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Abstract
This paper considers the pedagogic challenges encountered in preschool settings which strive to provide high quality learning experiences across the curriculum for three- to five-year olds while also immersing them in a second language. In our effort to develop an empirically and theoretically informed foundation for the development of pedagogic practices in Gaelic-medium preschools in Scotland, we draw on literature from early years education and from early total immersion, particularly in relation to language revitalisation initiatives, and report the findings from our study of the everyday experiences of young learners in three Gaelic-medium playrooms. The paper concludes with a discussion of the challenges for early years practitioners charged with meeting the goals of both the early years curriculum and early language immersion. It proposes theoretical foundations from which a specific pedagogy and professional practice model for preschool immersion education can be developed, to ensure that these goals are integrated rather than in tension.

Geàrr-iomradh
Anns a’ phàipear seo, nithear sgrùdadh air mòr dùblain foghlaim ro-sgoile aig solaraichean a tha a’ feuchainn ri cothroman oideachais sàr-mhath a thabhann còmhla ri bogadh cânain. Bheir sinn sùil air feallsanachd foghlaim thràth agus lân-bogaidh thràth, gu h-àraid an luib
iomairtean ath-bheothachaidh cânain, ’s sinn ag iarraidh bunait beachdail a leasachadh a fhreagrais air sgoiltean-àraich meadhan Gàidhlig ann an Alba. Bheir sinn iomradh air cuid den fhiosrachadh a chruinnich sinn ann a bhith a’ rannsachadh beathannan làitheil luchd-ionnsachaidh òg ann an tri rumannan-cluiche Gàidhlig. Ann an co-dhùnadh, bruidhniadh sinn air mor dùblain luchd-obraich ro-sgoile, is iad a’ toirt an dá chuid amasan a’ churraicealam tràth-bhliadhnaichean agus amasan lùn-bogaidh tràth gu buil. Bidh bunait beachdail air a mholadh, gus fiosrachadh oideachail agus cleachdaidhean proifeiseanta a leasachadh airson foghlam bogaidh ro-sgoile, a’ dèanamh cinnteach nach bi na amasan a’ stri, ach a’ co-chòrdachd ri chèile.

**Key words:** preschool immersion education, preschool pedagogy, early total immersion, young children, language revitalisation, Scottish Gaelic

1. **Introduction**

This paper is based on case studies focusing on the learning experiences of three- to five-year olds in Gaelic-medium (GM) preschool education in Scotland. It considers the pedagogic challenges in these settings which are expected to offer children high quality learning experiences comparable to those of their peers in English-medium (EM) playrooms. This provision is offered in the context of a total immersion programme where the majority of children come from English-speaking homes and are new to Gaelic. Our purpose is to give an account of the evidence we gathered and to discuss the tensions and contradictions which surfaced in our empirical work.

Establishing and extending the supply of GM preschool educational provision is an important part of the Gaelic language revitalisation policy, endorsed by the Scottish Government and implemented by Bòrd na Gàidhlig, the statutory language planning agency
for Gaelic in Scotland. However, as May (2013) points out, translating language policy into effective pedagogy and practice is not straightforward. Our investigation of the everyday experiences of three- to five-year olds in GM preschool settings raised questions about the quality of the learning opportunities they encountered and the appropriateness of the pedagogic practices we observed. It also drew attention to what can be seen as conflicting expectations about effective support for learning in preschool immersion settings.

GM preschool provision is expected to offer young learners the same aspects of the curriculum as EM provision, to achieve the same goals and to provide opportunities to learn to understand and use the Gaelic language. It is clear (Education Scotland, n.d.a; O’Hanlon, Paterson & McLeod, 2012) that this provision is intended to constitute early total immersion as defined by Baker (2011, p. 239), i.e. that it starts in the infant or kindergarten stage, and that Gaelic, a new additional language for almost all the children concerned, is to be used 100% of the time. However, there has not yet been any specific pedagogic development or adaptations at the national or local level, and no training in preschool immersion practices is available for preschool practitioners. GM preschool aims to meet the ambitions for children’s educational outcomes expressed in the national curriculum for children aged 3–18 and contribute to the revitalisation of the Gaelic language. Our argument, based on the evidence gathered in three case study settings, is that these aims will only be achieved by developing practices which take account of the particular pedagogic needs of young children learning across the curriculum in a new language.

In this paper we report the findings from observations focusing on children’s experiences in three GM preschool settings over one school year, discuss the ways in which understandings about educative practices appropriate for the early years can be in tension with practices adopted to support language learning, and argue for the development of a distinctive preschool immersion education pedagogy. Although the linguistic and
sociopolitical context for this paper is specific to Scotland, the pedagogic tensions and contradictions identified in our research are likely to be relevant to other preschool programmes based on the principles of early total immersion while at the same time adopting a child-centred and experiential approach to learning.

We begin by describing the linguistic and educational contexts for the research and then outline our study methods before presenting the evidence from our systematic observations and discussing the foundations on which preschool immersion education pedagogy can be developed for the Scottish context.

2. The GM Preschool Context

2.1 Gaelic and Gaelic-medium (GM) preschool provision

Gaelic-medium (GM) education, including the preschool sector, is seen, not only by government policymakers but more generally by the Scottish public (Paterson, O’Hanlon, Ormston & Reid, 2014), to be an important element of the revitalisation plan for the language (Bòrd na Gàidhlig, 2012). Gaelic is a Celtic language, established in Scotland for at least 1500 years (Gillies, 1993), but now spoken by just over 1% (58,000 people) of the Scottish population (National Records of Scotland, 2013). The language has survived best in remote, rural areas, mainly in the northwest of Scotland, including the Western Isles. However, Gaelic speakers are found elsewhere in Scotland, sometimes being the remnants of larger Gaelic-speaking populations who lived there in the past, or the result of migration or the growth in provision for Gaelic-medium education, which is available in 14 local authorities (municipalities) across Scotland, and of other provision to enable non-Gaelic speakers to learn the language. There are no national statistics about the home language of children enrolled in GM preschool. However, the 2013 School Census reported that only 0.07% of the entire Scottish school population (497 children) were growing up with Gaelic as their main
home language (Scottish Government, 2014). Although this number may underrepresent the number of children who are fluent Gaelic speakers growing up in homes where both Gaelic and English are in use, it is nevertheless the case that most children starting in GM preschool settings speak only or mainly English and come from homes and communities where English is the principal language of communication and cultural activity (Stephen, McPake & McLeod, 2012).

