding.

Table C2.4: P4 pupil views on the effectiveness of the learning experience

	Agree	Disagree	Don't know
I learned new things about what the artist did	36 (92%)	2 (5%)	1 (3%)
I found it easy to learn about the topic because we had the artist helping us	33 (85%)	4 (10%)	2 (5%)
I learned what I could do better	32 (82%)	2 (5%)	5 (13%)
I learned what I was good at	31 (80%)	1 (3%)	7 (18%)
I think my work was better in these lessons	28 (72%)	3 (8%)	8 (21%)

The majority indicated that they thought they had learned new things about what the artist did (this could mean understanding the work of the artist or also learning about the art); most also thought they had found the topic easier to learn, though fewer indicated that they were learning better, with about one-fifth unsure if their work was better. Most thought the experience helped with self-awareness of their learning identifying both what they were good at and what they could improve.

Table C2.5: P4 pupil views on working creatively

	Agree	Disagree	Don't know
I tried new things I had never done before	35 (90%)	2 (5%)	2 (5%)
I was able to talk about my own ideas	28 (72%)	6 (15%)	5 (13%)

Again, the majority identified that they had the opportunity to try new things, but they were slightly less sure about having the opportunity to talk about their ideas.

The P4 pupils were presented with one statement about **working with others** – ‘The things we did help me to work with other pupils in the class’. Their responses were:

- 32 (82%) agreed
- 5 (13%) disagreed
- 2 (5%) did not know.

Gender differences

The responses were analysed by gender (using Mann-Whitney non-parametric test) and there were no differences between the boys’ and girls’ responses.

Different length of involvement in AAC

Pupils in the school which had been involved for 2 years showed stronger agreement with 2 statements that those involved for only one year, with the latter pupils more likely to opt for ‘don’t know’:

	involved for	
	2 years	1 year
	Agree	Agree
I wanted to work longer on the tasks in these lessons	82%	35%
I look forward to the lessons when an artist and teacher worked together.	100%	56%

This could be explained by an ongoing positive experience for the first set of pupils, with the other group less familiar with the process.

4.2 P5/6 pupils

A total of 59 questionnaires were returned from P6 pupils (one was a P5/6 composite class, with only 4 pupils indicating that they were in P5.) They represented 3 schools with 17 (29%), 19 (32%) and 23 (39%) responses from each one respectively. One of the classes had been involved in AAC during both years of the project, whilst the other 2 had only been involved for one year.

There were 25 boys (43%) and 33 girls (57%) and one missing response.

What they thought they were learning

Twelve (20%) of the 59 pupils either did not answer this question or added a comment like 'it was fun'. The remainder referred to learning about:

- the topic only 18 (31%)
- the art only 17 (29%)
- both topic and art 8 (14%)
- general learning 4 (7%) ie: being more confident, how to cooperate, new skills and using imagination.

Of those who gave a relevant response, over a half focused on the curriculum topic, with a small number identifying that the learning experience was about both curriculum and art.

Views about the classes with the teacher and artist working together

The responses to the series of questions about the ICLs are given in Tables C2.6 to C2.9.

Table C2.6: P6 pupils' views on engagement with and enjoyment of learning

	Agree	Don't agree	Don't know
I looked forward to the lessons when the artists and teacher worked together	47 (80%)	4 (7%)	8 (14%)
I think that having the artist in the classroom made the topic more interesting	45 (76%)	6 (10%)	8 (14%)
We should have artists in more classes	43 (73%)	9 (15%)	6 (10%)
I wanted to work longer on the tasks	41 (70%)	13 (22%)	5 (9%)
I found that the time seemed to pass more quickly in these lessons	39 (66%)	8 (14%)	11 (19%)
Pupils were better behaved when we had an artist and a teacher in the classroom	24 (41%)	22 (37%)	13 (22%)
Some pupils did not like working with the artist	17 (29%)	22 (37%)	19 (32%)

The majority of the pupils appear to have found having the artist made the lessons more interesting and enjoyable and most would like to have artists in more classes.

Table C2.7: P6 pupils' views on the effectiveness of the learning experience

	Agree	Don't agree	Don't know
I found it easier to learn the topic because of the way it was explained in these lessons	45 (76%)	4 (7%)	10 (17%)
I learned what I could do better	44 (75%)	6 (10%)	9 (15%)
I learned what I was good at	42 (71%)	8 (14%)	9 (15%)
I learned new artistic skills	42 (71%)	8 (14%)	8 (14%)
I learned new things about art	41 (70%)	6 (10%)	11 (19%)
I found I could remember the ideas more easily	37 (63%)	7 (12%)	15 (25%)
I think my work was better in these lessons	34 (58%)	8 (14%)	17 (29%)

Around three quarters of the P6 pupils indicated that learning was easier because of the way it was explained, and similar numbers thought the experience helped with self-awareness of their learning identifying both what they were good at and what they could improve. The majority thought they had learned about art and developed new art skills; they were less sure if they could remember ideas or if their work was better, with over a quarter indicating that they did not know about these two aspects.

Table C2.8: P6 pupils' views on working creatively

	Agree	Don't agree	Don't know
I tried new things I had never done before	50 (85%)	5 (9%)	4 (7%)
I was able to talk about my own ideas	42 (71%)	4 (7%)	12 (20%)
It made me want to try out new ideas	40 (68%)	8 (14%)	9 (15%)

It was clear that the majority of pupils were getting the opportunity to experience new ideas though some were unsure about talking about their own ideas or making them want to try more new things.

Table C2.9: P6 pupils' views on working with others

	Agree	Don't agree	Don't know
I think that other people in the class had good ideas	52 (88%)	1 (2%)	5 (9%)
The things we did help me to work with other pupils in the class	38 (65%)	6 (10%)	14 (24%)
I worked with pupils I don't usually work with	28 (48%)	19 (32%)	11 (19%)

Pupils were positive about the ideas of their classmates, but were less sure how much it helped them to work together and less than half indicated that they were working with people they did not normally work with.

Additionally they were asked if the things they had done made them **feel confident**: 39/66% agreed, 8/14% disagreed and 12/20% did not know.

Gender differences

The responses were analysed by gender (using Mann-Whitney test) and there were no statistically significant differences between the boys' and girls' responses.

Different length of involvement in AAC

The results of the pupils who had been involved in the project for 2 years (n = 23) were compared with those who had only been involved for one year (n = 36) (using M-W test) and there were no statistically significant differences between the 2 groups.

4.3 P7 pupils

A total of 85 questionnaires were received from P7 pupils. They represented 3 schools, with 19 (22%), 14 (17%) and 52 (61%) from each one. There were 46 (54%) boys and 39 (46%) girls. All classes were involved for the first time during 2006 to 2007.

What they thought they were learning

The P7 groups provided more complex explanations of what they had been learning. While 9 (11%) did not respond, the following combinations of ideas were given:

- topic alone mentioned 6 (7%)
- art alone mentioned 27 (32%)
- general learning 15 (18%)
- art and topic combined 19 (22%)
- general learning and topic 3 (4%)
- general learning and art 6 (7%)

Examples of 'general learning' include: how to be creative; working with others; sharing; using imagination more; being confident; learning things we wouldn't normally learn.

The various combinations were found across all classes, but in one class in particular, most of the children identified that they had been learning both about different art forms and curriculum topics. Most of those that focused on art on its own were from 2 classes in different schools. This may reflect the explanations that both the teacher and artist have given about the work they are doing.

Views about the classes with the teacher and artist working together

The responses to the series of questions about the ICLs are given in tables C2.10 to C2.13. The questionnaire had the option 'don't know' but few chose this, so these figures have been omitted from the tables. This, combined with a small number of missing responses, explains why percentage totals do not add up to 100%. Where there was a higher 'don't know' response it has been noted.

Table C2.10: P7 pupils' views on engagement with and enjoyment of learning

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that having an artist in the classroom made the subject more interesting	53 (62%)	28 (33%)	2 (2%)	1 (1%)
I found that the time seemed to pass more quickly in these lessons	56 (66%)	17 (20%)	6 (7%)	2 (2%)
I looked forward to the lessons when an artist and teacher worked together	48 (57%)	28 (33%)	4 (5%)	1 (1%)
We should have artists in more classes	56 (66%)	12 (14%)	4 (5%)	5 (6%)
I wanted to work longer on the tasks	41 (48%)	24 (28%)	9 (11%)	2 (2%)
Pupils were better behaved when we had an artist in the classroom along with the teacher	20 (23%)	25 (29%)	24 (28%)	10 (12%)
Some pupils did not like working with an artist*	10 (12%)	13 (15%)	24 (28%)	18 (21%)

* 20 (20%) of pupils chose the 'don't know' response for this statement.

The P7 pupils clearly thought that having an artist made learning more interesting and the majority indicated that they looked forward to working with the artist, although a third only agreed a little with this. More than a quarter agreed a little or a lot that some of their classmates did not enjoy working with the artist; this is likely to mean that a small number did not like this, but this was observed by a greater number, although unsurprisingly around one-fifth responded that they did not know.

Table C2.11: P7 pupils' views on the effectiveness of the learning experience

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I learned new artistic skills	46 (54%)	31 (37%)	3 (4%)	1 (1%)
I learned new things about art	46 (54%)	27 (32%)	7 (8%)	1 (1%)
I found it easier to learn the topic because of the way it was explained in these lessons	38 (45%)	39 (46%)	4 (5%)	1 (1%)
I think my work was better in these lessons	40 (47%)	31 (37%)	6 (7%)	1 (1%)
I learned what I could do better	41 (48%)	33 (39%)	2 (2%)	5 (6%)
I learned what I was good at	32 (38%)	41 (48%)	3 (4%)	1 (1%)
I found I could remember the ideas more easily	30 (35%)	39 (46%)	8 (9%)	3 (4%)

This group of pupils gave prominence to the fact that they had been learning about art and art skills. Most agreed 'a lot' or 'a little' with all the statements, indicating that they found learning easier in these classes. Strength of agreement was less in relation to being able to identify what they were good at and being able remember things more easily.

Table C2.12: P7 pupils' views on working creatively

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I tried new things I had never done before	50 (59%)	27 (32%)	3 (4%)	3 (4%)
I was able to put forward my own ideas during the lessons	42 (49%)	31 (37%)	9 (11%)	2 (2%)
It made me want to try out new ideas and be more imaginative	32 (38%)	35 (41%)	9 (11%)	3 (4%)

There was broad agreement that the lessons provided the opportunity to try new things and make use of their own ideas.

Table C2.13: P7 pupils' views on working with others

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that other people in the class had good ideas	65 (77%)	14 (17%)	1 (1%)	1 (1%)
The things we did help me to work with other pupils in the class	39 (46%)	34 (40%)	7 (8%)	1 (1%)
I worked with pupils I don't usually work with	26 (31%)	27 (32%)	9 (11%)	17 (20%)

The pupils valued the views of others in their class and the majority thought that the activities had helped them work with other pupils, although almost one third indicated that they did not work with pupils they did not normally work with.

The responses about the activities in the AAC classes making them feel confident were:

- Agree a lot 37 (44%)
- Agree a little 34 (40%)
- Disagree a little 5 (6%)
- Disagree a lot 7 (7%)

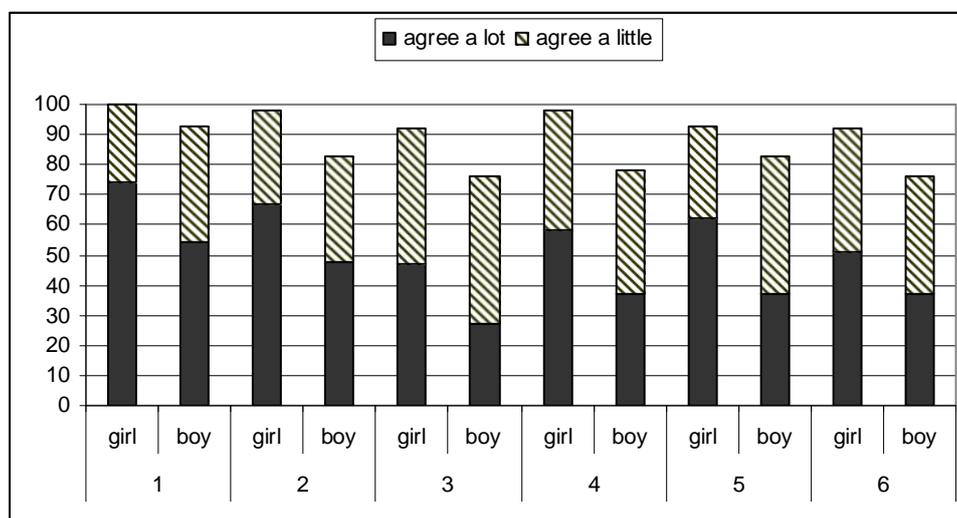
Gender differences

The data were analysed using t-test to identify differences in the responses between boys and girls. On the whole boys and girls responded similarly, but there were 6 items where girls responded more positively than boys; the differences were due, mainly, to the girls choosing 'agree a lot' more than the boys, although slightly more boys than girls chose to disagree. The percentage responses are given in table C2.14 and are illustrated in chart C2.1.

Table C2.14: P7 gender differences in responses on certain statements

	Girls (n = 39)		Boys (n = 46)	
	Agree a lot	Agree a little	Agree a lot	Agree a little
I think having an artist in the classroom made the subject more interesting	74%	26%	54%	39%
I looked forward to the lessons when the artist and teacher worked together	67%	31%	48%	35%
I found I could remember ideas more easily	47%	45%	27%	49%
The things we did helped me to work with other pupils in the class	58%	40%	37%	41%
I learned what I could do better	62%	31%	37%	46%
The things we did made me feel confident	51%	41%	37%	39%

Chart C2.1 P7 gender differences in responses on certain statements (%)



Note: gap up to 100% represents disagreement/don't know responses.

- 1 = subject more interesting with artist
- 2 = look forward to lessons with artist
- 3 = remember ideas more easily
- 4 = help me work with other pupils
- 5 = learned what I could do better
- 6 = made me feel confident

4.4. Secondary pupils

A total of 167 secondary questionnaires were returned. There were 82 (49%) boys and 83 girls (50%) in the sample (2 missing responses). They represented 6 schools, with the year groups distributed as follows:

Table C2.15 Schools and year groups in secondary school sample

	S1	S2	S3	Total
School 1	41		3	44 (26%)
School 2	46			46 (28%)
School 3	18			18 (10%)
School 4			13	13 (8%)
School 5		15		15 (9%)
School 6		31		31 (19%)
Total	105 (63%)	46 (28%)	16 (10%)	167 (100%)

The S1 responses were from 3 schools, the S2 responses from 2 schools and the S3 responses mainly from one school. The spread of numbers across the year groups is representative of where most of the activity took place. Only one S2 group of pupils had been involved over 2 years. Some of the S1 pupils may have had AAC in P7 but none of the schools planned continuity – it depended if the pupils happened to be in the S1 class chosen for AAC.

The subject areas in which the pupils were working with artists by year group were:

Table C2.16 Subjects and year groups in secondary school sample

	S1	S2	S3	Total
English	13	6		19 (11%)
Social subjects	41			41 (25%)
Science	18	15	13	46 (28%)
Art & Design	18			18 (11%)
Languages	15	25	3	43 (26%)
Total	105 (63%)	46 (28%)	16 (10%)	167 (100%)

Social subjects, science and languages were more or less equally represented in the sample, with English and Art & Design having fewer pupils.

What they thought they were learning

The secondary pupils, like the P7 pupils, proposed a range of learning possibilities. Forty (24%) did not answer this question or made non-relevant comments like 'it was fun', 'it was rubbish', or 'don't know'. (These came from all the schools so non-response could not be linked to any one group of pupils.) The following combinations of responses were given by those who did answer the question:

- subject only mentioned 39 (23%)
- art only mentioned 23 (14%)
- general learning mentioned 35 (21%)
- both subject and art mentioned 20 (12%)
- subject and general learning 7 (4%)
- art and general learning 3 (1%)

One S2 pupil mentioned the subject, the art and added that this was ... 'to make it better for learning which it did. It also gave me more confidence.'

Example of general learning included: how to communicate, how to work together and teamwork, how lessons can be taught in different ways, how to make learning easier for ourselves, how you can learn in different ways, how to be more creative and how to use our imagination.

Many of the older pupils appear to have grasped the concept of learning their subjects through art, particularly the relevance for enhancing learning generally.

Views about the classes with the teacher and artist working together

The responses to the series of questions about the ICLs are given in tables C2.17 to C2.20. As with the P7 results, the 'don't know' option has been omitted from the table, but noted where there was a fairly substantial choice of this option.

Table C2.17: Secondary pupils' views on engagement with and enjoyment of learning

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that having an artist in the classroom made the subject more interesting	96 (58%)	49 (29%)	10 (6%)	7 (4%)
I found that the time seemed to pass more quickly in these lessons	104 (62%)	33 (20%)	13 (8%)	7 (4%)
We should have artists in more classes	88 (53%)	42 (25%)	15 (9%)	7 (4%)
I looked forward to the lessons when an artist and teacher worked together	77 (46%)	45 (27%)	24 (14%)	10 (6%)
I wanted to work longer on the tasks	57 (34%)	44 (26%)	38 (23%)	15 (9%)
Pupils were better behaved when we had an artist in the classroom along with the teacher*	49 (29%)	47 (28%)	26 (16%)	26 (16%)
Some pupils did not like working with an artist*	34 (20%)	48 (29%)	21 (13%)	24 (14%)

* these 2 items had a fairly high number of pupils recording 'don't know': behaviour = 18 (11%) and not like working with artist = 38 (23%)

The majority of secondary school pupils agreed that the lessons with the artists were more interesting and that time passed quickly; they were also positive about the idea of having an artist in more classes. However, one-fifth indicated that they did not look forward to the lessons and almost one-third did not want to work longer on the tasks in the AAC lessons. Almost half perceived that others did not like working with an artist.

Table C2.18: Secondary pupils' views on the effectiveness of the learning experience

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I found it easier to learn the topic because of the way it was explained in these lessons	70 (42%)	62 (37%)	23 (14%)	6 (4%)
I found I could remember the ideas more easily	73 (44%)	47 (28%)	32 (19%)	6 (4%)
I learned new artistic skills	58 (35%)	63 (38%)	22 (13%)	13 (8%)
I learned new things about art	53 (32%)	64 (38%)	24 (14%)	16 (10%)
I learned what I was good at	40 (24%)	79 (47%)	17 (10%)	18 (11%)
I think my work was better in these lessons*	61 (37%)	48 (29%)	25 (15%)	8 (5%)
I learned what I could do better*	57 (34%)	69 (41%)	18 (11%)	6 (4%)

* work was better in these lessons: 'don't know' = 24 (14%)

* learned what I could do better: 'don't know' = 17 (10%)

Their responses to how effective they thought the lessons were in helping them learn were less positive compared to their enjoyment of the lessons. Although the majority were positive between a fifth and a quarter disagreed that learning was easier, more effective, that they had learned new art skills or that it helped them with self-assessment. Taking account of the 'don't know' responses, over a third did not agree that their work was any better in these lessons.

Table C2.19: Secondary pupils' views on working creatively

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I tried new things I had never done before	75 (45%)	51 (31%)	20 (12%)	12 (7%)
I was able to put forward my own ideas during the lessons	56 (34%)	66 (40%)	22 (13%)	13 (8%)
It made me want to try out new ideas and be more imaginative	48 (29%)	52 (31%)	39 (23%)	13 (8%)

Again the majority recognised opportunities that contributed to working creatively, but around one-fifth though they were not doing new things or getting the opportunity to put forward their own ideas and almost one-third responded negatively about the experience making them more imaginative.

Table C2.20: Secondary pupils' views on working with others

	Agree a lot	Agree a little	Disagree a little	Disagree a lot
I think that other people in the class had good ideas	88 (53%)	55 (33%)	8 (5%)	3 (2%)
The things we did help me to work with other pupils in the class	68 (41%)	55 (33%)	22 (13%)	8 (5%)
I worked with pupils I don't usually work with	67 (40%)	43 (28%)	27 (16%)	22 (13%)

As with the primary pupils, the secondary pupils thought that their classmates had good ideas. Just under one-third did not appear to work with a wider group than normal.

The responses about the activities in the AAC classes making them feel confident were:

- Agree a lot 52 (31%)
- Agree a little 53 (32%)
- Disagree a little 32 (19%)
- Disagree a lot 15 (9%)

Differences between the secondary year groups

Due to the difference in the year group sizes, the data were analysed using non-parametric tests (Kruskal-Wallis and Mann-Whitney; $p < 0.05$) to see if there were any statistically significant differences in the responses of the S1, S2 and S3 pupils.

On the whole the pattern of responses across the year groups was the same. However, the following differences emerged:

- S2 pupils showed stronger agreement than S1 pupils that AAC lessons had made them feel more confident.
- S2 pupils showed stronger agreement than S3 pupils that
 - others in their class had good ideas
 - they worked with pupils they don't usually work with
 - having an artist made the lesson more interesting

These differences were mainly on account of the more positive groups choosing 'agree a lot' as opposed to 'agree a little', rather than choosing to disagree.

Gender differences

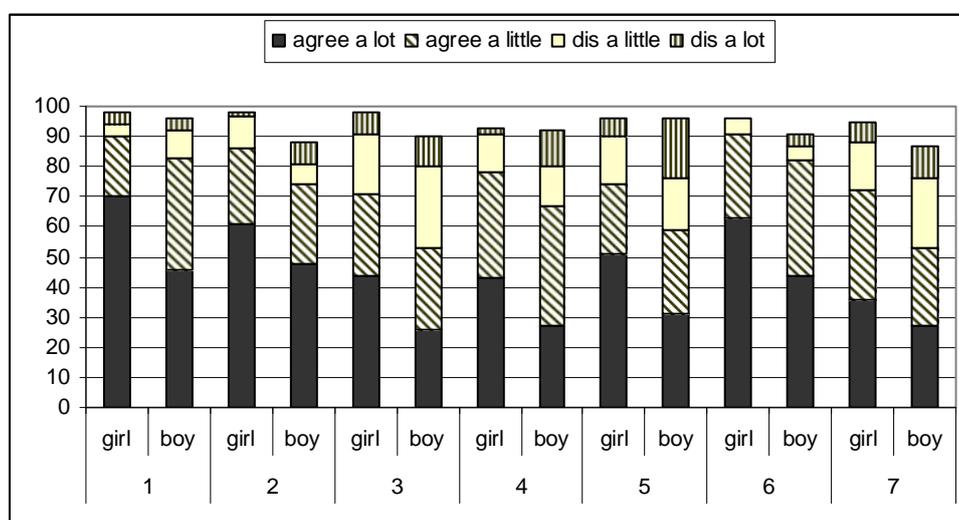
The responses of boys and girls were analysed using t-test ($p < 0.05$). The girls were more positive than boys on 7 items, linked to 3 areas: enjoyment and engagement with learning, the quality of the learning experience and working collaboratively, plus views on increased confidence. This was both because girls were more likely to choose 'agree a lot' over 'agree a little' and also because boys were more likely

to disagree on some of the items. The percentage responses are given in table C2.21 and illustrated in chart C2.2.

Table C2.21 Secondary pupil gender differences in responses to 6 statements

	Girls (n = 83)				Boys (n = 82)			
	agree		disagree		agree		disagree	
	a lot	a little	a little	a lot	a lot	a little	a little	a lot
1. interest	70%	22%	4%	4%	46%	37%	9%	4%
2. more artists	61%	25%	11%	1%	48%	26%	7%	7%
3. work longer	44%	27%	20%	7%	26%	27%	27%	10%
4. learn art skills	43%	35%	13%	2%	27%	40%	13%	12%
5. new people	51%	23%	16%	6%	31%	28%	17%	20%
6. good ideas	63%	28%	5%	0	44%	38%	5%	4%
7. confidence	36%	36%	16%	7%	27%	26%	23%	11%

Chart C2.2: Secondary pupil gender differences in responses to 6 statements



Note: gap up to 100% represents don't know responses.

Statements in full:

1. I think that having an artist in the classroom made the subject more interesting
2. I think we should have artists in more classes
3. I wanted to work longer on the tasks
4. I learned new artistic skills
5. I worked with pupils I don't usually work with
6. I think that other people in the class had good ideas
7. The things we did made me feel confident

Different length of involvement in AAC

One of the science classes had been involved in AAC for 2 years. This group was compared with the other science classes who had been involved only for one year. There were no differences in the responses of the groups.

4.5 Differences between primary and secondary pupils' responses

At stage 1, P7 responses were compared with S1 responses as this was the main year group involved in secondary schools at that time (no S2 pupils and a small S3 group). At stage 2, there was an S2 presence but for consistency only the P7 and S1 groups were compared. The data were analysed using t-test ($p > 0.05$).

The P7 pupils responded more positively on 12 of the 22 statements (the same statements as in stage 1, with the exception of two: 'it is easier to learn because of way topic explained' and 'we should artists in more classes'). The differences were based not only on choices between 'agreeing a lot' and 'agreeing a little' but because more of the S1 pupils opted to 'disagree'. The 12 statements are:

Engagement and enjoyment

- I look forward to the lessons when the artist and teacher worked together*
- I wanted to work longer on the tasks*

Effectiveness of learning experience

- I learned new things about art
- I learned new artistic skills
- I learned what I was good at
- I learned what I could do better

Working creatively

- It made me want to try out new ideas and be more imaginative
- I was able to put forward my own ideas during the lessons
- I tried new things I had never done before

Working with others

- I think other people in the class had good ideas
- The things we did helped me work with other pupils*

Confidence

- The things we did made me feel confident

* The data were analysed for the effects of both gender and year and in the statements asterisked, in addition to differences between year groups, gender played a role. Although the boys were more negative than the girls at S1, the girls at S1 were significantly more negative than the girls at P7.

The P7 responses were further compared with ALL secondary responses (using Mann-Whitney because of the different sample sizes). One further statement was found to have a statistically significant difference in the responses, with P7 again more positive: 'I think my work was better in these lessons'.

While, on the whole, S1 and other secondary pupils responded positively to the experience of working with the artist, a greater proportion of secondary than P7 pupils recorded negative responses. There does seem, therefore, to be something about the secondary experience that is less satisfying for some pupils, or something about some secondary pupils that makes them less responsive.

5. Pupils' hobbies and interests

5.1 Introduction

The pupil questionnaires, at both stages of the evaluation, contained questions to investigate the children's interests and hobbies out of school, participation in after schools clubs, and how good they thought they were at various skills. These questions were designed to investigate the extent to which young people engaged in arts-related activities.

They were also used to investigate if young people were more likely to take part in arts activities after they had experienced AAC. This aspect was investigated in relation to the research completed with AAC and comparator groups and is reported in Appendix F. It was found that those groups of AAC pupils were no more likely to take up new arts activities than the comparator groups. However, in the focus groups, reported in section 6, it was noted that some pupils, especially primary pupils, had been encouraged to take up new hobbies because of working with the artist, though generally they reported a lack of suitable or affordable clubs in their areas.

5.2 Pupils' hobbies and interests

The data from both stages of the evaluation are presented in table C2.22. Other activities were included in the questionnaire but those related to arts activities, plus sport and computers for comparison, have

been extracted. (Indeed, using computers could be relevant to some of the media work carried out during AAC.)

It should be noted that this table does not compare the same pupils at two different stages, but two comparable age groups at different times.

Table C2.22: Pupils' hobbies and interests

Year group	2006	2007
	I do this	I do this
P4		
Working or playing on the computer	32 (91%)	32 (82%)
Listening to music	30 (86%)	35 (90%)
Making things such as models, pictures, sculpture, art, knitting or sewing	30 (86%)	29 (74%)
Sports of any kind, like football, swimming, tennis, golf, martial arts	29 (83%)	30 (77%)
Playing a musical instrument or singing	16 (46%)	18 (46%)
Dancing of any kind, like ballet, modern, majorettes	16 (45%)	17 (44%)
Taking part in drama	5 (14%)	12 (31%)
P5		
Listening to music	49 (100%)	55 (93%)
Sports of any kind, like football, swimming, tennis, golf, martial arts	48 (98%)	53 (90%)
Working or playing on the computer	42 (86%)	53 (90%)
Making things such as models, pictures, sculpture, art, knitting or sewing	38 (78%)	38 (64%)
Playing a musical instrument or singing	23 (47%)	36 (61%)
Taking part in drama	15 (31%)	23 (39%)
Dancing of any kind, like ballet, modern, majorettes	10 (20%)	23 (39%)
P7		
Working or playing on the computer	82 (95%)	83 (98%)
Sports of any kind, eg football, swimming, tennis, golf, martial arts	81 (95%)	81 (95%)
Listening to music	81 (95%)	75 (88%)
Making things, eg models, pictures, sculpture, art, knitting and sewing	60 (70%)	45 (53%)
Playing a musical instrument or singing	46 (53%)	43 (50%)
Dancing of any kind, eg ballet, modern, majorettes	35 (42%)	13 (16%)
Taking part in drama	32 (38%)	15 (18%)
secondary		
Working or playing on the computer	198 (94%)	161 (96%)
Listening to music	197 (93%)	159 (95%)
Sports of any kind, eg football, swimming, tennis, golf, martial arts	193 (91%)	142 (86%)
Making things, eg models, pictures, sculpture, art, knitting and sewing	111 (53%)	94 (56%)
Playing a musical instrument or singing	94 (45%)	78 (47%)
Dancing of any kind, eg ballet, modern, majorettes	61 (29%)	52 (30%)
Taking part in drama	41 (19%)	46 (28%)

While there was variation in the proportions of the age groups that participated in the activities (eg more of the P4 group in 2007 said they took part in drama compared to the 2006 group), overall, all stages of pupils at both times were more likely to be involved in playing with computers, listening to music and taking part in sports than other activities. They were least likely to participate in dance and drama. 'Making things' was more popular with younger pupils, but around a half of secondary pupils indicated they did this.

Dance and drama were 2 art disciplines used frequently in AAC and were those least likely to be experienced by pupils out of school. This could add to the value and interest of them for some pupils, but could also present them with greater challenges.

