

Exploring Gaelic-medium teachers' perceptions of
professional learning for teaching Gaelic
in and through the curriculum

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This thesis is presented for Doctor of Education
The University of Edinburgh
2017

Statement of authorship

I confirm that this thesis has been composed solely by myself, and that the work contained within it has neither previously been published nor submitted for another degree.

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Abstract

Professional learning for teachers is an area of international interest, not least because teacher quality is seen to be a factor in pupil outcomes. Scholars agree that immersion teaching requires a particular knowledge and skill set; yet there is a paucity of international research on the professional learning of bilingual and immersion teachers and none in the context of Gaelic-medium education. This thesis examines what professional learning opportunities Gaelic-medium primary teachers perceive they require to support them in teaching Gaelic as a language and teaching the curriculum through the medium of Gaelic. Factors such as stage of career, teacher language background and contexts for teacher learning were also considered. Theories of bilingual and immersion education, second language learning and teacher learning informed the study.

Semi-structured interviews were conducted in Gaelic with 25 Gaelic-medium primary teachers, including teaching managers, across 7 local authorities. The teachers completed a short questionnaire eliciting relevant information of educational background, professional learning and experience that supplemented the interview data. Thematic analysis was used to identify key professional learning themes across the transcripts.

The results show that professional learning to further develop teacher language proficiency, including a deeper understanding of the grammatical structures of Gaelic, was of key importance to the teachers. The research also demonstrated that the teachers perceived a better understanding of bilingual and immersion education, how to teach language in the curriculum and extending their pedagogical practices were necessary areas of further learning for them. There was little Gaelic-specific professional learning available to the teachers, with English-medium local and national priorities taking precedence. The role of leaders and managers in choosing and facilitating professional learning opportunities was identified as a significant contextual factor shaping teacher learning. While there is a scarcity of bilingual and immersion studies in teacher professional learning, there is a wealth of research related to the language areas identified by the teachers for further learning which are drawn on in discussion.

This thesis offers a contribution to the professional learning literature base of Gaelic-medium teachers, based on their needs, through its analysis of teacher-identified learning opportunities in relation to teaching Gaelic as a language and teaching the curriculum through Gaelic. Key areas of teacher language proficiency, form-focused instruction, immersion pedagogies and assessment are identified for professional learning across the career continuum to further enhance classroom practice. It is recommended that professional learning opportunities in these teacher-identified areas be progressed at both national and local level, through flexible methods of delivery, to ensure availability and accessibility to the geographically dispersed Gaelic-medium teacher group.

Acknowledgements

Bu mhath leam taing mhòr a thoirt do na tidsean is na ceannardan a thug an ùine dhomh, gu saor thoileach, airson rannsachadh na cùise seo. B’e tlachd da-rìreabh a bh’ann còmhradh ribh, is barrachd a thuigsinn mun obair chudthromach agaibh. Tha mi fada nur comain.

I would like to thank the Gaelic-medium teachers and staff who gave generously of their time to make this thesis possible. Their willing participation to share their views was much appreciated.

My sincerest thanks go to my supervisors, Professor Lindsay Paterson and Dr Fiona O’Hanlon, for their encouragement, guidance and support throughout the research process.

Finally, special thanks must go to my husband and family without whose ongoing support this would not have been possible.

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List of Abbreviations

| | |
|----------------|--|
| BnG | <i>Bòrd na Gàidhlig</i> – The Gaelic Language Board |
| CLPL | Career-Long Professional Learning |
| CNES | <i>Comhairle nan Eilean Siar</i> – Western Isles Council |
| CPD | Continuing Professional Learning |
| DHT | Deputy Head Teacher |
| EM | English-medium |
| EME | English-medium education |
| GM | Gaelic Medium |
| GME | Gaelic-medium education |
| GMS(s) | Gaelic Medium Stream(s) |
| GTCS | General Teaching Council for Scotland |
| HMIe | Her Majesty's Inspectorate of Education |
| ITE | Initial teacher education |
| L1 | A person's first language or mother tongue |
| L2 | A person's second language |
| LA | Local Authority |
| NS | Native speaker |
| P1, P2, P3 etc | Primary One, Primary Two, Primary Three etc |
| PT | Principal Teacher |
| SCCC | Scottish Consultative Council on the Curriculum |
| SCRE | Scottish Council for Research in Education |
| SEED | Scottish Executive Education Department |
| SG | Scottish Government |
| SMO | <i>Sabhal Mòr Ostaig</i> – The National Centre for Gaelic Language and Culture |
| SOED | Scottish Office Education Department |
| Stòrlann | <i>Stòrlann Nàiseanta na Gàidhlig</i> – National Gaelic educational resources agency |
| SQA | Scottish Qualifications Authority |
| UHI | University of the Highlands and Islands |

Chapter 1 Introduction

Introduction

Inadequate teacher preparation for immersion programs remains a challenge in this field. Teachers need specialized professional development to meet the complex task of concurrently addressing content, language and literacy development in an integrated, subject-matter-driven program.