Current forms of GM provision in Scotland have evolved from experiments with bilingual education in the Western Isles, in the late 1970s and early 80s (Murray & Morrison, 1984). The model of bilingual education originally envisaged that both Gaelic and English would be used ‘naturally’ in the classroom, reflecting societal bilingualism in the Western Isles at the time. However, this approach did not lead to the desired outcome – academic competence in Gaelic comparable to that which the pupils achieved in English – even when those pupils were fluent Gaelic speakers, taught by fluent Gaelic speakers. Thus, it came to be felt that the bilingual model was not sustainable, particularly as monitoring revealed that the number of children considered to be fluent Gaelic speakers fell, rather than rose, during this period (Mitchell, 1992). It was replaced by a commitment to Gaelic-medium education, in which there was and remains a formal expectation that children would be educated wholly through the medium of Gaelic in the early years. As the number of children growing up in Gaelic-speaking homes has continued to fall, the early years of Gaelic-medium education (GME) now, de facto, constitute an early total immersion experience for most children.

Data for academic year 2013-4 show that 985 children attended 58 Gaelic-medium preschool settings; 2,652 children were enrolled in 59 primary schools with Gaelic-medium streams, representing 0.7% of the Scottish school population; and that 1,181 children were studying Gaelic and some other subjects through the medium of Gaelic in 33 secondary schools (Bòrd na Gàidhlig, 2014). Although this is therefore a small-scale initiative, demand
for GME is increasing, particularly among non-Gaelic-speaking families, and in central and southern Scotland. Such families have a variety of reasons for deciding to send their children to GME, ranging from a desire to reintroduce a language that may have been spoken by family members many generations ago, to recognition of the cognitive benefits of bilingualism (regardless of which second language is involved) conferred by immersion education (Stephen et al., 2012).

Although there is now half a century or more of research into immersion education around the world, attention to the preschool phase is relatively recent. Ó Murchú (1987), reviewing preschool provision in 29 minority language communities in 11 European states, concluded that early total immersion was likely to be the most successful in maintaining the minority language in question among children for whom it was L1 and in enabling children from the majority language community to start to become bilingual in both languages. However, Wong Fillmore (1985) established that success – in terms of the extent to which young children who are encountering the language used as the medium of instruction as an L2 become fluent in that language – is dependent on the strategies adopted by the early years practitioner. These are perhaps the earliest accounts, and established two different trends in research.

The first trend, following the work of Wong Fillmore, is the close attention paid by linguists to the role of early years practitioners in initiating very young children into the new language. For example, Södergård (2008) conducted detailed studies of Finnish-speaking children’s development in Swedish on joining an all-Swedish kindergarten at age 5. She studied the interactions of the children with preschool practitioners in a specific context (small group work) where the practitioners had opportunities to initiate and sustain conversations related to the work in hand, and how the children’s Swedish developed from an ability to answer simple yes/no questions to one word (noun or verb) answers and then
clauses. These accounts tend to be both detailed and encouraging, as they chart children’s increasingly complex utterances in the immersion language over the course of the time they spend in kindergarten. Reviewing this literature and other research into the teaching of second languages to young learners, Edelenbos, Johnston and Kubanek (2006) identified a number of features of effective early language teaching including: a naturalistic language learning environment in which adults support children to go beyond pre-fabricated utterances; attention to reading and writing as well as listening and speaking; and helping learners to notice and compare linguistic and cultural differences and to develop strategies for language learning. Similarly, Hickey and De Mejia (2014), summarising a series of reviews of immersion education, note a consensus around the need for “language-rich instruction […] embedded in meaningful tasks” (p. 133) in the early years.

The second trend concerns the organisational and policy challenges which minority-language medium preschool provision presents, when viewed from the perspective of those concerned with the minority language revitalisation, in particular the question of the extent to which the provision should – or can – be monolingually through the medium of the minority language in question. For example, Hickey (1997, 2001, 2007) has expressed doubts about the capacity of Irish-medium early years settings to maintain and enhance the Irish language competences of children from Irish-speaking backgrounds, when simultaneously providing an immersion experience for substantial numbers of children from non Irish-speaking families, new to the language. Similarly, in Wales, Lewis (2008) has drawn attention to the need to establish differentiated objectives for children who are already fluent Welsh-speakers on entry into preschool, and those who are in the early stages of learning the language, as well as developing strategies to ensure that interactions between children with different levels of fluency in Welsh strengthen all children's competence in Welsh.

Underpinning the work by these and other researchers who have considered mixed
language ability minority language medium playrooms and classrooms is the power
differential between majority and minority languages. Hickey (2011), referring to her own
and others’ research in preschool settings, which mix children for whom the medium of
instruction is L1 and English-speaking children for whom it is L2, notes that there is a
tendency for the L1 speakers of the medium of instruction to shift to English, while the
English-speaking children acquire only a low level of this language. She comments, “L2
learners may benefit less from being mixed with native speakers than is generally believed”
(p. 107). Such findings are in line with other studies which have demonstrated that, in a very
wide range of potentially multilingual contexts, English tends to become the dominant
language of interaction (Brutt-Griffler, 2002; House, 2003; Kirkpatrick, 2007), partly because
it is assumed that English-speakers do not have a high level of competence in other languages
and partly because English is assumed to be the lingua franca for everyone else. It is salutary
to note how such assumptions seem to emerge even among very young children.