5.3 After-school clubs

Participation in after-schools clubs varied across the year groups, with this being dependent on what was available to particular year groups in each of the schools, for example, in 2006 almost all the P5/6 pupils reported attending after school clubs, while in 2007 just over a half said they did. Participation in

sports was the most frequent after-school activity with around three-quarters of the primary pupils and one-third of secondary pupils reporting this. It appears that around one-fifth to one-quarter of primary pupils had participated in after schools clubs related to arts and crafts or drama, although very few (5%) secondary pupils reported these activities.

5.4 Pupils' perceived abilities

The pupils were asked to indicate how good they thought they were at certain activities, including sports and arts-related activities. The responses have been summarised for primary and secondary pupils in table C2.23.

**Table C2.23 Pupils' perceptions of how good they are at certain activities
Percentage of those responding good or very good**

I am good or very good at	Primary pupils		Secondary pupils	
	2006 (n = 170)	2007 (n = 183)	2006 (n = 203)	2007 (n = 167)
Sports	78%	73%	83%	79%
Being creative and using my imagination	76%	68%	66%	73%
Making things (arts and crafts)	72%	50%	63%	73%
Dancing	52%	45%	41%	42%
Doing drama	48%	42%	52%	43%

Again, while there were variations between the two cohorts, a similar rank ordering occurred across the two sectors and two cohorts (with the exception of the secondary being slightly more confident in relation to dance over drama, while the primary children's responses reversed this). These unsurprisingly parallel the extent to which they were experienced. While some children responded negatively with regard to dance and drama, more were also likely to say they didn't know. It is interesting to note that between two-thirds and three-quarters of the pupils thought that they were good at being creative and using their imaginations.

6. Pupil focus groups 2007

6.1 Introduction

Focus groups were held between February and May 2007 with groups of pupils from 9 of schools (5 primary and 4 secondary) participating in the evaluation. The following number of pupils took part:

	Boys	Girls	Total
P4	4	4	8
P6 and P6/7	9	7	16
P7	7	7	14
Total Primary	20	18	38
S1	7	6	13
S2	3	3	6
S3	6	5	11
Total Secondary	16	14	30
Overall Total	36	32	68

6.2 Primary focus groups

The pupils were asked about what they had been doing when the artist and teacher worked together with a view to 'getting them talking' and to give specific examples of tasks and activities. They were then asked what they had been learning and how the art had helped them learn the subject. They were asked what they had learned about the art form. General questions about what they liked and did not like about having lessons with the artist were asked, and finally they were asked if having any of the artists had encouraged them to be more interested in the art and if they had taken up any other activities because of this.

Subject and Art Combinations

- Art and environmental studies
- Art and drama with personal and social education (PSE), maths and science
- Drama and French
- Dance and media with science
- Creative writing with history and drama with India

Few of the pupils made any specific comments relating to the subject and art combinations that they had. Those who did comment on this area were very positive and found that the art form had helped them to understand the lessons better and had made the lessons more enjoyable. The pupils who had art lessons with their environmental studies found that their work was different because they were combining the environmental studies with art and, 'the quicker you did the environmental work the more painting time you got'. The pupils who had drama with French commented that they enjoyed talking in French in front of the microphone and it encouraged them to practice their conversations more with their friends and the pupils who had dance and media with science said they were also more motivated to learn.

What they learned about the subject

The responses from the pupils were all very positive about what they had been learning. The pupils who had art with environmental studies spoke about the things they had learned about plants from the artist and from their trip to the Botanic Gardens: 'We learned about the cycle of life of flowers and we did planning and research'. These pupils also spoke about the different experiments they did: 'chemistry was different, we saw reactions by mixing things with paint, like what happens when you put salt on your painting while its still wet and like mixing water and paints to see what happens'. One group had had art linked to different topics: they said that they learned about the different parts of a light bulb and how electricity works. They also learned their three times table and what they should do if they found a syringe or needle lying in the street. The pupils who had drama lessons with their French class were very positive and enthusiastic about their lessons with the artist and they listed a number of things that they had learned to say in French such as the days of the week. The pupils who had dance and media with science, however, did not say very much about what they had learned in science and only said that they learned how magnets work. Similarly, the pupils who had creative writing with history and drama with their India topic did not say very much about the actual subjects and only mentioned these in passing when they were talking about the art forms.

How the art form helped them to learn the subject

The responses from the pupils were all very positive although some groups gave more detail than others. All the groups described different ways in which the art form had helped them to learn the subject. For example, a number of pupils said that they found the work easier to understand because they were actually doing something rather than just sitting listening, 'we learned about our topic in a different way... a "funner" way instead of reading about it and writing it, we acted it out'. Another pupil said that, 'it's better doing the thing instead of just listening; it's boring when you have to listen, and you fade away'.

The pupils who had art with their environmental studies were very positive when talking about the art form and said, 'she (the artist) taught us parts of plants - to cut up a plant and showed us what aspects we need to concentrate on when we are painting'. This group also said that the trip they had to the Botanic Gardens with the artist, 'inspired us to do better'. The group who had creative writing in their history class talked about a number of different ways that the art form helped them. For example, they said that it changed the way they think about writing and one pupil said, 'You can find really interesting things when you really think'. They also said that when they were talking about Mary Queen of Scots, they were able to really understand what life was like at that time.

The group who had dance and media with their science class also found that it was easier to listen and concentrate in the lessons with the artist and the art form helped to motivate them to learn about the topic. One pupil commented that they liked the lessons more now because of the things they did with the

artist. This group also described how the art form helped them to understand the way that magnets work:

'we did a dance routine about magnets; me and my partner were being magnets but we were facing the wrong way at first, so if we were magnets we wouldn't have attracted each other, then we got it ourselves, that one of us has to face the other way to attract the other; the teacher asked what we were doing, we explained how we knew what way to turn and she was dead pleased with us'.

The group who had drama with their French lessons spoke about how the art form helped them to understand French better and how it had encouraged them to practice more: 'we sat in a circle with the artist talking French - it was really him that was talking because we don't know much French but it was good'. They also gave demonstrations of how to move your mouth to make French sounds, 'move your tongue about to exercise it so you could make the French sounds, like rrrrrrrrrr'. One pupil also commented that they learned to sing songs in French and the focus group facilitator commented that the pupils were highly motivated to practise their French when they found out they were going to be filmed having conversations with their partners. From the comments made by the pupils in this group, it is clear that they were really motivated to understand the French and to learn to speak it themselves, for example, 'half the time we don't know what they are saying - we just listen and try to pick it up, we listen to see if there's words we know; if there's one word in a sentence we know we try to guess the rest'. Finally, the group who had art and drama in several classes did not say very much about how the art had helped them. One pupil said, 'You remember the 3 times table by song' and another pupil said that they learned how electricity works but no other relevant comments were made.

What they learned about the art discipline

The responses in this section were very varied but there was not as much detail as in the previous section. Again, the responses were all very positive and the general feeling from all the pupils was that the art forms were fun and interesting and made school work more enjoyable. The pupils who had art with environmental studies listed a number of things that they had learned about the art discipline, for example, 'we learned how to work with wire and to clean brushes with turpentine and we learned how to work with silk canvas'. The pupils who had creative writing with history said that they learned about the different stages involved in getting a book published and how to 'express themselves through writing.

The pupils who had dance and media with their science class spoke about the different dance moves they learned about, 'different moves, steps, routines, timing, if you go too fast or are not in time with each other then it looks rubbish'. This group also said they learned about all the different angles you can get with a camera and the artist explained to them how the camera works.

The pupils who had drama and French said that they learned how to use a microphone and described a number of acting tricks the artist had shown them. For example, 'how to be confident and not go all nervous - how to stand normal and not crunch up and how not to be scared - just go for it'. As already said, this group also demonstrated the sounds and noises they had learned to make and they also said, 'We learned how to exercise your shoulders so you can make the right movements and to take a deep breath before you start'. One pupil also said that, 'we practised making eye contact, see you need to do that when you are doing a presentation to an audience'. Finally, the group who had art and drama with different subjects said that they learned how to make shoes out of foam with ribbons for laces and how to make felt puppets.

What they liked about the lessons with the artist

As already shown, all of the groups were very positive about the lessons they had with the artist and the majority of the groups said that the lessons were interesting and fun. Several of the groups said that they liked having the artist in the classroom because, 'the artist knew things that the teacher didn't' and it was 'good to have different teachers because it wasn't as boring'. The pupils who had drama with their French lessons had a long discussion about this in their focus group and they concluded that, 'teachers can't be really good at everything; they need artists sometimes who know a lot about some things'. This group also said that they really enjoyed using the microphone to record themselves speaking French and learning about making films and they were really positive about the lessons throughout the

discussion and continually said that the lessons were, 'fun' and that the artist, 'learns us more fun stuff'. They felt that these lessons were better than normal French classes and said that although they had done art and drama before in school, it was better with the artist. The group who had art and drama with several topics were also very positive and said that, 'we did millions of fun things but not much work' and one pupil said that it, 'helped me a lot.. The pupils also found that the lessons with the artist helped them to enjoy school more and one pupil felt that if they had these lessons all the time then they would like everything in school.

The group who had creative writing with history really enjoyed making the evacuee suitcases and toys, 'that was brilliant' and they also said that the lessons were exciting and interesting and, 'when you were doing it the time just flew by'. This group also liked the fact that they all got to talk and share their opinions and one pupil commented, 'Some of the boys in our class like to take over but everyone got their say'. They also liked the freedom they had to make their own decisions in the lessons, 'you could write whatever you wanted if it sounded right' and 'you chose what you wanted to do'.

The pupils who had art with environmental studies really enjoyed the trip to the Botanic Gardens and they also liked having more freedom in the class to do what they wanted and to make their own decisions, 'our artist let us experiment whereas normally in art you get told what to do'. One pupil also commented that, 'you don't misbehave because you are busy with your art work' and another pupil said, 'it is more fun because you do more rather than watching the teacher writing on the board'.

Finally, the pupils who had dance and media with science also found the lessons fun and one pupil said, 'We like dance but it's better with the artist because you make up your own dances'. One of the boys in this group also said that the dance was fun and, 'all the boys used to stand there and say they're not doing stuff and now we're better than the lassies at it'.

What they didn't like about the lessons with the artist

As shown, all of the groups were very positive about the lessons with the artist and there were very few negative comments. The comments that were made were mainly subject specific and the only general theme which was mentioned by a couple of the groups was that there was too much talking at the start when the artists were explaining things. The pupils felt this was boring and went on for too long but there were no other overlapping themes between the different art forms.

The pupils who had dance and media with science felt that artist was a bit demanding although they said this might have been due to the time constraints for putting on the show. They also felt a bit embarrassed at the start and one pupil said there was too much talking. Another pupil said that the artist didn't help them when they asked although the focus group facilitator suggested that this may be due to the artist trying to encourage the pupils to think for themselves and self-monitor which they are not used to doing.

The pupils who had art and drama with several topics said that learning the words to the songs was difficult and the pupils who had art and science with environmental studies said that they were scared at first because they didn't think that they knew enough about flowers. The pupils who had creative writing with history didn't think that the lessons could be made any better although one pupil suggested that they could actually go to India rather than just learn about it because that was the most boring topic and another pupil said that they wanted AAC more often. The pupils also said that the lessons were a bit rushed and they needed more time. Finally, the group who had French and drama said, 'We wish we could talk more French to the artist'.

Impact on their interests

The pupils listed a number of things that they would like to do and things that they have started to do since having the lessons with the artist but a general theme throughout the groups is the lack of clubs and activities in the local area. For example, the pupils who had dance and media with science were really positive and said that they would like to do films and dance after school and, 'if I had the chance to have a drama club I would want it' but they also said, 'there's hardly any clubs to do films and things like that'. Similarly, the pupils who had art and environmental studies said that they would like to do things outside school and one pupil commented, 'I know you can use household things, you don't need to get

your parents to spend a lot for you to do art'. These pupils seemed very enthusiastic about continuing with the art forms but also said that there are not enough clubs within the local area.

The pupils who had drama and French said that some of them already go to a drama club in school and although they would like to do more things outside school there are no clubs that do media and films. The pupils who had creative writing and history were also very enthusiastic about continuing to do the activities outside school and one pupil commented, 'I forced my mum to go to the shops to get materials to make stuff at home'. These pupils also talked about things that they have already started to do, for example, one pupil said that they have built dens and another said, 'I got spare wood from my dad and I'm making things'. Another pupil from this group said, 'My grandpa is a joiner and he is helping me with sketching'. This group listed a number of clubs that they are already members of but also commented that although there is a drama club in the area, it is too expensive for them. Finally, the pupils who had art and drama with several topics did not seem to have changed their hobbies and activities after having the lessons and only listed some of the clubs that they are already members of.

6.3 Secondary school focus groups

Subject and art combinations

- Media and biology
- Dance and media and science
- Drama and history
- Art and media and citizenship
- Dance and art and creative writing

Few of the pupils made any specific comments relating to the subject and art combinations. The comments that were made were mainly positive and the majority of pupils said that they found the lessons with the artists to be helpful as they made the classes more interesting and fun. A common theme throughout all the groups was that the lessons with the artists made the work easier to learn because they did not have to just sit and listen to the teacher and so it was not as boring. The pupils who had dance and art with creative writing spoke about doing graffiti with Scottish words but the pupils who had science with dance and media gave the most detailed response regarding the combination. They described a role play that they had done in class which was related to forensic science and spoke about changing scientific concepts such as atoms and neutrons into dance. One pupil said, 'the teacher tells the dancer what we need to know about science, then the dancer tells us'. The pupils in this group concluded that the dance helped them with some parts of their science work but it made other parts more complicated, 'the dance and stuff was better for biology but it's not so good for physics and chemistry stuff'.

What they learned about the subject

Very little detail was given from any of the groups about what they learned about the actual subject. The majority of responses focused on how the lessons were different to normal classes and what they liked about these lessons. The responses which did focus on the subject were again mainly positive but were lacking in detail. For example, the pupils who had drama with history said that they learned about Operation Barbarossa which was the German attack on the USSR in 1941 but no more detail was given about this although the focus group facilitator commented that the pupils had a lot of knowledge about it. Similarly, the pupils who media with biology had said that they learned to use science equipment and one pupil said, 'We learned a lot of stuff we hadn't before'. The pupils who had dance and media with science also said that they had learned to use the science equipment and they listed a number of scientific concepts such as atoms, neutrons, forensic science methods and electricity which they had learned about. The pupils who had dance and art and citizenship and the pupils who had dance and art and creative writing gave the most detailed responses here. For example, the citizenship group gave a detailed description of what 'good citizenship' is; 'it's re-cycling, it's no graffiti, it's looking after the community, you should help people' and the creative writing group discussed what they had learned about the Scottish language: 'It was because the language was dying out so we had to learn about it and we learned about reading and understanding it'. This group also listed a number of things they had learned about from the Second World War such as ration books, Anderson shelters and gas masks (this probably refers to an ICL they had experienced in P7).

How the art form helped them to learn the subject.

There were a number of general themes that were repeated throughout the groups with regard to this question. The majority of the groups said that the lessons with the artist were more interesting than normal classes, 'it makes the lesson more interesting, you get to express yourself' and because they were more active in the class, they remember more, 'we'll remember it better because we're doing it, not just writing'.

The pupils also felt that the lessons were fun and they paid more attention to what was going on in class. Furthermore, the fact that these lessons did not involve as much listening was also a major factor for most of the pupils:

- *'it's hard to listen for a whole period'*
- *'in normal classes you lose your concentration but not in these lessons'*
- *'there wasn't nearly as much listening, listening gets boring after a while, then you cut off'.*

Another common theme throughout the groups was that teachers tend to give too much detail which makes it hard to remember but it is easier to learn in the lessons with the artists:

- *'teachers give too much detail and they tell you stuff that you don't need to know; we usually forget it 2 minutes later'*
- *'our teacher says it in very complicated ways but the artist can simplify it'.*

There were also a number of subject specific comments from each group with regard to how the art form helped them to learn. For example, the pupils who had art and media with citizenship said that the lessons were, 'more fun than normal lessons' and that they paid more attention even when the subject is boring. The pupils who had drama and history were also very positive and one pupil commented, 'You learn what you were meant to in class but it's a better way of doing it'. This group also felt that they were more 'focussed' in these lessons and one pupil said that it helped them in tests because they remembered more of the information. The pupils who had dance, art and creative writing said that the lessons were really helpful because, 'sometimes the teacher can't tell you everything' and one pupil spoke about the poems they had written and how it helped them to understand art, 'we made a poem, it made you feel as if you were inside the picture'.

The pupils who had media with biology talked about a DVD they had made of the digestive system and one pupil said, 'we were interested in what we were doing so it made it easier to get on and do it - to understand it'. Another pupil in this group commented, 'You usually write what you need to revise but this is a different way of revising- you can go back to the DVD'. Finally, the group who had science with dance and media spoke a lot about how the art form had helped them with the work but they also said that it didn't always help and it depended on the actual subject. For example, the pupils felt that the dance made physics harder to understand, 'It didn't make any sense, it was just a laugh' and they felt that it would have been easier to understand if they had been told about it rather than, 'jumping about kidding on we were light bulbs'. Another pupil said, 'When we were mixing chemicals, when we had the artist we didn't have a clue what was going on'. Conversely, when they had biology lessons, they found the art lessons to be really helpful, 'we made models and this really helped us to get it'. The group concluded that while the lessons with the artist were helpful for some aspects of the work, they did not always help and sometimes they made the work harder to understand.

What they learned about the art form

The groups varied with regard to how much detail they gave in this question and there were no common themes throughout the responses. The pupils who had art and media with citizenship said that they learned to make figures from cardboard and described the different stages involved in this and said that they made puppets and used the OHP to make them move about. The pupils who had history and drama said very little about the actual art form but the focus group facilitator commented that all the pupils said that they were practising drama skills acquired in English or drama classes rather than learning new skills so they knew most of the techniques but had not applied them in a history context before. The pupils who had dance, art and creative writing listed a number of skills they had learned such as how to make wire sculptures, how to make sketches of movement, how to capture movement and they had learned about proportions of the human body. One pupil also said, 'With the artist, we

were learning how to express movement on a bit of paper using different materials'. The group who had media and biology described all the things they had had to do to make the DVD of the digestive system and one pupil said, 'I can put a presentation together now, we can edit it to make a DVD'. This group also learned about camera angles and how to use computers and one pupil commented, 'I can work a laptop better now and I have a go when I can get one'. The pupils who had science with dance and media also learned about camera work and doing animation with computers but they did not comment on the dance except to say that it was, 'a lot of fun'.

What they liked about the lessons with the artist

All of the groups listed a number of things that they liked about the lessons with the artist. Again, common themes included not having to listen to the teacher, being more active in the classroom, finding the work easier to understand and remember because they were not just listening and writing and a number of pupils also commented that they liked it when the artist asked them 'politely' if they would like to do the work.

There were also a number of subject specific comments. For example, the pupils who had art, media and citizenship said that they liked the fact that the artist gave them more choice of things to do and tips on how to do different types of art. Similarly, the pupils who had dance, art and creative writing said that the lessons with the artist gave them more confidence to try things that they wouldn't normally get to do. This group also said that they really enjoyed all the art things they did including doing the graffiti wall and making ceramic tiles.

The group who had media and biology said that they really enjoyed the lessons and, 'we'd definitely do it again' and one pupil commented, 'It shows that biology can be fun'. The pupils in this group also felt that being able to work on their own was really good, 'it's better to be left alone - you learn better that way. The artist doesn't interfere like the teachers do and when you are alone it's your own words'. They also enjoyed putting the DVD together, 'seeing all the work we had put in, it was amazing how it could all come together'. This was echoed by the group who had science with dance and media. They also enjoyed making the DVD and seeing it all come together. This group were very enthusiastic about the role play they did which was connected to forensic science and they said that the lessons were fun and, 'we learned a lot faster'. One pupil said that, 'it makes you want to go to science' and another pupil said that although they had not done very much media work before, they really enjoyed doing it.

What they didn't like about the lessons with the artist

All of the groups were very positive about the different lessons they had and there were very few negative comments made. One pupil who had dance and media with science said that he strongly preferred science lessons without dance and another pupil said that he would have preferred the time to be used doing more experiments as he felt the dancing reduced the time available for this. Another pupil agreed with this as he felt the time could be used for 'large outdoor experiments' instead. As discussed already, this group also came to the conclusion that the lessons with the artist only worked for some subjects and actually made some work harder and more confusing. The group who had dance and art with creative writing felt that they didn't have enough time and that meant they had to stop when they were in the middle of making things, 'when we had to stop, when you're doing something good and you have to stop like the clay heads'. No other negative comments were made by any of the other groups.

Impact on their interests

As with the primary schools, the pupils listed a number of things they would like to do after school but are unable to due to the lack of facilities in their local area. For example, one pupil said she would like to join an art class because although she draws at home, she would like help to do more but there are no classes available in her community. Similarly, one of the pupils who from the creative writing class said that they have started to draw more and another pupil from this group said they have started writing stories. The pupils in this group listed a number of clubs that they are already members of and seemed to be uncertain whether they had time to start any other hobbies outside school. The pupils who had media and biology said that although there is a club in their area which does similar things to the lessons they had in school, it is not as good as the lessons they had with the artist and, 'you just do dead simple things and folk muck about'. These pupils said they would like to go to a club to make DVDs but again,

the lack of facilities in the area makes this impossible. Half of the pupils who had history and drama said that the lessons with the artist had changed the things that they do outside school and the other half said that it had made no difference. The pupils said that they had started drawing and painting and making things at home but three boys in the group said that although they liked the lessons, they didn't want to do it outside school as well:

- *'it's great doing drama and art and stuff like that, we like it more too when we do it in other classes, but that's enough, we don't want to add it to the things we do in home time'.*

6.4 Summary of the main points from the analysis of the primary and secondary school focus groups

In general, all of the pupils were very positive about the lessons with the artists and there were very few negative comments made. Any negative comments tended to be subject specific.

In both the primary and secondary schools, limited detail was given with regards to what they learned about the subject and the art form individually but, for both groups, considerable detail was given with regards to how the art form helped them to learn the subject. A number of the pupils said that the lessons with the artist had helped their performance in the class because they found the work easier to remember. The general feeling from all the groups was that the lessons were fun and the artist explained things clearly and made it interesting.

The primary school pupils liked the freedom they had in the class to make their own decisions and the secondary pupils commented that it was better when they could work on their own rather than have the teacher 'interfere'. The primary school pupils commented that the artist knew things that the teachers didn't and the secondary school pupils said that the artist made things less complicated and didn't bombard them with as much detail as teachers do.

One of the main themes from the secondary school responses was that they didn't have to listen as much in the lessons with the artists. This was a major factor for the pupils as they said they didn't get as bored as they usually do which meant they were more focussed and learned and remembered things more easily. This was also echoed by the primary school pupils. Doing things in the class rather than sitting listening and writing was mentioned several times in the groups as being really helpful and fun. The pupils felt that they learned better this way because they were actually involved in the work.

One of the main things several pupils commented on was the use of cameras and making DVDs or filming themselves. A number of the pupils said they really enjoyed this and it seemed to motivate them and make them enthusiastic about their work.

Several of the pupils also said they would like to have lessons with the artist in other classes as well because it helped them to learn and it made boring subjects more enjoyable.

Some of the pupils said they felt nervous and worried at the start of the lessons but in time the lessons with the artist helped to build their confidence as they started doing things they had never had the chance to do before.

In the last question, it appears that more of the primary school pupils have been encouraged to try new hobbies outside of school but both groups said that the main problem is the lack of clubs in their local area. This seems to be a major block for the pupils who want to continue with the art lessons in their spare time.

7. Summary

A sample of pupils who took part in the second year of AAC were surveyed in May 2007. The original design of the evaluation had been to follow-up on the same pupils who had participated at stage 1, but due to changes within authorities and schools only 3 classes fitted this model - one P4, one P6 and one

S2 class. (These 3 groups remained positive in their responses with the P4 and P6 pupils showing stronger agreement on some aspects.) Pupils completing the questionnaire had experienced at least 2 ICLs, most with 2 art forms; some had a more extensive participation with several artists and art form linked to a wide range of curricular topics. Five primary and four secondary group interviews were held with pupils between February and May 2007.

In response to an open question about what they thought they were learning, overall, there was evidence that the pupils understood that the main focus was the curriculum topic but also that there was opportunity to learn about different art forms and arts skills. Younger pupils tended to report either the subject or the art as a focus for learning, while older pupils provided more complex explanations, including reference to developing learning and personal skills such as being creative, using their imaginations, working together and gaining in confidence. This suggests that the integrated nature of the lessons was working well.

The majority of pupils indicated that having an artist along with the teacher made the lessons more interesting and that they looked forward to those lessons. Four-fifths thought it would be a good idea to have artists in more lessons. In the open comments about what they liked, primary pupils were more likely to say they enjoyed the art, while secondary pupils emphasised the fact that the lessons were different from usual, especially not reading, writing and sitting still. Points made in the pupil interviews also emphasised the enjoyment of the lessons because of their active nature.

The majority of pupils also thought that the topics were easier to learn in these lessons with around three-quarters indicating they could remember ideas better. In relation to creative ways of working, the majority thought they were getting the opportunity to try things they had not done before but there was slightly less certainty about being able to contribute their own ideas and encouragement towards being 'more imaginative'. However, in the focus groups, pupils spoke of the benefits of being allowed to take responsibility for the tasks and being given choices about what they could do.

There were no differences in the views of younger boys and girls. At P7 and secondary school levels boys were less in agreement than girls across a range of items related to engagement, effectiveness of learning, being creative, working with others and being confident.

With respect to children's hobbies and interests out of school pupils at both stages of the evaluation and in all year groups (P4, P5, P7, secondary) were least likely to be involved in learning music or singing, dance of any kind and drama compared to other activities such as sports and using computers and 'making things'. Half, or less than half, of the pupils thought they were good at dance and drama. Music, dance and drama were all art forms used in AAC. That many were not involved in these activities outside of school could add to the value and interest of them when introduced in school generally, or through AAC in particular. It may, however, present them with greater challenges. During the interviews some pupils said that what they had done with the artists had made them want to take up new hobbies but their perception of lack of suitable opportunities in their local areas seemed to limit this.

As at Stage 1 of the evaluation, S1 pupils were more negative than P7 pupils across most aspects of the learning experience.

8. Note on inferential statistics

Section 4.1: P4 pupils – difference between those who had been involved for one year in AAC and those involved for 2 years (Mann-Whitney U test) (n: one year = 16 two years = 23).

Item	mean rank	U	sig
wanted to work longer on task	one year: 14.56 two years: 23.78	97.00	p=0.003
looked forward to lessons with artist	one year: 14.97 two years: 23.50	103.50	p=0.001

Table C2.14: P7 gender differences (t-test) (n: boys = 46; girls = 39)

Item	mean (sd)	t	df	sig
subject more interesting with artist	boys: 3.46 (0.69) girls: 3.74 (0.45)	2.245*	78	p=0.028
looked forward to lessons with artist	boys: 3.11 (1.19) girls: 3.64 (0.54)	2.711*	65	p=0.009
remember ideas more easily	boys: 2.87 (1.04) girls: 3.34 (0.82)	2.293	82	p=0.024
helped me work with other pupils	boys: 3.00 (1.09) girls: 3.55 (0.56)	2.823	81	p=0.006
learned what I could do better	boys: 2.96 (1.21) girls: 3.49 (0.79)	2.346	83	p=0.021
made me more confident	boys: 2.91 (1.17) girls: 3.38 (0.82)	2.117	83	P=0.037

* equal variances not assumed

Section 4.3: differences in responses between S1, S2 and S3 pupils (Mann-Whitney U); (n: S1 = 105; S2 = 46; S3 = 16)

Item	mean rank	U	sig
made me feel confident	S1: 69.92 S2: 89.87	1777.00	p=0.007
others had good ideas	S2: 34.16 S3: 23.84	245.50	p=0.025
worked with pupils don't usually work with	S2: 35.09 S3: 21.19	203.00	p=0.005
made lesson more interesting	S2: 34.07 S3: 24.13	250.00	p=0.033

Table C2.21: Secondary pupil gender differences (t-test) (n: boys = 82; girls = 83)

Item	mean (sd)	t	df	sig
artist made subject more interesting	boys: 3.16 (1.06) girls: 3.55 (0.83)	2.672	163	p=0.008
artists in more classes	boys: 2.93 (1.37) girls: 3.40 (0.92)	2.564*	140	p=0.011
wanted to work longer on tasks	boys: 2.44 (1.31) girls: 3.02 (1.08)	3.131*	156	p=0.002
learned new artistic skills	boys: 2.67 (1.21) girls: 3.07 (1.10)	2.232	163	p=0.027
work with pupils don't usually work with	boys: 2.60 (1.25) girls: 3.08 (1.16)	2.597	163	p=0.10
others had good ideas	boys: 3.02 (1.24) girls: 3.43 (0.97)	2.371	163	p=0.019
made me feel confident	boys: 2.41 (1.35) girls: 2.92 (1.12)	2.594*	157	p=0.011

* equal variances not assumed

Section 4.5: Differences between P7 and S1 (t-test) (n: P7 = 85; S1 = 105)

Item	mean (sd)	t	df	sig
look forward to the lessons	P7: 3.35 (0.98) S1: 2.94 (1.29)	2.490*	187	p=0.014
wanted to work longer	P7: 3.08 (1.21)	2.054	186	p= 0.041

	S1: 2.71 (1.24)			
learned new things about art	P7: 3.33 (0.95) S1: 2.78 (1.21)	3.520*	187	p=0.001
learned new artistic skills	P7: 3.38 (0.90) S1: 2.80 (1.24)	3.715*	185	p<0.001
learned what I was good at	P7: 3.04 (1.14) S1: 2.63 (1.22)	2.361*	184	p=0.019
learned what I could do better	P7: 3.20 (1.07) S1: 2.81 (1.29)	2.280*	188	p=0.024
want to try out new ideas and be more imaginative	P7: 3.06 (1.04) S1: 2.63 (1.28)	2.567*	185	p=0.011
able to put forward my own ideas	P7: 3.35 (0.77) S1: 2.89 (1.15)	3.288*	182	p=0.001
tried new things I had never done before	P7: 3.45 (0.83) S1: 2.97 (1.21)	3.231*	183	p=0.001
other people in the class had good ideas	P7: 3.63 (0.88) S1: 3.08 (1.23)	3.496*	182	p=0.001
helped me work with other pupils	P7: 3.25 (0.93) S1: 2.85 (1.31)	2.461*	184	p=0.015
made me feel confident	P7: 3.13 (1.04) S1: 2.48 (1.32)	3.814*	188	p=0.001

* equal variances not assumed

Evaluation stage 2 data collection

Evidence from teacher survey and interviews

1.	Introduction to teacher survey	140
2.	Teacher sample	140
3.	Range of ICL practice	141
4.	Results of teacher survey	142
5.	Teacher interviews	153
6.	Summary	157

Evidence from teacher survey and interviews

1. Introduction to teacher survey

Teachers who had been involved with the Arts Across the Curriculum project during 2006-07 were asked to complete a questionnaire in May 2007, that is toward the end of the second year of the project. Some of the teachers had been introduced to the programme in the academic year 2006-07, while others had been involved for the 2 years of the project. Therefore, some teachers had the experience of delivering more Integrated Curricular Lessons than others, over more aspects of the curriculum and with more artists. While the teacher survey in the first stage of the evaluation had aimed to gather views after their first experience of delivering ICLs, the second survey asked teachers to generalise about their whole experience of the programme.

