

Employing Formative Assessment in Secondary School

Abstract

The Assessment is for Learning programme has been implemented by Learning and Teaching Scotland over recent years and there will be further developments throughout the curriculum up until and beyond 2007. This paper re-examines the techniques of formative assessment that can progress pupil learning and appeals to teachers to review their practice against the background of the research. The purpose of the paper is to implore practitioners in all parts of the U.K. to embark upon a more systematic review of their teaching with regard to formative assessment. In light of the research nationwide practitioners now have a plethora of effective techniques that can be embedded within all aspects of teaching in order to enhance their practice. Teachers may now wish to re-examine their own teaching with a view to exploiting the various strategies and techniques to benefit their pupils.

Keywords: learning objectives, target setting, self-assessment, peer-assessment.

Overview

There are various techniques in formative assessment that can enhance teaching and learning by providing a more focused application for pupils. As with many aspects of the learning process, target setting, which was previously the domain of the teacher, has moved in to the realm of pupil responsibility. The benefits of sharing the learning objectives with pupils are now becoming widely known as opposed to former practice, which took pupils on an unknown journey. Glover and Thomas (1999) emphasise the involvement of pupils in learning, indeed advocating ‘devolving power to the learners’ without which, they claim, interactive formative assessment is not possible. Similarly, introducing lessons in a particular way to help pupils and teachers share their understanding of learning objectives and ensure clarity of purpose has proven to be more effective. Again, some teachers are aware of the various roles that they can adopt to aid their pupils’ learning in a more proactive way than in the past, and so are more focused on pupils’ *learning* as opposed to *their own teaching*. That is, the focus is more on the changes taking place in pupils’ minds as opposed to the effectiveness of the teacher’s performance. Questioning techniques are being reviewed and more sensitivity and precision is being applied to assessment in all its forms. Lesson endings, like beginnings, are more structured while the recording of pupil progress is developing to facilitate more rigorous monitoring of individual pupil progress. What follows is a more detailed analysis of each of these areas with a view to assisting practitioners to focus on areas for development in their own practice.

Target-setting

This section explores the advantages of pupils setting their own targets and attempting to overtake such targets proactively; this strategy could relate to an individual lesson or to a longer period of learning. In the past target-setting has been the prerogative of the teacher. The pupil was not considered sufficiently competent to set appropriate targets or to adopt a metacognitive approach to learning. However, learning is clearly more effective when pupils take more responsibility for the management and the overtaking of their targets.

(Schunk 1996)

This sense of responsibility is developed by the teacher creating a climate of reciprocal trust and respect in the classroom so that pupils can develop their own learning in a safe environment. Benefits are to be gained from teachers adopting the role of the facilitator in what Vygotsky refers to as the 'zone of proximal development'. This is defined as

‘the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.’ (Vygotsky 1978 P202)

In the latter pupils are more likely to be able to take the next step and learn actively by making the connections between prior learning and the next phase. Initially this would take place with teacher support, which would lessen in time and lead to increasing

autonomy lying with the pupil. This should also result in more opportunity for sustainable learning for those pupils. For this to be effective teachers need to build an intimate and detailed knowledge of their pupils' thinking and assist them, with fairly specific advice and scaffolding, in achieving the next stage. It also requires teachers to convey a construct of quality work with pupils. Sadler (1989) states that with exemplification and support, pupils' ideas of quality approach those of the teacher; this is what he refers to as 'guild knowledge' (P119-144). This construct knowledge is clearly a pre-requisite for pupils taking responsibility for their own learning and for setting their own targets since success is only possible if the end results are clearly delineated. In this context learning is advanced to a greater extent since not only is the learner's conceptual awareness raised but he/she also develops an increasing awareness of his/her own metacognition.

Therefore, self-assessment and meaningful learning are inextricably linked. These shifts in awareness also help pupils to become more focused on the purpose(s) of the activity, which consequently enhances motivation in addition to learning. With such insight and engagement pupils become more proficient in monitoring their work continuously during production and again developing sustainable learning and self-assessment skills. They develop a repertoire of approaches such as editing and self-evaluating in addition to that of setting their own target(s) since their needs become apparent as part of the procedure. So pupils' increasing awareness of their developing skills, combined with an enhanced awareness of their goal leads to an ability to determine their priorities for development and ultimately to more focused learning.