Such findings raise questions about the optimal pedagogical practices to ensure
language progress for all children in early years minority language medium provision, not
only for children who are L1 speakers of the minority language (the focus of the Irish and
Welsh research discussed above) but also for L2 learners of the minority language. In a recent
article, Hickey, Lewis, and Baker (2014) found that play leaders in Welsh-medium preschool
settings, while rhetorically committed to an ‘all-Welsh’ playroom, also acknowledged that
they used English to support English-speaking children emotionally and to ensure that they
understood what was being said, translating instructions or information into English when
this seemed to be required. Some play leaders expressed a certain degree of ambivalence in
relation to the principles of total immersion at such a young age, commenting that preschool
children need to develop communication skills in ‘their’ language (i.e., English): “not all staff
are fully confident that young children can be happy in an exclusively immersion
“environment” (p. 225). In the Scottish context too, these phenomena - the tendency of English to dominate other languages, and the ambivalence of preschool practitioners towards early total immersion in relation to young children’s emotional needs and communicative development, can undermine staff commitment to an ‘all-Gaelic’ environment, and affect children’s linguistic behaviour.

Hickey (2011) has some concerns that this ambivalence may be exacerbated by the emergence of a new early years curriculum in Ireland (as elsewhere): “A current challenge is the need not to lose sight of the particular aims and objectives of immersion in the drive to implement a new early years’ curriculum” (p. 107). It is this issue that we seek to discuss in the current paper: is it possible to integrate the aims and objectives of early immersion education into the broader goals of contemporary early years education, or are there irreconcilable tensions?

2.2 Preschool Education Context

All preschool settings in Scotland are expected to offer 3- to 5-year olds educational provision in line with the Curriculum for Excellence, the national curriculum (Education Scotland, n.d.b) and guidance for practitioners (Scottish Executive, 2007). The Curriculum for Excellence aims to offer all children from 3–18 years a broad general education across eight curriculum areas and has four goals: that children will become ‘successful learners, confident individuals, responsible citizens, and effective contributors’. Preschool pedagogy in Scotland is expected to be founded on active learning. Practitioners in the early years are urged to ensure that children’s learning, whatever the curriculum area, develops in natural and familiar contexts and through exploring ‘real-life and imaginary situations’ which
challenge thinking and learning and allow children choice and ownership in their educational experiences (Scottish Executive, 2007, p. 5). 

These policy expectations reflect the consensual understanding of practice that has arisen in Scotland and the implicit theory on which everyday pedagogical decisions and actions are based (Stephen, 2012). This thinking includes many of the hallmarks of a sociocultural or Vygotskyian understanding of learning (Robson, 2012): learning is thought of as a social and collaborative construction between the child, her peers, and the adults who care for and educate her. From this perspective language is both a key tool of society which children should acquire and a primary means through which the interactions which support learning are mediated.

Studies of children’s developmental progress in preschool and primary school make it clear that not all preschool provision is equal and that it is only good quality preschool education which offers positive, lasting educational and social benefits for children (e.g., Burchinal, 2000; Sylva, Melhuish, Sammons, & Siraj-Blatchford, 2010). This research suggests that the key features of good quality provision include a balance between adult-initiated group work, child-chosen ‘potentially instructive’ play activities, curriculum differentiation and cognitive challenge, and sustained shared thinking (Siraj-Blatchford & Sylva, 2004). Practice in preschool settings in Scotland reflects the evidence that effective preschool provision begins by building on children’s existing knowledge, offering challenging but achievable experiences, modelling appropriate language and values and developing thinking, concepts, and metacognition as well as acquiring information and mastering skills (Bowman, Donovan & Burns, 2000; Stephen, 2006). This child-centred and

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1 At the time of the empirical work pedagogic guidance for all preschool settings was set out in Building the Curriculum 2: Active Learning in the Early Years (Scottish Executive, 2007). This guidance was developed further with launch in 2014 of Building the Ambition, National Practice Guidance on Early Learning and Childcare, Scottish Government, 2014. [http://www.gov.scot/Resource/0045/00458455.pdf]
activity-based construction of effective pedagogy is inherent in the training of preschool practitioners and the national guidance about curriculum and pedagogy (Grogan & Martlew, 2013; Stephen, 2012). Practitioners are urged to engage in responsive planning, offering children the opportunity to choose freely from a range of playroom activities which reflect their interests and motivations, with only brief adult-led small group activities to provoke children’s engagement in particular curriculum areas such as language and literacy, mathematics, and science. These expectations are identical for both EM and GM preschool practitioners.

3. Observing GM Preschool: Methods

The issues discussed in this paper were identified in a small-scale, exploratory study designed to investigate the experience of 3- to 5-year olds attending GM preschool settings in Scotland. We were particularly interested in the breadth and richness of learning opportunities across the national curriculum, including the quality of their language learning experiences. We adopted a nested case study methodology. Each setting is considered as a distinctive case nested in a shared national policy context. We make no claims about generalizability beyond the context we investigated but offer our conclusions, through a process of abduction, as exemplary knowledge: representation and sense-making in a particular context which speaks to other practices and contexts (Thomas, 2011a, 2011b). Our study began with semi-structured interviews with the practitioners and the head teachers in each setting. Responses to questions about their professional background and training, their fluency in Gaelic and confidence about using the language and their perception of their role were recorded on a prepared schedule. These interviews were followed by systematic observations across the school year.
3.1 The settings

Three preschool settings, reflecting the range of publicly funded GM preschool provision in Scotland, took part in the study. One was located in the Gàidhealtachd, or Gaelic ‘heartlands’, and two were in the ‘Central Belt’, the largely urban area in the south, where demand for GM provision is growing fast. In line with national policy for all children in Scotland, those participating in our study were taking up their entitlement to a state-funded part-time place (usually five sessions per week of about three hours daily) in preschool education in the two years before they begin school. The adult:child ratio for GM preschools, like that for all provision for children aged between three and five years old in Scotland was 1:10. The settings and practitioners are described further in Table 1. All names for children and settings included here are pseudonyms, and care was taken to obtain informed consent from all participants before the study began.

[Table 1 about here]

3.2 The Practitioners

The initial professional education of the practitioners working in the participating settings was typical of preschool staff in Scotland: they had completed either a vocational level qualification or degree level teacher education (Wilson, 2013). The interviews which we conducted with each practitioner and each head teacher at the beginning of the data collection period revealed that, regardless of their training route, none had received any training in language learning and teaching in general nor, more specifically, in education through the medium of Gaelic or supporting young children as emergent bilinguals. Indeed, no such training (either during initial or continuing professional education) was then available to early years practitioners in Scotland, although this need has now been acknowledged in the GM Early Years Strategy 2013-16 (Bòrd na Gàidhlig, 2013).
The head teachers at each setting talked about recruiting practitioners to work in GM preschools because they were fluent Gaelic speakers who also had a recognised early years qualification, albeit one gained through training and experience in EM provision. Answers to questions about their practices, routines, planning, and expectations suggested that the practitioners’ understandings of their roles were rooted in the child-centred, play-based, experiential tradition endorsed by national guidance.