The questionnaires were modified slightly from the first questionnaire, primarily to remove questions where it was felt there was repetition and to reduce the number of items in some of the questions. As in the first survey, the questions were based on the explicit aims of the AAC project and on issues identified in the literature on arts-infused curricula (as explained in Appendix A2).

The themes addressed were:

- Planning and delivering an ICL with the artist
- Impact on pupils in relation to engagement with learning, creativity, confidence and self-esteem
- Impact on teachers in relation to approaches to teaching and learning, and working creatively and collaboratively
- Whole-school issues in relation to school ethos and educational priorities.

The data were investigated for differences between primary and secondary teachers using the non-parametric Mann-Whitney Test (because of small and uneven group sizes within the teacher sample). At this stage of the evaluation, no statistically significant differences were found in the responses between primary and secondary teachers. Results are therefore presented for all teachers together. Difference in responses between the responses in stage 1 and stage 2 questionnaires was also investigated, and these are reported in Appendix X.

2. Teacher sample

The aim was to send questionnaires to all teachers who had been involved during 2006-07. The information used for distribution was based on the information supplied by the local authority managers. Fifty questionnaires were sent out but 3 of those who received them indicated that they had not actually been involved during the current year. Of the remaining 47, 16 were sent to secondary teachers and 31 to primary teachers. The return rates were:

- 35 in total (74% return rate):
- 23 primary (74% of the primary teachers)
- 12 secondary (75% of the secondary teachers).

Eighteen (51%) had been involved in AAC for 2 years – 12 primary and 6 secondary, therefore half of each. Fourteen responded to both surveys (5 secondary and 9 primary teachers).

The primary teachers taught the following year groups:

- P1 (1)
- P2 (3)
- P4 (5)
- P5 (2)
- P5/6 & P6 (5)
- P6/7 & P7 (6)

One teacher represented a small rural school where there was a wider age grouping in the class.

The subject taught by the secondary teachers were:

- Science (including chemistry, physics, biology) (4)
- Art & Design (2)
- Social Subjects (2)
- Modern languages (2)
- English (1)
- ASN (1)
-

The year groups that were involved with these teachers were:

- S1 (5)
- S2 (2)
- S3 (3)
- S3/S4 (1)
- S4-S6 (1)

3. Range of ICL practice

For each ICL that they had been involved in during the course of 2006-07, teachers were asked to give a brief indication of the topic and the art form.

Primary teachers

Primary teachers reported delivering different numbers of ICLs during the course of the year:

- 10 had delivered 4
- 2 had delivered 3
- 2 had delivered 2
- 8 had delivered 1
- (1 missing response)

It is clear, therefore, that some teachers were working for the whole year with artists while others had less opportunity. It may be that some teachers continued to work with the artist in the final term after the questionnaires were returned and therefore would have more ICLs to add.

The curricular areas reported for developing ICLs were:

- Environmental Studies topics (36 mentions), with science topics such as energy, forces and magnetism, weather and living creatures being mentioned; the Egyptians, the Vikings, the Victorians and WW2 were also popular choices.
- Aspects of PSE and citizenship were addressed (12 mentions)
- language work was mentioned 3 times
- maths was mentioned twice
- one primary class had learned French
- one had RE
- some lessons were used to introduce the pupils to the art from eg dance and local events were also prepared for, eg Jubilee celebrations.

It is clear that primary teachers found working with the artist most suitable to topic work in the environmental studies curriculum

All of these topics were addressed with a range of art forms and mapping combinations of topics and art forms would be complex. The art forms mentioned were:

- visual arts (17 mentions)
- drama (11 mentions)
- crafts (including ceramics, textiles) (11 mentions)
- dance (9 mentions)
- media (4 mentions)
- literature (writing, storytelling) (4 mentions)
- music (one mention)

Thus it would appear that visual arts, drama and crafts were the most frequently experienced art forms.

Secondary teachers

The secondary teachers reported delivering the following number of ICLs during the year:

- 4 had delivered 4
- one had delivered 3
- 3 had delivered 2
- 4 had delivered 1

The subject areas they were used in are noted above. The following art forms were mentioned by the teachers:

- drama (9 mentions)
- visual arts (7 mentions)
- media (4 mentions)
- craft (4 mentions)
- dance (2 mentions)
- literature (one mention)

Some of the art forms were used in combination, eg drama and media; dance and media. As with the primary teachers, some of the secondary teachers may have been involved in further ICLs after the return of the questionnaire.

The figures for both primary and secondary teachers are not intended to represent a precise map of what had happened during the year, but are indicative of the activity that was going on.

All of the secondary teachers and the majority of the primary teachers (20/86%) reported using ICLs to consolidate concepts already taught, while 9 of the secondary teachers and 20 of the primary teachers indicated that ICLs were used to introduce new concepts to the pupils. The secondary teacher responses were similar to the stage 1 evaluation responses, but in stage 1 fewer primary teachers (58%) reported using ICLs to introduce new concepts. This may suggest that both the teachers and the artists were becoming more confident in using the art as a means of delivering curriculum content.

4. Results of teacher survey

4.1 Planning and delivering ICLs with artists

Planning

Teachers were asked to indicate on average how many planning meetings they held with artists for planning and delivering each ICL. Responses ranged from 1 to 11, but the majority (24/69%) indicated that they met between one and 4 times.

The extent of teachers' agreement with factors related to planning is reported in Table 4.1. A small number indicated that some items were not relevant. These have been omitted from the tables that follow but explain, along with the occasional missing response, why figures do not add up to the total or to 100%.

Table C3.1: Teacher views on planning

Key : SA = strongly agree, A = agree, D = disagree, SD = strongly disagree

Generally, ...	SA	A	D	SD
the artist(s) planned and reviewed the ICLs effectively	20 (57%)	14 (40%)	1 (3%)	0
we came up with most of the ideas for the ICLs together	11 (31%)	24 (69%)	0	0
there was sufficient time available at each meeting to plan effectively	9 (26%)	24 (69%)	1 (3%)	1 (3%)
we devised new approaches to assess the curriculum content for the ICLs	6 (17%)	21 (60%)	6 (17%)	0
the content was assessed using 'normal' classroom tests (if relevant; if not relevant to your class or topic, leave blank.) ¹	3 (9%)	11 (31%)	2 (6%)	2 (6%)
we devised ways of assessing the arts outcomes	4 (11%)	20 (57%)	9 (26%)	0
AAC planning meetings fitted easily with my other teaching commitments	7 (20%)	11 (31%)	14 (40%)	1 (3%)

¹Note 17/48% did not respond

Overall, the teachers were positive about the planning process with almost all agreeing the planning meetings provided sufficient time to plan effectively. In the first survey 7 (one-quarter) of the primary teachers had disagreed that they came up with the ideas for the ICLs together with the artist; it would appear that in the second year all teachers felt they were jointly developing ideas. A few commented that the curriculum content was either not normally assessed or only done informally; however, a greater number of teachers indicated that they had devised new approaches to assessing the curriculum content compared to stage 1, with more primary than secondary teachers changing their view. One teacher reported that they had used the art activity as the basis for the national assessment on instructional writing and this had been very successful.

The aspect with which there was most likely to be disagreement was fitting meetings in with teaching commitments. In the open comment section for this question, 4 of the secondary teachers indicated that this took place either at lunchtime or outwith school hours. In the open section at the end of the questionnaire which asked teachers to identify challenges, just under one third reported finding time to plan and prepare was a challenge (see section 4.5).

Delivering

A number of questions were asked about the process of delivering the ICL, based on key factors in the literature which are considered essential for effectiveness in an arts-infused curriculum (Doherty and Harland, 2001). Teachers' agreement with the statements is given in Table C3.2.

Table C3.2: Teacher views on aspects of delivering an ICL

Generally,	SA	A	D	SD
the arts outcomes were at a suitable level for the children	19 (54%)	16 (46%)	0	0
the art discipline(s) was/were a good match for the curriculum content	16 (46%)	19 (54%)	0	0
there were sufficient suitable resources to deliver the ICLs	19 (54%)	15 (43%)	1 (3%)	0
the classroom was a suitable environment to deliver the arts element of the ICLs	7 (20%)	16 (46%)	5 (14%)	3 (9%)

The teachers all agreed that the arts outcomes were at a suitable level for the children and that the art was a good match for the curriculum content; the teachers at stage one were also all in agreement with these aspects. Although they reported that the art was a good match, in the section on challenges 7 primary teachers and 1 secondary reported that deciding on the curriculum topic and making the art fit had been challenging.

On the whole teachers reported having suitable resources but in the open comments 4 reported that these were provided by the artist and the school did not have appropriate resources. In a question at the end of the questionnaire which asked what would be required if teachers were to continue to deliver arts-infused lessons, the most frequent response was materials, resources and a budget to purchase them (see section 4.5).

As at stage 1, a number of teachers disagreed that the classroom was a suitable environment to deliver arts-elements. Open comments indicated the need for use of the gym hall, for example, for drama, or the need to reorganise the furniture in the classroom, or lack of space. This was also mentioned by some teachers in what they had found most challenging. Fewer disagreed than in the first survey. This may be because amongst the teachers who responded in the second survey there were fewer occurrences of dance as an art activity, or access to other school facilities were accepted as part of AAC.

Two further statements addressed the issue of it taking longer to cover curriculum content and whether this was manageable or disruptive. Five teachers disagreed with both statements indicating that they thought it did not take longer to cover the curriculum. Of the remaining 30, 28 thought this was manageable. Only 2 thought it was disruptive – one primary and one secondary teacher. In the open comments, seven primary teachers and 2 secondary teachers referred to covering less curriculum content as being challenging, but as one said ‘she had learned not to worry about it’. This was an issue discussed at greater length in the interviews (see section 5.5).

Working with artists

In the evaluation of two arts-education initiatives by NFER, Harland (2005) emphasised the importance of the pedagogy of the artist. The questionnaire for the evaluation of AAC asked the teachers to comment on the quality of the work of the artist. This is not, of course, meant to be a way of judging of the artists’ pedagogy, but if the teachers perceive that the artists are effective contributors to their classroom, it is a strong endorsement of the artist.

Table C3.3: Teachers views on working with the artists

Overall	SA	A	D	SD
the artist(s) got on well with the children	31 (89%)	4 (11%)	0	0
I was able to develop relationships of trust and respect with the artist(s)	30 (86%)	5 (14%)	0	0
the artist(s) had a good understanding of working with children	29 (83%)	6 (17%)	0	0
the artist(s) encouraged the pupils to try out new ideas	26 (74%)	9 (26%)	0	0
the artist(s) gained a good grasp of the curriculum area/subject	26 (74%)	8 (23%)	1 (3%)	0
the artist(s) was/were skilled at presenting the curriculum content through art	26 (74%)	8 (23%)	1 (3%)	0
the artist(s) encouraged me to try out new ideas	18 (51%)	13 (37%)	4 (11%)	0
the artist(s) took the lead in most of the lessons	7 (20%)	18 (52%)	7 (20%)	0

The teachers’ views were very positive with respect to the quality of the artists in their relationships with both artists and pupils and their ability to deliver their art and the curriculum. In the open section of the question, 11 of the teachers commented that the quality of the artist for this approach was crucial and the artists were of high quality.

As at stage 1, teachers tended to agree that artists took the lead in the lessons, though more at stage 1 ‘strongly agreed’. In the open comments, some explained that they delivered all lessons jointly, but others indicated that sometimes they shared, sometimes it was teacher led, and sometimes it was artist led, depending on the particular focus of the lesson. One indicated that it was important to ‘maximise

the impact of the artist' while he/she was available and therefore most of the lesson needed 'heavy involvement' of the artist.

4.2 Pupil outcomes

For an explanation of the questions asked regarding pupil outcomes, please refer to this section of the stage 1 evaluation in Appendix B3).

Teachers were asked to rate on a scale the extent to which they noticed evidence of the various outcomes in their situation (1 = no evidence and 5 = considerable evidence). The categories have been collapsed for presentation of the data into 'considerable evidence', 'some evidence' and 'little or no evidence'; the mean score is also reported. The rating of evidence as '3' has been taken to mean that teachers are possibly still ambivalent at these early stages; there may be a sense of the outcome, but evidence is not yet clear. 'No evidence' does not imply that the presence of the artist had a negative effect, but rather that the pupils were, for example, as engaged (or possibly disengaged) as they are with all other learning opportunities.

Table C3.4: Teacher views on pupil engagement with learning

	Considerable Evidence	Some evidence	Little or no evidence	m (SD)
The pupils were more positive towards subject matter because of the art activities	29 (83%)	4 (11%)	1 (3%)	4.2 (0.76)
The pupils showed greater involvement with the topics than normal even when the artist was not present	23 (66%)	9 (26%)	2 (6%)	3.8 (0.81)
The pupils persisted with related tasks for longer than I would have expected	18 (51%)	9 (26%)	6 (17%)	3.7 (1.11)
More pupils attended on ICL days	3 (9%)	9 (26%)	20 (57%)	1.9 (1.20)

The teachers were positive about increased engagement of the children when working with an artist and that the interest continued when the artist was not present, though slightly fewer thought there was strong evidence of this. In the open section of this question the comments were fairly wide-ranging, but included the view that the practical nature of the work with the artist engaged the pupils, and the some with learning needs in particular showed increased levels of participation. These views were also expressed at interview, with it being reported that benefits in engaging pupils were particularly evident among those in the lower end of the achievement range. One teacher reported that not all art forms led to the same levels of engagement. Several indicated that their pupils were already well motivated; it was also pointed out that attendance was already good; two secondary teachers and one primary teacher thought that more pupils did attend on ICLs days.

Table C3.5: Teacher views on effectiveness of learning experience for the pupils

	Considerable Evidence	Some evidence	Little or no evidence	m (SD)
Curriculum				
Pupils were able to reflect on what they had learned	28 (80%)	5 (14%)	1 (3%)	4.03 (0.72)
The pupils learned the topics more effectively than pupils previously did using other methods	18 (51%)	9 (26%)	6 (17%)	3.4 (0.99)
Art				
The pupils valued the art product/performance	33 (94%)	1 (3%)	0	4.6 (0.55)
The pupils learned new things about the art form	32 (91%)	2 (6%)	0	4.5 (0.62)
The pupils showed an interest in knowing more about the art discipline	26 (74%)	6 (17%)	2 (6%)	4.0 (0.87)
Pupils were able to critically reflect on the art work they produced	26 (74%)	6 (17%)	1 (3%)	3.9 (0.73)
General				
Integrating arts activities with other learning suits most pupils	28 (80%)	4 (11%)	2 (6%)	4.0 (1.0)

The learning experiences provided by the ICL were viewed positively by the teachers, particularly in relation to the value of learning about art and the value the children placed on it. Around a half indicated that there was strong evidence that the ICL was more effective than other approaches; this suggests that half the teachers were not convinced of this, and this was one of the benefits which received an overall lower score.

Table C3.6: Teacher views on encouraging pupils in creative ways of working

	Considerable Evidence	Some evidence	Little or no evidence	m (SD)
The pupils were willing to try out new ideas	31 (89%)	3 (9%)	0	4.3 (0.64)
The pupils contributed their own ideas to the activities	29 (83%)	5 (14%)	0	4.2 (0.70)
The pupils were willing to take risks	29 (83%)	1 (3%)	3 (9%)	4.1 (0.96)
The pupils asked more questions than usual	18 (51%)	12 (34%)	3 (9%)	3.6 (0.83)

Teachers perceived that their pupils were willing to engage in approaches that encouraged creative ways of working, which was similar to the views of respondents to the first survey. However, at the end of the second year more teachers thought that they had evidence of pupils asking more questions than usual (see section 4.5), though compared to other benefits this received a lower overall mean score.

Table C3.7: Teacher views on aspects of pupils working collaboratively

	Considerable Evidence	Some evidence	Little or no evidence	m (SD)
Pupils showed responsibility towards each other	24 (69%)	10 (29%)	0	3.9 (0.69)
Pupils valued other people's ideas	19 (54%)	12 (34%)	2 (6%)	3.7 (0.82)

While the majority of teachers thought that pupils valued others ideas and behaved responsibly, these two items received a lower overall scoring than other aspects of pupils benefits.

Table C3.8: Teacher views on the opportunity for pupil development of

confidence and self-esteem

	Considerable Evidence	Some evidence	Little or no evidence	m (SD)
Pupils have increased in confidence	24 (69%)	9 (26%)	1 (3%)	4.03 (0.87)
Pupils have gained in self-esteem	25 (71%)	7 (20%)	1 (3%)	4.03 (0.81)

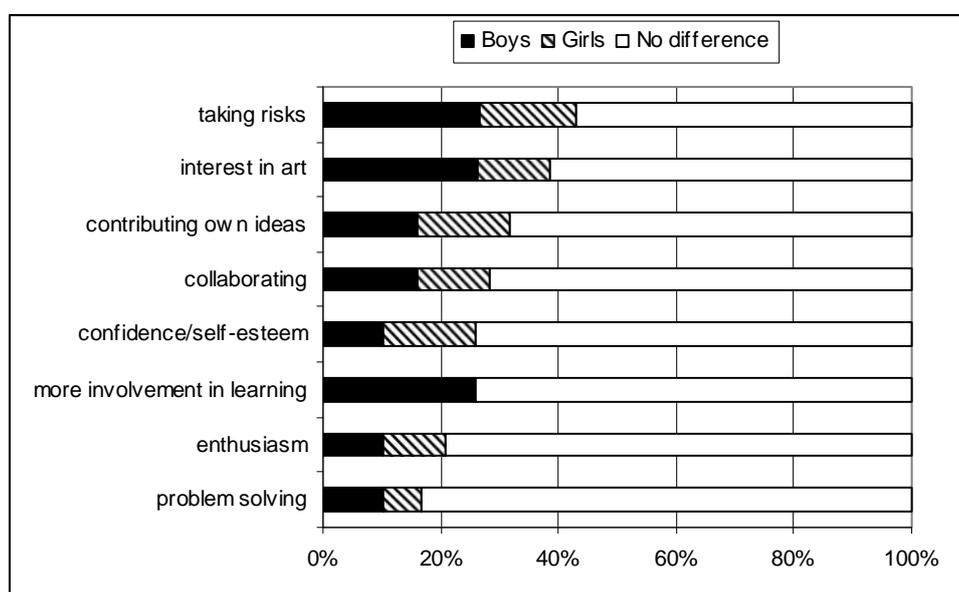
Most teachers thought that pupils had increased in confidence and self-esteem. This was mentioned at interviews with teachers providing examples of pupils who had particularly benefited.

Gender differences

Teachers were asked to indicate whether they thought there were any differences between boys and girls on a number of issues, such as enthusiasm, gaining in confidence and self-esteem, asking questions, taking risks, helping with behaviour, collaborating with others, showing interest in the art discipline, general increase in involvement in learning.

The majority of teachers reported no difference in the responses of boys and girls to working with an artist in the class, but where they were noted, a greater number of teachers suggested that boys had gained more than girls. This is particularly noticeable in relation to greater involvement in learning, where only boys were reported as having benefited in this way (23% of teachers). Underlying this may be the view that girls were more involved than boys in the first place, but it is positive to note that an approach like AAC can influence boys' involvement. Gains in confidence and self-esteem were noted by slightly more teacher for girls than for boys.

Chart C3.1: Teacher views on gender difference on impact of AAC



4.3 Teacher development

One aim of the AAC project is to support and develop the skills of teachers to work collaboratively and creatively. Another aim is to encourage links between different areas of learning and to 'erode subject barriers', which is dependent on the way that teachers work and what is possible within the constraints of existing priorities for education and management practices. This issue is therefore addressed both as part of teacher development and also as part of whole-school issues.

It is recognised that many teachers are already using a wide range of approaches to teaching and learning in their classrooms and that other initiatives in recent years have developed approaches that might also be expected in AAC. The questions on approaches to teaching and learning were not designed to be a measure of how well a teacher does or not does not teach, nor do they make the assumption that AAC is introducing teachers to completely new approaches in their classroom practice. Teachers were asked to focus on the extent to which involvement in AAC has developed their practice. Clearly, we cannot differentiate between teachers who do not do these things and have not changed, and teachers who already do everything and have no need to introduce anything new. That is not the point of the questions – they are simply to identify if AAC has provided the opportunity for development, regardless of the starting point of the teachers.

Teachers were asked to indicate the extent of their agreement to a range of statements which asked about ways in which AAC might have influenced their approaches to classroom practice and working with others. Their responses are reported in tables C3.9 to C3.11

Statements about the opportunity and readiness to adopt new approaches and to encourage children to learn from mistakes and ask questions sought to investigate the extent to which teachers fostered creativity in their classrooms (Cropley, 2001).

Table C3.9: Approaches to teaching and learning¹

	SA	A	DA	SDA
Working creatively				
I have developed new approaches to teaching	9 (26%)	22 (63%)	4 (11%)	0
I use the new ideas I have learned when teaching other parts of the curriculum (primary) or other classes (secondary)	5 (14%)	19 (54%)	8 (23%)	1 (3%)
I have changed the way I think about classroom organisation	3 (9%)	13 (37%)	15 (43%)	1 (3%)
Encouraging creative approaches in pupils				
I am more willing to let pupils make mistakes	4 (11%)	13 (37%)	15 (43%)	0
I now encourage the children to ask more questions	5 (14%)	7 (20%)	17 (49%)	1 (3%)

¹ in tables which follow in this section, all the strongly disagree responses came from one teacher

Almost all the teachers (90%) thought that they had developed new approaches to teaching and just over two-thirds indicated they had tried out the new ideas in other lessons. It was also reported at interview that teachers had gained confidence to try out new things in their other lessons. Just under one half were rethinking how the classroom was managed. About a half said they were more willing to let pupils make mistakes and a third said they encouraged the children to ask more questions. In the open comments, teachers suggested that they already encouraged children to ask questions and to learn from mistakes. The responses, however, indicate that the teachers who responded to the survey, had found that AAC had influenced their teaching and encouraged them to develop new approaches. The teachers interviewed also indicated that working with an artist had given them greater confidence to try new approaches and to be less 'controlling' in their classroom practice.

Table C3.10: Working collaboratively

	SA	A	DA	SDA
I have discussed AAC developments with other teachers	10 (29%)	21 (60%)	3 (9%)	0
Collaborating with the artist has made me more inclined to work with other adults in the classroom	3 (9%)	18 (51%)	11 (31%)	1 (3%)
I am now more willing to work collaboratively with other teachers	1 (3%)	18 (51%)	11 (31%)	1 (3%)

The teachers who responded negatively to the statements, indicated that it was because they were already willing to work with other adults and already worked collaboratively with their colleagues. In the open comments, one teacher said they he/she had always worked collaboratively but now had more confidence in suggesting unusual ways to present the curriculum. At interview some suggested that

there was little opportunity for collaboration on AAC with other teachers, but they had enjoyed collaborating with the artists.

Table C3.11: Other development opportunities for teachers through AAC

	SA	A	DA	SDA
I have developed new understanding of the arts	14 (40%)	19 (54%)	2 (6%)	0
I have developed new arts skills	12 (34%)	22 (63%)	1 (3%)	0

Teachers reported learning about the art disciplines and gaining arts skills from the experience, just as they had reported for their pupils.

A further statement was included for secondary teachers in relation to '**eroding of subject barriers**':

- I have discussed developments in my subject with teachers of other subjects

Eight out of the 12 secondary teachers indicated that they had had the opportunity to discuss developments with other subject teachers. One Art & Design teacher reported having discussions with the English Department to have an English teacher help with the delivery of his art course. Another Art teacher spoke of helping out in other departments.

One final statement asked if teachers would like to do more of this kind of work. All agreed or strongly agreed.

4.4 Whole-school issues

Further aims of AAC are to encourage links between different areas of learning, to erode subject barriers and to improve the ethos of the school. A series of questions asked about whole-school issues: how well AAC fitted into curricular priorities and ways in which it might influence school ethos.

A question asked whether AAC fitted in with **school development planning**. The majority (24/69%) thought it fitted in, but 6 of the primary and 5 of the secondary teachers thought it did not - with 2 primary and one secondary teacher responding 'not at all'. Obviously, where an initiative is in line with what a school is planning, it is likely to be easier for teachers to take it on board. However, where it is something additional to what has already been committed to through the development plan, then additional resource and effort is usually required.

Views on the extent to which AAC could contribute towards schools' National Priority targets and the aims of the *Curriculum for Excellence* were sought. National Priorities and the *Curriculum for Excellence* are aiming at similar long term outcomes but were presented separately as they are 2 key frameworks for school and curriculum development.

Table C3.13: National Priorities and the *Curriculum for Excellence*

	Very much	Much	A little ¹	Not at all ¹
National Priorities				
Achievement and Attainment	11 (31%)	13 (37%)	10 (29%)	1 (3%)
Framework for Learning	12 (34%)	16 (46%)	5 (14%)	1 (3%)
Inclusion and Equality	14 (40%)	16 (46%)	4 (11%)	1 (3%)
Values and Citizenship	11 (31%)	19 (54%)	4 (11%)	1 (3%)
Learning for life	14 (40%)	16 (46%)	4 (11%)	1 (3%)
Curriculum for Excellence				
Develop successful learners	19 (54%)	12 (34%)	3 (9%)	0
Develop effective contributors	22 (63%)	10 (29%)	2 (6%)	0
Develop responsible citizens	14 (40%)	15 (43%)	5 (15%)	0
Develop confident individuals	22 (63%)	11 (31%)	1 (3%)	0
Enhance provision of rich and varied experiences	24 (69%)	7 (20%)	3 (9%)	0

¹ One teacher recorded 'not at all' throughout; it was not the same respondents who recorded 'a little' throughout.

The majority indicated that AAC contributed to the national frameworks for educational priorities, though around one-third had reservations about the extent to which it was contributing to achievement and attainment. The majority were also positive about the extent to which AAC fitted in with the aims of the *Curriculum for Excellence*; the primary teachers were more positive about this after the second year of the project – see section 4.5.

Respondents were asked to indicate the extent to which they thought AAC would contribute to enhancing the school ethos. As with other questions, negative responses need to be interpreted cautiously: they may mean that the school ethos is good and does not need enhancing, or they may mean that AAC is unlikely to have an impact on contributing to aspects that need improvement.

Table C3.14: School ethos

	Very much	Much	A little	Not at all
Provide opportunities for a wider range of pupil abilities to be developed	21 (60%)	12 (34%)	2 (6%)	0
Encourage more positive relationships between teachers and pupils	13 (37%)	18 (51%)	3 (9%)	1 (3%)
Encourage collaboration between teachers	8 (23%)	17 (49%)	7 (20%)	2 (6%)
Enhance existing behaviour policies	5 (14%)	12 (34%)	16 (46%)	2 (6%)
Encourage communication between management and teachers	2 (6%)	11 (31%)	19 (54%)	2 (6%)

Teachers were largely positive about AAC encouraging more positive relationships between themselves and pupils, though they were less convinced that it could encouraged more collaboration amongst teachers or communication with management. See comments above on collaboration following tables C3.10 and C3.11.

As one of the aims is the erosion of subject barriers, secondary teachers were also asked if AAC encouraged collaboration between departments and across subjects: the 12 secondary teachers were evenly split, with 5 selecting 'very much', 2 'much', 6 'a little' and 1 'not at all', suggesting a diversity of

experience amongst the teachers in different schools. See comments above following tables C3.10 and C3.11.

Parental involvement

Seven teachers (20%) – 4 primary and 3 secondary – reported that parents had been involved in the project in some way, with 10 – 8 primary and 2 secondary – indicating that they had received feedback from parents.

All reported that parents had been invited to a presentation, performance or assembly to hear about the project and see what the children had been doing. The feedback received had all been verbal at the presentations or at parents' evening. Comments were all positive – parents had thought it was helpful, unusual, logical to have an 'expert' and were impressed by the quality of the work and the skills of the pupils.

Other community groups

One primary teacher said other arts or community groups had become involved in the ICLs, but provided no information about this.

4.5 Final questions

Challenges

Teachers were asked what had been the **greatest** challenges in being involved in AAC. The most frequently stated challenges were:

- Fitting in planning and preparation time (8 primary and 2 secondary)
- Reorganisation within school eg timetables for access to gym, other school events (10 primary)
- Not worrying about not covering the curriculum content, fitting both art and curriculum into time, neglecting some of curriculum (7 primary and 2 secondary)
- Deciding which curriculum topic best suits art, and making art fit (6 primary and 1 secondary).
- Limited time slot in which ICL took place; making sure everything was cleared up on time (2 primary and 5 secondary)
- Finding suitable accommodation and adequate resources in the school (2 primary and 5 secondary).