(Fortune 2009)

The issue of specialized professional development for immersion teachers, at initial teacher education (ITE) level and at the continuing professional development (CPD) stage, has been recognized to be of key importance across immersion contexts internationally (Ballinger 2013; Fortune 2009; Johnstone 2002; Stephen et.al. 2010; O’Diubhir et.al. 2016; Walker and Tedick 2000). This thesis examines, from a teacher professional learning perspective, what professional learning Gaelic-medium teachers perceive would be of benefit to them in teaching Gaelic as a language and teaching the curriculum through a second language.

Although the immersion literature identifies the need for specialist professional learning, Walker and Tedick (2000) suggest that little effort has been made to enlist teachers in the identification of their professional learning needs, identifying a gap in the literature. Little is also known about whether the professional learning needs identified by immersion teachers who are native-speakers or learners of the language differ across the career continuum or by language background. This study aims to address these gaps within the Scottish context through allowing Gaelic-medium (GM) teachers, across the career continuum, to identify key areas of focus for their professional learning in relation to immersion teaching. In so doing, the study also seeks to identify gaps in existing CPD provision for Gaelic-medium teachers.

Before progressing into the main body of the thesis, the remainder of this chapter explores the professional learning context for Gaelic-medium teachers. I will firstly provide a brief outline of the professional learning context of all Scottish primary teachers and look at the ideas attached to current terminology within the field. I will

then situate Gaelic-medium education (GME) within the Scottish education setting to contextualize the Gaelic-medium teachers' field of practice. Following this, I aim to summarize specialist professional learning opportunities available to Gaelic-medium teachers. Finally, I consider my background as a researcher before summarizing the structure of the thesis.

Scottish primary teacher professional learning

Teacher professional learning and development was a central, if contested, focus of the *Teaching Scotland's Future* Report (*TSF*) (Scottish Government [SG] 2010). Supporting and strengthening the quality of teaching was identified as one of the ways in which Scotland could achieve the high aspirations that it has for its young people (SG 2010). The Report recommended that teachers have access to development and learning opportunities at all stages of their career. This is widely viewed as an essential component of teacher growth (Darling-Hammond et.al. 2009; Day 1999; Lingard, Hayes and Mills 2003). However, the *TSF* Report also raised concerns over the 'lack of focus in CPD and the lack of coherence and progression within it' (SG 2010:68).

The Report further emphasized the need for teachers to own and be responsible for their own continuing professional development (CPD) and to have 'access to high quality CPD for their subject and specialist area' (SG 2010:99). For Gaelic-medium teachers this would include having deep knowledge of the immersion language and of immersion pedagogies. It also reported that primary teachers would welcome more knowledge and understanding in subjects across the curriculum. It would, therefore, be helpful to know which areas of professional learning the Gaelic-medium teachers themselves would identify and prioritize as useful for furthering their specialist knowledge and understanding.

Recognition of CPD as a professional entitlement was established in Scotland following the McCrone Agreement (2001) (SEED 2001) which aimed to modernize the teaching profession, with CPD being central to achieving this aim (Robinson

2010). Scottish teachers were, from then, contractually obliged to undertake CPD annually:

An additional contractual 35 hours of CPD per annum will be introduced as a maximum for all teachers, which shall consist of an appropriate balance of personal professional development, attendance at nationally accredited courses, small scale school based activities or other CPD activity. This balance will be based on an assessment of individual need taking account of school, local and national priorities and shall be carried out at an appropriate time and place. (SEED, 2001:7)

This coincided with an increased acknowledgement of CPD for the teaching profession internationally (Fraser et.al. 2007). Teacher learning is also recognized to be a highly complex process, with many contributing and interacting factors such as the individual teacher, the nature and quality of the CPD, the school context, and national and local authority (LA) policies (Hoban 2002; Kennedy 2007), factors that offer some considerable variation within the Gaelic-medium setting. Prior to the McCrone Agreement, professional learning was the domain of local authorities (LAs) and the colleges of education and directly funded by the Scottish Education Department, with short course offerings proliferating (O'Brien 2011:779). However, it was suggested that this CPD was for teachers 'often episodic, variable geographically across the country, ill-coordinated and unplanned, not valued and under-funded'. (O'Brien 2011:778). This would likely have been the experience of nearly a third of the participants of the present study who were in teaching before 2001.

Professional standards for teachers were introduced in the 1990s and are now maintained and revised by the General Teaching Council for Scotland (GTCS). These include the Standards for Registration (GTCS 2012a), the Standard for Career-long Professional Learning (GTCS 2012b) and the Standards for Leadership and Management (GTCS 2012c). They were originally designed to 'form a comprehensive framework with the overall intention of structuring teachers' careers and guiding ongoing professional development' (O'Brien 2012) and signal important milestones in teaching careers. The standards associated with the

induction period and headship are statutory requirements, whereas the standard for career-long professional learning and preparing for other leadership roles are not. Gaelic-medium teachers are required to meet the Standard for Registration to qualify as primary teachers (GTCS 2012a) but no additional standards in relation to the Gaelic language or immersion pedagogies are required.