3.3 The Observation Methods
We explored children’s everyday learning experiences in their GM immersion settings through a combination of structured target child observations (Sylva, Roy, & Painter, 1980) and time-interval scans of activity across the playroom. This mix of observation methods yields data that go beyond plans and intentions to give a rich picture of children’s everyday experiences. Five observation visits were made to each setting across one school year. The observations were completed by an experienced researcher who was a fluent Gaelic speaker and a qualified preschool educator. Before the study began the researcher trained with a member of the research team who was an experienced user of the observation methods selected. They observed independently in the same pilot study setting then compared their observations and their ratings on the engagement scale over several rounds of data collection until they were satisfied that they were reaching a high level of agreement (typically over 95% of engagement ratings within one point variation). The researcher adopted a non-participant role. She followed the schedule for targeted observations and time-interval scans but was ready to respond to children in a warm and friendly manner. On each visit the observations took place over a whole session and covered each phase of the morning or afternoon, such as, time, time outside, free play indoors, adult-directed group time.
Whole room scans gave a snapshot of the activities children were engaging in across the playroom and the language in use by children and adults. Scans were made at 20-minute intervals over each session with a minimum of eight scans per visit, yielding approximately 40 scans per setting over the school year and a total of 120 scans. The whole room scans were recorded in writing, employing an agreed code, and a written narrative account was produced for each of the target child observations. For the target child observations we chose six children at each of the three settings, selecting from those who were regular attenders and aiming for equal numbers of boys and girls. Gaelic was a second language for all of these children who came from English-speaking homes. Each target child was observed for five minutes on approximately four occasions per session (a maximum of 20 observations/approximately 100 minutes per child over the year). Details of the target child observations achieved are given in Table 2.

We use the term activity to refer to the ways in which the children were spending their time in the playroom. These activities were categorised into relevant curriculum areas, activity types, and response modes. For example, play with puppets could be associated with expressive arts and afford imaginative, speaking, and listening responses. A small group activity discussing the feelings of others could be associated with moral education and listening, sorting, or speaking response modes.

Engagement was rated on a four-point scale developed for use in preschool settings: intensely engaged, engaged but distractible, engaged but easily distracted, not engaged (Stephen, 2003). Researchers make judgements of engagement based on verbal and non-verbal behaviour. Although this is a relatively high influence scale, it has substantial face validity and high levels of agreement between observers are readily obtained.
As explained above all the observation procedures were piloted before the main study commenced, and care was taken to ensure that way in which the researcher responsible for data collection employed the observation processes and made ratings of behaviours observed by was in close agreement with the most experienced team member. The analysis was carried out within and across the three case study settings, typically looking at the activities and language recorded as a proportion of total observations. The target child observations also provided narrative accounts which illustrate and explicate the pooled findings.

4. **Children’s Experiences in GM Preschool Settings**

4.1 **Children’s Curriculum Experiences in GM playrooms**

GM preschool settings are expected to offer 3- to 5-year olds the same range of learning opportunities as their peers in EM settings. However, the evidence from our target child observations (Table 3) suggests that in these GM case study settings the children may not be experiencing the breadth of learning opportunities expected to be offered to all children in Scotland and that the range of subject content and language experienced is limited. The percentages given in Table 3 are the proportion of total child observations at each setting.

As evidenced in Table 3, children were most frequently observed engaged in activities associated with language development, while play with resources and exploration of topics related to health and well-being, expressive arts, mathematics, and science were seen less often. Activities associated with religious and moral development, social sciences, and technology were seldom observed. The apparent focus on language may not be surprising in settings such as these where particular attention to facilitating communication skills and to the understanding and use of the target language can be expected. The lack of engagement with technology is surprising given the potential for technology to engage children through
visual and verbal prompts and to offer access to recordings of spoken Gaelic, although it may reflect the general perception amongst practitioners that appropriate GM resources were in short supply. It should be noted that the children’s activities did not relate to a specific curriculum area on a substantial proportion of the observations at each setting. These instances included activities such as playing with sand (which offers variety of learning opportunities), getting dressed for going outside, eating snacks, and waiting while others completed tasks. These activities are indicated in Table 3 as No Curriculum Category (NCC).

Our observations allowed us to go beyond broad curriculum categories to examine the nature of the activities in which target children were engaged across a school year. The most commonly observed activity types engaged in by the target children at each setting, as a proportion of all target child observations at that setting, are presented in Table 4. Activities recorded on less than 5% of the observations were not included in this table.

[Table 4 about here]

The picture of learning activities which emerged was one of considerable variability. The variation in the proportion of time spent in tidying or transitions between phases of the day (e.g., waiting for all to gather into one group, getting dressed to go outside) is particularly striking: target children at Newton spent more than twice as much time in transition as children at Braes. Activities such as replacing toys, dressing, and queuing tended to involve routine commands and phrases rather than opportunities for learning new vocabulary, expressive language use, or problem-solving. On the other hand, singing in Gaelic can provide opportunities to practice language use in ways that young children find engaging and was part of the regular schedule at Braes (noted on 13% of observations) but it was seen much less often at the other settings (7% of the observations at Newton and 6% at Highfields). Activities designed to support the development of language for reasoning were
rare, and children had limited recourse in their playrooms to technologies to stimulate their understanding and use of Gaelic.