Other challenges included: ensuring joint delivery of the lesson with the artist (2), learning new skills, particularly using technology (2), pupil behaviour – sometimes some pupils could be disruptive (2) and convincing other teachers of the value of what was happening (2).

Sustainability

The teachers were asked if they thought they could deliver arts-infused lessons without the input of an artist. Five of the 12 secondary teachers thought they could and 10 of the 23 primary teachers. Therefore, just under one half of the teachers thought this was a possibility.

The teachers were asked to give reasons for their response.

The reasons of those who thought they could do it without an artist covered the following points:

- they could deliver a modified version as they had always taught art, but extra classroom assistance would be required to manage large classes; some teachers indicated that they had the skill to do it. (6 primary and 4 secondary).
- the teachers had gained skills through working with the artist and has the knowledge to link art to the curriculum (6 primary teachers and 1 secondary teacher).
- it could be possible as long as there was support for the teacher, eg an online forum for sharing ideas and asking questions; examples of a range of ICLs would be helpful (1 primary and 1 secondary teacher).
- one-secondary teacher thought that working with other subjects would make it possible.

For those who thought it was not possible, the overwhelming reason given was that the knowledge, expertise and talent of the artist was essential. The view by many was that the teacher did not have the skills or 'fresh ideas' which the artist brought (15 primary teachers and 6 secondary teachers). Three (2 secondary and 1 primary) said that the school did not have the resources; teachers had to deal with too many other things (3 primary) and (even if the teacher had the skills to do it) the artist was key in motivating the pupils (3 primary teachers).

Teachers were asked what would help them to deliver arts-infused lessons when the AAC project was over. One primary and one secondary teacher simply said they would not try it without an artist. The following suggestions were made:

- There was a need for resources and materials and a budget to buy them. In many cases it was the artist who had supplied materials and equipment (13 primary comments and 11 secondary comments). Linked to this, sharing resources of previously developed ICLs would be helpful, for example, a resource pack with examples and ideas (6 primary).
- Working with an artist as a mentor, to help with planning and ideas (7 primary and 6 secondary)
- Time to plan and develop new strategies (5 primary and 4 secondary)
- CPD in arts related activities and skills (6 primary and 2 secondary)
- More support from colleagues – a greater belief that it is worthwhile; more sharing and collaboration with others in school (3 primary and 3 secondary).

Three words

Finally, teachers were asked to sum up in 3 words their feeling about the experience of being involved in AAC. The following words, adjectives and phrases were used:

- enjoyable/fun (17 occurrences)
- refreshing/exhilarating/stimulating/inspiring (8 occurrences)
- motivating/engaging/involving (5 occurrences)
- exciting (5 occurrences)
- challenging/thought provoking (4 occurrences)
- interesting (4 occurrences)
- rewarding/enriching (4 occurrences)
- beneficial/valuable (4 occurrences)
- confidence building (3 occurrences)
- educational/enlightening (3 occurrences).

Other words were excellent, inclusive, active, energetic, enterprising, innovative, creative and successful.

Some made phrases out of their 3 words:

- worked for me
- do it again
- a good experience
- an excellent experience
- thoroughly enjoyable experience
- very interesting experience
- excellent, educational fun
- very, very worthwhile.

There was only one comment with a hint of a negative response – 'unrealistic in the future'.

Therefore, it is safe to conclude that the teachers who responded to the survey, were overwhelmingly positive about their experience of AAC.

5. Teacher interviews

5.1 Introduction

In total, 12 teachers were interviewed about their experiences of implementing Arts Across the Curriculum (AAC). Seven teachers had been interviewed in the first round of interviews while five teachers were new to AAC and were interviewed for the first time. Participants included 7 primary and 5 secondary school teachers. The following report summarises responses to questions posed and concludes with a summary of implications for future implementation of the initiative. It should be noted that the source of responses is indicated only where differences in perspectives emerged between different groups of teachers (i.e. those established in AAC versus those new to AAC and primary school versus secondary school teachers), or where considered otherwise appropriate.

5.2 Teacher backgrounds

Teachers who were new to AAC shared similar backgrounds with those who had been previously involved with the project. Their length of involvement in teaching ranged from 2 to 26 years and whilst they did not view themselves as being especially 'arty', they all shared an interest in the use of the arts in teaching. Participants had either little or no previous experience of working in similar projects and typically became involved by either being selected by or expressing an interest to a senior member of staff.

5.3 Implementing AAC

Numerous examples that teachers had used to promote learning through art were provided and included combining art forms and topics such as; drama and dance with electricity; music with times tables; and visual arts with shapes and measurements. In terms of planning ICLs, most planning took place between the teacher and artist in advance of lessons with 'fine tuning' taking place between classes. When making decisions about the topic to be included in ICLs, artists and teachers were influenced by various factors including module descriptors and what could be achieved within the available time and teaching resources. This inevitably resulted in some ideas being rejected, such as a knitting project which was deemed unsuitable due to the degree of 'hands on' assistance that would have been required by pupils. One primary school teacher who took the lead in deciding on ICL subjects explained that she tends to select topics that she finds 'dull' and believes could be made more engaging by incorporating art. Another teacher who had been involved in delivering ICLs for two years explained that she has become increasingly flexible with regard to planning lessons and tends to think about 'where they've been [pupils], and where they need to go'.

Different teachers adopted different approaches to working with artists, with some preferring to take the lead and others taking a 'back seat' in the delivery of lessons. The majority of artists, however, led lessons, while teachers played a supportive role in assisting small groups and interjecting to clarify points where necessary. Several teachers commented that a flexible approach was most effective, where artists and teachers could share the lead, depending on the circumstances. One teacher commented: 'It's not just that the artist does her bit and I do mine – we are all on a learning curve...'. The general feedback in interviews was that teachers and artists had collaborated very well together and typical comments included the following:

'We exchanged resources and talked by email; I was able to get a lot of advice from artists through email...we worked really well together...it's been a team approach – chatting and discussing'.

Some teachers who were new to AAC provided their views on the differences between ICLs and 'normal' lessons. Here it was felt that incorporation of arts activities in lessons increased the accessibility of learning for kinaesthetic learners, and thereby met the needs of all pupils, not just those who were more academically orientated. The question of whether the arts activity used would contribute towards evidence for 5-14 Expressive Arts Assessment was addressed by two teachers, both of whom expected that art work produced in ICLs would be used as evidence.

5.4 Meeting aims of AAC

Pupil achievement

Feedback relating to pupil achievement from those who were new to AAC and those who had been involved in the project for some time was generally very positive. The most commonly reported observation, noted by five teachers, was that ICLs enabled pupils to retain information more effectively due to facilitation of learning by association. Typical comments included: 'pupils can come back to a lesson one week later and remember exactly what they did the previous week' and, 'if you model something they [pupils] make a better job of learning it'.

Views on the effect of ICLs on academic performance were equivocal. Four teachers (two from primary schools and two from secondary schools) reported that pupils were achieving higher grades across a variety of subjects in which ICLs were applied. One secondary school teacher who had been involved in both years, for example, stated:

'A much higher proportion of pupils than previously have achieved grades in science at the end of S2 that the school considers necessary for success in Standard Grade Science subjects'.

However, another secondary school teacher who had been delivering ICLs for two years felt that pupil attainment had not increased and added: 'In fact, I felt that I had to rush through the teaching of skills which I would normally take longer over'. Two other teachers, who were new to AAC, were reluctant to make links between ICLs and academic performance, stating that due to the vast number of initiatives currently in operation within their schools, it would be impossible to isolate such effects.

A prominent theme emerging from responses concerned the observation that pupils had gained a number of psychosocial benefits from their involvement in ICLs. These benefits were observed by five teachers and most commonly included increased confidence, as is encapsulated in the following extract:

'There were two very withdrawn pupils in the class and there were two special moments when one of them stood in front of the class and delivered a thoughtful individual talk, smiling all the way through. The other pupil wrote on his feedback sticker, "I am confident now."'

Other psychosocial benefits reported included enhanced team work skills and a greater willingness to 'embrace anything new' and initiate conversations with specialists visiting the school. In that connection, two teachers commended the approach in its ability to expand pupils' perspectives of the real world, or as one teacher put it, 'connecting pupils to another life that was out-with most children's experiences'. A final point made in relation to pupil attainment came from two secondary school teachers who observed that benefits of ICLs such as securing engagement and eliciting positive attitudes towards learning were especially marked among the lower end of the achievement range. Indeed it was proposed that if ICLs were 'more focused' on these pupils, the impact on motivation and achievement would be stronger.

Pupil motivation to learn

All teachers unequivocally agreed that ICLs had enhanced pupils' motivation to learn in the subjects in which they were implemented. This was typically evidenced in observations that pupils 'sat up and took notice' and demonstrated a greater willingness to engage in tasks that would previously be seen as a chore. For example one teacher commented:

'...the difference in some members of my class has been quite marked; pupils have grown enormously...they'll say "ok, I'll give it a go"... I'll look [at one pupil in particular] now and think, "yes, he's now engaged, at least he's listening".'

The question of whether increased motivation transferred to other subjects was addressed by two teachers who felt that the motivational benefits were exclusive to the subjects in which ICLs were taught. As with benefits relating to pupil attainment, one teacher pointed out that motivational benefits were particularly evident among those in the lower end of the achievement range.

Impact on teaching skills/strategies

Many teachers commented that the initiative had enabled them to become more creative and ‘opened [their] eyes’ to different ways of delivering lessons. Four teachers who had been involved in AAC for two years also acknowledged that they had become more confident about doing ‘things differently to achieve the same result’ and that they now teach other curricular areas through the arts. One primary school teacher commented that the idea of introducing more creativity in the classroom was not new, having undertaken her teacher training at a time when there was a strong integration movement in Scottish primary schools where expressive arts and content were to be integrated wherever appropriate. Having seen this model be abandoned, the teacher welcomed AAC, seeing it as giving her ‘permission to have fun and not worry if something doesn’t get finished’. In that connection, two further teachers commented that the initiative had made them realise that they can ‘let go’ more while teaching rather than having to have ‘every minute planned’.

With regard to collaboration, one teacher reported that the initiative had made little difference to his collaboration skills, while another reported that she had become more willing to collaborate. A further three teachers commented that they had enjoyed collaborating with artists, but that the opportunity to cascade this collaboration in other areas of teaching was limited.

Impact of AAC on the school ethos

No general consensus was reached as to whether the inclusion of AAC had impacted on the school ethos, with three teachers believing that it had an overall impact and four reporting that there was either little or no impact beyond the ICLs themselves, or that the effect was difficult to isolate due to the application of many other initiatives within the school. Those who believed that the introduction of ICLs had impacted on the school ethos struggled to articulate the ways in which the ethos had changed, however, allusions were made to schools’ adoptions of a more open approach to learning, the generation of a positive learning environment and that a sense of excitement and curiosity had been injected into the school. For example, one teacher stated: ‘...all the teachers want to know what’s going on, the pupils are interested and the parents are talking about it’. Indeed, at one primary school where parents to watch a video of their children participating in ICLs, parents provided a great deal of positive feedback, including that their children had talked more frequently and enthusiastically about their learning experiences in relation to ICLs.

Perceived effectiveness of AAC

All teachers spoke positively about the effectiveness of the initiative, with most describing it as ‘very effective’ and qualifying this with references to, for example, its ability to make challenging topics ‘brighter and more achievable’ and to engage kinaesthetic learners and elicit positive attitudes towards areas of content. Other evidence for the initiative’s success included observations that more pupils were completing homework and remaining on target in class. Indeed, one teacher who perceived there to be ‘so many benefits’ of ICLs was keen that her views were reported.

Additional comments included the initiative’s effectiveness in developing the whole person and recognising achievement in different areas of the curriculum. For example, one teacher stated: ‘The arts have a lot to offer holistically for a child ... going back to the Curriculum for Excellence, it’s the whole person and success in the arts or PE or whatever, self-worth is improved by having that recognised’. One secondary school teacher did, however, feel that the benefits of ICLs were restricted to pupils in the bottom end of the range of abilities.

Whilst all teachers voiced positive views about the effectiveness of AAC, three teachers cautioned that the time involved in preparation and tidying up makes it difficult to fit ICLs into single period time slots. Another teacher who saw great potential for the initiative to be rolled out cautioned that the effects could be ‘diluted’ if ICLs were implemented across all subjects and proposed that they should be limited to certain topics. In terms of fostering links between different areas of learning, five teachers reported that the initiative had encouraged links between arts and different areas of the curriculum, while three felt that it had not.

5.5 Evaluation and reflection

In terms of evaluation of the initiative, four teachers reported implementing formal evaluation procedures. Two of these teachers, both of whom were in their second year of AAC, distributed evaluation forms to pupils while the other two, also in their second year of the initiative, wrote reflections of their experiences. In the other schools, no formal evaluation procedures were undertaken, although three teachers reported making notes of any changes in homework and class test performances and two reported receiving informal feedback from pupils on their experiences of ICLs.

Reflections included views on what teachers would do differently in future AAC projects. Few commonalities were apparent in these reflections, although two teachers identified the need to locate better space or ensure that better space is available before ICLs take place. Other comments included being 'less rigid about things', having a better appreciation of the compatibility between topics and certain art forms and ensuring planning time is incorporated from the start of projects. While one theme emerging from responses was that teachers have become more flexible in their approach to teaching, one primary school teacher, in contrast, spoke of the overly flexible approaches adopted by some artists and cautioned about the need to be explicit from the start that specific learning outcomes need to be achieved.

Limitations

Regarding limitations of the AAC model, numerous teachers commented on the time demands of ICLs, in terms of both the time required to plan lessons and the time required to deliver them. Consequences of these time demands included having to rule out attractive options for lessons and having to use lunchtimes and non-class contact time to plan lessons.

Connected with that, four teachers shared the view that it is not possible to cover as much content in ICLs and that progression through learning outcomes is considerably slower in comparison to non-integrated lessons. Indeed, these teachers felt that ICLs 'do not work where teaching staff insist on too much content or fret about not covering enough' and that ICLs are 'too time consuming for standard grade and higher grade teaching.' However, although the need to adopt a more flexible approach to teaching was recognised, it was not always seen to be possible while satisfying all the learning objectives. One primary school teacher was particularly vocal about this, stating: '...you can't do both', you can't have these formal programmes and then say, "by the way, be creative"; they're expecting too much of teachers'. The teacher went on to explain that inclusion of ICLs within the curriculum requires changes in policy that place less demands on attaining multiple learning objectives; otherwise, she felt, teachers would continue to be 'just ticking boxes'. This idea was echoed by a secondary school teacher who saw the need for AAC, and specifically increasing teacher creativity, to link with the guidelines of the Curriculum for Excellence.

Other limitations of the initiative included restrictions caused by lack of appropriate space and the potential for the initiative to impact positively on the whole school being quashed due to schools' participation in numerous other initiatives.

Implications for future implementation

A number of views were expressed regarding the best whole school conditions for successful implementation of AAC. Not surprisingly, the most insightful feedback came from those who had been involved in the initiative for longer periods. The most commonly reported view was that members of the school management team, particularly the headteacher, should be receptive to the concept of AAC and willing to adopt new approaches to teaching. Coupled with that, it was deemed important that the initiative is promoted within schools in order to increase its profile and ensure staff have positive attitudes towards it. One secondary school teacher, for example stated:

'It seems that AAC needed to be promoted almost, to get all staff on board and for it to be accepted by staff. This hasn't happened and as a result, confusion and doubt have arisen.'

In addition to increasing staff awareness of the initiative, several teachers commented on the importance of involving the whole school and raising the profile of AAC across the school community by, for example, providing opportunities for pupils to present what they have learned to parents and other members of the whole school.

Availability of resources including time and appropriate space was mentioned by almost all teachers. Particular emphasis was placed on time resources where it was considered essential that appropriate time for planning between teacher and artists is permitted by school management and built into every project. Extending the theme relating to time resources, it was suggested by some secondary school teachers that ICLs be incorporated into double (2 x 50 minutes) rather than single periods.

Although the need for more time to be granted to planning ICLs was recognised, two primary school teachers felt that involvement in the initiative necessitated a commitment to do extra work in order to prepare lessons. Both of these teachers commented on their willingness to undertake such work in light of the benefits of ICLs that they had observed.

Other points raised included resolving the issue of covering less content in ICLs and having appropriate funding available to purchase any equipment required.

Summary

In sum, teachers' perceptions of AAC were very positive, with the initiative considered to be effective in making learning more accessible to all pupils (particularly those at the lower end of the ability range), taking a holistic approach to pupil development and connecting classroom learning to real life. Whilst the perceived effects on academic attainment were ambiguous according to responses, AAC was seen to have a strong positive impact on psychosocial characteristics such as confidence and team working. Limitations of the model are, however, evident and include constraints caused by the time consuming nature of preparing and delivering ICLs, and the consequent conflict between developing creativity among pupils while also achieving learning outcomes. Important 'ingredients' for success include support from the head teacher and school management, integration and promotion of AAC across the whole school, availability of appropriate space and allocation of adequate time for project planning and delivery of lessons.

6. Summary

Teachers who were involved in AAC in 2006-07 were asked to complete a questionnaire in May 2007. Thirty-five responses were received out of the 47 questionnaires that were distributed. Half of the respondents had participated over 2 years of the project and half had only been involved in year 2. Teachers had delivered between one and 4 ICLs in the current year, covering a wide range of topics and art forms with classes from P1 to S4/6. Environmental Studies topics were the most frequent context for ICLs in primary schools with visual arts, drama and crafts being the most frequently mentioned art forms. In secondary schools, science was the most mentioned subject with a range of topics being covered; drama and visual arts were the most frequently occurring art forms in secondary schools. Twelve teachers were interviewed between April and June 2007 – 7 primary and 5 secondary teachers.

Teachers were unanimously positive about the quality of the artists they had been working with and valued the skills, expertise and ideas they brought to the ICLs.

Teachers were largely positive about the effectiveness of the planning process, though finding sufficient time remained difficult with many reporting doing planning and preparation in lunchtime and outwith school hours. It was a challenge to find sufficient time and opportunity for the artist and teacher to plan together.

Although, generally, teachers held the view that the art and curriculum matched well, it had been challenging to achieve this. It was reported that it took longer to cover the curriculum but at primary school level, this generally was not disruptive in light of the richer learning experiences; however, at secondary school it caused greater concern if learning objectives were not covered. While teachers reported that they and the artists came up with ideas for the ICLs together, four-fifths of the teachers said that the artist took the lead in delivering the lessons, though roles varied in different classes and at different stages of the ICLs. Teachers indicated that they wanted to 'maximise the input' of the artists and take advantage of their particular skills and expertise while they were in the classroom.

Teachers were positive about the benefits to pupils' engagement with learning and about the effectiveness of the learning experience in terms of understanding the curriculum, developing knowledge of art and art skills and encouraging ways of working creatively. The issue of raised attainment was discussed at interview; teachers were divided in their views with some indicating better than expected test results, but others unsure about benefits related to this.

Teachers also indicated that AAC had influenced their teaching and encouraged them to develop new approaches with two-thirds saying they had tried out new ideas with other classes. While they had enjoyed working collaboratively with the artist, for the most part AAC had not allowed for collaboration with other teachers; most teachers indicated that they already worked collaboratively with their colleagues.

Teachers were positive about the potential of AAC to contribute to targets for National Priorities and also to support developments for the *Curriculum for Excellence*. They were largely positive about the ICLs enhancing their relationships with pupils but were less convinced that it would encourage greater collaboration with other teachers or better communication with management. Secondary teachers were split between agreement and disagreement as to whether AAC had provided the opportunity for cross-subject/cross-departmental working, thus contributing to the erosion of subject barriers. Generally the view was that the influence of AAC had not gone beyond the classes into which it was introduced.

Just under one-half of the teachers indicated they could deliver arts-infused lessons without the input of the artist because they felt they had developed or already had the skills to do it, albeit with additional support. For those who thought they could not, the overwhelming reason given was that the knowledge, expertise and talent of the artist was essential – the artist introduced a dimension which the teacher could not replicate. To enable arts-infused lessons to be continued after the AAC project had finished, the greatest need was for resources and materials and a budget to buy them.

Evaluation stage 2 data collection

Evidence from artist survey and interviews

1.	Introduction to artist survey	160
2.	Artist sample	160
3.	Range of ICL practice	161
4.	Results of artist survey	163
5.	Artist interviews	172
6.	Summary	179
7.	Note on inferential statistics	180

Evidence from artist survey and interviews – Stage 2

1. Introduction to artist survey

Artists who had been involved in Arts Across the Curriculum during 2006 to 2007 were asked to complete a questionnaire in May 2007, that is towards the end of the second year of the project. As with the teachers, some artists were new to the project in 2006-07, while others had been involved since the beginning of the project and, therefore, had more experience of ICLs.

At stage one of the evaluation, artists had been asked to respond to the questions in the survey focusing on one ICL, for example, the one they thought had been most effectively developed. Although even at that time some artists had delivered more than one ICL, they were asked to respond while thinking about one specific example in order to have a dataset which paralleled that of the teachers, who had been involved in one ICL only at the time of completing the first questionnaire (see Appendix B3). At stage 2 of the evaluation artists were asked to try to generalise about their experiences of delivering ICLs. It is appreciated that this may not have been easy, especially where artists perceived that some ICLs had been more effective than others, and had delivered ICLs in a range of contexts.

At the stage 1 evaluation it was noted that artists responded more positively in relation to the work in primary schools on a number of aspects of ICL delivery, for example the school environment and time for delivery of lessons, pupil engagement with the process and the support received from school management. As some artists were working in both sectors and as at stage 2 they were being asked to respond generally about their experiences, it was decided to construct the questionnaire with 2 separate sections – one for responses about working in primary schools and one about responses for working in secondary schools. If artists had worked in one sector only, then they were invited to complete the appropriate section of the questionnaire; if they had worked in both, they were invited to complete both sections, but as the evaluation team were not wishing to overburden artists with more paperwork, they were given the option of choosing to respond in relation to one sector only. This added complexity to the data analysis and how this was managed is explained below in the results section – section 4.

As with the teacher survey, there were some modifications to the artist questionnaire to eliminate repetition and reduce the number of items in some of the questions. As with the first survey, some the questions were based on the explicit aims of the AAC project and on issues identified in the literature on arts-infused curricula. However, the AAC project did not specify aims for artists and issues identified as relevant to artists in the literature have been included, for example, the artists' personal and professional development and practical considerations in relation to contractual arrangements. The themes addressed in the artists' questionnaire are:

- planning and delivering ICLs with teachers
- perceived impact on pupils
- impact on artist in relation to pedagogy and practice
- practical issues.

2. Artist sample

The aim was to include all artists who had been involved during 2006-2007 in the schools that had been involved in AAC from the outset of the project. The information used for distribution of the questionnaires was based on information received from the local authority managers for the project. Thirty-five questionnaires were sent out and 23 returned (66% return).

Nineteen of the 23 respondents (83%) had been involved in the project for 2 years and only 4 had become involved in the second year of the project. Eleven artists completed questionnaires at both stages of the evaluation.

Nine had only worked in primary schools (or had chosen to respond only in relation to working in primary schools), 5 had worked only in secondary and 9 responded to working in both sectors.

The artists' disciplines were:

- dance 6
- drama 4
- craft 3
- visual art 3
- writing/literature 3
- media 2
- music 1
- media/drama/literature 1

This was a similar range of arts disciplines as reported by artists in the stage 1 evaluation.

3. Range of ICL practice

Artists were asked to give an indication of which years groups and which curriculum topics they had worked with during the course of the year.

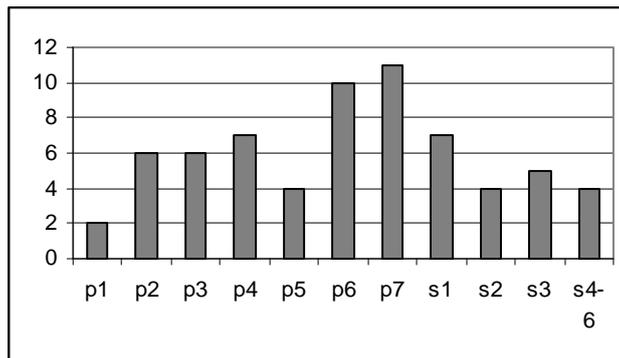
The artists had delivered ICLs across all year groups – some working with many different year groups, others working only with one. Table C4.1 summarises the year groups that the artists worked with and illustrates one aspect of the diversity of the experience of the artists.

Table C4.1: The number of stages/year groups that the artists worked to deliver ICLs

Artist	Prim stages	Sec stages	Total stages
1	5	3	8
2	2	3	5
3	5	0	5
4	4	0	4
5	2	2	4
6	3	1	4
7	1	2	3
8	3	0	3
9	3	0	3
10	3	0	3
11	2	1	3
12	2	1	3
13	2	1	3
14	1	1	2
15	2	0	2
16	2	0	2
17	2	0	2
18	2	0	2
19	0	1	1
20	0	1	1
21	0	1	1
22	0	1	1
23	0	1	1

Chart C4.1 shows the number of artists that had worked with each different year group, which indicates that most frequent involvement was in the P6 to S1 range of classes.

Chart C4.1 Number of artists working with each year group



In primary schools the artists reported working with teachers on the following curriculum topics

- Environmental Studies – science topics, such as magnets; forces & friction; sun, moon and stars; plants (17 mentions)
- Environmental Studies – history topics, such as Victorians, Vikings, WW2, Mary Queen of Scots (10 mentions)
- Environmental Studies – geography topics, such as India (6 mentions)
- Environmental Studies – environment, pollution and conservation (4 mentions)
- Writing and Language (10 mentions)
- Citizenship/PSE topics (9 mentions)
- Maths (7 mentions)
- RE (2 mentions)
- French (2 mentions)

We may assume that this list is not exhaustive but it illustrates the wide range of topics the artists had applied their art forms to and parallels the emphasis found in the teacher questionnaire on Environmental Studies topics – more than half references to topics addressed fell within the field of Environmental Studies.

In secondary schools the following subjects/topics were mentioned:

- Science – topics such as the digestive system, forces, electricity, reproduction (10 mentions) (note some artists just wrote 'science' without expanding on the number of topics covered)
- English (4 mentions)
- Art & Design (3 mentions)
- Music (2 mentions)
- Enterprise (2 mentions)
- French (2 mentions)
- Maths (2 mentions)
- Modern Studies – parliament (1 mention)
- History – Mediaeval Scotland (1 mention)
- Geography (no detail – 1 mention)
- PSD (1 mention)
- RE (1 mention)

Again, this illustrates the wide range of topics and subjects that were addressed by the artists working in secondary schools.

All artists, both at primary and secondary levels, indicated that their art form had been used to introduce new concepts to the pupils; all except one at primary level and two at secondary level indicated that their art form had been used to consolidate concepts which had already been taught by the teacher.

4. Results of artist survey

As indicated above the artists were asked to respond separately to their views on working in primary schools and working in secondary schools, with 9 respondents completing both sections of the

questionnaire. The results for primary schools and secondary schools have been presented separately and the total number of responses overall is therefore greater than the number of artists who completed the survey.

The data were investigated for statistically significant differences in the two sectors in several ways: first, all primary and all secondary responses were compared (using Mann-Whitney test); secondly the responses of the 9 artists who responded for both sectors were compared to see if they were responding differently in relation to their work in each sector (using Wilcoxon signed ranks test); thirdly, the responses of those who had worked only in one sector were compared with each other (using Mann-Whitney test). Overall, only 3 statistically significant differences emerged: in the whole sample responses, artists thought that primary school children were more likely to ask questions than secondary pupils; and management were found to be more supportive in primary schools. The responses of those who worked in one sector only suggested that they thought primary pupils were more likely to value the art form than secondary pupils.

An overall, more positive response to working in primary schools is observable in the data although the differences were not statistically significant. With such a small overall artist 'population' engaged in the project and a small sample, the differences need to be treated seriously, but with caution.

Due to the small sample size, only frequencies are reported. Within tables, items have been ordered from those with greatest agreement to least agreement.

4.1 Planning and delivering ICLs with teachers

Planning

Artists were asked to indicate on average how many planning meetings they held with teachers for planning and delivering each ICL. Responses ranged from 1 to 8 for both primary and secondary schools but the majority indicated that they met between one and 3 times: 13 out of 18 (72%) working with primary schools and 9 out of 14 (64%) working with secondary schools.

The extent of artists' agreement with factors related to planning is reported in table C4.2.

Table C4.2: Artist views on planning for ICLs

Key : SA = strongly agree, A = agree, D = disagree, SD = strongly disagree

<i>In primary schools, generally ... (n=18)¹</i>	SA	A	D	SD
AAC planning meetings fitted easily with my other commitments	3	13	1	0
There was sufficient time available at each meeting to plan effectively	5	5	6	1
The teachers planned and reviewed the ICLs effectively	2	9	5	0
We came up with most of the ideas for the ICLs together	3	7	5	1
We devised ways of assessing the arts outcomes	2	8	2	4
<i>In secondary schools, generally ... (n=14)</i>	SA	A	D	SD
We came up with most of the ideas for the ICLs together	3	8	0	1
AAC planning meetings fitted easily with my other commitments	2	11	1	0
There was sufficient time available at each meeting to plan effectively	5	5	3	1
The teachers planned and reviewed the ICLs effectively	2	8	1	2
We devised ways of assessing the arts outcomes	0	6	6	0

¹Note: figures do not always add up to total number of respondents in tables which follow due to some missing responses.

On the whole the planning process appeared satisfactory, although for a minority this was not the case; in the open comments, artists reported that the effectiveness of the planning process varied from school to school and teacher to teacher, both in the primary and secondary sectors.

There was broad agreement that the work of AAC fitted in well with artists' other commitments; at the first stage of the evaluation this had been a problem for about one-third of the artists.