Target setting is proving very beneficial in Stewarton Academy (East Ayrshire) where pupils in the English department set personal targets at the beginning of term on skills checklists. These are specially designed A4 sheets of paper that list the various skills in the four modes of Reading, Writing, Listening and Talking. Pupils are directed by the teacher to select a few of these on which to focus over the following weeks. They tick the “target” boxes at the beginning of the term and are reminded to check back on the targets ticked from time to time throughout the term. At the end of term pupils are directed to reconsider the targets and either to tick the “target achieved” box or to consider carrying their target forward to the next term, if necessary. More able pupils quickly become adept at setting, focusing on and ultimately achieving their targets. The less able require more supervision from their teachers who need to offer sensitive direction. Copies of the Target Setting Sheets are kept in pupils’ folders to facilitate the process of learners checking on their own progress regularly or at the teacher’s direction at specific points throughout the term. Teachers need to encourage pupils to focus on a fairly small number of targets at any one time and negotiate with the reluctant and the over-ambitious pupils.

Sharing the Learning Objectives

This section describes the benefits of teachers and pupils being clear about the learning intentions. If this is achieved, then pupils are more focused on their goal and are consequently more likely to achieve it. In Kenmay Primary School (Aberdeenshire) lessons all start with a discussion of the learning objectives and teachers have noticed pupils’ increased focus on their learning and pupils are also using the word “learning” more regularly which appears to indicate a concept shift.

Pupil focus and achievement can also be enhanced by the act of pupils visualising their own success. Pupils are thus *prepared* to succeed; in fact, they can ‘see’ a mental image of what the success looks like. Moreover, there is evidence to suggest that the learning objectives need to be well expressed if pupils are to comprehend fully what they are expected to learn. (Sadler 1989) Again, it would appear that pupils more successfully achieve the learning objectives if they are expressed in a concrete way and also when the teacher models examples. Words such as ‘thinking’, ‘knowing’, ‘understanding’ etc are helpful for pupils because they link directly to activity in which pupils are expected to engage in the specific task. It appears to be less helpful to express the LOs as activities e.g. ‘You are going to find interesting words in the passage’ or ‘We are going to be doing close reading today’. The former wording of LOs tends to focus more on the activity itself rather than the *purpose* for learning, which is more likely to assist pupils in achieving their goals.

Structuring Lesson Introductions

The way in which a lesson introduction is presented to pupils can also influence the success of the learning. One effective lesson introduction format is to begin with an outline of the topic or unit of work as a way of providing the overview and then follow with the stimulus, if appropriate. Thereafter, the LOs are introduced, discussed and clarified. A clear explanation of the activity follows and then the teacher models or demonstrates. Following this, it is important that the teacher reassures the pupils that their task is similar to the practice or model. Once pupils have begun the task is a good time to

stop and teach the criteria for success. This strategy enables pupils to engage with the task and its demands before encountering what is required for optimum success. This suggests that only once a basic understanding of what is involved in the completion of the task has been established are pupils able to receive ideas about how to maximise their achievement. It is important at this stage for the teacher to relate the purpose of the task to wider learning in the school and in the world at large as this again will help to increase pupil motivation. Here again pupils can benefit from being privy to the metacognition process and if they are taught how motivation impacts on learning success, they are more likely to apply themselves to the best of their ability.

Auchinleck Academy (East Ayrshire) use the “Walt” and “Wilf” strategies of sharing within the pupils’ focus on learning throughout the course of a lesson. Learning objectives are shared, discussed or negotiated at the outset and they remain visible throughout the lesson on flip-charts so that pupils can check their progress against them as they work. Teachers have noticed an improvement in pupils overtaking the objectives by this method as awareness has been heightened and it has become a class activity to focus on them. A similar process is used in Tynecastle High (Edinburgh City) where an advanced organiser is presented to learners at the beginning of each lesson. This procedure assists some learners who are aided by the knowledge of the “big picture” of the learning; they are helped to see what activities they will be expected to undertake in the course of the lesson and seem to consciously or subconsciously prepare for them. In addition, learning outcomes are also shared; stimuli and success criteria are discussed and negotiated as appropriate with learners at the beginning of each lesson. Once this approach becomes

routine learners know what to expect and they become more efficient at focusing on the features of the learning that are crucial; indeed they appear to be learning in a much more proactive way and are genuinely involved in their own learning.