Terminology

In Scotland the terminology associated with teacher learning has evolved alongside changes in policy and practice. ‘In-service training¹’ became ‘continuing professional development’ (CPD) which has evolved into ‘career-long professional learning’ (CLPL). The terms teacher development, professional development, teacher training have also been used. Depending on when they entered the teaching profession, teachers in the study will be familiar with some or all of the terms. For example, teachers who entered the profession before 1998 will probably be familiar with all the terms. The two terms in current usage are defined further:

Continuing professional development (CPD)

CPD was the term used in the *McCrone Agreement* (SEED 2001). The term has come to be associated with something that is ‘provided’ for a teacher, usually through organized courses (Kennedy 2005; Rae 2010) although it can also be used to describe all the activities in which teachers engage during the course of their career which are designed to enhance their work (Day and Sachs 2004:3). CPD is a term still in common usage and will be used in this study where it is found in the literature or preferred by teachers.

Career-long professional learning (CLPL)

CLPL is a term that emerged following the *Literature Review on Teacher Education in the 21st Century* (Menter et.al. 2010) and the *Teaching Scotland’s Future Report* (SG 2010), reflecting the concept that teacher learning should operate as a continuum, spanning the whole of a teacher’s career (SG 2010:28). It is the term currently used in guidance and policy documents, and in the revised GTCS Standards

¹ In-service training was the term commonly use in the 1980s and 1990s.

(GTCS 2012b). CLPL is seen to move away from traditional ‘set-piece events to more local team-based approaches’ (SG 2010) which aim to be more embedded, sustained and relevant with an appropriate blend of teacher learning tailored to the individual teacher and to school improvement.

In this study I use the term teacher professional learning (or shortened to professional learning or teacher learning) to encompass the diversity of teacher learning that takes place across the career continuum. This includes formal and informal learning, a range of experiences that are organized at school, local authority or national level, collaborative or individual learning, and accredited courses. The use of ‘professional’ merely indicates that it is learning which is relevant to the teacher’s work but does not exclude learning that takes place outwith the educational realm.

Gaelic-medium education in the context of Scottish education

GME is based on the principle of language immersion and is generally regarded as having commenced in 1985 with the opening of the first two Gaelic-medium units within English-medium (EM) primary schools in Glasgow and Inverness (MacLeod 2003:13). The concept of Gaelic as a medium for education was established earlier in the century, with formal schemes for teaching through the medium of Gaelic being launched from the 1960s (O’Hanlon and Paterson 2015). The Western Isles Bilingual Education project (1975) and the Inverness-shire Bilingual project (1978) were two significant initiatives at that time. Teachers on these projects transferred from mainstream teaching, their suitability being judged by fluency in the language. Through the projects teachers gained confidence in working within a bilingual framework, and a more positive attitude to the use of Gaelic as a language of learning and teaching developed among parents and policy makers (MacNeil 1994:246).

Aims of Gaelic-medium education

One of the aims of GME is to enable children to develop their personal and educational potential through learning an additional language (L2) and developing

their home language (L1). Bòrd na Gàidhlig [BnG] (2012) identifies GME as playing a central role in the maintenance and revitalization of the Gaelic language (National Gaelic Language Plan 2012-17). Additionally, for some parents GME is a demonstration of commitment to their heritage, whether family, cultural, Highlands and Islands or general Scottish cultural heritage (O’Hanlon, McLeod and Paterson 2010:51). A recent small-scale study of Gaelic-medium teachers showed that the teachers variously adhered to the stated aims of GME, and it is likely that it will be the teachers’ own views of the aims of GME that may influence their practice and choices in relation to CPD (Nicleòid, Armstrong and O’Hanlon 2015).

Gaelic-medium education provision

At the time of the study, GME was available in fourteen local authorities across Scotland² (BnG 2015). This provision was available in fifty-nine primary schools with fifty-four of these being in dual-stream schools where GME and English-medium education (EME) was being delivered concurrently. There were also five freestanding Gaelic-medium schools: two in Glasgow, and one in each of Inverness, Edinburgh and Fort William. In total there were 3004 children in the GME primary sector (ibid). A distinctive factor for Gaelic-medium teachers is the much higher percentage of composite classes in GME compared to EME with 68% of Gaelic-medium teachers teaching composite classes compared to 27% of EME teachers (SG 2014). When compared to other bilingual education contexts, the key distinguishing feature is the predominant provision of GME in dual-stream schools (Nicholson and MacIver 2003; O’Hanlon, Paterson and McLeod 2013).

Gaelic-medium education language policy context

Languages within Scottish schools have featured more prominently in education policy over recent decades. Scottish language policy has been influenced by wider UK, European and global influences. *The European Charter for Regional or Minority Languages*, ratified by the UK government in 2001, made provision relating to minority language education (Dunbar 2005:470). Gaelic was one of the minority languages recognized by the UK government at that time. Post-devolution,

² The statistics refer to the academic year (2015-16) when the research data was collected.

educational policy aspired to become more outward looking as the Scottish Executive (SE) recognized the need to ‘ensure that Scots are fully equipped with the languages skills necessary for employment, study and travel’ (Scottish Executive Education Department [SEED] 2007:4). In the Strategy for Languages Report (SEED 2007) and the Languages 1+2 Report (SG 2012), there is acknowledgement of the ‘good example’ of GME and the benefits of bilingualism. It is therefore a potentially auspicious time to consider specialist professional learning needs of Gaelic-medium teachers to enhance their capacity as language educators.