In the early years context dramatic or imaginative play is considered to offer rich potential for first language, cognitive, and social development (Howe & Mercer, 2007; Smidt, 2007) and could be expected to afford similar advantages to children learning another language. The settings had ample small world play resources, dolls, and dramatic play props but at Newton the target children were observed engaging in dramatic play on only 9% of observations and this dropped to 6% at Braes and less than 5% at Highfields. As Girard and Sionis (2004) point out, the development of formulaic speech in the early stages of an immersion programme is an important step towards fluency, and role-play offers opportunities to use formulaic speech in creative ways, and so the limited opportunities for children to ‘play’ in this way with the language they have acquired is unfortunate. Across the school year puppets were only observed in use in one setting, despite the opportunities which these resources also offer for expressive language development and second language learning (Bangma & Riemersma, 2011). Each of the settings had some age-appropriate Gaelic books available to children in the playroom, although the range and number on display varied between the settings. Data from the time interval scans revealed that group story reading happened sometimes in two settings but was not seen at all in the third. Looking at books with adults might be expected to offer considerable advantages in terms of language acquisition for children who have limited opportunities to hear Gaelic spoken and to practise speaking. Similarly, reciting finger rhymes and poems, hearing an adult tell a story or peers sharing news was seldom observed, despite the opportunities for presenting new Gaelic vocabulary and using newly acquired language which these activities afford.

Some of the variability we noted across the settings can be explained as the inevitable fluctuations of a free play environment and responsive planning. However, our findings come
from a substantial evidence base gathered across a school year and suggest that the patterns we noted reflect the sustained decisions and practices of practitioners in each case. Some practitioner teams made more frequent recourse to particular activities than others and some created more points of transition across the session. Furthermore, some curricular areas and competencies received less attention than the national curriculum expects. We argue that children’s experiences in these settings are influenced by (a) the absence of guidance or consensus about appropriate pedagogic actions or interactions to support language learning and (b) the difficulty of attending to all curriculum areas in settings where most children are learning through the medium of a language new to them. We suggest that at least part of the considerable variability in children’s activities across settings reflects practitioners’ uncertainty in circumstances when learning through Gaelic has been added to existing expectations, without appropriate curricular and pedagogic development.

4.2 Children’s language experiences in GM playrooms

Our data suggest that maintaining the early years playroom as an early total immersion setting is a considerable challenge for GM preschools in Scotland. Communication with parents is usually in English, and, outside the playroom, children spend most of their time each day in an English speaking environment and make use of their more extensive English vocabulary and sophisticated understanding of that language as they play and talk together in their preschool setting. Although each of the settings said that they aimed to offer total immersion in Gaelic, it was clear that English intruded. Table 5 charts children’s language experiences noted during target child observations, expressed as a proportion of the total number of target child observations at each setting. Language experiences recorded on less than 5% of the total number of episodes (including ‘no language being heard’) were not included in this table.
At Highfields children were hearing Gaelic spoken by an adult or another child on almost half of the observation episodes over the year (49%). At Newton they heard an adult or other child speaking Gaelic on 41% of the observation episodes and at Braes the figure was 43%. Across all three settings English could be heard on around 40% of the target observations. Practitioners used English to talk to visitors and to parents. They were heard to rephrase in English to aid understanding and to console and reassure an unhappy or distressed child. On some occasions practitioners embedded an English word or phrase in a longer utterance in Gaelic or used an English word or phrase in a Gaelic sentence and we observed some examples of code-switching. On some occasions practitioners spoke to each other in English.

In each of these settings children spoke in English much more often than they spoke in Gaelic. Table 6 shows the proportion of observations across the school year when the target children were noted to be speaking English or Gaelic, or not speaking at all. For beginners, limited linguistic production is expected, and does not necessarily reflect what they can understand in Gaelic, although Roberts (2014) has recently challenged the evidence for a silent period as a recognised second stage in language learning for children.

In the overwhelming majority of cases when the target children were recorded as using Gaelic they were involved in singing or responding in an adult-led activity. They were also recorded responding correctly in Gaelic about the name of the day or month, rote counting, or using familiar phrases such as ‘thank you’, asking to go to the toilet or ‘tidy-up time’ (expressions typically found on the ‘target’ language lists of the settings). A few children were able to name playroom resources in Gaelic (e.g. sand or water). We noted two

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2 By code-switching we mean alternating stretches of words in one language with words from another within a single conversational turn (see Muysken, 2000).
instances, both at Highfields, where a child embedded a Gaelic phrase when speaking in English. The proportion of observations when children were speaking Gaelic was particularly low at Newton. In our interviews with the practitioners at that setting we learned that one member of staff was a Gaelic learner and, although the lead practitioner at that time was a fluent Gaelic speaker, she had little experience of working in a preschool setting. It may be that the gaps in their pedagogical and linguistic knowledge were limiting the nature of the immersion experience that they could offer.

English was the language shared by the children and it was used extensively in their talk and play together. Role play, an activity highly valued in Scottish preschool settings for its contribution to social development and communication skills, was typically an activity for children only, with little direct adult engagement, and was carried on in English. With very few children coming from homes where Gaelic is spoken it is unsurprising that when they engaged in activities with peers and without an adult present English was used, as the extract below from an observation of a target child playing with others illustrates.

Joseph at sand table with 2 other boys and 1 girl. All speaking to one another in English about imaginative game with aeroplanes and sand using the sand as snow. Joseph responds ‘Oh yeah, that happened to me one time’ then goes on to take an active role in the play with lots of big motor movements, scooping up and pouring out the sand and accompanying sound effects. (Target child observation, Braes, 6 November, 9.20 am)

The evidence presented here about the language heard and spoken raises questions about whether the young learners’ experiences can be described as early total immersion, considering the influence of English as the language of their peer group and also about the extent to which the content of their learning was enhanced or inhibited in comparison to EM
peers using English, their first language, to explore and communicate. This issue is considered further in the next section.

4.3 Children’s Learning Experiences in a GM Playroom

Our study explored the extent to which children experienced three specific characteristics of the preschool environment thought to support learning and the development of positive learning dispositions (Carr & Lee, 2012): active response modes, high levels of engagement, and verbal interactions that provoke exploration and cognitive challenge and are related to children’s interests and everyday lives (Bruner, 2002; Bertram & Pascal, 2002; Carr & Lee, 2012).

We recorded the response mode in which each target child was engaged during each observation and the findings are presented in Table 7 as a percentage of the total number of target child observations at that setting, including only those modes found on more than five percent of the episodes. Children were also observed writing, building, reading or looking at books, and using technologies but these were infrequent events.