The Learning

This part considers ways in which the teacher can be ‘freed up’ to devote more lesson time to *teaching* in order to advance pupil learning to the maximum. The assessment of pupils’ work has undertaken a paradigm shift in recent years in terms of its nature and purpose. As a result of changes in the curricula, assessment is less about labelling and more about determining the exact stage of pupils’ development and assisting them to progress. There is a desire for an increasing focus on formative assessment in every aspect of learning and teaching from written work to everyday classroom interaction.

Teachers can be more aware of opportunities to *teach* whether in the expository, activity or feedback phases, indeed teaching is ‘a constant regulation of learning’. (Wiliam 2002 P59) Teachers are clearly more effective if they address pupils’ individual needs by making it their business to know at what stage of development each pupil is and how to assist them to move to the next stage.

Teachers are aware of the need to express clarity about purpose and audience, and of the importance of deconstructing exemplars in order to analyse specific features in addition to explicitly teaching the skills involved. As already stated, at each stage of the learning teachers are becoming more aware of the need to engage pupils in metacognitive thinking. The more autonomy pupils are helped to develop, the more effective, the more

motivated and the more self-reliant they become. Deakin Crick et al (2002) advocate that pupils are taught a language for metacognition if they are to be strategically aware of their learning. The crucial points, then, are that teachers need to have detailed knowledge of the strengths and the development needs of the learners in order to assist pupils to move to the next stage of their development in addition to equipping pupils with a language with which to analyse their own learning.

It could be said that there is a cultural shift involved for the entire learning community in accepting the fact that learning should depend less on the right answer and more on working with the response offered in a way that takes learning forward in a supportive way. (Black and Wiliam 1998) Pupils need to see that they are personally valued if they are going to volunteer potentially ‘wrong’ answers yet have them received positively. This necessitates the climate of mutual respect and trust referred to earlier. Such a climate encourages divergent thinking and activities are more likely to involve thinking skills and problem solving tasks while the range of teaching methods are likely to provide pupils with more responsibility for how they learn. In fact, teachers need to ‘reconstruct the teaching contract’ (Perrenoud 1991 P79-101) if formative assessment is going to succeed in breaking the established classroom habits and focus on developing new, more effective ways of working. There is, in this climate, a more collaborative approach to learning with an emphasis on analysis and discussion. The essential implication for lesson planning, therefore, is one that moves thinking from ‘What am I going to teach and what are pupils going to do?’ to ‘How am I going to teach this and what are the pupils going to learn?’ (Black et al 2002 P19) Additionally, teachers need to plan assessment so that they know

how and when the assessment will occur just in the same way that they do lesson content. In the lesson itself, it means that the traditional roles of teachers and learners change from expert and novice into a learning community in which everyone is learning and everyone is valued. Pupil perception about the purpose of the assessment is another aspect which teachers need to consider. If pupils are taught that tasks are about learning rather than performance or assessment this also has an impact on the effectiveness of the learning. (Pollard et al 2000)

A practical issue for teachers is, as always, time management. The teacher needs to engage with a number of pupils in the course of the lesson while avoiding devoting too much time on a few. Managing the teaching so that pupils are involved in discourse with the teacher on a one-to-one basis from time to time is crucial. Moreover, these interactions should be meaningful and productive. A delicate balance can be found in which the teacher can genuinely help pupils to progress their learning and witness real progress without spending more time than is necessary. Again, this management requires planning and record keeping ensuring that all pupils are helped in such a strategic way over the course of a term or session. Similarly, careful time management is required in a lesson in order to incorporate questioning, direct feedback, redirect the learning, facilitate self-/peer-assessment or provide exemplification at the appropriate times.