The Curriculum for Excellence (CfE), a 3-18 curriculum introduced in 2004, further acknowledges the importance of language learning as a communicative skill that will enable young people to participate fully in a global society and economy. However, the implementation of the CfE has not been without controversy (O’Brien 2012; Paterson 2017; Priestley 2016). From the perspective of Gaelic-medium teachers a key issue is its design for a monolingual school population, with no recognition of the altered pattern of learning found in bilingual children (Baker 2011). While there is acknowledgement of this altered pattern of learning in some policy documents (Education Scotland 2015), this is not explicitly reflected in the translated versions of the CfE experiences and outcomes which broadly mirror the English documents (Education Scotland 2017a, 2017b).

Gaelic development policy is specifically framed in BnG’s National Plan for Gaelic³ that contains a strategy for promoting and facilitating the promotion of Gaelic education and Gaelic culture. A stated outcome of the 2012-2017 National Plan was an ‘increase in the acquisition and use of Gaelic by young people in the home and increased numbers of children entering Gaelic-medium early years education’ (BnG 2012:18).

In order to achieve this outcome, the 2012-2017 Plan included in its priorities:

- Increasing initiatives to promote, establish and expand both GME and Gaelic Language Education (GLE) at primary and secondary levels;

³ The Gaelic Language (Scotland) Act 2005 requires BnG to produce a new plan every 5 years.

- Ensuring adequate attention is given to the recruitment, retention, education, support and development of GME and GLE teachers. (BnG 2012:23)

The important role of education in the revitalization of Gaelic is recognized in the National Plan for Gaelic (BnG 2012:23), and is accepted as a significant component in the second language literature (Dorian 2006:456; Hornberger and King, 1996:438). This revitalization outcome adds a dimension to the work of immersion teachers that is not expected of mainstream primary teachers. As teacher development is known to be a factor in the success of immersion education, with its importance acknowledged in the 2012-17 National Plan, the teacher views of the professional learning and knowledge required to teach in the immersion context is crucial.

Gaelic-medium primary teacher professional learning

Baker (2011), in identifying the teacher as the central factor in achieving the aims of any immersion programme, has emphasized that the sustainability and success of immersion programmes is founded on the constant development of teacher effectiveness (2011:306). Opportunities for teacher learning are key to this. This is particularly important for Gaelic-medium teachers, as the disparity of teachers' experiences of and in the education system is large (Pollock 2006). For example, many of the older teachers transferred, as fluent speakers, from English-medium teaching when the early Gaelic-medium streams were opened, without any formal learning in the immersion approach but with extensive experience in classroom practice. Professional learning opportunities at that time would have been sparse (O'Brien 2011:778). In contrast, many of the younger teachers have acquired Gaelic through GME, at secondary school or as adults, may have accessed learning in the immersion approach through their ITE experience and will have been allocated a mentor in their induction year. Current specialized teacher learning opportunities for Gaelic-medium teachers is briefly summarized next.

Initial teacher education

The concept of career-long professional learning (CLPL), spanning the whole of a teacher's career, starts at ITE level. At the time of the study there were four

undergraduate programmes available that offered Gaelic-medium pathways to primary teaching: one jointly offered by the University of Aberdeen with the University of the Highlands and Islands (UHI), two at the University of Edinburgh, and one at the University of Strathclyde. Two post-graduate (PG) routes were offered: one at UHI and one at the University of Strathclyde. At that point only the University of Edinburgh ITE programmes were bespoke to Gaelic-medium education, with UHI subsequently developing a fully Gaelic-medium programme⁴. However, the sustainability of these programmes is threatened by a scarcity of suitably qualified staff with specialist knowledge and understanding of primary education, bilingual and immersion education, and professional practice within the disciplines.

Gaelic-medium teacher CLPL opportunities

In the Gaelic-medium education (GME) sector, current professional learning provision appears to be offered by a range of organizations on an ad hoc basis. Two national organizations, Bòrd na Gàidhlig (BnG), a government related advisory body, and Stòrlann, a body established by government to coordinate resources for GME, provide annual events and funding for specific teacher professional learning opportunities. A leadership award⁵ for Gaelic-medium education is also available, in conjunction with the Social Enterprise Academy, on an annual basis. Education Scotland provides an online forum for the exchange of professional practice examples, and has hosted two Gaelic Education Conferences since 2015. STREAP, a 12-month post-graduate certificate is available to qualified Gaelic teachers who want to enhance and extend professional practice in the teaching of subject/stage through the medium of Gaelic. Additionally, universities have developed a number of one-off initiatives, and it is also likely that local authorities and schools offer specialist CPD opportunities. Teachers in the study showed that they also developed informal networks, across authorities and nationally, to progress their professional learning. A number of issues emerge from this fragmented picture. Firstly, there is a lack of data available on the overall provision of CPD in GME and therefore a perceived lack of

⁴ Accredited by the GTCS in 2017 and commenced in 2017-18.