The issue of sufficient time for planning remained a concern for some of the artists in both sectors (around one-third of responses reflecting this). Of the 9 who commented on working in secondary schools, 5 said teachers did not have time to fit in planning and review along with their other work; one

commented on the willingness of one teacher to spend time discussing the work despite the pressures. Another artist indicated that she felt that the project was 'low priority' for the teacher she was working with. It was suggested that one thorough planning meeting at the outset with ad hoc discussions and a willingness to be flexible and make changes as the project progressed was effective. One spoke of planning by email.

It appears that artists and teachers in secondary schools worked more together to come up with the ideas for the ICLs, while some artists felt this was not the case in primary schools. In relation to primary teachers one artist commented that only one out of 4 teachers had been active and had come to meetings with his/her own ideas; the others were happy to accept the artist's ideas. Another artist spoke of working and planning closely with a secondary teacher in one school, but having to take the lead in another, where it was felt that the teacher did not 'really understand or fulfil their roles'. At the first stage of the evaluation, secondary teachers were more likely than primary teachers to agree that they came up with ideas together; however at the second stage of the evaluation, primary teachers were also agreeing that they were working more collaboratively with artists in this respect. There appears to be some disparity in the perceptions of artists and teachers (especially primary teachers) in respect to joint planning of ideas.

One comment was made about the ICL planning document – it had not been helpful in planning but provided a useful 'diary' of the projects. In the challenges, reported in section 4.6, artists refer to the additional administrative burden that fell to some artists in relation to planning and the unsuitability of the planning document. This was also raised during artist interviews.

Delivering

The views of artists on aspects of delivering ICLs are given in table C4.3.

Table C4.3: Artist views on aspects of delivering ICLs

<i>In primary schools, generally ... (n=18)</i>	SA	A	D	SD
I was able to develop relationships of trust and respect with the teachers	10	7	0	0
The scheduling of the lessons fitted well with my other work commitments	7	9	0	1
There were sufficient suitable resources to deliver ICLs	6	10	1	0
The classroom was a suitable environment to deliver the arts element of the ICLs	3	9	2	2
There was sufficient time to develop the arts outcomes	3	7	6	1
The teacher(s) took the lead in most of the lessons	1	1	11	4
<i>In secondary schools, generally ... (n=14)</i>	SA	A	D	SD
I was able to develop relationships of trust and respect with the teachers	8	4	0	1
The scheduling of the lessons fitted well with my other work commitments	1	12	0	1
There were sufficient suitable resources to deliver ICLs	2	8	2	2
The classroom was a suitable environment to deliver the arts element of the ICLs	2	6	2	4
There was sufficient time to develop the arts outcomes	0	5	5	4
The teacher(s) took the lead in most of the lessons	0	3	8	3

Artists' responses on delivering ICLs are positive, particularly in terms of developing relationships with the teachers, which parallels the views of teachers, though there had been some less satisfactory experiences. Five artists commented on the relationships with teachers – 'some were good, others frustrating'. Three indicated they had good working relationships, which they believed essential for the project to work, and one specifically referred to having skills which complemented each other. One artist reported in relation to working with a secondary teacher 'I felt that the teacher's comments in class undermined the energy I put in to get buy-in from the class'.

Disagreement from some artists emerged in relation to teachers taking the lead, time to develop the arts outcomes and the suitability of the classroom as an environment for delivering ICLs. These were also found to be issues at the time of stage one of the evaluation.

As with planning, the experience of who takes the lead in the sessions varied between teachers with some establishing equal responsibility and sharing delivery and others leaving the delivery to the artist. One artist spoke of the project continuing when the artist was not present and therefore the teacher was leading and taking full responsibility for the work at those times. This accords with the views expressed by teachers that preparing the pupils and following up the work of the artist were important aspects of integrating the art and the curriculum which they did when the artist was not there; this allowed them to maximise the use of the artists' skills when the artist was present. The lack of involvement of some teachers, and their expectations of the artist 'doing all the work', was raised by some artists as one of the challenges of working on AAC and it was also an issue raised at interview (see sections 4.6, 5.5 and 5.7).

The suitability of the classroom varied with the art form and the artistic processes that were being used, but for most there was some element of inadequacy and frustration. Two dancers reported that they had had access to the gym in primary schools and therefore this was not a problem. For the visual artists working in the class had limited the possible processes because of lack of space and facilities such as sinks; one indicated that having access to a separate room in a primary school was beneficial as it meant setting up and clearing away was possible without disturbing the class. This was reported as less of a problem in secondary schools in the second year of the project compared to year one: in year one all 10 secondary artists disagreed that the classroom was a suitable environment while in year 2 only 6 out of 14 artists disagreed. This may reflect different art disciplines being used – for example, there were more responses from literary arts and craft artists working in secondary schools in the second year. Alternatively, it may mean some artists have adapted differently as those from the field of media and drama both agreed and disagreed.

One drama artist found working in a secondary school 'frustrating and of limited value' due to having to 'move tables, not being able to make a noise, stuck in cramped classrooms and trying to run drama sessions in 35 minutes'. Half of the artists who commented on working in secondary schools reported that working within a single period was frustrating, but some also felt that in primary schools they were 'pushed for time' to cover the arts outcomes. This was an issue emphasised in the question on the greatest challenges.

While most artists thought that resources were adequate, one artist commented that it was he/she who supplied the resources. This reflects the views of teachers who reported dependency on the artists for materials and highlighted the issue of budgets for resources as an issue for sustainability in schools.

4.2 Pupil outcomes

In addition to the issues identified as key elements of an arts-infused curriculum from the perspective of teachers and pupils, the literature also identified that for artists the valuing and success of the arts outcomes are important (Harland *et al*, 2000; Orfali, 2004). Therefore, in relation to the impact on pupils, the statements for the artists focused on the arts aspects of the ICLs.

The questions followed the same pattern as the in the teachers' questionnaire, namely a 5-point scale where 5 = 'considerable evidence' and 1 = 'no evidence'. The categories have been collapsed into 'considerable evidence', 'some evidence' and 'little or no evidence'.

Table C4.4: Artist views on pupil engagement with learning

Min = 1; Max = 5

<i>In primary schools, generally ... (n=18)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were enthusiastic about learning about the art	17	1	0	4.6	0.61
The pupils persisted in the tasks they were given	15	2	1	4.2	0.86
<i>In secondary schools, generally ... (n=14)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were enthusiastic about learning about the art	10	3	1	4.1	0.99
The pupils persisted in the tasks they were given	9	3	1	4.0	1.00

The artists had positive perceptions about the pupils' engagement with the learning process.

Table C4.5: Artist views on the effectiveness of the learning experience for pupils

<i>In primary schools, generally ... (n=18)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
Arts related learning					
The pupils developed new arts-related skills	18	0	0	4.7	0.49
The pupils valued the art product/performance	16	2	0	4.6	0.71
The pupils showed an interest in knowing more about the art discipline	15	3	0	4.3	0.75
Pupils were able to critically reflect on the art work they produced	11	4	3	3.7	1.07
general					
Integrating arts activities with other learning suits most pupils	13	4	1	4.2	1.00
<i>In secondary schools, generally ... (n=14)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
Arts related learning					
The pupils developed new arts-related skills	11	1	2	4.1	1.29
The pupils valued the art product/performance	10	2	2	3.8	1.37
The pupils showed an interest in knowing more about the art discipline	8	3	3	3.6	1.28
Pupils were able to critically reflect on the art work they produced	7	5	2	3.4	1.09
general					
Integrating arts activities with other learning suits most pupils	9	2	3	3.7	1.14

The artists were confident that pupils were learning new arts-related skills. Those working with secondary pupils were less sure that the pupils valued the arts outcomes, showed an interest in knowing more about the art and on their ability to reflect critically about the art. They were also less sure that it suited all or most pupils in secondary schools. As noted in the introduction to section 4, the difference between artists' responses with respect to the value on the arts outcomes was statistically significant, with 12/18 artists selecting 5 on the rating scale for primary pupils but only 5/14 selecting 5 for the secondary pupils. Indeed 2 artists selected 1 on the rating scale for secondary pupils while none selected the negative end of the scale at all for primary pupils.

In the open comments, it was noted that, while there had not always been a product or performance, where there was the children had valued it highly. For example, one artist reported

'Pupils develop a real sense of ownership of their completed art piece. They have been on a journey throughout the project and it's great to see them more confident and pleased with their own abilities and creation'.

Table C4.6: Artist views on encouraging pupils to work creatively

<i>In primary schools, generally ... (n=18)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were willing to try out new ideas	17	1	0	4.5	0.62
The pupils contributed their own ideas to the activities	17	1	0	4.3	0.59
The pupils asked lots of questions	15	2	1	4.2	0.86
The pupils were willing to take risks	16	2	0	4.1	0.58
<i>In secondary schools, generally ... (n=14)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
The pupils were willing to try out new ideas	13	0	1	4.3	0.83
The pupils contributed their own ideas to the activities	12	2	0	4.2	0.70
The pupils were willing to take risks	8	6	0	3.7	0.73
The pupils asked lots of questions	8	4	2	3.4	1.02

The artists were largely positive about the outcomes which could contribute to working in creative ways, though it is notable that the secondary pupils were perceived as less likely to ask lots of questions and were slightly less willing to take risks. (As noted in introduction the difference in artists' views regarding pupils' propensity to ask question was statistically significant.) It was noted in the teachers' responses that primary teachers in the second year of the evaluation reported that their pupils were more likely to ask lots of questions in the ICLs.

Table C4.7: Artist views on the opportunity for pupils to work collaboratively

<i>In primary schools, generally ... (n=18)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
Pupils valued other people's ideas	11	5	1	3.8	0.83
Pupils showed a sense of responsibility towards each other	11	6	1	3.6	0.70
<i>In secondary schools, generally ... (n=14)</i>	Considerable evidence	Some evidence	Little or no evidence	m	SD
Pupils showed a sense of responsibility towards each other	13	0	1	3.9	0.62
Pupils valued other people's ideas	9	3	2	3.6	0.93

Group working was an important aspect of many of the ICLs and the majority of artists thought that pupils had attributes which enabled effective group-working.

The majority of artists thought that pupils had gained in confidence with 15/18 indicating there was considerable evidence of this in primary schools and 11/14 indicating there was considerable evidence in secondary schools. This was in accord with the views of teachers.

In the open comments, one artist commented that it was difficult for artists to make judgements on some of these issues as it required a long term relationship with the children to be able to see evidence of impact. However, the artists commented positively in the impact on primary school children in particular. One artist made an interesting remark in relation to what was 'normal' within a school environment:

'I had the impression that across the school I was in, a lot of good cross-curricular work had been done and my sessions didn't seem outrageously different from "normal" learning'.

Where teachers have already embraced the belief that learning is promoted through cross-curricular work and different experiences, they are perhaps more likely to embrace initiatives like AAC effectively.

Artists working in secondary schools were slightly less positive about the impact on pupils, with more expressing the view that it varied between pupils and classes – depending on ability, behaviour and

'what was happening in the pupils' home life'. Individual comments reflected the range of experiences of the artists

- *'sticking plasters over gashes. It felt pointless and almost patronising to the children and teachers. Forced to stick so closely to the curriculum it took the fun out of the art.'*
- *'I was involved in 2 secondary schools . one school reacted well, the other excelled.'*
- *'the class comprised students ... many at the risk of exclusion. The group had few discipline problems while working on the project and became highly invested in their projects.'*

Gender

Artists were asked to indicate if they thought that boys or girls benefited most in relation to a number of factors. For the most part artists indicated that they did not identify any differences between boys or girls. However, at primary school level, 6 of the artists thought that boys benefited more in relation to collaborating with other pupils, while 2 thought girls benefited more and the remainder saw no difference. At secondary level, 3 of the artists thought boys had gained in collaborating more than girls while none of the artists thought this had benefited girls more.

In the open comments, for the most part, the artists observed no differences between the benefits for boys and girls. There were other factors which were more likely to have an influence:

'I have found (benefits) vary from class to class, depending on the dynamic in the class and the balance between boys and girls. Some classes are more mature, or more energetic or inquisitive'.

Two indicated that they thought that girls were more enthusiastic 'at times'. A dance artist commented: 'Primary school aged boys despite their preconceptions always enjoy dance – sometimes more than the girls because they have more energy and are prepared to take greater risks'. Another commented:

'Secondary pupils tend to be more self-conscious and less forthcoming than primary pupils, but their evaluations have shown how positively they feel about their involvement, which is great ...'

4.3 Working with schools

The Arts Council document on quality indicators for effective partnerships (Orfali, 2004) emphasises that from the artists' perspective the following are important: good communication between school and artist, with HT/SMT present at the initial meeting and a main contact for liaison purposes; and awareness of school needs. Artists were asked about general arrangements in relation to working in the schools. Their responses are given in table C4.8.

Table C4.8: Working with schools

<i>In primary schools, overall</i>	SA	A	D	SD
I was made to feel welcome in the schools	10	8	0	0
I felt the management team was supportive of my role	7	8	1	1
I received the information I felt I needed about the schools	7	8	3	0
The headteacher or other member of the school management was present at first/early planning meeting/s	3	3	8	4
<i>In secondary schools, overall ...</i>	SA	A	D	SD
I was made to feel welcome in the schools	4	7	2	0
I received the information I felt I needed about the schools	2	9	2	0
I felt the management team was supportive of my role	2	5	4	1
The headteacher or other member of the school management was present at first/early planning meeting/s	0	3	5	5

The artists indicated that they were welcome in schools (with the exception of 2 who found secondary schools unwelcoming). Most felt they had the information they needed about the school and generally the school management was supportive, though less so in secondary schools (as noted in introduction to section 4, this difference was statistically significant). This had also been a finding in stage one of the evaluation and perceptions do not seem to have changed. However, as reported in the open comments

(below), in secondary school artists had focused on the relationship with the teacher and that had been sufficient for the purpose of the ICLs.

In the open section of the questions, artists reported a wide range of interest and level of support experienced in primary schools, from head teachers/other management participating in planning meetings, showing a keen interest and sitting in on lessons and having 'excellent support structures', to schools where there was contact only with the teachers and in one case where teachers told the artist that they had received no information about the project from their management team and they 'knew nothing about what was meant to happen'. Two artists reported working only with the teachers but indicated that this had been more than adequate. One artist commented that he was not sure that the managers had information about the project. Another artist reported that in some schools some of the management team were not welcoming or supportive in the early stages but that their attitudes changed when they saw the enthusiasm of the pupils and the quality and relevance of the work produced.

In secondary schools, one artist commented that the school and management had been supportive throughout the project, but for the most part artists worked solely with the teachers which for the most part was sufficient and effective. Some felt that apart from the teachers others were not aware or interested in their presence in the school.

4.4 Artist development

Within the literature, some possible areas of development for artists have been identified (Harland *et al*, 2005). As with the teachers, it is recognised that artists already have knowledge and experience of these aspects; the question asks artists to consider if AAC has led to any further developments of their knowledge and understanding of working in the school context.

Table C4.9: Artist views on aspects of personal development

As a direct result of my involvement in AAC (n=23)	SA	A	D	SD
I have developed new skills in working with children and young people	7	12	3	1
I have developed new understanding of the school curriculum	9	9	3	2
I have developed a greater awareness of the needs of young people	6	10	4	2
I have developed new understandings of how classrooms are managed	6	10	5	2
I have developed a greater awareness of the capabilities of young people	7	8	5	3
I have changed the way I think about using my art	4	8	8	3

All, except one of the artists, had prior experience of working in schools and 19 out of the 23 respondents had been involved in AAC for 2 years. For those who disagreed with the statement it was likely, as one commented, that disagreement meant that they were already aware or competent in these aspects and that there had been no change in their knowledge or skills. The project, however, had provided opportunities for further development for a majority of the artists.

Twelve of the artists chose to comment, for the most part expressing positive views and benefits. Some spoke in general terms of the experience being 'enriching', 'rewarding', 'valuable', 'stimulating professionally and personally'. Some of the more specific comments are:

- *'Hopefully it will make me better at what I do'.*
- *'I have learned one or two new methods of delivery from some excellent teachers and AAC has helped me deliver some other workshops in different ways.'*
- *'My work with AAC has enriched by own business and art work.'*
- *'I would like to develop art within primary schools using it as a vehicle for learning in other curriculum areas'.*

Two more questioning comments were:

- *'It re-opened my eyes to some of the complexities of teaching. However, I'm not sure this model was the most effective solution to the problem. I think artists could be more effectively and imaginatively integrated into school.'*

- *'I think there is still work to do to carefully define the role of the teacher and artist as I found the work challenging and engaging because of the dual focus on art and curriculum. Which was most important at any one time?'*

All agreed to one final statement 'I would like to do more of this kind of work', though one added the caveat that he/she wanted to work only in primary schools.

4.5 Practical issues: local authority

As artists were engaged by local authorities to work on the project, a series of questions about practical and contractual issues was asked. The Arts Council document on quality indicators for effective partnerships (referred to above) (Orfali, 2004) also emphasised the importance of financial arrangements (enough money and prompt payment). The artists were asked to rate the effectiveness of various arrangements on a 1 to 5 scale with 1 being 'not effective' and 5 'highly effective'

Table C4.10 Working with local authority

	n	m	sd
Communication with Creative Links Officer (CLOs) or Cultural Co-ordinators (CCs)	22	4.5	0.86
Support and help as required from CLO	22	4.3	1.09
Facilitation of meetings and planning sessions	22	4.2	0.87
Arrangements for payment (sufficiency)	21	4.2	0.89
Arrangement of contract	20	4.0	1.21
Arranging liaison with other artists involved in the project	19	3.8	1.46
Information about legal aspects related to working with children in schools	20	3.7	0.66
Arrangements for payment (promptness)	21	3.7	1.01

While the majority seemed satisfied with the adequacy of payment, the promptness of payment was the least effective aspect. Three artists chose to comment on the slowness of payments, with one indicating that this was a problem when they had bought materials and one raised the issue of the authority deducting tax and NI which was an inconvenience for self-employed artists.

On the whole the views were extremely positive regarding the support from the local authority managers. Five commented that the AAC authority managers had been very helpful, 'great to work with' and supportive. An artist who had worked with 2 authorities indicated that one 'had been great' about supplying contracts and child protection information, the other had provided nothing.

For the 11 artists who participated in both years of the evaluation, there was a statistically significant shift in their views on the effectiveness of the communication with the local authority managers (mainly CLOs) (analysed with Mann-Whitney test). In the first questionnaire, 5/11 had rated the CLOs' communication at the negative end of the scale with only 1 considering the performance rated 5. In the second questionnaire, all 11 artists were at the positive end of the scale, with 8 recording '5' and 3 recording '4'.

4.6 Challenges and what would help more effective delivery

Artists were asked to name up to 3 greatest challenges and 3 things which would have enabled them to deliver ICLs more effectively. The ideas for improving the process were often addressing the challenges. Some of these points have been referred to in the preceding sections.

The responses in relation to primary and secondary schools were similar although some artists identified an issue specifically in relation to the primary or secondary sector. The responses fell into the following broad themes: time, space and resources; the teachers; curriculum and learning; and the artists' role.

Time, space and resources

Limited time to deliver the ICL within the school timetable (10 mentions) was identified mainly in relation to secondary schools, but was also a challenge in primary schools. Preparation and planning time with teachers (6 mentions) and preparation time for the artist (2 mentions) were also identified as challenges. Seven artists suggested that more time would help them deliver the ICLs more effectively, with 3 indicating that longer preparation time for them was important, particularly having greater advance warning of the curriculum topic.

Five found using unsuitable spaces challenging and 5 said bigger and better spaces would make it more effective.

For some artists carrying their equipment and material around from school to school was inconvenient and storage space would have been helpful (2 mentions); as noted above (working with local authority) artists purchased materials for ICLs and teachers also reported that it was the artists supplied the materials. Four indicated the better equipment and resources, with budgets in schools for this, would make ICLs more effective. This view was shared strongly by the teachers, especially in relation to sustainability of the project.

Teachers

Seven artists commented on finding aspects of working with teachers challenging. It was reported that in some cases artists do all the work and some teachers had to be helped to understand that it was not an art lesson and encouraged to participate. Lack of commitment, particularly from some secondary teachers, was reported and developing relationships of trust with some teachers had proved challenging. Six artists suggested ways in which working with teachers could be improved:

- more information for teachers on how to integrate art and the curriculum
- more training for artists and teachers together
- development of teachers' technical skills for using equipment (media).

One said more enthusiasm from teachers would be helpful. Difficult behaviour from pupils was noted in some instances (3 mentions) with the teacher doing more to discipline the children identified as something that would help.

Curriculum and learning

Five artists made comments which related to the curriculum, indicating that focusing on both the art and academic outcomes was challenging – one expressed this as 'keeping the fun in the art without losing sight of the curriculum'. Also adapting their art – or expanding their approach – to the educational context of the ICLs had been challenging. Three indicated ways in which they thought that learning could be more effective: more freedom to listen to the children and 'so create rather than deliver', greater flexibility and more focus on the art outcome.

The artists' role

Three artists mentioned the added responsibility they had for administrative aspects of ICLs and they had found this challenging, particularly the amount of paperwork associated with the planning documents. Unsurprisingly a more user-friendly planning document would have helped. Four commented on the difficulty of travelling between schools and one reported long gaps between projects and very little lead in time when asked to take part. Three indicated that delivering ICLs would be improved if they had been based in one (or fewer) schools enabling them to develop relationships with pupils and teachers and if they had longer blocks of time. One artist indicated that working only in primary schools would be an improvement. One artist had not liked being filmed; another artist spoke of 'dealing with a sense of failure when one ICL went "phut" '.

Other points

Class size was mentioned by 2 of the artists with the suggestion that smaller classes would make it more effective.

Two artists thought that the lack of a higher profile for the project within schools and into the wider community was disappointing, and more publicity would have made it more effective. Two thought that more sharing of information between artists, teachers and authorities would have helped.

4.7 And finally....

Artists were asked to give 3 words which described their experience. A wide range of adjectives were given – more positive than negative and 4 artists gave whole sentences!

- challenging and thought-provoking (7 mentions)
- rewarding (7 mentions)
- excellent/fantastic/brilliant (4 mentions)
- formative/enlightening/learning experience (4 mentions)
- exciting (3 mentions)
- enjoyable/fun (3 mentions)
- interesting (2 mentions)
- effective
- impressive
- intriguing
- inclusive
- inspiring
- worthwhile

On the other hand, it was:

- frustrating (3 mentions)
- depressing
- infuriating
- exasperating
- mad
- hard

Other comments were 'creative learning works' and 'pupils' poetry rocks!'.

The longer comments were:

- *'This is the way forward for teaching young people.'*
- *'Generally good, but as usual with arts projects the arts have to fit into the safety of the school and the artists do all the work.'*
- *'I am positive about AAC but still unsure as to whether one of the strands – art or curriculum – must always be subservient to the other.'*
- *'The project in theory is inspirational and exciting and has a strong future but in practice needs more research and development.'*

5. Artist interviews

5.1 Introduction

Six interviews were held at the end of year two with artists who had been participating in Arts Across the Curriculum (AAC). Efforts were made to select artists from a range of art disciplines and geographical areas in order to gain a balanced understanding of their views and experiences of participating in the programme. Six of the authorities were represented in the interviews; the artists in the seventh (East Ayrshire) had participated in the in-depth study and their views were obtained in group interviews. The art forms represented were visual arts (2 artists), dance, drama, music and film and media.

The following report summarises artists' responses to each of the interview questions and highlights the key themes with illustrative quotations.

5.2 Artists' personal and professional backgrounds

The interviewees were all experienced artists, having worked in their arts fields for between 6 and 13 years. They all had experience of working in education prior to their involvement in AAC, typically as artist residents or as deliverers of arts projects to schools. Although they commented that AAC had close links with their work, none of the artists had specific experience of teaching curriculum content with the use of the arts. However, they reported that the initiative had captured their interest and that the idea of finding ways of adapting skills used in the arts to different subject areas was a challenge that motivated them. The artists had all become involved in AAC following direct or indirect contact made by a local authority representative.

5.3 The Chicago/LEAP model and key issues to be addressed

All of the artists were knowledgeable about the Chicago/LEAP model and the basic principles behind it but were unaware of any other similar models. All artists viewed the aims of AAC similarly, stating that they involved delivering teaching to pupils in different formats so that different types of learners (typically the less academically able) can be engaged. One musician went onto say that a further aim of AAC is to raise the profile of the arts and to demonstrate that they are “extremely important academically and not just a peripheral thing.” He did, however, point out the risks of this, stating that AAC should not be seen as a way of justifying arts by suggesting that you can use them to promote learning of “more important” subjects.

Consistent with feedback provided in the first phase of interviews, the most commonly reported issues to be addressed concerned time and space. Time was a particular problem in secondary schools, where artists struggled to package their sessions into 50 minute time slots. Time was also seen to be a problem in the sense that much time is required to build rapport with teachers and thereby optimise collaborative teaching:

‘There is also a timing issue – you need time to develop a relationship with the teacher and the closer you get to a working relationship with the teachers the better it is’ (film and media artist).

Space was a particular problem for dance and drama artists and also some visual artists where, for example, space to display art work on walls was restricted and the lack of sinks created problems when cleaning equipment. Typical feedback included: ‘The most major issue has been space – you can’t deliver dance in a classroom’. Two artists mentioned the importance of having teachers becoming fully involved in sessions rather than taking a ‘back seat’:

Finally, one artist mentioned the importance of the artist familiarising themselves with terminology surrounding curriculum guidelines:

‘Getting the artist up to speed with the current practice and curriculum guidelines, I would say that’s the main thing – the idea of concepts and strands and levels’ (musician).

5.4 Planning ICLs

Aspects of the planning processes that artists would change included better communication between artists and teachers regarding availability of space and provision of opportunities to share experiences with other specific discipline artists. The lengthy format of planning and evaluation sheets were also criticised and it was felt that more valuable planning and evaluation time could be achieved through reflecting on and planning sessions with teachers rather than filling out paper work. Typical feedback included:

- *‘I found the planning sheets a killer to developing ideas; they are too heavy and wordy with too much duplication so they need to be shortened and simplified’ (visual artist).*
- *‘I think it would’ve been useful to have some kind of meetings with other artists who were doing projects. I know there weren’t that many musicians doing it but just to put their heads together and say, ‘well this worked’, or ‘this didn’t work.’ It did feel as if we were running along on our own and when it’s going well it’s fine but when it’s not going so well it would’ve been useful to have spoken to someone (musician).*

5.5 Implementing Arts Across the curriculum

Examples of how artists combined their art forms with subject areas included making propaganda posters with rationed arts materials to illustrate life during the war (visual art and history in a primary school), filming pupils presenting scripts they had written about electricity (media and science), translating musical sound into images (music and art), performing poems in a shower block dressed in keeping with the theme of the poems (theatre and English).

Contribution of art to the learning

While 3 artists reported that the arts activity fit very well with the curriculum topics being addressed, the other 3 artists felt that the success of the ICL depended on the match between the art form and subject area. Specifically, it was felt that the more abstract the concept being taught, the more effective the art form as a learning tool. This idea is illustrated in the following quotes:

- *'The more abstract the concept is to understand, the more easy it is for them to explore through dance because they can see it differently, whereas when you're working in English it's harder for the kids to explore characterisations because characters are real'* (dance artist).
- *'Because music is an art form it was a useful way of encouraging the group to create abstract art, which is something they find very difficult, so that went very well. With the maths ICL, I have a feeling that the links are very sophisticated ... so they did find it quite difficult and they hit brick walls.'*

Moments that were considered turning points

All artists were able to recall events that they had reflected upon as turning points in some way. For some, turning points included generalised changes in pupils confidence or pride in their work as the project progressed. Others recalled specific incidents such as when a teacher appeared to suddenly 'buy into' AAC after having remained sceptical for several months and when a new idea using an adapted form of the art discipline was implemented and worked well. Another example related to a moment when the artist felt that the pupils had really grasped the concept being taught. He recalled:

'...there was a definite moment when I was playing a few chords and we were trying to get the idea of why certain chords sound cold or blue or warm and I think when we then translated that to their own music it made them listen more deeply and I felt that they really got that' (musician).

Promotion of problem solving/creative thinking skills

All artists made efforts to promote problem solving and creative thinking skills. This was typically done by giving pupils ownership for the direction of their work. For example, once pupils had been equipped with basic dance skills they were encouraged to come up with moves and ideas for learning through dance. Other commonly used strategies included having groups discussions, where pupils were encouraged to reflect on what they had done and suggest avenues for the direction of the project, and regular questioning where the artist refused to provide answers.

Effectiveness of some ICLs over others

Five artists commented on what makes some ICLs more effective than others. A variety of responses were given and consistent with the previous phase of interviews, two artists mentioned the importance of involvement of the teacher and an 'equal balance of teaching between the teacher and artists' in shaping the effectiveness of ICLs. A dance artist explained:

'I think the thing that makes AAC effective is a good teacher. I think if your teacher understands it and is willing to trust you as an artist and communicate well what it is that the kids need to learn then it will work' (dance artist).

Other artists commented that ICLs are more effective when they have an adequate number of sessions for pupils to learn the basic art skills and allow the project to develop, and when the link between the art form and concept is obvious and not 'shoehorned into the subject area'.

Differences between ICLs and other teaching experiences of the artists

Consistent with responses given in the previous phase of interviews, all artists reported that the main difference in their teaching experiences in ICLs included the emphasis on achieving educational goals and learning outcomes. In general, the artist thus felt that they had less flexibility when teaching and had to structure their sessions more rigidly. Typical responses included:

'...in AAC, the pressure is there to make sure that the learning outcomes are in the art itself, so yeah, you have to structure it more rigidly so the art takes a step backwards because it's not as important' (visual artist).

Other than having to spend more time preparing and collaborating with the teacher, the artists did not feel that they had adapted their approach to working in schools.

Perceived quality and assessment of the arts activity

The artists did not undertake any formal assessment of the sessions but they all evaluated them at some level through subjective processes such as talking to the teacher, observing pupils' effort and interest and engaging in self-reflection. In terms of perceived quality of art work produced by pupils, responses were mixed with one artist claiming that it was 'pretty good', another stating that 'some was really good and some was really awful' and another stating that the art work suffered at the expense of the focus on attaining learning outcomes. All artists, however, acknowledged that it was not the purpose of the ICLs to produce high quality art work, as the following quote illustrates:

'I didn't really think about it in terms of quality of performance because it was more about the process' (drama and theatre artist).