A related issue is that if pupils are to gain fully from the teacher's formative assessment, then they need to be helped to become more proactive in making progress. Pupils can be encouraged to review their own previous, similar work before embarking on their work,

and indeed forming an ongoing process of self-evaluation. The feedback pupils obtain from their own previous, similar work is important with regard to their belief in being able to learn. (Brookhart and DeVoge, 1999). Such a process is employed in Battlefield Primary School (Glasgow City) where teachers write carefully worded questions on pupils' work to help them to think more about a particular issue and to work at producing an answer to the question. Pupils are directed to engage in this activity before beginning follow-up or new work, which assists with continuity of learning and, indeed, maximises the learning opportunity. Progress in learning is all the more likely to take place in such an ethos where teachers are demonstrating a genuine commitment to assisting pupils' learning and make class time available for pupils to follow up and take their thinking further. This process has the added benefit of enhancing pupils' self-esteem, so crucial to learning, and it simultaneously frees up teacher time for engaging with individuals requiring support with the process.

There also need to be opportunities for pupils to express their understanding in any lesson; they need to show that they can apply, or at least express their learning since we know that this is how new material is assimilated. As Smith says the teacher needs to provide '...opportunities in an environment which is safe for students to "show they know"'. (Smith. A, 1996 P97)

There is also the question of generic learning or pupils' acquisition of transferable skills. These supersede the particular activity in which pupils are engaged and can be applied to other activities and forms of learning. Clearly, this is, again, a more productive form of

learning that produces important life skills and lessons that incorporate such learning are inevitably more beneficial.

Certain lessons should also enable pupils to achieve their own targets set either at the beginning of the lesson or at the beginning of the term or unit of work. Learners should be increasingly autonomous in deciding on the next step to progress their learning and teachers need to recognise each pupil's stage and support them in this decision-making. In line with earlier statements of the efficacy of developing pupil autonomy, it is beneficial that pupils should have a say in who helps them if and when they require it. This reinforces the idea of pupil autonomy in progressing learning.

Formative assessment, by its very nature, implies that the teacher's ongoing assessment of pupils and their progress are central to real learning. Consequently, teaching approaches need to vary in order to take account of different learning styles. 'If you are self-consciously auditing your teaching to ensure that there is a balance then you are beginning to access your students in their preferred learning style.' (Smith. A, P46) Clearly then, there are benefits from teachers planning as wide a variety of strategies as possible for inclusion in their teaching. If formative assessment is about assisting individuals to progress then adapting teaching styles and learning situations to suit individual learners is crucial and means that all learners are more likely to have their needs met more often.

Quality questions

Over time there is a danger of complacency when it comes to questioning. With all the demands of curricular innovation, there is less and less time for teachers to review the basics yet it is important for the quality of learning that every aspect of lessons is planned, including time for questioning. Practitioners need to use questions that go beyond recall in order to promote, challenge or broaden the range of pupil experience. We need to be aware that questioning is one of our most effective in *creating* learning rather than simply *testing* learning. Wrong answers are not only useful, but are *essential* to promote learning and broaden the range of pupil experience. Practitioners need to keep checking the wording of questions to ensure clarity and to attempt to tailor questions to suit the individual's stage of development.

This kind of planned questioning has improved the ethos and the behaviour of children at Tullynessle School (Aberdeenshire) for example. The pupils are encouraged to ask questions of the teacher and each other, as a regular feature of lessons, in addition to being helped to think more about the responses to the questions. This tends to slow down the pace of lessons resulting in less coverage of the curriculum and more quality in the learning, the ultimate goal of effective teachers. The teachers in Tullynessle see themselves more as facilitating pupils' learning rather than being the "font of all knowledge", which helps to ensure more active learning in the classroom. Given more responsibility for their learning, pupils will take more and learning will be more likely to be deeper and more meaningful. Results have included an improvement in pupils' focus on learning and in the teachers' knowledge of pupils' stages of learning.

Again, the practical issues include the choice of whether learners are expected to raise their hands with a response or whether the teacher instead selects an individual, taking account of attainment and needs. It is important to have 'wait time' (Black et al 2002 P7) so called because learners require thinking time between the question and the response. This technique also helps to create the right climate for learning; one in which everyone is expected to have an answer and to contribute and where all answers are classed as valuable to the learning experience. To provide support to pupils in responding to questions, pairs may consult before answering, thus relieving the pressure on individuals. Group questioning enables the teacher to set more or less challenging questions to ability groups who can confer before responding. As with all monitoring of learning, the responses to questions can helpfully inform future planning and teaching.