⁵ Completion of this programme offers eligibility for an ILM Award in Leadership (SCQF Level 9).

coherence in provision. It is also unclear whether or not the CPD that GME teachers access meets their professional development needs across the career continuum or is relevant and/or specific to the sector.

As the majority of the pupils are learning Gaelic as a second language, it would be important for GME teachers, across the career spectrum, to have access to CPD to develop teacher confidence and competence in the Gaelic language, their knowledge and understanding of first and second language acquisition and their pedagogical knowledge (Johnstone 2002). Additionally, the *National Gaelic Education Strategy Steering Group (2016)* identified teacher professional learning related to Gaelic-medium as a priority area for development.

Access to teacher professional learning

A number of studies have described access to specialist professional learning opportunities for Gaelic-medium teachers as limited (Milligan et.al 2012; Stephen, McPake and McLeod 2012). The availability of immersion-related teacher learning opportunities and schools' willingness to release staff for external CPD events were the main factors identified (Milligan et.al 2012; Stephen et.al. 2012). A further issue of access to CPD is the geographically dispersed nature of Gaelic-medium schools across 14 LAs and, for some in more remote locations, the difficulties of accessing online materials due to absence of broadband. The local context of the Gaelic-medium setting, whether in a freestanding or dual-stream school, and the language of the local community will also influence the availability of formal and informal opportunities for specialist professional learning. All Gaelic-medium teachers will have access to the same professional learning opportunities at school and LA level as their EME counterparts. However, these CPD opportunities are usually designed for a monolingual education system and not always transferable to a bilingual context. While mainstream CPD may offer valuable learning where Gaelic-medium teachers are given additional time to adapt the learning for the immersion context, it does not act as a substitute for specialist professional learning.

The current policy emphasis on professional learning in Scotland provides a context for my research, along with the need for specialist learning for immersion teachers identified in the literature. Nonetheless, this context alone does not account for my interest in the topic and I therefore present some relevant personal background information that contributed to focusing on this research area.

Personal background

My interest in Gaelic-medium education (GME) and bilingualism emanates from a period of class teaching, at all stages, in the Gaelic-medium stream of a dual-stream primary school. Through observing the language and cognitive development of pupils, my initial scepticism of the concept of GME developed into a curiosity about the development of bilingualism in general, and the concept and value of the immersion approach in the Gaelic-medium sector in particular. Added to this, as a class teacher I was exercised about the most effective ways to support children's language learning without compromising their overall educational experience. I was very aware that, while my experience and learning in mainstream teaching was of value and could be adapted, there was an additional dimension to teaching and learning through the immersion approach that required more knowledge and understanding. The absence of organized professional learning opportunities meant that much of my learning was informal, through discussion with more experienced colleagues and through trial and error. We had no awareness of the rich body of international literature that could have informed our practices.

My journey into teacher education was driven by a desire to simultaneously learn and understand more about children's learning and development in specific disciplines and to contribute to student teacher learning. My initial position was in the development of a part-time distance learning PGCE programme for Gaelic-medium teachers that, contrary to my expectations, transpired to require only translation of materials from an established programme for mainstream teaching. For me, this was frustrating as it did not offer Gaelic-medium teachers specialist knowledge of their field. My subsequent position as primary education lecturer, teaching on language courses, enabled me to explore and deepen my knowledge and

understanding of language and language education. When the opportunity arose to undertake doctoral studies, it offered me an opportunity to pursue a personal interest in an area that could also be of potential interest and benefit to the Gaelic-medium teaching community.

The research

This thesis reports on an interview study with 25 teachers that took place in Gaelic-medium schools or streams. Additional background information was gained through questionnaires. The main aim of the study was to examine what professional learning Gaelic-medium teachers perceive would benefit them in teaching Gaelic as a language and teaching the curriculum through Gaelic. Subsidiary foci of the study were to examine whether the identified needs varied by stage of career or by teacher Gaelic language background, and if there were contextual factors that facilitated or impeded their learning. Through this it is hoped to gain an increased awareness of what teachers understand to be their professional learning needs. Additionally it is anticipated that this awareness may inform the future design of early phase and career-long professional learning programmes.

Structure of the thesis

The purpose of this first chapter was to set the context of the research. Following this, chapter two embarks on a review of the literature. This is presented in two distinct sections with the first section contextualizing the learning of Gaelic-medium teachers in the Scottish and international immersion education sector, demonstrating the need for distinct professional learning opportunities. The second section examines the theoretical basis of bilingual and immersion education, and the literature at the interface of immersion teacher learning and classroom practice. This chapter notes the paucity of studies examining immersion teachers' own views of their professional learning needs, although there is a growing body of knowledge internationally about theoretical and pedagogical issues associated with teacher learning.

In chapter three the methods and processes used to answer the research questions are described. The choices and rationale underpinning the research design are explained. In particular, the strategy for sample selection, and language-related issues that occurred at different stages of the research process, are discussed. Decisions about the data collection and analysis are also outlined.

Chapter four presents the main findings of the study from analysis of the data. These are presented thematically, identifying the professional learning needs that were perceived to be most important to the participants in the interviews and additionally drawing on contextual and background information from the questionnaires. Three main themes related to immersion teacher learning needs are identified: the teachers' personal language needs; needs in relation to teaching the curriculum through the minority immersion language; and needs related to the learning contexts.