5.6 Meeting the aims of AAC

Pupil interest and motivation

Pupils were generally perceived to be very motivated and some artists commented that the pupils were visibly excited as lessons started. Three artists reported that motivation varied from pupil to pupil or class to class, with one film and media artist commenting that some pupils 'got really behind it' and looked forward to it while others saw it to be 'too airy-fairy'. Responses included:

'They were really motivated, they loved it. They got really excited and they were always disappointed when it was over and they would say things like, "this doesn't feel like learning", which is fantastic' (visual artist).

Similarly, artists reported pupil interest in the arts discipline to be generally high.

Perceived effectiveness of the arts discipline

As in the first phase of interviews, all artists felt that their arts discipline was an effective way of delivering the subject topic. Two artists reiterated their view that the ICLs were particularly effective for the more abstract concepts found in science and abstract art. Four artists provided evidence for the effectiveness of their arts discipline for teaching curriculum content. This included improved class results in science, production of abstract art work that revealed hidden talents and positive feedback from the teacher. In one project which had used media as the art form, the science teacher was so impressed with the media produced that he kept copies for future teaching materials. Quotes illustrating perceptions of the effectiveness of the arts discipline include the following:

- *'It can be very effective in terms of teaching tools. Due to health and safety regulations, pupils are no longer allowed to do the bigger experiments so filming them is ideal'* (film and media artist).
- *'Visual arts is very effective, not everyone can draw but everyone can improve. It's a very sort of stimulating way to learn and they got a lot out of it.'*
- *'With one of the primary schools we looked at the Richter scale and we just tried to physicalise that and the teacher did say that it was particularly effective because she'd always had difficulties trying to explain that and I think in that case drama, particularly because it is so accessible to children, did work well'* (drama and theatre artist).

5.7 Reflection/evaluation

Lessons to be learned for teachers and artists about working together

Lessons that the artists had learned about working with teachers included ensuring that the teacher and artist are well suited and 'gel' well together (mentioned by 2 artists) and ensuring that the teacher has the support of school management staff so that adequate time and space resources can be committed to the project (mentioned by 2 artists). It was also suggested that teachers should fully understand their role and not see the project as an opportunity to 'go off and do something else'. Typical responses included:

- *'I think it would be helpful to have more time with teachers and almost have a process where you meet lots of teachers and get paired up with one who seems to be particularly suited, so a teacher's who's very nervous about doing music should be paired with an artist who's very comfortable working in an education context'* (musician).
- *'...it's about people further up giving teachers the time, 'cause I mean I had the time that was available for planning but they didn't 'cause they had other classes...it's a shame because they'd have got a lot more out of it if they'd been allowed to be involved in the planning process'* (drama and theatre artist).
- *'There was one occasion where the teacher didn't understand the concept; they thought that when I was there it was art lessons and it took a while before the penny finally dropped'* (visual artist).

Key benefits for school pupils

Pupils' enjoyment, learning in a different way, and having a break from conventional learning were all mentioned as key benefits of the programme. The most commonly reported benefit, however, concerned the potential for ICLs to engage the less academically gifted pupils, help them to feel included and consequently raise their confidence. One dance artist, for example, stated:

'It's opened up a new way of learning and it was really beneficial for those kids who struggle to read and write because they got to explore the concepts and remember them in a different way.'

In one case, the artists felt that such exploration of concepts in a new way revealed some pupils' hidden talents:

'...for the art group there were kids who weren't very good at representational art who found that they had a real gift for abstract art...there was one girl who wasn't going to take art standard grade and then she did this beautiful piece and decided that she would take art, so that was a nice outcome' (musician).

Ingredients for success

A number of suggestions were made for the most important ingredients for success of AAC. The most commonly reported factors included: ensuring that the initiative is embraced by the whole school to ensure that sufficient resources are injected into it; and ensuring availability of time and space resources through effective communication. Other reported ingredients for success are summarised below:

- Allowing pupils ownership so that they can 'become their own learners'
- Ensuring that the teacher and artist gel well together
- Adequate planning time
- Ensuring a sense of flow between ICLs
- Flexibility of the artist and teacher
- Willingness to try different mediums – 'it's better to be a Jack of all trades than master of one' (film and media artist).

Advice for future artists participating in AAC

The most commonly reported advice suggested (by 4 artists) concerned the need for the artist to be prepared yet flexible enough to change his or her plans where necessary. Comments included:

- *'Give it time to think about it and don't be afraid to have several different directions and expect things to go differently'* (musician).
- *'Give yourself plenty of time initially but then you need to be flexible enough to say, "Well this isn't going in the direction I thought it was, let's change it completely and do something different"'* (drama and theatre artist).

Other advice for artists included ensuring a basic understanding of the subject area and knowing how a school operates as 'you're not necessarily going to have everything the way you thought it was going to be'.

Advice for teachers included: being open minded and willing to try different methods of teaching; making an effort to learn the basics about the art form; getting involved in sessions so that 'you experience what the kids are experiencing' and being prepared and willing to invest adequate time in it.

Finally, two artists mentioned the importance of 'keeping it exciting' for pupils. A visual artist advised: 'Just come up with an idea and go with it; allow for the noise, allow for the excitement and let it go'.

Whole school issues that contribute to effectiveness

Three responses were given to the question of what whole school issues contribute to the effectiveness of AAC. All responses echoed the previously mentioned point that school management staff need to be 'on board' to ensure that artists have sufficient resources and that teachers are permitted to give adequate time to the project.

Impact of AAC on approach to working in schools and practice as an artist

Two artists felt that their involvement in AAC had 'not really' influenced their approach to working in schools, while one artist felt that he had become more flexible and open-minded with regard to trying out different art forms beyond his specialist area. Another artist reported that she had grown in confidence in terms of working with teachers and 'becoming part of the school community'. In terms of whether the initiative had influenced their practice as artists, one artist felt that it had not influenced her practice while another spoke of her feelings of inspiration and another explained that she had learned new techniques through experimentation:

- *'Seeing the vitality that pupils put into art when they've got the freedom to do so is just invigorating to see so it makes me feel inspired'* (visual artist).
- *'I could try things out that I've not been able to try that I now use more regularly because I've got the confidence in them, which is great'* (drama and theatre artist).

Three words to sum up their experiences

Not all artists were able to sum up their experiences of AAC but those that did chose the following words:

- Inspiring, exciting and it should be continued (visual artist)
- Frustrating, challenging, rewarding (dance artist)
- Interesting, puzzling (no 3rd word) (film and media artist)

- Challenging interesting, worth investing in (musician)

5.8 Further comments

Three artists made further comments that are worthy of consideration. Firstly, one artist was keen to praise the initiative for its potential to include all pupils and provide a sense of ownership and achievement:

'The overriding thing that I put in all my reports is that what a wonderful thing it is for pupils ... I really feel that it reaches out to all of them and they all feel equally involved and get such a sense of ownership about what they're doing, you know they just feel so proud of themselves and they have learned so much about the subject' (visual artist).

Another artist commented that while the principle behind AAC is "fantastic", it requires development and further funding:

'The idea and principle behind it is fantastic and it's a great step to using arts more in practice but it has teething problems and it's not quite there yet. It's a shame that's the funding stopped, it's crazy as it's just not long enough to develop a programme like that' (drama and theatre artist).

Finally, one media and film artist felt that the initiative could be successfully delivered with less involvement of artists. Specifically, he felt that with initial guidance from an artist and appropriate equipment, teachers could run ICLs themselves:

'The lesson could be explained in a booklet and teachers, with some knowledge of the art form, could then deliver... It's more just providing teachers with a really good teaching path and equipment to do it with.'

5.9 Summary

In summary, the artists were generally very positive about their experiences of participating in AAC. They were informed and articulate about the principles behind the programme and receptive to the concept. They saw pupils to be motivated and interested in ICLs and reported positive outcomes among pupils to include increased confidence, feeling included and enhanced learning. However, several issues for consideration were raised and are summarised below:

- Time, space and teacher commitment is crucial. Support from school management staff and strong communication is required to ensure that these resources are made available.
- Ensuring that the teacher and artist 'gel' well is important. Teachers must involve themselves in the planning and delivery of ICLs and not 'take a back seat.'
- Teachers and artists should be open and flexible to new ways of delivering sessions and should be willing to gain a basic understanding of the art form (teachers) and curriculum topic (artists)
- The evaluation and planning sheets may be too lengthy. Spending time reflecting on sessions with teachers and sharing experiences with other specific discipline artists may provide more valuable forms of evaluation.
- ICLs may be more effective when the concept being taught is abstract in nature. The link between the art form and subject area must be obvious and not tenuous.

6. Summary

Artists who had been involved in AAC during 2006 to 2007 were asked to complete a questionnaire in May 2007. Twenty-three, out of 35 who were sent questionnaires, responded; 19 had been involved in both years of the project while 4 had become involved during 2006-07. Some artists had worked with several year groups, others had worked with only one; all classes from P1 to S4/6 had been worked with

but the highest involvement was with the P6 to S1 age group. A wide range of art forms were represented with dance and drama being the most frequent. In primary schools the most frequently reported curricular area was Environmental Studies topics, which reflects teacher responses. In secondary schools, science was the most reported subject. Six artists were interviewed between May and June 2007.

On the whole, artists reported that the planning process was satisfactory, though for a minority this was not the case. As with teachers, finding sufficient time for planning remained a concern for some of the artists in both primary and secondary schools. Some artists indicated that completing the planning documents was a time-consuming, and perhaps unnecessary, task for them.

Artists' views on aspects of delivering ICLs were positive, though they were split on their views about having sufficient time to develop the arts outcomes, particularly in secondary schools. Artists tended to agree with teachers that they came up with the ideas for the lessons together especially at secondary level. However, there was some disparity regarding primary teachers, where teachers agreed that they had done this together, while a number of artists indicated that primary teachers did not do this. As with teachers, most artists reported taking the lead in lessons. Some gave explanations similar to that of teachers, with roles varying in different lessons and at different stages of ICLs. However, the lack of involvement of some teachers, and their expectations of the artist 'doing all the work', was raised by some artists as one of the challenges of working on AAC and it was also an issue raised at interview.

Artists were largely positive in their views on the outcomes for pupils in terms of engagement in learning, their valuing the art discipline and learning arts-related skills. A small number would have liked more opportunity for the pupils to develop better skills prior to engaging on the ICL. The artists' perceptions were slightly more negative towards secondary pupils. Experience in secondary schools seemed to be more varied with some pupils and classes engaging less well than others with ICLs.

Schools had been welcoming and management supportive, though less so in secondary schools, where artists indicated that concentrating on the relationship with the teachers had been sufficient, though they noted that teachers could have benefited from greater support from management in some schools. On the whole, views were extremely positive regarding support from local authority managers.

While about one-third of the artists indicated that being involved in AAC had not lead to further personal development as they were already well experienced in working with schools, the remainder reported having developed new awareness and understanding of issues related to schools and young people and had developed new skills in working with young people. Some said it had encouraged them to develop new approaches in their art. All agreed that they would like to do more of this kind of work.

7. Note on inferential statistics

Comparison of all primary and secondary responses ie those who worked in both sectors are included twice, once in primary and once in secondary. (Mann-Whitney U-test) (Numbers: primary = 18; secondary 14)

Table C4.6: Artists' views on encouraging pupils to work creatively

Item	mean rank	U	sig
pupils asked lots of questions	primary: 19.50 secondary: 12.64	72.00	p=0.028

Table C4.8 Artists' views on working with schools

Item	mean rank	U	sig
management was supportive	primary: 17.97 secondary: 11.79	63.50	p=0.046

Comparison was made between those who worked only in primary or only in secondary (numbers: primary = 9; secondary = 5)

Table C4.5 Artists' views on effectiveness of learning experience for the pupils

Item	mean rank	U	sig
pupils valued the art product/ performance	primary: 9.17 secondary: 4.50	7.50	p=0.025

Evaluation stage 2 data collection

Views of parents

1.	Introduction	182
2.	Parents' views	182
3.	Summary	187

Views of parents

1. Introduction

Letters, inviting parents to take part in a short telephone interview, were distributed through the schools that were included in the evaluation. In total, around 200 letters were sent out – 100 to parents of children in primary school and 100 to secondary school parents. Parents were supplied with a reply-paid envelope and were asked to indicate when would be a suitable time to contact them. This approach was adopted to try to gain the views of parents who might not be able to come to the school to meet with one of the research team and also to reduce the 'burden' on the school in trying to contact parents and arrange for a group to be present at the school.

Twenty-four parents – 12 with primary children and 12 with secondary children – replied saying they were willing to be interviewed. In the end, 21 – 11 primary and 10 secondary – were interviewed, although several attempts were made to contact the remaining three. The gender and stage of the children are given in table C5.1

Table C5.1 Sector and gender of children whose parents were interviewed

School sector	Boy	Girl
Primary School	2	9
Secondary School	4	6

Most of the interviews were with the mothers of the children; two fathers were interviewed.

A semi-structured approach was used, investigating what the parents knew about the project, the extent to which their children spoke about it and what they said, their views on the impact of the project on their children and their views more generally on arts in the curriculum.

2. What the parents knew about Arts Across the Curriculum

In general, the parents said they did not know very much about the AAC project. A number of parents said that they did not know anything about it until they received the letter from the evaluation team asking them to be interviewed and at that point they had asked their son or daughter about the project. Several commented that the school had given them very little information on what was happening although some agreed that they may have had letters about it, but as they receive so much information from schools, they don't remember everything. When prompted by the interviewer with an explanation of what the project involved, some were able to recall more details and remembered their children talking about it.

About half of the parents indicated they knew about it from what their children said but mainly only that it was something they enjoyed and found interesting. One parent said that their child had told them "little snippets" about what they had been doing and other parents were able to remember some of the things the children had been doing with the artist such as World War Two and making hand puppets but one parent commented, 'when you ask children what they have been doing at school they say, "I did this and that" or "we did nothing"'. Some parents mentioned they had talked a little about it at parents' evenings and seen wall hangings that the children had made.

The general theme from all the parents, however, was a lack of knowledge about AAC and what it actually involved.

The parents were asked what they thought AAC was trying to achieve. Given the lack of general understanding of what the project was about, parents found this difficult to give a view on, and 13 of them were unable to respond. The responses from the remaining parents varied both in terms of content and detail, but showed insight into the aims.

For example, one primary school parent said that the aim was to, 'make the topics for learning more fun and to bring in different ways of learning'. Another parent commented that because people learn in

different ways, these lessons would help some pupils to get interested in the work and to learn the subject. Both of these parents said that one of the aims was integration, 'trying to integrate different parts of the curriculum' and 'bring art into mainstream learning, bringing it all together'. Another primary parent said they thought one of the aims was:

'trying to make them use their ideas to work together in a group, to share experiences, to talk, see what they really want to do with their wee minds'.

The responses from the secondary school parents were also quite varied. One parent said that art helps the pupils to understand the lessons and to make them more interested and another said that it, 'puts a different slant on the topic'. Another parent felt that the aim was to try to get the children engaged in their work and to give them a different perspective on the subject while another said that the aim was to give them something which they are able to achieve outwith school hours as well. Finally, one parent felt that these lessons aimed to help the children remember the work better and to try to and capture their attention without them switching off and losing concentration.

3. The extent to which the children spoke about the classes with the artist and teacher and what they said

Parents were asked if their children spoke about working with the artist. Their responses are given in table C5.2.

Table C5.2: Numbers of children who told their parents about AAC

Stage	Yes	No
Primary	6	5
Secondary	5	5

The children were evenly divided in terms of whether or not they had spoken to their parents about what they had been doing in the lessons with the artist. Although a number of parents said that their child had not talked to them in detail about the work they had been doing, most parents were able to remember some details that their child had mentioned in passing. Also, with prompting by the interviewer, some parents remembered more details as the interview progressed.

The responses from parents varied considerably in terms of the amount of detail they were able to give with regards to what their children had told them they were doing. The general theme from all the parents was that the children really enjoyed the lessons and only one pupil gave a negative response. This pupil had had another artist in the art and design class and felt that the work with the artist 'got in the way' and he preferred the normal art class although he had not told the teacher this.

All the parents of the primary school pupils said that their child had enjoyed the lessons and one parent, although he did not know anything about it, when prompted by the interviewer's explanation of what had occurred in his child's school, was sure that his son would enjoy it as he likes drawing and painting. Another parent, who said that her daughter had not spoken about the lessons with the artists, asked her about it during the course of the interview; she discovered that her daughter had been learning about the Egyptians and, in particular, enjoyed learning about the way they dressed and their jewellery. Another parent said that their child had been learning about World War Two and had been surprised that she had found it interesting.

One parent said that her daughter doesn't give a lot of detail but, 'she puts her heart and soul into it, she really enjoys it' and another parent echoed this, 'my daughter thinks it's the best thing since sliced bread'. This parent said that one of the main things her daughter enjoyed was the fact that the artist spent a lot of time with them and showed them different ways of doing things and, 'one of the most important things is that she takes time to listen to them'. Similarly, another parent said that her daughter does not normally talk about school but she had told her about the posters they had made about rationing; this mother commented: 'she is one of these people who will tell you if something was really boring but I haven't heard that at all'.

The responses from the parents of the secondary school pupils were less detailed than those of the primary school pupils and none of the parents spoke about the actual projects the children had been involved in. One parent remembered that her daughter had had drama with maths when she was in primary school but she seemed unaware that this was continuing at secondary school and so she concluded that the lessons at primary school must have had a bigger impact on her daughter than anything she is doing now. One parent said that their child enjoyed the lessons because it was a change from the normal routine and another commented that their child liked having younger people in the classroom rather than just the teacher all the time. Another parent indicated that her daughter had found it 'fun', she was 'proud of her art' and she had 'retained more information'. Most of the parents said that their child had not said very much about the lessons but they seemed to enjoy them and to get a lot from them.

4. Impact of AAC on the children

Interest in and enthusiasm for school work

In response to this question, the majority of parents said that their child was usually interested and enthusiastic about their school work and that their work was usually of a good standard. Most parents who felt able to comment thought that the lessons with the artists had helped to encourage this. In general, parents thought that the lessons made the work more interesting for the children and they helped to improve attention and concentration in class and several parents felt that the lessons had made a difference in terms of their child's enthusiasm for schoolwork.

Only one parent said that the lessons with the artist had had a negative effect and she felt that they, 'didn't suit' her son. Another parent felt that her son would have done just as well without the lessons with the artist although he enjoyed them and a further parent commented that although the lessons showed the children a different way of doing things, her daughter already does well at school.

Two parents whose children have dyslexia felt that the lessons had really encouraged them and had made them interested in topics which they had not enjoyed before. For example, one of these pupils had lessons with the artist in her English class and her mother said:

'this approach suited her better because it got her more interested in writing stories and she enjoyed that part of the English more than she usually does. It made her want to pick up a book and read it more and made her more interested'.

The other parent said that having drama in class would make her daughter more interested in the work and would help her to understand it.

Several parents commented that they felt the lessons would improve their child's concentration in the classroom and one parent said:

'it makes her more interested in her work and she is concentrating more. She pays more attention to detail and takes more interest and she wants to get it right. She is gaining in confidence although that may be partly due to age'.

Another parent felt that the lessons were really helping her daughter as:

'normally her friends are not at the same level as her which means that she doesn't work as hard to be like them but with this her friends are involved as well and they are working together'.

Another parent, whose daughter is very quiet in class and not very confident, felt that having another adult along with the teacher in the class would encourage her to talk more and she would be able to work in smaller groups which she finds easier.

Behaviour at home/school

None of the comments made by parents were specifically related to AAC. In general parents either did not comment on this question or said that their child had no behaviour problems. One child had a difficult time in the transition from primary to secondary but he has settled down now and another parent commented that teachers have said her daughter is a 'model pupil'.

Willingness to attend school and do homework

Generally AAC was not seen as impacting children's willingness to attend school or do homework. Most indicated that their children were happy to go to school and several parents said they were enthusiastic about both school and their school work. In general parents said that there were no problems with homework. In relation to a positive effect of AAC, one parent said:

'she got more involved in projects [since having lessons with the artist] and was doing her own research and going on the internet, not because she had to but to satisfy her own mind'.

Interest in and enthusiasm for arts activities

In response to this question, a number of parents said that their child was already interested and enthusiastic about art before the lessons with the artist and thus did not seem to think that the lessons had changed this. One parent said that their child had enjoyed the lessons but had not expressed an interest outside school and another parent said that although she had enjoyed it, she wasn't sure if they had made her daughter more interested in drama. One parent, whose son did not enjoy the lessons, said that they had not put him off art but the lessons 'did not suit him and might work better in another class'.

Another parent said that their child had always enjoyed drawing and painting but since the lessons with the artist they had been paying more attention to detail and one of the fathers who was interviewed commented that, 'without a doubt it has increased her interest and enthusiasm for arts activities'. Finally, another parent said that although her son had always been interested in art, 'he is beginning to develop it now and to use his imagination more' and she feels that AAC helped with that.

5. Views on art topics alongside other subjects

Parents were asked their views on putting art into other subjects like maths and English. The parents who were less aware of the details of the project were responding speculatively; around a half of the parents were speaking from a greater awareness through what their children had told them.

In response to this question, most parents said that they feel it is a good idea and they have no concerns about the subjects being combined like this. Many parents felt that anything which makes a subject more interesting and fun and which captures the attention of the pupils 'has got to be an advantage'. Several parents also felt that having another person in the class was a good idea as it meant that the children were shown different ways of working and it made it more enjoyable for them. For example, one parent said:

'it can take them a long time to grasp a new subject when they are starting secondary school so to have someone there who can do things in a different style I think would be very beneficial'.

Similarly, another parent commented:

'it would be a good way to show children different ways of working things out. It is better showing them rather than just the teacher explaining it as some children understand better through seeing it'.

One parent was very impressed when her daughter was able to explain to her how electricity works and commented, 'it has been a great idea because she really looks forward to it and she has learned all the work as well'.

Some parents thought it would be helpful for the pupils for different reasons. For example, one parent felt that it would probably be better for children with lower abilities as it would help them to get them involved and to join in whereas another parent felt that this approach would be more helpful for children who are more academic but who may not get on well in art, 'making things and learning at the same time can encourage them to see that they can do artistic things'. This parent also felt it would help children who do not learn in a typical way, 'using drama they will feel more confident to discuss another part of the curriculum which otherwise they won't discuss'.

A few parents, however, had some reservations. For example, one parent felt that it might work in some subjects but she was not sure how it would work in maths, especially in secondary school where maths is more important and more 'serious'. She was concerned that the children might get distracted but at the same time she felt it might work for children who are struggling or who find it hard to concentrate. Similarly, another parent was concerned about art being introduced into subjects such as maths and English as she didn't feel as though they 'mixed' and she commented, 'when pupils move into second or third year I don't think it will be appropriate'.

6. Impact on School

Parents were asked if they thought the project had made a difference to the school. Only 6 parents were able to comment, with most saying they 'did not know', because they did not know enough about the project or did not have enough information from the school.

The responses from the parents who felt that it had made a difference to the school were quite varied but they were all positive. For example, one parent said that the children had enjoyed having the other 'teachers coming in'. Another said that it had definitely made a difference to the school and:

'They all talk about it. They enjoy it and it is a break away from class work. You can see what they have been doing, it is really nice'.

Another parent said that the teacher had also seemed to enjoy it and was pleased with what they had produced, 'all the children were talking about it at parent's night. It was very positive'.

One parent was not sure if it had made any difference because the, 'atmosphere in school is always great anyway; it is quite a happy place'. Some parents referred to other activities in the school which use drama and art which were not part of AAC but the parents were not sure what the difference was between the projects. One of those parents commented, however, that she felt that all of these projects were good for the school.

One parent talked about their school having evolved and the ethos having changed so it was now one of the best schools in the area; when prompted whether AAC had contributed to this or whether it was the ethos which had allowed AAC to fit in, she replied, 'it is difficult to say. The school is trying to develop the whole curriculum, not just focus on high marks in tests and maybe that's why AAC fits in'.

7. Importance of art and art activities

Parents were asked if they thought it was important for their children to be involved in arts activities and if the parents themselves took part in any arts activities.

In response to this question, only two parents said that they did not think that it is important for their child to be involved in arts activities as they feel the academic subjects are more important. One of these parents also said that her son agreed with her as he only did art and drama at school because it was in the curriculum and these were not subjects that he intended to continue at school.

The mother of the boy in S1 who did not enjoy the AAC lessons said that he enjoyed both music and art and was, 'the only one in the family who plays an instrument' but he really did not like these lessons.

Some parents listed a number of clubs and activities that their children were already involved in and most parents said that their children liked to draw and paint at home but were not involved in any art clubs or groups. One parent commented that her daughter was quite shy so she was not involved in

any out of school clubs or groups; for this reason she felt the AAC was really good for her. Other parents said that they felt it was very important for their children to be involved in art activities, such as music and drama, outside school because it gave them a chance to meet other people and, 'it keeps them busy'. One parent said that it was important for children to experience drama because it let them see that 'art is not just drawing and painting'. This parent also said that she felt that being involved in arts activities was 'an important part of his [her son's] life'. Finally, another parent felt that it was very important for her child as it, 'helps her to express her feelings'.

While the majority of parents said that they thought it was very important for their children to be involved in art activities they did not give much detail about any arts activities that they, personally, were involved in. Some spoke about the activities their other children are involved in and a few parents spoke about activities that they do as a family. The most frequently mentioned family activity was going to the theatre or to concerts or art galleries, though limiting factors were finding things suitable for children of different ages in a family and suitable activities that were not too expensive in rural areas or in housing schemes.

8. Further comments and questions

Parents were given the opportunity to make any further comments they wished at the end of the interview or to ask questions.

Additional comments made by parents were very positive and they all seemed to think that the project had been very successful. For example, one parent said that her daughter gets very excited about working with the artists and said that, 'she totally loves it'. Another parent said that it should continue because, 'the children enjoy it and it lets them see other people and it might give them ideas for later in life'. This parent also liked the fact that it gave the children another person that they could talk to and that it gave the teacher a chance to work one-to-one with pupils as there was someone else in the class. Another parent felt that all the children should be able to benefit from it and it should be offered to all the year groups as her son had, 'thoroughly enjoyed it and had benefited a lot from it'. One of the fathers who was interviewed admitted that he does not have a very good memory so the fact that he was able to remember things that his daughter had said about the project suggests that she had spoken about it a lot at home and had, 'burned it in my memory'. One parent who had mentioned previously in the interview that her daughter was quite quiet and shy said, 'she did these dances for the display no problem and that has been great for her, I am just amazed at how well she is doing'.

In general parents were interested in the project and there were a number of common questions that were asked at the end of the interview. For example, most parents wanted to know whether it would continue at the school and whether it would be extended to other year groups. They wanted to know why their school had been chosen, what other schools were involved and whether their child would be involved in it next year. One parent asked who was running the project and whether the children get a say in the subject matter. This parent was also interested in where the idea and funding came from and whether 'the education people think it has a track record'. Another parent was interested in finding out more about the work her son had been doing and another parent asked whether it had been a success, both in general and in her daughter's school.

9. Summary

Twenty-one parents were interviewed – 11 with children at primary school and 20 at secondary school. Most declared that they knew very little about the project but around half had discussed it with their children either as a result of receiving the invitation to be interviewed or because their children had spoken about it. Others indicated their children had mentioned it 'in passing'. A few parents had greater understanding of the project and were able to talk about the aims of the project being to find ways of helping the children learn better.

The majority of those interviewed were able to indicate that their children had enjoyed the experience and had spoken enthusiastically and positively about the lessons with the artists. Most believed that the interest generated by the artists would help the children concentrate more and help them learn. It was particularly beneficial to have another adult in the classroom and some parents spoke of the way in which the artists had taken an interest in the children and had taken time to listen to them. One parent

reported that her child had not enjoyed the AAC experience and had found that it got in the way of learning about the subject.

Most parents had no concerns about integrating arts and other areas of the curriculum – the general view being that if it made it more interesting and kept the children involved then it could only be a good thing. Some reservations were expressed that it could be a distraction and was probably not suitable as they progressed in secondary school.

A small number commented on the enthusiasm and interest in the school for the project, but otherwise parents were not able to say if AAC had had an impact on the school. Schools had many different initiatives and projects which were all part of creating the ethos of the school.

Most parents thought that arts and arts activities were important for their children's development and were keen for their children to be involved in activities out of school if possible. Some thought that their children had become more interested in arts and crafts activities because of the influence of the artists in the AAC programme and were developing their skills.

Parents were positive about the project and were keen to know if it would continue.

Differences observed in the data between stage 1 and stage 2 of the evaluation

1.	Introduction	190
2.	Pupils	190
3.	Teachers	192
4.	Artists	195

Differences observed in the data between stage 1 and stage 2 of the evaluation

1. Introduction

The evaluation was designed to include repeat measures, namely, the same or similar research instruments were used at the two stages of the evaluation. Ideally, these measures would have been used with the same people to identify any shifts or changes in their thinking. However, as noted in section C appendices new classes, teachers and artists became involved in the second year of the project and many of the pupils and some of the teachers and artists did not continue.

This section reports findings from comparisons between the two stages of data collection. Where possible, data collected from participants in both stages were extracted, and compared; as it was not possible to match cases one for one, between-groups analysis rather than within-groups analysis was carried out. Otherwise, the datasets for stage 1 and stage 2 were compared.

2. Pupils

2.1 Survey responses

The views of both cohorts of pupils were largely positive about their experiences of working with the artist and teacher together. In each year group there were some pupils who either responded negatively to the statements or did not know.

The data from the two stages of surveys were compared in two ways: firstly the classes who had been involved over two years were extracted and looked at separately, to see if the longer experience of AAC changed their responses either negatively or positively; secondly, the data for each year group was compared. (Statistical tests used were t-test or Mann-Whitney as appropriate to the data and sample sizes.)