Another strategy is to encourage pupils to formulate their own questions and then ask each other since the act of formulating questions encourages deeper thinking about the topic. Foos et al (1994) and King (1992) found that pupils preparing for exams in this way out-performed comparable groups who prepared in conventional ways. Perhaps this is partly because the fear of failure is removed and pupils are encouraged to be open and honest and focus on self-improvement rather than praise, marks or right answers. This strategy also involves a larger number of pupils in active learning than the more traditional method of questioning where the teacher asks all the questions and where learning is passive for the majority of pupils. A small, practical technique is to have

pupils actively involved by inviting them to write the answer on the board, rearrange cards or suchlike, which is also a further support to some kinaesthetic learners.

The Importance of Feedback by the Teacher

Assessment, as indicated above, is implicit in the learning process and should involve pupils meaningfully, leading to developments in their learning. The ongoing feedback that is central to meaningful assessment in its multiplicity of forms should help learners to perceive the gap between current and desired knowledge and ability and should also help to identify the action necessary to close the gap. This is, indeed, the scenario in the classrooms of many committed practitioners.

A climate that encourages an exploration of ideas rather than one that judges responses is far more likely to promote learning. In creating this climate, the teacher needs to take account of the impact of feedback upon learners. Insensitive feedback can damage learners' attitude to work and motivation to learn in addition to their self-confidence, self-esteem and self-efficacy. It must, at this stage, be remembered how crucial motivation and self-esteem are to learning so ultimately feedback that emphasises the positive will be more effective and productive than that which is less so. According to Cowie (2004), in any one activity pupils are working towards three goals simultaneously. These are: completion of work tasks, effective learning and social acceptance. When these conflict pupils tend to prioritise the social acceptance goal, which means that many will reduce their contributions for fear of damage to their reputation and their feelings. The way in which the teacher deals with pupil contributions is, therefore, crucial. Clearly, good

formative assessment is by its very nature ipsative rather than normative; it should promote real learning through building self-esteem.

Teachers, as professionals, are now aware that the power of praise is immense if it is specific, credible and sincere. Therefore the amount of positive feedback or praise needs to be greater than the feedback on development needs. Pupils are limited in the amount of feedback that they can take on board so it makes sense to provide about twice the number of strengths to the number of development needs. These are most effective if they focus on the most important learning goals. Again, the wording is vitally important. After conveying the strengths, the teacher needs to be aware of the connective employed before conveying the development need. If the teacher can use 'and' or better still 'now' then the overall impression for the learner is a far more positive one. Formative feedback implies understanding the causes of difficulty and it is the teacher's professional duty to attempt to provide pupils with ways of circumventing these difficulties. The feedback itself will be clear, specific and attainable if learners are going to understand it and be able to utilise it.

The "two stars and a wish" strategy for positive and constructive feedback is fully embedded and used to good effect in Battlefield Primary School (Glasgow City).

Teachers write two positive comments that are designed to focus on those aspects that have successfully achieved the criteria and celebrate that fact. This is proving to be motivational for pupils who then strive for further success. The comment on the development need is written sensitively yet specifically focuses on how the learner can

work to overtake the need. With this process, pupils appear to be more focused on their strengths and development needs and take a more active role in their learning. At the same time the number of strengths always outweighs the number of development needs, ensuring that the child's self-esteem remains intact. Another successful strategy in feeding back to pupils is that teachers are indicating improvement on a pupil's previous (similar) work with a plus sign; no improvement with an equals sign and any regression with a minus. This has allowed for the abolition of grades and marks, so detrimental to self-esteem, resulting in each child measuring his/her performance against the last rather than against other pupils' or against a bank of grades. This is clearly a more healthy way of assisting pupils to focus on their own growth in learning and to develop an ability to monitor their own progress for its own sake.