Chapter five discusses implications of the key findings in relation to the research questions and the national and international literature. The concluding chapter reflects on what has been learned from the study about the learning needs and priorities of the participants, and considers how this can contribute to the design of professional learning programmes across the career continuum by all providers, local and national.

Research questions

In order to bring focus to the following discussions, I now introduce the main research question guiding this study:

- What do Gaelic-medium primary teachers perceive to be their professional learning needs in relation to teaching Gaelic as a language and to teaching the curriculum through the medium of Gaelic?

Two further related questions informed the thesis:

- Do the perceived learning needs of Gaelic-medium primary teachers differ by career stage or language background?
- What contextual factors facilitate or impede Gaelic-medium teachers' professional learning?

Chapter 2 Literature Review

Introduction

In this chapter I draw on a range of literature that helped to frame the research questions and guide the study. It further contextualizes the potential professional learning needs of Gaelic-medium teachers within the Scottish context. The main aim of the study was to explore Gaelic-medium teachers' perceptions of their professional learning needs⁶ for teaching Gaelic as a language and teaching the curriculum through Gaelic. In the absence of academic studies on the professional learning of teachers in the Gaelic-medium sector, I draw on related literature in the national and international immersion contexts such as Wales, Canada and Ireland where bilingual education has been practiced and researched for over five decades. The literature relating to bilingual and immersion education is the main body of literature informing the study with the professional learning literature offering insights into the contexts of teacher learning. These literatures are reviewed because of their relevance to my study and to the potential interests of the participant group.

It may seem to some unnecessary to consider the professional learning needs of Gaelic-medium primary teachers apart from those of other Scottish primary teachers. As noted in chapter one, teachers in the Gaelic-medium sector meet the same criteria for full registration with the General Teaching Council for Scotland (GTCS) that all other primary teachers meet (GTCS 2012a). The GTCS does not require additional competences in relation to registration for Gaelic-medium teachers. In common with all Scottish primary teachers, teachers in the Gaelic-medium sector work within the framework of the Curriculum for Excellence and are likewise governed by local authority and national education policies. It could be argued that their professional learning needs are no different to other Scottish primary school teachers who teach

⁶ In this study the term 'need' or 'professional learning need' is a positive concept, a term used to identify a specific area for teacher practice-related learning that requires to be addressed or requires further development.

pupils with diverse language needs. I would, however, argue that the distinctiveness of the professional learning needs of teachers in the Gaelic-medium sector lies not in denying the potential relevance or benefits of professional learning opportunities available to all primary teachers to Gaelic-medium teachers, but in suggesting that Gaelic-medium teachers require to have *additional* professional understandings in relation to teaching in their specialist role as minority language educators through an immersion approach. It is teachers' perceptions of these additional understandings that are the focus of the research questions (Chapter 1, p13), while being open to other professional learning needs that GM teachers might identify. It is recognized that a balance requires to be maintained between these additional learning needs, the needs of other teachers, school-level and policy-level needs (O'Duibhir 2006).

This chapter is structured into two sections. The first section considers the literature that focuses specifically on distinctive factors for Gaelic-medium teachers that point towards the need for specialist professional learning. The second section examines the current theoretical basis and debates in bilingual and immersion education and second language acquisition, content-based instruction of language, and immersion pedagogies that are pertinent to Gaelic-medium teachers' practice.

These literatures have helped to hone the research questions, narrowing their focus and help to contextualize the study. They have further informed the analysis and the findings on an iterative basis.

SECTION 1

Distinctive factors for Gaelic-medium teachers' learning

It is recognized that there are many factors that influence the professional learning opportunities of teachers and that will, in turn, contribute to shaping the professional learning needs of teachers (Deforges 1995; Hargreaves 1999; Kelly 2006; Kennedy 2007). These include: the school context; the teacher as an individual; the nature and quality of Continuing Professional Development (CPD), and local and national policies. In this section I will examine further the role of the school context, the

language and curricular context, the teacher as an individual, and their potential influence on the professional learning of Gaelic-medium teachers.

The Gaelic-medium school context and teacher learning

Schools are part of wider communities with a range of constituent members (e.g. pupils, parents, teachers, management teams, ancillary staff). They also sit within localities and identified local authorities, and are governed by local and national educational policies that are typically designed for the dominant culture and language. Supportive school contexts have been found to be of crucial importance to teacher effectiveness (Sammons et.al. 2007:687). Professional learning needs to be situated within professional and personal contexts that support teachers' upward trajectory of learning and commitment (ibid). The school context of Gaelic-medium teachers is distinct within Scotland in a number of ways, contributing to the need for teachers in the sector to have additional specialist knowledge and understandings of bilingual and immersion education in minority contexts (May and Hill 2005).

Teaching Gaelic through immersion

Firstly, a distinct pedagogical approach is used. The teachers are teaching a minority language, Gaelic, to all the pupils using an immersion approach to language acquisition,⁷ and are also teaching the curriculum through the medium of Gaelic. Therefore the everyday language of teaching and learning in the class is different to mainstream primary classes, requiring the teachers to have a deep understanding of first and second language acquisition and immersion pedagogical strategies (Walker and Tedick 2000).