There was no consistent pattern of change in pupils' responses over the two years, though some changes did occur on a few items.

Classes involved over 2 years (same pupils)

There were 2 groups of primary pupils in the sample who had continued involvement over the 2 years of the project.

The younger group (**P3 to P4** n = 23) recorded more positive responses at time 2 on two items:

- 'having the artist in the classroom made the topic more interesting'
(At time 1 80% of the class agreed with this with the remainder disagreeing or unsure while at time 2 100% agreed;
[mean ranks: time 1 = 19.70, time 2 = 24.00; MW-U = 184.00; p=0.026].)
- 'the things we did helped me work with other pupils'
(Their responses changed from 55% agreeing at time 1 to 91% at time 2;
[mean ranks: time 1 = 18.08, time 2 = 25.41; MW-U = 151.50 p=0.01].)

This change possibly reflects an ongoing positive experience of working with artists; the second statement may also reflect the fact that the pupils are a year older and developing skills of working together. It may also reflect the way the artists worked with the class.

The **P5 to P6** group (n = 26) also were in stronger agreement in relation to 2 items:

- 'I learned what I could do better'
(This was not only because more agreed, but also fewer opted for 'don't know'. Agree at time 1 = 46% and at time 2 = 83%; don't know at time 1 = 31% and at time 2 = 17%;
[mean ranks: time 1 = 21.27, time 2 = 29.22; MW-U = 202.00 p=0.023].)

- 'other people had good ideas'
(Again this was largely because fewer opted for 'don't know'. Agree at time 1 = 69% and at time 2 = 96%; don't know at time 1 = 23% and at time 2 = 4%;
[mean ranks: time 1 = 22.00, time 2 = 28.39; MW-U = 221 p=0.02].)

The 15 **secondary pupils** who had worked with an artist in their class over two years remained positive about their enjoyment and benefits in learning. At the second stage, they showed less agreement on one item only:

- 'I tried new things I had never done before'.
(This was mainly because of a shift in view from agreeing a lot: 56% at time 1 and 27% at time 2, to agreeing a little: 39% at time 1 and 47% at time 2;
[mean time 1 = 3.50; mean time 2 = 2.73; t=2.33 df = 31 p=0.026])

As they had worked with the same subject and art forms in both years this is perhaps not surprising.

Differences in responses of year groups (different pupils)

The following changes in responses between stage 1 and stage 2 of the evaluation were noted:

P3/4 and P4

- 'I wanted to work longer on the tasks'
(The responses were less in agreement at time 2, with more opting for 'don't know'. Agree at time 1 = 89% and at time 2 = 64%; don't agree at time 1 = 9% and at time 2 = 13%; don't know at time 1 = 3% and at time 2 = 23%;
[mean ranks: time 1 = 42.59, time 2 = 32.94; MW-U = 504.50; p=0.01].)
- 'some pupils did not like working with the artist'
(Pupils showed less agreement with this at time 2, with more opting for 'don't know'. Agree at time 1 = 40% and at time 2 = 8%; at time 1 don't agree = 43% and at time 2 = 53%; at time 1 don't know = 17% and at time 2 = 40%;
[mean ranks: time 1 = 44.60, time 2 = 30.00; MW-U = 399.00; p=0.001].)

This suggests that the pupils in the second year were less likely to have noted classmates either saying that they did not like the artist, or behaving in ways that indicated they were not enjoying it.

P5/6 and P6

- 'I work with pupils I don't usually work with'
(Pupils showed less agreement with this at time 2, with more opting for 'don't know'. Agree at time 1 = 78% and at time 2 = 48%; don't agree at time 1 = 18% and at time 2 = 33%; don't know at time 1 = 4% and at time 2 = 19%;
[mean ranks: time 1 = 63.11, time 2: 46.3; MW-U = 974.50; p=0.001])

As this difference was not noted in the continuing group (see above), this may reflect different ways of working with the pupils, or it may mean that at time 2 the pupils were already used to working with most other pupils in the class.

P7 and P7

- 'I tried new things I had never done before'
(Pupils showed less agreement at time 2, although this was because more opted for agree a little instead of agree a lot. Agree a lot at time 1 = 79% and at time 2 = 60%; agree a little at time 1 = 16% and at time 2 = 32%;
[mean time 1 = 3.71; mean time 2 = 3.45; t = 2.20; df = 168; p=0.029])

Secondary

The secondary data was looked at as separate year groups (ie S1 and S1 only; S1 and S1 and 2 combined; S3 and S3) and as a whole sample. Only one item showed any difference in all the various combinations, so the whole sample figures are reported:

- 'some pupils did not like working with the artist'
(Pupils showed more agreement at time 2, with the 'don't know' responses remaining the same at around a quarter. The responses combining 'a little' and 'a lot' were: agree at time 1 = 33% and at time 2 = 50%; disagree at time 1 = 40% and at time 2 = 27%;
[mean time 1 = 1.62; mean time 2 = 2.10; $t = 2.72$; $df = 373$; $p=0.007$])

This probably reflects that there was on both occasions some who did not like the experience but it was noted by a greater number of their classmates.

2.2 Views expressed in focus groups

In both years, both primary and secondary pupils, spoke very positively about their experience of integrated curricular lessons, with most agreeing that working with an artist made the lesson more interesting and more fun.

Primary pupils spoke very enthusiastically about the artists and the art work, with those at year one emphasising the benefits of working together in groups, while those in the second year put greater emphasis on being active and learning in active ways.

Secondary pupils, in particular, emphasised at both times that what they were doing with the artist helped them remember things better, for example, because they were acting out ideas or actively involved and they were able to 'replay' this in their minds when trying to remember what they had learned at a later date. In the second year focus groups, secondary pupils put forward the idea that artists did not give them too much detail which sometimes happened in ordinary lessons – they did not give them 'lots of information' all at once. One secondary group who had been involved both years (and who were interviewed both years) reported in the second year that they felt that the art they had experienced was more effective in some subjects than others.

Both primary and secondary pupils had enjoyed learning about the art and reported developing new skills. In the first round of focus groups some pupils expressed negative views in relation to arts which required 'performance'; while using media had been an art form experienced by pupils throughout the project, pupils interviewed in the second year particularly emphasised enjoying this aspect of working with an artist.

Primary pupils involved in the second year focus groups were more likely to report taking up activities out of school because of what they had done with the artist, such as making things and drawing. Some would like to have done more, but they reported a lack of suitable clubs or facilities in their local areas. Secondary pupils were more likely to talk about clubs that they were already members of and were less likely to be influenced to try something new.

3. Teachers

3.1 Surveys

The survey responses were investigated from 2 perspectives. Firstly, the responses of teachers who completed questionnaires at both stages of the evaluation, namely, teachers who were involved in the project for two years, were compared, to see if they had changed in their perceptions. Secondly the responses for all teachers at stage 1 and stage 2 were compared.

Fourteen teachers, 9 primary and 5 secondary completed questionnaires both times. The items that were the same in both questionnaires were extracted for comparison purposes. The data were analysed using the Mann-Whitney non-parametric test (due to small sample size) and were considered for all teachers together and primary and secondary separately. There were no statistically significant differences in their responses. Therefore, the views of this group of teachers remained the same from their initial experience of AAC in year 1 to the end of year 2.

Forty-four teachers completed the questionnaire at stage 1 and 35 at stage 2. The data were analysed using t-test, and a small number of statistically significant differences emerged between the two groups

of respondents. On further investigation, these differences were on account of the responses of the **primary school teachers** – 27 at stage 1 and 23 at stage 2.

Planning ICLs

In the second survey primary teachers were more likely to say that there was sufficient time available at planning meetings to plan effectively with all but one teacher agreeing, while 7 (or a quarter) of the first group of teachers disagreed. Some of the issues around planning may have been resolved in the second year of the project; [mean time 1 = 2.81; mean time 2 = 3.17; $t = 2.401$; $df=47$; $p=0.02$].

Teachers in the second survey were more likely to indicate that they were devising new ways of assessing curriculum content with 18 (86%) agreeing with this statement, while in the first survey only 8 (36%) reported this was the case; [mean time 1 = 2.41; mean time 2 = 3.17; $t = 3.398$; $df = 41$; $p=0.002$].

Delivering ICLs

In the second survey almost all primary teachers agreed that it took longer to deliver the curriculum (21 out of 23), but this was manageable; [mean time 1 = 2.70; mean time 2 = 3.09; $t = 2.551$; $df = 48$; $p=0.014$]. The respondents in the first survey also thought it took longer to deliver the curriculum but about a quarter at that time thought it was not manageable, but disruptive. This was reported as a challenge in open questions at both stage 1 and 2, but although it was challenging, it was not necessarily a major problem.

In the second survey 16 (80%) thought that the classroom was a suitable environment for delivering ICLs, while in the first survey only 56% of the primary teachers had agreed; [mean time 1 = 2.40; mean time 2 = 3.00; $t = 2.796$; $df = 43$; $p=0.008$]. Secondary teachers were also less likely to report this as a problem, though a few more still saw it as a problem.

Impact on pupils

In the second survey teachers thought that pupils were more likely to ask questions than usual during an ICL. At stage 1, 9 out of 27 primary teachers had disagreed (one-third) while at stage 2 only 2 out of 23 teachers disagreed. It was proposed at stage 1 that teachers would be using other approaches in their classes that encourage pupils to ask questions and therefore AAC was less likely to influence this. However, at the end of the second year, it would appear that the primary teachers found that working with the artist was encouraging pupils to ask questions more than usual; [mean time 1 = 2.85; mean time 2 = 3.50; $t = 2.419$; $df = 47$; $p = 0.019$].

Whole school issues

In the second survey, primary teachers were more likely to indicate that their school's involvement in AAC would contribute towards the aims of the *Curriculum for Excellence*. The difference lay in the extent to which they thought it would contribute 'much' or 'very much', in particular to developing successful learners and effective contributors.

- successful learners: at stage 1, 31% strongly agreed; at stage 2, 64% strongly agreed [mean time 1 = 3.08; mean time 2 = 3.36; $t = 2.181$; $df = 46$; $p = 0.034$].
- effective contributors: at stage 1, 39% strongly agreed; at stage 2, 73% strongly agreed [mean time 1 = 3.15; mean time 2 = 3.68; $t = 2.515$; $df = 46$; $p = 0.015$].

This may reflect a growing understanding of the *Curriculum for Excellence* as well as greater recognition of the benefits of AAC.

Challenges

The themes which emerged in the responses to the open questions at the end of the questionnaire about the greatest challenges encountered remained largely the same at both stages of the evaluation. These challenges need to be balanced against the largely positive responses about the benefits of

working with artists in terms of engaging the pupils in learning and enhancing the teachers' own practices.

The challenges reported both times were:

- not having sufficient time for planning and preparation both individually and along with the artist
- finding suitable accommodation/space for some of the arts activities, including storage of materials
- fitting the ICLs into busy school schedules (particularly the one-period timeslots in secondary schools)
- identifying suitable topics to fit with the art form, so that the ICL worked for both the curriculum and the art
- taking longer to cover the curriculum content (for some this meant 'learning not to worry about it because deeper learning was occurring'; for others, especially in secondary schools, this meant having difficulty in completing the required syllabus)

3.2 Interviews

On the whole, teachers spoke very positively about the experience and benefits of working with artists to develop and deliver ICLs at both stages of the evaluation. They agreed that the approach fitted well with current developments related to the *Curriculum for Excellence*.

Planning and delivery

At both times, teachers spoke of varied approaches to planning, developing and delivering ICLs, with some preferring to allow the artist to lead in developing ideas about the art and in taking the lessons. This was explained as teachers not having the skills and expertise of the artist and wanting to maximise the time the artist had in the class. Others spoke of engaging in discussion over how the art should tie into the curriculum and of sharing time and tasks during the lessons with the artist present. At the first stage of the evaluation teachers were more likely to explain that they were unsure of what role to take and some found it difficult to 'take a back seat'. The teachers interviewed at the second stage of the evaluation were more likely to talk about the importance of being flexible, focusing on what the pupils needed, and balancing roles according to the topics being taught and the tasks being undertaken.

Helping learning and achievement

At both times teachers focused on the visual and kinaesthetic benefits of using arts as a medium for delivering the curriculum and that this was an important factor in the way in which ICLs enhanced learning. At the second stage of the evaluation, teachers were more likely to emphasise the benefits of this for less academically able children – it was an inclusive approach which enabled children of all abilities to participate. Teachers were positive about ways in which children were gaining deeper understanding of concepts and were remembering ideas better. However, at the first stage, teachers spoke more of instances where they felt it had not worked well because of the difficulties of making the art fit the curriculum or children not taking it seriously. At the later stage of the evaluation some teachers spoke more confidently about raised attainment, reporting higher grades than expected or compared to similar classes who had not had AAC.

At both times, concerns were expressed about how AAC had reduced teaching time for the rest of the curriculum or had taken longer to cover the topics selected than normal.

Motivation

At both stages teachers spoke of pupils' enthusiasm for working with the artists but it was not clear that the enthusiasm during the ICL carried into other lessons or subjects.

Teacher development

At both times teachers reported working collaboratively prior to involvement in AAC; some indicated that working with the artist had made them more confident to work with others. The majority spoke of the benefits of working collaboratively with artists but reported not having the opportunity to work with other teachers in developing the ideas of AAC. Many of the teachers reported having their eyes opened to new ways of teaching the curriculum and had learned strategies and techniques they could apply in other areas or the curriculum.

Eroding subject barriers and enhancing ethos of schools

These were two aspects about which teachers, at both stages, were less certain; clearly arts and other curricular areas had been used together although for some teachers this was not a new idea. There was little evidence of other cross-curricular working, though some teachers saw the potential for it. Generally, the application of AAC was too limited to have an impact on school ethos, indeed in some schools, it was seen as a limitation that no one else knew about it; however, in the midst of everything else it was not a school priority. By the second stage of the evaluation a small number of (primary) teachers indicated that they felt it was contributing to a more positive learning environment in the school.

Effectiveness of arts as a way of delivering the curriculum

Again, at both stages, teachers were positive about the effectiveness of arts as a medium through which the curriculum could be delivered. There was emphasis on it making topics interesting and fun and of providing a 'holistic' approach to the child. However, there were caveats: identifying suitable topics in the curriculum, matching appropriate art forms and art activities, and the suitability of the artist.

Issues for ongoing implementation

At both times teachers spoke of the importance of management support to ensure those involved had sufficient time and resources; another issue was the need for a whole school co-ordinator to raise awareness of working with artists and to identify suitable areas of the curriculum (and in secondary schools other subject departments) to make use of the ICLs approach.

4. Artists

4.1 Survey

There were few differences in the responses to the questionnaires at the two stages of the evaluation.

Firstly, the artists working in secondary schools were less likely to indicate that the classroom was not a suitable environment for delivering ICLs. In year one all 10 secondary artists disagreed that the classroom was a suitable environment while in year 2 only 6 out of 14 artists disagreed; [mean ranks: time 1 = 7.70, time 2 = 15.86; MW-U = 23.0 p = 0.002]. This may reflect different art disciplines being used – for example, there were more responses from literary arts practitioners and craft artists working in secondary schools in the second year. Alternatively, it may mean some artists have adapted differently as those from the field of media and drama both agreed and disagreed at stage 2, while all had disagreed at stage 1. The suitability of the classroom, nonetheless, remained an issue for some artists.

Secondly, for the 11 artists who had been involved in both years of the project, there was a statistically significant shift in their views on the effectiveness of the communication with the local authority managers, mainly CLOs. In the first questionnaire, 5/11 had rated the CLOs' communication at the negative end of the scale with only 1 considering the performance rated 5. In the second questionnaire, all 11 artists were at the positive end of the scale, with 8 recording '5' and 3 recording '4'; [mean ranks: time 1 = 7.32, time 2 = 15.68; MW-U = 14.50; p = 0.001].

Challenges

The themes which emerged in response to the open questions at the end of the questionnaire remained similar at both stages of the evaluation. As with the teachers, these challenges need to be balanced

again the very positive views reported in relation to working on the project. The main issues found to be challenging were:

- insufficient time for planning and preparation both with the teacher and independently. Artists would have particularly valued longer lead in time to allow get to know the curriculum and plan appropriate arts activities. Coping with the paperwork (planning documents) was a time-consuming burden, which some thought was probably not necessary.
- working with teachers who did not fully engage with the process and expected the artist to do most of the work (and also with teachers who did not sufficiently control, in the artists' view, disruptive behaviour)
- focusing on both art and the curriculum and adapting art to suit the curriculum context.

At the first stage of the evaluation, a small number of artists thought that better opportunities for artists involved in AAC to liaise with each other and learn for each other would have made the project more effective. This view was repeated at stage 2 with the further comment that it was disappointing that there had been little media coverage and that the project did not have a higher profile in schools and in local communities.

4.2 Interviews

Both at stage 1 and stage 2 of the evaluation, the artists who were interviewed were very positive and enthusiastic about AAC. There had been challenges in adapting to the project and developing ideas and lessons along with teachers, but for the most part these were challenges which were 'relished'.

In both sets of interviews, artists had viewed the aim of AAC as mainly about engaging pupils in learning by taking account of different learning styles. The view was expressed that it was of particular benefit to the less academically able. At the later stage, one artist suggested it was also about raising the profile of arts.

Contribution of art to learning

At both stages, artists spoke positively about how well their art supported the learning objectives, emphasising the importance of the role of the teacher in making the connections and helping the children to make the connections too. At stage 2, artists were more likely to talk about the 'match between the art form and the topic' suggesting that some art forms were more suited than others for certain topics. For example the appropriateness of dance for visualising scientific concepts or maths concepts was reported, while a musician found that in maths the links were 'very sophisticated' and the pupils 'hit brick walls'.

In the second set of interviews artists spoke of the benefits of the arts activities giving children responsibility for their own learning, giving them alternative ways of expressing themselves and also, for some, discovering hidden talents.

At both stages artists said that the difference between effective and less effective ICLs was the commitment of the teacher to engage along with the artists, as well as suitable facilities and resources.

Pupil interest and motivation

Artists reported high levels of interest and enthusiasm amongst pupils. During the first interviews some indicated that amongst secondary pupils in particular there were some classes, or a few in each class, who were not 'on board'.

Factors contributing to success

At both stages artists again reinforced the importance of the teachers' commitment and the artist and teacher working as a team. Support from school management was indicated at both stages. The artists interviewed at the second stage, additionally, reported the need for the whole school to be aware and

involved (even in order to make space and resources available). Further factors suggested were the willingness of both artists' and teachers' willingness to be flexible, teachers' willingness to allow pupils to have ownership of the learning and artists' willingness to try different art forms.

Classroom observations of ICLs

1. Introduction
2. Categories observed and proportion of teacher, artist and pupil interaction during ICLs
3. Pupil small group discussion
4. Pupil post-observation lesson questionnaires

Observations of ICLs

1. Introduction

As explained in Appendix A, as ICLs are at the heart of the project, substantial evaluation time was spent in building a robust description of how artists and teachers interpreted the Chicago arts integration model into Scottish practice. A key element of building this description was observation of ICLs using a category system developed through a process of initial observations and taking account of project aims and arts education literature. The process of developing these categories is explained in Appendix A section 5.3. The categories, their definitions and examples of talk are given in tables E1 and E2.

Table E1: AAC ICL Observation – definitions and examples (artist and teacher)

TEACHER/ARTIST	DEFINITIONS/EXAMPLES
Curricular goals for lesson	Communicates curricular goals for lesson. Sets learning in context...Why do you think we are doing this task? Why do you think this is important? Asks for example(s) of how art activity will help understanding, where arts/curricular goal is used in real life. Asks pupils to link to other lessons.
Artistic goals for lesson	Communicates artistic goals for lesson. Sets learning in context...Why do you think we are doing this task? Why do you think this is important? Asks for example(s) of how art activity will help understanding, where arts/curricular goal is used in real life. Asks pupils if they know of other artists' or designers' solutions.
Link between arts and curriculum content	Explains link between arts and curriculum content. Uses examples, e.g. Maths: puppets/measuring, mass/volume, making things, calculating quantities (number of dancers); Language/writing instructions.
Choice within activity	Invites choice within activity. Asks for volunteer. Who would like...? Who can suggest..? Organises small 'teams' or groups, each with some autonomy within overall aim.
Enhancing curriculum content through art activity	Scaffolds curriculum content through art activity. Models how artist/teacher thinks about curriculum content and encourages pupil talk about their thinking. Uses multiple representations, eg visual/aural aid. E.g. proportions of colours blue/red needed to mix violet/purple to think about fractions; dance movements to think about divisions of time or to explain solid/liquids and gases in science; 3D models to learn about angles.
Thinking about goals and alternative strategies for achieving them	Scaffolds thinking about goals asks pupils to suggest alternative ways of achieving them. Seeks alternatives. Who can suggest ...? How many different ways are there to...? Are there other ways of describing decimals...? Asks class to speculate, e.g. how might (the solution/product/event) be improved? Encourage 'sensible' errors, e.g. an imaginative speculation.
Encouraging evaluation	Encourages 'appeal' to criteria. E.g. What would a good poem, lab report, map, portrait, dance performance look like? How do we know this? What did we do well/could we have done better?
Encouraging students to tolerate ambiguity	Teacher/artist does not provide instant answer but initiates experimentation. E.g. Have you tried ...? Have you thought about ...?
Focusing pupils on improvements	Focuses pupils on personal best. Encourages commitment and persistence. You are making great progress, but how could we make it even better?
Promoting enquiry	Promotes enquiry. Encourages students to generate questions. E.g. 'hot seating'. In pairs, generate questions about the task... Ask as many questions as you can in two minutes.
Allowing time for thought	Allows time for pupils to think about responses to questions. Example: I'm going to ask you to respond to this question after you've had a couple of minutes to think about it.

Table E2: AAC ICL Observation – definitions and examples (pupils)

PUPILS:	PUPIL DEFINITIONS/EXAMPLES
Goals/ contextualisation	Comments on goals/contextualisation. Pupil asks/responds to where curricular goal is used in real life/example(s) of how art activity will help understanding/ refers to other lessons.
Link between artistic and curricular goals	Comments on link between artistic and curricular goals. Pupil asks/responds to links between art discipline and curriculum content. Why are we doing dance? Is this not a science lesson? How do you get fractions from dancers?
Choice within activity	Comments on choice within activity. Pupil asks/responds, e.g. Can we try a different story/art material/dance routine next?
Enhancing understanding of curriculum content through arts activity	Comments on understanding curriculum content through art. Pupil asks responds re understanding, e.g. I see what you mean about fractions, when we saw the dance moves, that helped...When he/she explained it using the puppets I 'got it' then.
Thinking about goals and alternative strategies for achieving them.	Suggests alternative ways of achieving goals. Pupil asks/responds, e.g. I've got an idea...Can I suggest something... can we do the dance using a different room/ the art using different materials/ the story using different characters? Speculates on alternatives ways of achieving goals. Uses imagination... 'brainstorm'... unhindered suggestions... Wonder how it would look with more red/brighter colours/louder music/more words/more dance moves...
Evaluating artwork/task outcome, etc.	Evaluates 'fitness for purpose'/usefulness of product/outcome, etc (chocolate teapot). (Assumes a product of some sort) ...It wouldn't work because... The music would need to be louder... The pictures would need to be brighter. It would work better if the dance movements were more jerky...
Toleration of ambiguity	Willing to try different/untried approaches. I'm not sure what you mean, but I'll have a go... I've never tried dance, music, ceramics before ... sounds good, though, and I'll try it. It took ages, but I'm glad I didn't give up

2. Categories observed and proportion of teacher, artist and pupil interaction during ICLs

The focus of the observations was the quality and quantity of interactions initiated by the artist and the teacher with the pupils and also pupil responses to these; the extent to which pupils initiated talk was also noted. The interactions were measured in 10 minutes cycles when teachers and artists were working with the whole class and 3 such cycles were recorded during and ICL that lasted between one and 2 hours. In total, 32 ICLs were observed, 19 in 2006 and 13 in 2007. The categories of teacher interaction/talk recorded are reported in Tables E3 to E5 and the categories of pupil talk are reported in Tables E6 to E8.

These observations therefore represent a snapshot of what was happening during the course of ICLs and also a sample out of many ICLs which occurred during the 2 years of the project. These observations have been interpreted along with other data sources in Chapter 2 of the report.

Column one shows the number of times the artist and teachers initiated talk in the various categories during the first 10 minutes of the lesson, and the percentage of each category within their total talk for that cycle. So for example in the 2006 date (table E3), during the first cycle, teachers initiated talk about curricular goals 17 times, which represents 32% of their contributions in that cycle, while artists initiated talk about how the art activity enhanced the curriculum 35 times or 25% of their contributions in that cycle. The final 2 columns report the total number of times the artist and teacher initiated talk in each category over the 19 lessons and the mean per ICL. These figures show that overall the artists were more likely to be interacting with the pupils than the teacher during these lessons and the main focus of the interactions is enhancing the curriculum through the art activity. Explanations are explored in Chapter 2 of the report.

Table E3: Categories of talk initiated by artists (A) and teachers (T) over 19 ICLs in 2006

ARTIST/TEACHER	Cycle 1 (no. & %)		Cycle 2 (no. & %)		Cycle 3 (n & %)		Totals for all cycles		Mean per ICL	
	Artist	Teacher	Artist	Teacher	Artist	Teacher	A	T	A	T
Curricular goals for lesson	10 (7.2)	17 (32.0)	18 (8.0)	12 (12.4)	13 (8.8)	16 (19.8)	41	45	2.2	2.4
Artistic goals for lesson	12 (8.6)	1 (1.9)	22 (9.7)	2 (2.1)	12 (8.1)	1 (1.2)	46	4	2.4	0.2
Link between arts and curriculum content	10 (7.2)	2 (3.8)	31 (13.7)	5 (5.2)	23 (15.5)	1 (12.3)	64	17	3.4	0.9
Choice within activity	14 (10.1)	2 (3.8)	30 (13.2)	7 (7.2)	17 (11.5)	4 (5.0)	61	13	3.2	0.7
Enhancing curriculum content through art activity	35 (25.2)	2 (3.8)	58 (25.6)	13 (13.4)	24 (16.2)	23 (28.4)	117	38	6.2	2.0
Thinking about goals and alternative strategies for achieving them	17 (12.2)	3 (5.6)	19 (8.4)	19 (19.6)	14 (9.5)	11 (13.6)	50	33	2.6	1.7
Evaluating	4 (2.9)	9 (17.0)	11 (4.8)	13 (13.4)	4 (2.7)	4 (5.0)	19	26	1.0	1.3
Encouraging pupils to tolerate ambiguity	9 (6.5)	6 (11.3)	7 (3.1)	6 (6.2)	14 (9.5)	2 (2.5)	30	14	1.6	0.7
Focusing pupils on improvements	6 (4.3)	2 (3.8)	8 (3.5)	7 (7.2)	12 (8.1)	5 (6.2)	26	14	1.3	0.7
Promoting inquiry	16 (11.5)	8 (15.1)	13 (5.7)	10 (10.3)	4 (2.7)	3 (3.7)	33	21	1.7	1.1
Allowing time for thought	6 (4.3)	1 (1.9)	10 (4.4)	3 (3.1)	11 (7.4)	2 (2.5)	27	6	1.4	0.3
TOTALS PER CYCLE (ie 100% of artist talk and teacher)	139	53	227	97	148	81	514	231	27.0	12.0

Table E4: Categories of talk initiated by artists (A) and teachers (T) over 13 ICLs in 2007

ARTIST/TEACHER	Cycle 1 (no. & %)		Cycle 2 (n & %)		Cycle 3 (n & %)		Totals for all cycles		Mean per ICL	
	Artist	Teacher	Artist	Teacher	Artist	Teacher	A	T	A	T
Curricular goals for lesson	14 (7.5)	11 (14.7)	5 (3.0)	5 (9.3)	9 (8.0)	9 (17.3)	28	25	2.2	1.9
Artistic goals for lesson	24 (12.8)	6 (8.0)	26 (15.8)	1 (1.9)	15 (13.3)	2 (3.9)	65	9	5.0	0.7
Link between arts and curriculum content	20 (10.6)	8 (10.7)	9 (5.5)	2 (3.7)	4 (3.5)	2 (3.9)	33	12	2.5	0.9
Choice within activity	15 (8.0)	4 (5.3)	10 (6.1)	-	4 (3.5)	3 (5.8)	29	7	2.2	0.5
Enhancing curriculum content through art activity	65 (34.6)	22 (29.3)	50 (30.0)	29 (53.7)	28 (24.8)	14 (27.0)	143	65	11.0	5.0
Thinking about goals and alternative strategies for achieving them	15 (8.0)	7 (9.3)	19 (11.5)	4 (7.4)	8 (7.1)	3 (5.8)	42	14	3.2	1.1
Evaluating	9 (4.8)	3 (4.0)	12 (7.3)	3 (5.6)	20 (17.7)	5 (9.6)	41	11	3.1	0.8
Encouraging pupils to tolerate ambiguity	5 (2.7)	2 (2.7)	7 (4.2)	2 (3.7)	1 (0.9)	-	13	4	1.0	0.3
Focusing pupils on improvements	11 (5.9)	6 (8.0)	17 (10.3)	8 (14.8)	19 (16.8)	11 (21.2)	47	25	3.6	1.9
Promoting inquiry	4 (2.1)	3 (4.0)	3 (1.8)	-	4 (3.5)	1 (1.9)	11	4	0.8	0.3
Allowing time for thought	6 (3.2)	3 (4.0)	7 (4.2)	-	1 (0.9)	2 (3.9)	14	5	1.1	0.4
TOTALS PER CYCLE (ie 100% of artist talk and teacher)	188	75	165	54	113	52	466	181	35.8	13.9

Table E5: Proportions of artist and teacher initiation of talk in 2006 and 2007

	Cycle 1 (no. & %)		Cycle 2 (no. & %)		Cycle 3 (no. & %)		Total (no. & %)	
	Artist	Teacher	Artist	Teacher	Artist	Teacher	Artist	Teacher
ICLs in 2006	139 (72.4)	53 (27.6)	227 (70.1)	97 (29.9)	148 (64.6)	81 (35.4)	514 (69)	231 (31)
ICLs in 2007	188 (71.5)	75 (28.5)	165 (75.3)	54 (24.7)	113 (68.5)	52 (31.5)	466 (72.0)	181 (28.0)

Table E6 Categories of pupil talk (responses to artist or teacher or initiated by pupil) over 19 ICLs in 2006

PUPILS IA=initiate to artist; RA=respond to artist; IT=initiate to teacher; RT=respond to teacher; OT=off task	Cycle 1					Cycle 2					Cycle 3					<i>Totals for all cycles</i>				
	IA	RA	IT	RT	OT	IA	RA	IT	RT	OT	IA	RA	IT	RT	OT	IA	RA	IT	RT	OT
Goals/contextualisation	3	11	3	17	0	0	14	0	4	0	0	8	2	8	0	3	33	5	29	0
Link between artistic and curricular goals	4	2	0	2	0	3	22	0	3	0	1	9	2	1	0	8	33	2	6	0
Choice within activity	4	12	0	1	0	3	31	1	0	0	2	12	0	1	0	9	55	1	2	0
Enhancing understanding of curriculum content through arts activity	1	51	0	2	2	4	50	0	17	9	0	27	0	16	6	5	128	0	35	17
Suggesting alternative ways of achieving goals	6	39	0	5	0	7	24	12	11	0	1	4	3	9	0	14	67	15	25	0
Evaluating artwork/task outcome, etc.	0	3	4	8	0	0	1	7	17	0	4	3	1	2	0	4	7	12	27	0
Toleration of ambiguity	0	3	0	1	1	2	4	1	0	1	2	3	1	0	0	4	10	2	1	2
TOTALS	18	121	7	36	3	19	146	21	52	10	10	66	9	37	6	47	333	37	125	19

Table E7: Categories of pupil talk (responses to artist or teacher or initiated by pupil) over 13 ICLs in 2007

PUPILS IA=initiate to artist; RA=respond to artist; IT=initiate to teacher; RT=respond to teacher; OT=off task	Cycle 1					Cycle 2					Cycle 3					Totals for all cycles				
	IA	RA	IT	RT	OT	IA	RA	IT	RT	OT	IA	RA	IT	RT	OT	IA	RA	IT	RT	OT
Goals/contextualisation	4	16	1	8	-	4	2	-	-	-	-	7	-	3	-	8	25	1	11	-
Link between artistic and curricular goals	-	18	-	4	-	1	7	-	2	-	1	8	-	2	-	2	33	-	8	-
Choice within activity	1	6	2	5	-	4	9	1	-	-	-	8	-	3	1	5	23	3	8	1
Enhancing understanding of curriculum content through arts activity	9	78	-	8	-	4	42	3	21	-	1	33	-	13	-	14	153	3	42	-
Suggesting alternative ways of achieving goals	1	8	-	1	-	5	23	-	3	-	5	1	-	-	-	11	32	-	4	-
Evaluating artwork/task outcome, etc.	1	2	-	4	-	-	5	-	-	-	-	5	-	8	1	1	12	-	12	1
Toleration of ambiguity	1	2	1	-	-	-	2	-	2	-	-	-	-	-	-	1	4	1	2	-
TOTALS	17	130	4	30	-	18	90	4	28	-	7	62	-	29	2	42	282	8	87	2

Table E8: Categories of pupil talk – mean responses overall in 2006 and 2007

	Initiate with artist	Respond to artist	Initiate with teacher	Respond to teacher
ICLs in 2006	0.7	17.5	1.9	6.6
ICLs in 2007	3.2	21.7	0.6	6.7

These figures show that pupils are more likely to respond to the artist and teacher than to initiate discussion; they are more likely to be interacting with the artist than the teacher; their talk related mainly to the art enhancing the curriculum. These figures are unsurprising as they reflect the interactions recorded for artists and teachers.