[Table 7 about here]

The dominant mode of responding to or engaging in learning activities in these three GM immersion preschools was listening, followed by speaking/answering in an adult-led interaction (Table 7). This pattern of responding may be as expected in an environment focused on language learning, although such an emphasis may not follow from naturalistic and meaningful language learning and in the early stages of encountering a new language when children will understand only some of the Gaelic used around them. However, such an emphasis differs from the naturalistic and meaningful language support advocated by Edelenbos et al. (2006). Furthermore, it is antithetic to the active and experiential learning
advocated in the national guidance and the expectations about good practice held by practitioners and those responsible for inspecting practice (Scottish Executive, 2007).

Ratings on the four-point scale engagement scale described above varied across the settings but in general, children’s level of engagement was less intense when they were engaged in Gaelic-mediated activities. Levels of engagement at Newton were generally lower than in either of the other two settings, regardless of the language being used. There were more than twice as many observations there when children were disengaged than at either of the other settings and they were less often recorded as intensely engaged. Across the three settings we found that when children were hearing Gaelic they were most frequently observed to be ‘engaged but easily distracted’. When English was being heard some children were also ‘engaged but easily distracted’ however, others were more engaged and less readily distracted. It is interesting to note that when children were alone or alongside others but not in conversation with them the most frequently noted form of engagement was ‘intensely engaged’. While these periods of intense engagement were welcome positive indicators for learning and developing positive dispositions towards learning (Carr & Lee, 2012) they were also times when no Gaelic was being experienced. Extracts from two target child observations illustrate this finding.

Jessica – sitting at a small table intensely engaged in threading plastic spools onto a lace to make a necklace. She does not speak to the only other child at the table – focuses on the lace and spools . . . She goes on until she appears to be satisfied with the necklace – unthreads all the spools and puts the equipment away on the nearby shelf. No interaction with adult or child during this episode.
(Target child observation, Newton, 7 January, 9.15 am)

Welcome time over – Elizabeth goes straight to the drawing table. She sits down without speaking to the other girls who were arriving at the same time.
Immediately engrossed in drawing a detailed picture, then cuts out some shapes in coloured paper . . . None of the children or adults nearby talk to Elizabeth and she does not try to initiate any conversation. (Target child observation, Highfields, 12 January, 9.45am)

In GM preschool settings providing opportunities to engage children in cognitively challenging activities and sustained shared thinking with an adult is clearly demanding given the children’s beginner status as Gaelic learners and the limitations on their ability to pose questions, articulate problems, and seek solutions in an unfamiliar language. One example from our observations illustrates the challenge. Mairi and Laura were playing together in the home corner when the practitioner passed close by the area.

Mairi (to Laura): I’m pretending in the game that I’m ill.

Mrs MacNeill: Dè tha ceàrr ort? (What’s wrong with you?)

Mairi: I don’t know.

Mrs MacNeill: Dè tha an doctair ag ràdh? (What does the doctor say?)

Laura: They don’t know.

The two girls left the home corner and went to play together in another part of the playroom. (Target child observation, Braes, 6 November, 11.05 am)

In this example, the girls’ responses to the practitioner’s questions are ambivalent. They may understand the questions but be unable to answer them in Gaelic. Another interpretation is that they have learnt to offer generic answers to questions in Gaelic, answers which discourage further conversation. We noted that in a context where play and interaction is child-led, it is difficult for a practitioner to persist with interaction if children seem not to wish to continue, and that it is sufficient for children to get up and walk away when any Gaelic language activity is introduced, for them to avoid engagement with the language.
We found little evidence of personal meaning making in children’s use of Gaelic. What evidence we found of children using Gaelic was restricted to routines, labels, and polite phrases rather than posing questions or expressing opinions, a finding which is not in line with expectations for preschool experiences. Furthermore, these difficulties would have been compounded when practitioners themselves sometimes lacked confidence when using Gaelic in the playroom, a circumstance reported by two participants.

Two further observations arose from our data. Firstly, the observation records suggested that children in these settings had limited access to the language of metacognition in Gaelic and few opportunities to join in discussions with adults about the metalinguistic features of the two languages they were experiencing. The work of Pramling Samuelsson and Carlsson (2008) suggests that explicit discussion of linguistic features support the metacognitive understanding that begins to develop in the preschool years. Secondly, it is difficult in an institutional setting where children spend time in a specially set aside environment to offer the kind of naturalistic environment advocated by Edelenbos et al. (2006). Children learning Gaelic in a formal educational setting have few opportunities to acquire the language as it is used in family or community life and to learn through guided participation (Rogoff, 1993).

Designing and providing a learning environment that meets the ideal expectations for high quality preschool education and facilitates children beginning to learn a new language is clearly a challenging proposition. In these circumstances there is a need for clarity, and possibly for compromise, about appropriate pedagogic practices if the educational environment which the children experience is to serve them well.
5. **Discussion**

The evidence presented here raises some specific questions about the quality of the children’s learning experiences in GM preschool settings and highlights fundamental tensions that arise when early years settings are charged *both* with supporting young children’s learning in ways that meet the expectations of the national curriculum for all children *and*, at the same time, with fulfilling their role in the language revitalisation project. As Hickey and De Mejia (2014) note, “Increasing recognition of the need for appropriate curricula for early years’ education also presents early immersion with a challenge, if policy makers require the immersion preschool to do everything expected of mother-tongue preschools, and in the same way, but with the target language pasted on top” (p. 139). Notwithstanding the enhanced development of some cognitive functions such as some aspects of executive control and metalinguistic awareness which follow from growing up in a dual language environment (Barac, Bialystok, Castro & Sanchez, 2014), our study of children’s experiences in GM preschool settings raised questions about the appropriateness of expectations about curriculum coverage, the training of practitioners, the nature of the language environment in the playroom and aspects of the learning environment that can be expected to enhance young children’s learning, as well as issues of practitioner education in immersion pedagogies.

While there may be scope for reviewing policy positions, the challenges which preschool settings face as they try to meet the expectations of what can be seen as two sometimes contradictory sets of goals (aspirations for language revitalisation and ensuring a good quality preschool educational experience for young children) mean that building a corpus of pedagogical practices has become an urgent task for those responsible for this form of provision and its outcomes. That there is an appetite for enhancing practice and further professional development was clear in the responses of providers and practitioners gathered
by Stephen et al. (2012). Respondents were keen to have access to development programmes to address their self-identified lack of expertise in language learning practices and pedagogy.