Practicalities of Assessment

Pupils respond better to being assessed when they have been consulted about some of the practical aspects and given some choices in how assessment is administered. Indeed, the actual process of assessment, depending on how it is presented, can even raise pupils' self-esteem and enhance learning. Pupil knowledge that assessment is ongoing including routine oral activities helps pupils to perceive that their learning is being driven at all times. Also, knowing in advance what activities and tasks will be assessed is beneficial for pupils since they cannot determine this intuitively from the multitude of activities in the various lessons. Art lessons in Tynecastle High School blend formative and summative assessment with pupils being given summative grades along with strengths and development needs comments, thus enabling pupils to have the information they so

often crave for assessing themselves against the grades allocated to exam work while also providing encouragement for successes achieved and offering advice about how to improve further. Aware of how important it is that pupils feel secure in order to be successful, teachers ensure that pupils know precisely what is being assessed in amongst the variety of activities, are clear on the success criteria and are fully informed about how the assessment will be administered. Teachers claim that pupil attainment has clearly improved as a result of these strategies. Having a mixture of formal and informal assessment is also beneficial because of the variation in pressure on pupils and because the informal assessments can serve as preparation for the more formal assessments.

Perhaps it is not surprising that pupils are encouraged and reassured by the teacher's reference to official documents prior to assessment as targets for learning since this is likely to lend validation and weight. Teachers indicating the purpose of the assessment and attempting to generate an interest in the subject or topic of the test, will find that pupils are more motivated and focused, which leads often to more successful outcomes. Assessments are also more likely to be successful if they cater for a range of learning styles just as in the lessons themselves. There are likely to be many benefits in employing a shared language of assessment criteria among all participants in the assessment process since this further promotes pupil ownership of their learning and a better awareness of exactly what is required. Prompt responses to pupils' work, marking it at the time or immediately afterwards is more effective and there are clear benefits in reducing routine marking to allow more focus on specifics. Similarly, there are advantages in reflecting on achievement to aid pupils' critical thinking and self-esteem.

Teachers may wish to avoid definitive judgements and issue comments without grades for, at least, the early stages of courses. Otherwise pupils tend to focus on the grade or level to the exclusion of all else and their learning potential is limited. The results of summative assessment can be used for some formative purposes. Maxwell (2004) talks of blurring the boundaries between summative and formative assessment and says that good summative assessment will provide feedback to assist learning although there are limitations in the application of such information.

Self/peer-assessment

This section describes the benefits of self- and peer-assessment that Sadler (1989) claims are ‘essential to learning’ (P119-144) and whose view is backed by the work of White and Frederiksen (1998). This is, in part, owing to the fact that pupils work at a cognitive level when self- or peer-assessing and also that self-esteem is raised by the fact that the teacher has entrusted the pupils to carry out such work effectively. Additionally, pupils are more amenable to accepting criticism from their peers than from their teachers or other adults who have power over them. However, pupils do require to be taught collaboration skills for this to be most effective.

Metacognitive discourse led by the teacher is a crucial follow-up to self- and peer assessment to ensure progress in learning. It also helps to motivate learners by increasing self-esteem since pupils are being put at the centre of their own learning. The teacher questioning pupils about what processes took place during the learning produces very positive outcomes in pupils’ achievement as it, too, raises awareness of metacognitive

processes. From time to time it is beneficial for teachers to work through examples illustrating their own thinking processes in task completion as, although time consuming, it has positive outcomes in terms of raising attainment. It also helps pupils to see that difficulty is a normal part of learning and that they should persevere.

In a Portuguese study conducted by Fontana and Fernandes in 1994, twenty-five mathematics teachers and 354 pupils aged 8-14 engaged in tests before and after a particular course. Both groups spent the same time and covered the same topics and both groups indicated signs of gain. However, the group who self-assessed achieved approximately twice that of the control group. This was perhaps owing to the fact that pupils were taught the LOs and the criteria, they were given a choice of tasks and they assessed their own learning outcomes. (James 1998)

Another benefit of the process of pupils assessing their own work prior to the teacher doing so means that learners themselves will improve the work and learn more by doing so. Additionally, the teacher's suggestions for improvement will be minimised thus enhancing pupil self-esteem. In order for this to work learners need to be fully aware of the meaning of the assessment criteria and or marks schemes. Learners require time in class to address these issues in the same way that they require time to deal with feedback about their work. The process works well in Pilrig Park School (Edinburgh City) where pupils use the success criteria to assess each other's work in class. Thereafter, homework tasks involve pupils in self-assessment and then a brief written report on the extent to which they agree with their peer's assessment of their work. This process, then, involves

self- and peer-assessment and develops pupil autonomy. An increase in pupil independence and self-esteem was noted by teachers as a result of these strategies again, perhaps, because of the increased motivation resulting from ownership of the learning. Where this was not quite so effective was with autistic children who were overly challenged by such a task. In such an instance the amount of challenge was counter-productive and resulted in damaging self-esteem. These pupils did, however, benefit from interacting in a group where they developed their social skills.