Baker (2011) notes that immersion teachers have to 'wear two hats: promoting achievement throughout the curriculum and ensuring second language proficiency' (2011:300). He also suggests that this dual task requires specific professional learning for teachers, as teaching in a minority immersion classroom requires skills and strategies beyond those required in traditional monolingual mainstream

⁷ This includes maintaining and enriching the language of the minority of L1 pupils alongside teaching Gaelic as a second language to most of the pupils.

classrooms. This is further explored in Section 2 of this chapter. Stephen, McPake and McLeod (2012), in their study of Gaelic-medium early years settings, found that Gaelic-medium practitioners did not have good opportunities for professional learning focused on language acquisition in minority contexts (2012:25). Stephen et.al (2010) further state that:

there is little awareness in Scotland of the specific skills required for this approach (*second language acquisition*) and training opportunities specifically focusing on immersion education or on approaches to bilingual education more generally, are very limited, particularly for early years practitioners. (Stephen et.al. 2010:24)

The findings from the Stephen et al (2010) study infer an identified area of professional learning not only for Gaelic-medium early years practitioners, but more widely within the whole Gaelic-medium teacher sector. The need for teachers to have access to relevant high quality CPD for their subject area and other specialist responsibilities is further acknowledged in the *Teaching Scotland's Future* (TSF) Report (Scottish Government (SG) 2010:74). Whether Gaelic-medium teachers themselves identify the skills for teaching a second language as an area for professional learning remains to be seen within the study. What the literature says about the immersion approach and associated language pedagogies is further examined in Section 2.

Dual-stream schools

Next, as noted in Chapter 1, a feature of the professional learning context for the majority of Gaelic-medium teachers is that provision of Gaelic-medium education (GME) is predominantly in dual-stream schools where Gaelic-medium and English-medium education are being delivered concurrently (Galloway 2017; O'Hanlon et.al. 2013). This adds an extra dimension to the professional learning context for both the Gaelic-medium teachers and the head teachers. In contrast, Ireland, which has similar language revitalization aims, has had a strong preference for dedicated Irish schools, with their solidly Irish-language environment, instead of classes within English-medium schools (McLeod 2003).

In dual-stream schools the Gaelic-medium teachers are teaching a minority language (Gaelic) and teaching the curriculum through the minority language, within a majority language (English) school and community setting. The dual-stream setting has potential implications for the informal and formal professional learning of Gaelic-medium teachers. Although there has been no research examining the professional learning of Gaelic-medium teachers in dual-stream schools it is almost certain that teachers in isolated school contexts⁸ are unable to access informal immersion-related professional learning from peers within the school, or hone their language skills, as the medium of all school communications will be English (Ward 2003). Informal sharing of practice, mentoring and discussions of wider curricular or professional issues will be in English with the predominant focus of the school professional learning programmes on mainstream education priorities (ibid).

Selection of schools to host Gaelic-medium classes is usually based on availability of accommodation rather than because of head teacher knowledge or sympathy towards bilingual education (Ward 2003:36). Usually head teachers are not able to speak Gaelic, and they sometimes find this acts as a barrier to supporting the specialist needs of Gaelic-medium teachers within the school (2003:36). The leadership of dual-stream schools is of significance for Gaelic-medium professional learning as head teachers have overall responsibility for planning and facilitating professional learning at school level (GTCS 2012c). The Standard for Leadership (GTCS 2012c) identifies the head teacher's responsibility for developing staff capability, capacity and leadership to support the culture and practice of learning in their schools. Specifically, head teachers are expected to:

- take responsibility for, and engage actively in, ongoing professional learning to deepen their personal and professional skills and knowledge base;
- promote ambition and set high expectations of continuing professional learning for all staff and ensure opportunities which deliver this;

⁸ Isolated contexts here include teachers of composite classes (e.g. P1-7) in rural settings or Gaelic-medium teachers with similar composite classes in large primary schools in Scottish towns where the EME:GME ratio is very small.

- ensure an appropriate balance between collaborative and personal professional learning;
- ensure an appropriate balance between personal and professional goals and school and local authority priorities;
- develop and use knowledge from literature, research and policy sources to support the processes of leading and developing staff and creating school cultures for the enhancement of professional practice and decision making, and
- provide systematic opportunities to enhance and refresh teachers' pedagogic practice. (adapted from GTCS 2012c:19-21)

For head teachers of dual-stream schools this demands balancing the learning needs of staff in both the English-medium and Gaelic-medium streams, and engaging critically with knowledge and understanding of research and developments in teaching and learning (in both mainstream and immersion education) 'to ensure the application of relevant development to improving outcomes for learners' (GTCS 2012c). Head teachers are also responsible for ensuring that school professional learning programmes offer a balance between the particular needs of the individual, whilst taking account of school, local and national priorities. (SEED 2003:3). Additionally they act as gatekeepers to external professional learning courses and can therefore facilitate or constrain access to specialist Gaelic-related learning opportunities at inter-authority or national level. In essence, effective school leadership makes an important contribution to the development of teachers in school (OECD 2009).