Given the need and desire for pedagogical development the next task is to seek foundations from which to develop pedagogy for GM preschool children. We will consider first some suggestions for pedagogic development which arise from the early years literature before turning to lessons from the immersion education field. Contemporary sociocultural understandings of learning and development draw attention to the mediating role of the adults and the environment that surrounds the learner. The concept of scaffolding, developed from the work of Vygotsky and Bruner and Wood (Wood, Bruner & Ross, 1976; Wood & Wood, 1996) seems particularly valuable in the circumstances of GM preschool, even if taking a more interventionist approach challenges usual practice. Meadows (2006) suggests that effective scaffolding requires that practitioners “highlight critical features and information, buffer the learner’s attention against distraction, channel the learner’s activities so that there is freedom to succeed and not too much freedom to go wrong” (p. 383).

Pramling Samuelsson and Carlsson’s (2008) construction of developmental pedagogy suggests two forms of pedagogic interactions which seem to be particularly pertinent for children’s learning experiences in GM settings. Firstly, they argue that the educator should focus the child’s attention on the object of learning through dialogue and engage her in meaning-making, though these tasks will be particularly challenging in GM preschool and would benefit from the development of specific practice guidance if children’s comprehension and creativity are to be employed in active ways that are not limited by their linguistic competence. Secondly, they point to the potential for cognitive and linguistic development that employing the concepts of similarity and variation offers. Children in GM settings should experience ample opportunities to learn about the similarities and differences between languages and associated linguistic and social practices, although Pramling
Samuelsson and Coulsson (2008) suggest that there is a role for explicit support for this form of metacognitive development. However, this may demand a shift in approach where practitioners construct their task as being to focus only on Gaelic in an attempt to maximise input of the language and resist the dominance of English.

The three guiding principles for immersion settings identified by Swain and Lapkin (2013) are helpful here too. Beginning from Vygotskian theorising they argue that learners should initially be allowed to use their first language in collaborative activities and when they engage with complex or novel ideas. They go on to suggest that practitioners ensure that children experience consistency in the use of their first and second language and that their first is only employed for clear pedagogic reasons. For practitioners in GM preschool settings the pedagogic challenge is to find ways in which children can be supported to use their fledgling Gaelic vocabulary for any communication.

Beyond a concern for the language input to which children are exposed, their efforts to speak Gaelic require sensitive support. Language learning is a product of input and output and neither can be “simply left to chance” (Edelenbos et al., 2006, p. 13). Our study found that practitioners were alert to the need to offer children extensive input in Gaelic through their own use of the language and the material resources employed, and we saw examples of practitioners modelling and rephrasing their own Gaelic speech to make it easy for children to understand what they were saying. However, scaffolding the production of the language was less common. Indeed, the empirical evidence reported in this paper points to the limited frequency of children’s Gaelic output. The examples of children’s Gaelic output which we observed occurred mostly in the context of group activities involving singing or listening to stories being read, activities which lend themselves to the practice of set phrases in the course of enjoyable activities. We saw very few examples of this kind of work in relation to other kinds of playroom activities, for example exploration of the natural world or of science or
support for role-play in which children had spontaneously engaged. Mhic Mhathuna (2012) describes ways in which supplying playscripts in the target language can enhance imaginative play and support the use of the immersion language. This kind of proactive involvement in children’s imaginative play will not come readily to practitioners trained in an English-medium tradition that typically provides resources then ‘stands back’ from direct involvement in dramatic play in free play time. Nevertheless, this may be one of the shifts in expectations necessary to develop a distinct pedagogy for GM preschool education. While many of the learning outcomes may be the same in EM and GM settings, the means of learning do not necessarily have to be the same.

The pedagogic developments we argue for build on the sociocultural understanding of the critical mediating role of the practitioner. Developing the role of the pedagogue in GM provision will require the support of applied linguists, early years educators, and researchers and policymakers. There are three areas which require policy support. Firstly, specific financial and strategic attention will be needed to ensure that professional development happens and is well resourced and that playroom materials and digital technologies in particular, match the aspirations of practitioners. Secondly, a policy decision to fund more favourable adult:child ratios in GM provision would enhance children’s opportunities to spend time with a practitioner, their prime source of the language they are learning and allow more of the direct small group language development activities which we found to be surprisingly absent. Such a decision would also need to accept the need for more adult-led activities in GM playroom than in the EM playroom, to make best use of these opportunities for enhanced input and more structure Gaelic language activity. Thirdly, there is scope for reconsidering the policy position which expects GM provision to deliver the same curriculum as EM settings and, in addition, to ensure language learning. Our evidence suggests that children in GM settings do not engage in all of the expected curriculum areas and it seems
pertinent to investigate the implications of developing a targeted curriculum, with associated outcomes and expectations appropriate for children learning in a second language and acquiring the benefits of bilingualism.

This paper has examined children’s learning experiences in GM preschool settings. We have argued that our data make evident the extent of the pedagogical challenge which faces practitioners in preschool immersion settings and demonstrates the need for the development of specific pedagogy and professional practices to ensure that language learning happens in the context of a good quality preschool education.

Acknowledgements

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References


Edelenbos, P., Johnstone, R., & Kubanek, A. (2006). *The main pedagogical principles underlying the teaching of languages to very young learners*. European Commission:


Table 1
The Case Study Settings

<table>
<thead>
<tr>
<th></th>
<th>Braes</th>
<th>Newton</th>
<th>Highfields</th>
</tr>
</thead>
<tbody>
<tr>
<td>GM nursery class in Nursery School (3-5 year olds) with Gaelic- and English-medium strands</td>
<td>GM nursery class in primary school with Gaelic- and English-medium strands</td>
<td>GM nursery class in GM primary school</td>
<td></td>
</tr>
<tr>
<td>Two Practitioners:</td>
<td>Two Practitioners:</td>
<td>Two Practitioners:</td>
<td></td>
</tr>
<tr>
<td>1. fluent Gaelic speaker, primary and nursery qualifications</td>
<td>1. fluent Gaelic speaker, primary teaching qualification – no preschool training</td>
<td>1. fluent Gaelic speaker, nursery practitioner training</td>
<td></td>
</tr>
<tr>
<td>2. fluent Gaelic speaker, nursery practitioner training</td>
<td>2. Gaelic learner, nursery practitioner training</td>
<td>2. fluent Gaelic speaker, nursery practitioner training</td>
<td></td>
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</table>