End of Lesson Review

Pupils need to be encouraged to express what they have learned at the end of a lesson to determine, first and foremost, that something has been learned. This can then be compared with the learning objectives set out at the beginning of the lesson. Pupils can then be asked to reflect on how successful their learning was and at what they still need to apply themselves. Again, there is a variety of methods of doing this such as pairs discussion, note making, written work, drawing, mind mapping, role-play, reporting to the class and so on. It is also beneficial to ask pupils how motivated they were and how much they think this contributed to their learning, as they will begin to realise from their experiences that motivation can have a significant impact. In Dalry Primary (Edinburgh) lessons end with a plenary in which pupils complete prompt cards about their learning in that lesson. They have to indicate the aspects of learning with which they are most pleased and the areas in which they require more support. This has proved effective in providing the right amount and type of support for pupils while also adding to the teachers' knowledge of their pupils.

Recording Progress

Record systems are extremely important if pupils' progress is to be monitored effectively yet they need to be manageable and avoid adding to teacher workload, if at all possible. It is possible to use one, two or three record sheets for each pupil depending on the number of areas requiring records. These need to be held by the teacher although it may well be desirable for pupils to have access to these from time to time. If pupils *can* have access then they can copy their strengths and development needs from the record to their own workbooks and therefore keep their own record of their progress. This again promotes the idea of the pupils' ownership of their own learning. Pupils could also be assisted in keeping records of how they have addressed their needs. (Black et al 2002) This would also negate the need for the teacher to write comments on the pupils' work in addition to the record sheet(s). Accurate recording is important, although the analysis of results and acting upon them is more so. Recording itself does little more than raise awareness of pupils' achievement. Results and formative assessment comments need to be monitored by teachers from time to time to assist pupils to make progress. Teachers need to be aware of where the pupil is in each aspect of his/her learning and be committed to helping each pupil to move forward. This is clearly an onerous task and has to be managed in sections with the teacher perhaps monitoring a small group of pupils at any one time.

An alternative method is one used by Ardnamurchan High (Highlands and Islands). Pupil attainment is monitored by a computer programme, which can highlight the names of the pupils who are evidently not achieving their potential. The Principal Teacher of English

pointed out that these results needed to be viewed with scepticism since the inflexibility of such a system is not appropriate in itself as a monitor of learners' progress. It needs to be combined with the teacher's professional judgement since pupil progress is clearly affected by a host of factors.

Conclusion

This paper asks that teachers reconsider their own practice in formative assessment, which is crucial to meaningful learning. Pupils who are encouraged and assisted to set their own targets for learning and who know and understand the learning objectives are far more likely to make progress in their learning and learn more effectively. If the teacher can structure lesson introductions to direct the learning and thereafter ensure that every opportunity is taken to assist individuals to progress then he/she is providing a far more effective learning environment. Questioning is a teacher skill that is developed through time and with experience, yet time can unfortunately create complacency so it is worth rethinking our questioning techniques and adding to our repertoire where possible. Assessment is a very sensitive business being so closely tied up with motivation and self-esteem. It is of paramount importance, therefore, that teachers are highly aware of the language used in their feedback to pupils and that they take opportunities to build self-esteem whenever possible. Self- and peer-assessment are also crucial to progress in learning because of the autonomy with which they provide learners. At the end of the lesson practitioners are more aware of the importance of reviewing the learning in a meaningful way rather than simply ending with a consolidation activity. Finally, if meaningful learning is to take place in the long-term, teachers require an efficient

recording system that allows them to monitor their pupils' strengths and needs in order to track and assist with their progress.

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