3. Pupil small group discussion

The purpose of observing small group discussion was to see if pupils were engaging in the kind of talk that correlates with educational gains (see Appendix A). The categories used and their explanations are given in table E9.

Table E9: Categories and definitions of pupil talk in small group discussions

Observation category	Explanation
Expresses positive feelings	
Expresses negative feelings	
Expresses intolerance of ambiguity	expresses unwillingness to explore possible solutions when way forward is unclear ; expresses desire to be told what to do
Self-regulates There is a separate category for evaluates (product)	tries to clarify nature of task/describe goals/strategies /any constraints, or to compare output with goals (monitoring appropriateness of goal set, strategy and output)
Generates suggestions for changing direction	e.g. proposes tool not yet considered but does not try to judge the worth of the alternative (If judgment attempted code as evaluates)
Tries to advance/clarify understanding of content	re-explains/questions concept, or procedure, or own thinking, builds on others' views, gives relevant examples/shows how something works/answers questions; expands/clarifies with examples
Tries to advance/clarify understanding through art	As understanding , but draws on the artistic experience to advance understanding of content
Evaluates	any talk intended to judge an idea/product : any question/comment that is about criteria for judging
Minimal comments	Agree/disagree with what is stated, but no reason given
Off task; irrelevant comments	

During the observations there were few opportunities to gather data on pupil small group discussion, using this category system. In part, the paucity of opportunities arose from lesson planning decisions to use the limited ICL time available for arts activities that involved the whole class working together towards a common goal (e.g. dance and drama). It would not be appropriate to generalise from the few analyses undertaken of pupil small group discussion. The data gathered from three observations show a high incidence of pupil talk connected with better understanding of ideas and with encouraging each other to think deeply. However, it is not possible to say whether this pattern was typical of pupil small group discussion in ICLs, or even if small group discussion took place.

4. Post-observation lesson pupil questionnaire

Questionnaires were completed by pupils following the lessons which the evaluation team observed during the first year of the project. The responses were gathered following 19 observation lessons and are summarised in table E10.

Table E10: Pupils' views on lessons observed during first year of project (2006)
(150 primary responses; 234 secondary)

	Primary	Secondary
Question 1 – I found the things we learned today were ...		
too easy	52 (35%)	58 (25%)
about right	92 (61%)	166 (71%)
too difficult	5 (3%)	9 (4%)
Question 2 – I thought taking part in the activities was ...		
easy	140 (93%)	203 (87%)
difficult	9 (6%)	30 (13%)
Question 3 – I thought the activities were ...		
really great fun	102 (68%)	87 (37%)
quite good fun	39 (26%)	102 (44%)
not much fun at all	7 (5%)	42 (18%)
Question 4 – I think this lesson was ...		
fabulous	83 (55%)	62 (27%)
ok	59 (30%)	131 (56%)
boring	7 (5%)	40 (17%)
Question 5 – I think the artist and teacher worked well together in this lesson ...		
yes	125 (83%)	154 (66%)
no	2 (1%)	9 (4%)
don't know	23 (15%)	69 (30%)

These findings confirm the views expressed elsewhere that the secondary pupils were slightly less positive than primary school pupils. They also support the view that in the majority of cases the artists and teachers had set realistic academic and arts goals, although about a third of the primary school pupils thought that what they had learned had been too easy for them.

Evaluation of Arts Across the Curriculum Selected AAC classes with comparator groups

1.	Introduction	208
2.	Creative thinking skills	209
3.	Self-concept	211
4.	General interest questionnaire	212
5.	Summary	214
6.	Information about the Marsh Self-Description Questionnaire (SDQ-I and SDQ-II)	215

Selected AAC classes with comparator groups

1. Introduction

It was decided to select a small number of AAC pupils' groups for more in depth investigation. The focus of this study was firstly, to investigate the development of creative thinking skills. A second focus was any changes in pupils' self-esteem and attitudes to school and a third focus was to investigate if pupils' experience of AAC encouraged more interest in arts evidenced by taking part in more arts related activities and their perception of how good they were at arts-type activities. The pupils completed questionnaires at, or near the beginning of involvement in AAC, and again after or towards the end of their participation.

Pupil development is encouraged through many experiences and even being a year older can lead to maturing which can, for example, change attitudes to school, others and self. Comparator groups were therefore included in the study. The purpose was not to draw direct comparisons between the two groups, but to investigate if the AAC pupils were more likely to have changed than the comparator group.

Classes were identified from the AAC schools to take part and the Creative Links Officers were asked to identify schools that were similar with respect to catchment area and social background. While this approach offered some control, the research team recognises its limitations; for example, there is no guarantee that change was on account of AAC and changes could occur because of other home or school influences. Following up a year later (and in one case over 18 months later) means that not all children completed the questionnaire on both occasions thus leading to attrition in the sample; only those who completed questionnaires on both occasions were included in the study.

Two of the groups selected for this aspect of the study took part in AAC during the first year of the project (2005-06), but not the second (2006-07). One group was in S1 but did not continue with AAC in S2; another group was in P7 during the first phase and were not guaranteed to be in the S1 classes in year 2 that were working with an artist when they progressed to secondary school. Therefore, these pupils were followed up at the beginning of the second year of the project (October 2006). A third class (P5 at the outset) was working with an artist over both years of the project, and therefore, they were followed up towards the end of year 2 (May 2007). It should be noted that, at the outset, a second S1 AAC and control group were included in this part of the research, but due to changes in the school, they were not followed up at a later time. For simplicity, the groups are referred to as P5, P7 and S1.

The pupils in both the AAC and comparator groups were asked to complete a set of tasks which investigated creative thinking skills (Torrance Test of Creative Thinking - TTCT), a questionnaire which investigated self-concept (Self Description Questionnaire - SDQ) and a general interest questionnaire. Descriptions of these instruments are given below.

The numbers who completed the SDQ and self-interest questionnaire on both occasions were:

Table F1: Pupil numbers who completed SDQ and general interest questionnaire at both time 1 and time 2.

	AAC pupils			non-AAC pupils		
	Total	Boys	Girls	Total	Boys	Girls
P5	16	8	8	17	7	10
P7	17	10	7	8	6	2
S1	18	13	5	17	9	8
Total	51	31	20	42	22	20

Figures for the completion of the TTCT were different as explained below.

2. Creative thinking skills

A standardised measure of creativity, the Torrance Test of Creative Thinking ('Thinking Creatively with Words'), was used with selected pupils. The Torrance Test of Creative Thinking (Thinking Creatively with Words) is a longstanding, well-established instrument for measuring creative thinking skills, and has been used previously in investigations related to the impact of arts education (Torrance, 2000; Burton, Horowitz and Abeles, 2000).

It focuses on three aspects of creative thinking: fluency, originality, and flexibility. Fluency represents a person's ability to produce a large number of relevant ideas. However, it is possible to produce a large number of common or uninteresting responses, and therefore the other two concepts are very important. Flexibility represents the ability to produce a variety of kinds of ideas, to shift from one category of thinking to another, akin to lateral or divergent thinking. Low flexibility suggests rigid thinking habits, limited knowledge or experience, and/or low motivation. Originality represents a person's ability to produce ideas that go beyond the obvious or commonplace.

The assumption of the study is that working with an artist might encourage children to think differently about their learning and enable them to think more expansively. It is recognised that a limitation of the instrument is its dependence on written responses, which could limit some young people's ability to record the ideas they were able to generate. To this end they were reassured that we were not going to look at their writing, spelling or grammar – only their ideas.

The Thinking Creatively with Words workbook contains 6 tasks, each of which is completed within a timed framework. The scoring of the tests follows a manual based on statistical analysis of large samples with clear guidance on what does not count as an original response and a wide range of categories of ideas which can be generated by participants. Standardised scores are provided relevant to different age groups.

In all groups (both AAC and the comparator groups), a number of pupils did not complete the second booklet, leaving some questions unanswered. The precise reasons for this would need to be investigated in greater detail and this has not been possible; they were therefore removed from the datasets. The following numbers of pupils completed the tasks on both occasions.

Table F2: Numbers completing the Creative Thinking Skills tasks at both time 1 and time 2

	AAC pupils			non-AAC pupils		
	Total	Boys	Girls	Total	Boys	Girls
P5	13	7	6	12	5	7
P7	11	4	7	8	6	2
S1	13	10	3	15	7	8
Total	37	21	16	35	18	17

As stated above, the purpose of study is not to directly compare AAC pupils with non-AAC pupils, but to see, at the end of the intervention, if the AAC pupils have increased their creative thinking abilities as defined by the Torrance instruments, and if, is it to a greater extent than non-AAC pupils.

The results are based on standardised scores derived from the large samples of different age groups as mentioned above. Standardised scores are used as a similar, but different, set of tasks was used for the second administration of the test (workbook A and workbook B). Each task is open-ended and therefore there is no total score to be attained. Each of the 3 strands on which the activities are based and the test average scores are reported.

Table F3: P5 scores on creative thinking skills tasks at time 1 and time 2

	AAC group (13)		Non-AAC group (12)	
	Time 1	Time 2	Time 1	Time 2
	m (sd)	m (sd)	m (sd)	m (sd)
Fluency	86 (16.2)	88 (20.6)	85 (11.5)	79 (13.6)
Flexibility	83 (12.3)	86 (20.1)	83 (10.7)	76 (22.8)
Originality	99 (14.3)	94 (18.1)	99 (11.9)	87 (10.6)
Average score	89 (14.2)	89 (19.4)	87 (10.6)	82 (12.9)

The P5 AAC group and the comparator group had similar overall scores on both the initial and final tasks; the non-AAC group had a slightly lower score at time 2, though not at a statistically significant level (t-test; Wilcoxon signed ranks) and this change may therefore have occurred by chance. For both groups, their performance between time 1 and time 2 remains largely unchanged.

Table F4: P7 scores on creative thinking skills tasks at time 1 and time 2

	AAC group (12)		Non-AAC group (8)	
	Time 1	Time 2	Time 1	Time 2
	m (sd)	m (sd)	m (sd)	m (sd)
Fluency	63 (21.6)	72 (15.9)	80 (18.2)	90 (14.1)
Flexibility	61 (13.8)	74 (16.4)	79 (17.5)	94 (14.7)
Originality	77 (20.8)	83 (14.0)	96 (14.6)	99 (13.5)
Average score	67 (17.7)	76 (15.4)	85 (16.1)	94 (14.0)

The P7 AAC group had lower scores than the comparator group on both the initial tasks and the final tasks; however, both AAC and non-AAC groups increased their scores between time 1 and time 2, although the differences in the scores were not statistically significant (t-test/Wilcoxon signed ranks). It does not appear, therefore, that the intervention with the artist led to any notable increase in the P7 groups creative thinking skills.

Table F5: S1 scores on creative thinking skills tasks at time 1 and time 2

	AAC group		Non-AAC group	
	Time 1	Time 2	Time 1	Time 2
	m (sd)	m (sd)	m (sd)	m (sd)
Fluency	73 (20.6)	65 (15.5)	92 (11.6)	86 (11.9)
Flexibility	71 (20.9)	68 (15.8)	98 (13.8)	93 (18.0)
Originality	84 (17.5)	77 (18.8)	93 (10.2)	94 (13.4)
Average score	76 (18.8)	70 (15.8)	94 (10.6)	90 (16.6)

The S1 AAC group had lower scores than the non-AAC group on both the initial tasks and the final tasks. Both AAC and non-AAC groups' scores fell between time 1 and time 2, but the differences were not statistically significant, suggesting that their performances were similar on both occasions.

The three stages were combined to investigate gender differences. While the girls in the AAC group obtained higher scores than the boys both times, there were no statistically significant differences in the change between time 1 and time 2 for any of the groups.

Table F6: Scores for all stages combined on creative thinking skills tasks - gender

	AAC group		Non-AAC group	
	Time 1	Time 2	Time 1	Time 2
	m (sd)	m (sd)	m (sd)	m (sd)
Boys	74 (17.4)	71 (14.0)	92 (12.9)	88 (15.1)
Girls	82 (20.7)	88 (19.9)	88 (11.7)	88 (15.8)

The three AAC groups were involved with different art forms and different subjects over different lengths of time. Their experiences do not appear to have made notable difference to their creative thinking abilities as measured by the Torrance Test of Creative Thinking skills. One possible explanation that is supported by the data gathered during ICL observations is that there was insufficient time in ICLs for pupils to practise a range of creative thinking skills. Typically, in ICLs there was time only for pupils to respond to questions posed by teacher and artist, whereas in common with other such instruments, the TTCT measures also the ability to generate relevant questions and to speculate about consequences and other forms of thinking embedded in particular art forms. As noted elsewhere in the report, teachers did not have time outside the ICL to develop pupils' thinking about an art form being studied because they had to address curricular demands.

Most research (eg see Livingston et al 2004) suggests that any form of thinking has to be practised quite intensively before a measurable impact occurs, and the nature of the thinking needs to be made explicit. In the more successful initiatives (eg see McGuinness, 2005) forms of thinking embedded in an art form or academic subject have been identified at a planning stage and the different forms have been systematically and explicitly introduced and practised in each lesson. Taxonomies of thinking (eg see Moseley et al 2004) provide a landscape of thinking processes that can be developed. While other aspects of the evaluation indicate that pupils have benefited, it became clear that the overall planning of the project had not incorporated messages in the research literature on developing thinking.

3. Self-concept

Data relating to pupils' self-esteem were gathered through a standardised instrument known as the Marsh Self Description Questionnaire (SDQ). The instrument includes scales that assess self-concept in relation to maths, verbal and reading skills, social interaction, attitudes to school and self. (See end of this section for further explanation of the SDQ.)

Only pupils who had completed the SDQ both times were included in the analysis. Differences within the groups over time were investigated (using paired samples t-test and for P7, where the comparator group was small, the Wilcoxon signed ranks test).

- No differences were found in either of the P5 groups over time, which means that pupils rated themselves similarly when in P5 and towards the end of P6.
- No differences were found in either of the P7 groups over time, which means that pupils rated themselves similarly when in P7 and near the beginning of S1.
- The S1 AAC group were found to have rated themselves more positively with respect to attitude to school and attitude to self (see table F7), while the non-AAC group did not change their ratings on self-perceptions.

Table F7: Comparison between time 1 and time 2 ratings on attitude scales for S1 AAC and non AAC groups

(differences in ratings on general school and general self scales
min score = 10; max score = 60)

	AAC group (18)		Non-AAC group (17)	
	Time 1	Time 2	Time 1	Time 2
	m (sd)	m (sd)	m (sd)	m (sd)
Attitude to school	35.1 (11.49)	42.3 (10.53) ¹	46.4 (12.34)	45.7 (8.14)
Attitude to self	38.9 (13.96)	47.2 (11.96) ²	48.7 (12.65)	49.7 (8.82)

¹ t = 2.85 p = 0.014;

² t = 3.57 p = 0.004

Thus, while the S1 comparator group responses had remained stable, some within the AAC group had become more positive.

The results were investigated for gender differences. The P5 were not combined with the other stages as for TTCT, as they had a slightly different scoring and maximum score. No differences emerged in attitudes in either the AAC or the comparator P5 group – indeed on some elements the mean scores before and after were exactly the same. The P7 and S1 groups were taken together. One statistically significant result emerged: the girls in the AAC group increased their self-ratings on attitude to self between time 1 and time 2. Due to the small number in this category (10 girls), the data were analysed using Wilcoxon test. Six girls rated themselves more positively at the later stage; ($z = 1.96$ $p = 0.05$; time 1 $ms = 45.1$; time 2 $ms = 50.3$).

AAC could be a contributing factor to these changes, although other school support measures cannot be discounted.

4. General interest questionnaire

Pupils were asked to indicate if they took part in certain activities as hobbies out of school, or as part of after-school clubs. They were also asked how good they thought they were at doing certain activities. The lists in the questions included arts related activities, such as dancing, taking part in drama, playing an instrument and singing, making things as well as non-art related activities such as sports and working with computers. The purpose was to investigate if pupils who had experienced AAC were more likely than others to have taken up arts related activities, possibly through interest generated by having an artist in the classroom.

The question about after-schools clubs asked if they went to any after schools clubs, and, if so, to tick out of a range of possible activities which ones they went to. It is recognised that the pupils can only go to what is on offer in the schools for their particular age group. Only small numbers from the P7 and S1 groups participated in after-school clubs. However, the majority of children in the P5 class (both AAC and comparator groups) took part in after school clubs and for both groups, sports was the most frequently reported activity, though with more in both groups reporting it in P5 than in P6. Small numbers reported taking part in other activities but no meaningful conclusions could be drawn from the data with respect to change in activities between time 1 and time 2.

The numbers who completed questionnaires on both occasions are given in Table F1 above.

Hobbies and interests outside of school

The younger pupils were asked to indicate if they did or did not do certain activities as hobbies. The older pupils were asked how often they did certain activities on a scale from 'I don't do this' to 'I do this more than once a week'. For analysis these have been collapsed into 'don't do' and 'do'. The opportunity to take part in certain activities as hobbies may be limited by what is available within a community and also on family contexts which have not been explored.

For all 6 groups (ie P5, P7 and S1 AAC and P5, P7 and S1 comparator groups) the activities they were most likely to take part in, at the time of both surveys, were 'sports of any kind', 'listening to music' and 'working or playing on the computer'. Additionally the majority of the P5 pupils in both AAC and comparator groups reported 'collecting things' and 'making things'.

A more detailed inspection of 'arts' related activities, presented in table F8, focuses on pupils likely to be taking part in such activities at the time of both surveys and how many had taken up the activity in the interim period.

Table F8: Pupils' participation in arts related activities as a 'hobby'; change between time 1 and time 2 completion of questionnaires.

	AAC group		Comparator group	
	Did activity both times	Did not do before but did after	Did activity both times	Did not do before but did after
P5 groups	n = 16		n = 17	
Dance of any kind	6	3	4	6
Play musical instrument	6	3	5	7
Take part in drama	3	3	2	3
Making things*	10	0	17	0
P7 groups	n=17		n = 8	
Dance of any kind	0	1	1	0
Play musical instrument	2	2	3	0
Take part in drama	0	5	2	3
Making things*	5	4	2	3
				<i>Contd</i>
S1 groups	n = 18		n = 17	
Dance of any kind	3	1	3	3
Play musical instrument	6	0	8	0
Take part in drama	4	3	7	2
Making things*	5	4	9	1

* examples given were models, pictures, sculpture, art, knitting, sewing

These figures suggest that there were no major change in pupils' involvement in arts activities out of school, or that the AAC groups were more likely than the comparator group to take up new interests.

How good the pupils thought they were at certain activities

The pupils were asked to indicate how good they thought they were at doing things on a scale from 'really good' to 'no good at all' or 'don't know'. They were asked to comment on how good they thought they were at:

- playing at sports
- painting and drawing,
- making things (arts and crafts)
- doing drama
- playing a musical instrument
- writing stories and poems
- dancing
- being creative and using my imagination.

The results of the time 1 and time 2 questionnaires were compared using the Wilcoxon signed ranks test, which records the number of same responses, those which have moved in a negative direction and those which have moved in a positive direction.

Across all groups some individuals rated themselves the same, some rated themselves more positively and some less positively on all items. However, only 3 statistically significant differences emerged:

- Both the P5 AAC and comparator groups were less positive about how good they were at drama, though it was only for the comparator group that this change was statistically significant, with 10 out of 15 being more negative. [AAC: time 1 ms = 2.44; time 2 ms = 1.75. Comparator: time 1 ms = 2.27; time 2 ms = 1.33 (t-test: $t = 3.29$, $p = 0.005$; Wilcoxon test: $z = 2.65$, $p = 0.008$)].
- The P7 AAC group were less positive about how good they were at being creative and using their imaginations, with half rating themselves more negatively [AAC time 1 ms 3.07; time 2 ms = 2.27 (Wilcoxon signed ranks test: $z = 2.101$, $p=0.03$)].
- The S1 AAC group were less positive about how good they were at making things (Arts and crafts), with 7 out of 17 being more negative [AAC time1 ms =2.71; time 2 ms = 2.35 (t-test: $t = 2.40$, $p = 0.03$; Wilcoxon test: $z = 2.21$, $p = 0.03$)].

For the P5 group of pupils, who came from different schools but in the same associated schools group, it may be that experiences other than AAC were influencing them. Drama had not featured as part of after-schools clubs, but some did report taking part in drama as an interest/hobby. Where there are differences over time, it may be that the pupils have become more aware of what it means to be creative and therefore are less confident in rating themselves, but validation of such assumptions would require further investigation.

5. Summary

Groups of AAC pupils were selected for more in-depth study with respect to the effects of AAC on creative thinking skills, self-concept and attitude and general interest in arts-related activities. This was carried out by using a repeated measures design, with completion of instruments near the beginning of the pupils' engagement in AAC and after or near the end of their involvement. As other influences might affect pupil progress, comparator groups were identified to take part. The purpose was not to directly compare the performance of the AAC and comparator groups but to investigate if those involved in AAC were likely to make greater progress than those who were not. The groups included in the study were P5 to P6; P7 to S1 and S1 to S2.

Standard instruments for creative thinking skills – the Torrance Test of Creative Thinking (TTCT) – and for attitudes – the Self-Description Questionnaire (SDQ) – were used; a general interest questionnaire was devised by the evaluation team.

The main findings were:

- There were no statistically significant differences in the scores obtained on the TTCT for any of the AAC or comparator groups; no differences were found between boys and girls. The three AAC groups were involved with different art forms and different subjects over different lengths of time. Their experiences do not appear to have made a notable difference to their creative thinking abilities as measured by the Torrance Test of Creative Thinking skills. Other evaluation data suggests that there was insufficient time in ICLs for pupils to practise a range of creative thinking skills, such as generating questions and alternatives, which are typical constructs of TTCT and similar instruments.
- There were no differences in P5 or P7 pupils' ratings of their attitude to school or to self-esteem between the two times of the administration of the questionnaire in either the AAC or the comparator groups. The AAC pupils who were in S1 at the outset of the programme recorded significantly more positive responses for attitude to school and self-esteem at time 2, while the comparator group remained the same. The girls in the P7 and S1 groups combined recorded a more positive attitude to self at time 2. AAC could be a contributing factor to this change, although other school support measures cannot be discounted.
- The results from the questions about hobbies and general interests suggest that there were no major change in pupils' involvement in arts activities out of school, or that the AAC groups were more likely than the comparator group to take up new arts interests.
- The P7 pupils and the S1 pupils both rated themselves more negatively on how good they thought they were at different creative activities, while the comparator groups did not show similar change. The P7s were less positive about how good they were at 'being creative and using their imaginations' and the S1s were less positive about how good they were at 'making things (arts and crafts)'. Such changes may not be related to AAC but other school activities; one possible explanation is that the pupils have become more aware of what it means to be creative and therefore are less confident in rating themselves, but such assumptions would require further investigation.

6. Information about the Self-Description Questionnaire (SDQ-I and SDQ-II)

The Self-Description Questionnaire is an instrument developed to measure self-concept in a number of academic and non-academic areas, ie physical ability, physical appearance, peer relations, parent relations, reading, mathematics, general school and general self. The instrument has been shown to be well-validated and reliable through the work of Marsh and others (Marsh H, 1990) and is used in studies investigating pupils' self-esteem, attitudes towards school and school work, and their self-concept in relation to maths and reading.

SDQ-I: The SDQ-I has been developed for use with younger children or where simplicity of language is important.

The different scales of the SDQ represent the multi-dimensional nature of self-concept and Marsh (p105) indicates that studies have shown that the dimensions most likely to be influenced, in any given intervention, are those specifically relevant to the goals of the programme. Factor analysis has supported the stability of the scales and that they can be safely used as separate scales.

The instrument is therefore considered appropriate for use in relation to Arts Across the Curriculum, as the claims for such an intervention include improved motivation, more positive attitudes to school and learning, more positive relationships with other pupils, enhanced self-esteem and raised expectations. To shorten the questionnaire and to maintain relevance to the current study the physical ability, physical appearance and parent relations were omitted as none of these areas was likely to be affected by the intervention of an arts infused curriculum.

In completing the questionnaire children are asked to respond to simple sentences, for example, 'I am good at mathematics', 'I make friends easily' with one of 5 responses: false, mostly false, sometimes false/sometimes true, mostly true, true. The questionnaire is administered by a researcher or the class teacher who reads it through item by item, allowing the children to respond at an equal pace.

SDQ-II: The SDQ-II contains the 8 scales from SDQ-I, although the peer relations scale has been divided into same-sex and opposite-sex relation scales. It includes two additional scales: emotional stability and honesty/trustworthiness. As with the SDQ-I, the scales related to physical ability, physical appearance and parental relations were omitted for our study as these were unlikely to be influenced by Arts Across the Curriculum. Working with the principles of an arts-infused curriculum which encourage positive discussion and relationships could potentially influence self-concepts with respect to emotional stability and trust, as well as self-perceptions related to school and self-esteem and specific academic activities. The reading score of SDQ-I is labelled 'verbal score' in SDQ-II but specifically addresses reading and expression in writing in English.

In completing the questionnaire, students are asked to respond to short statements; for example, 'mathematics is one of my best subjects', 'I make friends easily with members of my own sex', 'when I make a promise I keep it'. There are also negative statements (which are reverse scored) for example, 'I sometimes cheat', 'I have trouble expressing myself when I try to write something'. They select one of 6 responses: false, mostly false, more false than true, more true than false, mostly true, or true.

References

Livingston K, Soden R and Kirkwood M (2004) *Post-16 Pedagogy and thinking skills: an evaluation* Guildford: Learning and Skills Research Centre (LSRC)

Marsh, Herbert W (1990) *The Self-Description Questionnaire*. Macarthur: University of Western Sydney

McGuinness C (2005) Teaching thinking: theory and practice, *Pedagogy: Learning for Teaching: British Journal of Educational Psychology: Special Monograph Series II 3*

Moseley D and others (2004) *Thinking skills frameworks for post-16 learners* Guildford: Learning and Skills Research Centre (LSRC)

Evaluation of Arts Across the Curriculum

DVD of artists' video diaries

Available on request from the Department of Sport, Culture and the Arts,
Jordanhill Campus, University of Strathclyde or www.strath.ac.uk/degas

Evaluation of Arts Across the Curriculum

Evaluation instruments

Available as separate volume