Table 2
Target Child Observations

<table>
<thead>
<tr>
<th></th>
<th>Braes</th>
<th>Newton</th>
<th>Highfields</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target child gender (Female:Male)</td>
<td>4:2</td>
<td>3:3</td>
<td>3:4</td>
</tr>
<tr>
<td>Mean number of 5-minute observations per target child</td>
<td>19.8</td>
<td>19</td>
<td>18.3</td>
</tr>
<tr>
<td>Aspects observed during each 5-minute observation</td>
<td>phase of playroom session (e.g. free play, whole group time)</td>
<td>child actions (by curriculum area and activity type)</td>
<td>language child hearing</td>
</tr>
</tbody>
</table>
Table 3

Engagement with Curriculum Areas (expressed as percentage of total observations)

<table>
<thead>
<tr>
<th></th>
<th>Expressive Arts %</th>
<th>Health/Well-being %</th>
<th>Language %</th>
<th>Maths %</th>
<th>Religious &amp; Moral %</th>
<th>Science %</th>
<th>Social Science %</th>
<th>Technology %</th>
<th>NC C %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braes</td>
<td>18</td>
<td>12</td>
<td>23</td>
<td>4</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>6</td>
<td>24</td>
<td>98</td>
</tr>
<tr>
<td>Newton</td>
<td>11</td>
<td>12</td>
<td>31</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>34</td>
<td>99</td>
</tr>
<tr>
<td>Highfield</td>
<td>8</td>
<td>11</td>
<td>23</td>
<td>11</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>41</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Figures have been rounded to whole numbers and therefore totals do not necessarily reach 100%. NCC = No Curriculum Category
Table 4

Activities Frequently Observed in the Playrooms (expressed as percentage of total observations)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Braes (%)</th>
<th>Newton (%)</th>
<th>Highfields (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tidying/transitions</td>
<td>15</td>
<td>35</td>
<td>28</td>
</tr>
<tr>
<td>Singing in Gaelic</td>
<td>13</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Sand</td>
<td>12</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Dramatic play</td>
<td>6</td>
<td>9</td>
<td>*</td>
</tr>
<tr>
<td>Drawing/writing/painting</td>
<td>*</td>
<td>*</td>
<td>9</td>
</tr>
<tr>
<td>Number</td>
<td>*</td>
<td>*</td>
<td>11</td>
</tr>
<tr>
<td>Physical play</td>
<td>*</td>
<td>*</td>
<td>9</td>
</tr>
<tr>
<td>Chatting</td>
<td>8</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Science</td>
<td>7</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Listen to story in Gaelic</td>
<td>*</td>
<td>*</td>
<td>7</td>
</tr>
<tr>
<td>Craft</td>
<td>7</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Construction</td>
<td>*</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Computer/technologies</td>
<td>6</td>
<td>6</td>
<td>*</td>
</tr>
<tr>
<td>Small world</td>
<td>*</td>
<td>*</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: *Activities recorded on less than 5% of the total observations at any one setting were not included.
Table 5

Language Heard by Children in the Playroom (expressed as percentage of total observations)

<table>
<thead>
<tr>
<th></th>
<th>Gaelic from adult (%)</th>
<th>Gaelic from peers (%)</th>
<th>English from adult (%)</th>
<th>English from peers (%)</th>
<th>Adult code-switch (%)</th>
<th>Adult embed English (%)</th>
<th>Adult embed Gaelic (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braes</td>
<td>35</td>
<td>8</td>
<td>12</td>
<td>28</td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>99</td>
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<tr>
<td>Newton</td>
<td>36</td>
<td>5</td>
<td>12</td>
<td>28</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>99</td>
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<tr>
<td>Highfields</td>
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<td>9</td>
<td>29</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>97</td>
</tr>
</tbody>
</table>

Note: Figures have been rounded to whole numbers and therefore total do not necessarily reach 100%.

Table 6

Language Spoken by Children in the Playroom (expressed as percentage of total observations)

<table>
<thead>
<tr>
<th></th>
<th>Speaking English (%)</th>
<th>Speaking Gaelic (%)</th>
<th>Not speaking (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braes</td>
<td>65</td>
<td>20</td>
<td>15</td>
<td>100</td>
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<td>Newton</td>
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<tr>
<td>Highfields</td>
<td>53</td>
<td>13</td>
<td>34</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Figures have been rounded to whole numbers and therefore total do not necessarily reach 100%.
Table 7

Children’s Response Modes (expressed as percentage of total observations)

<table>
<thead>
<tr>
<th></th>
<th>Speak/Answer (%)</th>
<th>Listen (%)</th>
<th>Role Play (%)</th>
<th>Physical Activity (%)</th>
<th>Fine Motor Activity (%)</th>
<th>Draw (%)</th>
<th>Sing (%)</th>
<th>Count (%)</th>
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</thead>
<tbody>
<tr>
<td>Braes</td>
<td>20</td>
<td>28</td>
<td>5</td>
<td>12</td>
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<td>4</td>
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<tr>
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<td>27</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>7</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: Activities recorded on less than 5 percent of the total observations at any one setting were not included.
Authors’ addresses

Christine Stephen
School of Education
University of Stirling
Stirling FK9 4LA
Scotland
christine.stephen@stir.ac.uk

Joanna McPake
School of Education
University of Stathclyde
Lord Hope Building
141 St. James Road
Glasgow G4 0LT
Scotland
joanna.mcpake@strath.ac.uk

Irene Pollock
School of Education
University of Glasgow
St Andrew’s Building
11 Eldon Street
Glasgow G3 6NH
Scotland
Irene.Pollock@glasgow.ac.uk

Wilson McLeod
School of Celtic and Scottish Studies
University of Edinburgh
50 George St
Edinburgh EH8 9LD
Scotland
w.mcleod@ed.ac.uk