Specialist knowledge of the Gaelic-medium sector is therefore essential for the designers of school-based professional learning programmes if Gaelic-medium teachers' learning and development is to be progressed and included. Johnstone (2002), in his review of international research of immersion in a second language at school, emphasizes the importance of school leaders' of immersion or bilingual schools being knowledgeable about the goals of immersion education, the theories of first language (L1) and second language (L2) acquisition, and immersion teaching.

Mainstream teachers in a dual-stream school can expect the head teacher to have deep subject knowledge and offer pedagogical leadership, with expertise in curriculum and assessment. Gaelic-medium staff cannot assume this level of expertise and pedagogical leadership in relation to immersion education in dual-stream schools. In a report on Gaelic Medium Education: *Building the Successes, Addressing the Barriers* (HM Inspectorate of Education [HMIe] 2011) it was noted that opportunities for professional learning had been missed in some cases where school leaders did not feel equipped with the knowledge and confidence in immersion education (2011:13).

Although I have been unable to source literature on the role of principals or head teachers in relation to teacher professional learning in bilingual schools, the crucial role that head teachers play in shaping language policy and leading learning is noted in a recent New York city study of bilingual schools (Menken and Solorza 2014). The New York study recommended that head teachers of schools serving bilingual classes should receive specialized preparation in bilingualism and language learning (Menken and Solorza 2014:19), a suggestion previously noted by Ward (2003) in the context of GME (2003:37). This specialized knowledge is important so that they can support teacher learning for teachers who are expected to be experts in subject matter while using a range of assessments and teaching strategies in order to carry out current curricular and assessment requirements in two languages (Menken and Solorza 2014:4). While acknowledging the different context of the study, this raises questions about professional learning or accredited study for head teachers and leaders of Gaelic-medium and dual-stream schools.

School size and location

Thirdly, school size and geographic location will shape opportunities for teacher learning and the form of teacher learning. Gaelic-medium provision spans fourteen local authorities (Chapter 1, p6). Over half of Gaelic-medium schools are situated in the Highlands and Islands and Western Isles, with three quarters of the remaining authorities having only one or two Gaelic-medium schools in each authority

(Galloway 2017). Although school size and geographic location will impact both EME and GME teacher learning opportunities in these contexts (e.g. moderation of assessment processes and collaborative learning opportunities), it will affect Gaelic-medium teachers disproportionately because of the greater geographic spread and also because of the smaller ratio of GME to EME teachers in dual-stream schools. In the absence of research examining the impact of school size or location on teacher learning in either the Scottish context or in the immersion literature, a North American study offers some interesting insights that may inform the Gaelic-medium context (Kelly and Williamson 2002).

The policy context of professional learning in which the North American study is situated bears strong similarities to the wider Scottish context (Kelly and Williamson 2002; SG 2010b). The need for high quality, career-long professional development, emphasizing that teachers take increasing responsibility for their own professional learning, and a focus on the link between teacher learning to high learner achievement is emphasized in both settings (Kelly and Williamson 2002:410; SG 2010:). The study is of interest because of its findings in relation to the geographic and school size elements. The format of school-based professional learning was found to differ between schools in small rural districts and schools in larger, more populous areas. Small schools in rural districts relied more on conference attendance and one-off workshop professional development sessions, and were less likely to be involved in collaborative learning community activities than teachers in the larger area schools (Kelly and Williamson 2002:419). It was suggested that these choices might be determined by lack of specialist expertise in the more rural settings. It further proposed that the reliance on one-off workshops might be because of organizational and time constraints - in spite of the extensive literature testifying to its inadequacy (Cordingley et. al. 2005; Darling-Hammond et.al. 2009:9; Fraser et. al 2007:156). The study suggests that geographic location influences the possible format of professional learning opportunities for teachers (Kelly and Williamson 2002:418). While the study is in a different context, geographic distribution and school size were factors in selecting the sample for the this research, and it may be

that the Kelly and Williamson study (2002) will offer insights at the analysis stage of the study.

Class composition and teacher learning

Finally, teachers in the Gaelic-medium primary sector in Scotland teach Gaelic through the immersion approach to classes that include pupils from varied language backgrounds. The class composition will include children for whom Gaelic is a first language (L1) or a second language (L2). In some instances Gaelic may be a third or fourth language where the majority language, English, may not yet be established. However, the majority of pupils will be L2 learners (SG 2016). Within this context teachers have to provide a firm foundation in the development of the target language (TL), Gaelic, for L2 learners while enriching and extending the language of L1 learners, and concurrently provide a high quality education for all. It has been demonstrated in other minority immersion contexts that the L1 group are often subsumed within the larger L2 group of learners, even though their educational and language needs differ (Hickey, Lewis and Baker 2013; May and Hill 2005).

Hickey (2001), in a study of the effects on target language development of mixing L1 and L2 learners in an Irish early years immersion setting, suggested that professional learning on language enrichment for L1 children is required for immersion teachers and leaders, together with support for ways of developing language objectives for children of different language abilities (2001:466). This latter focus of professional learning would include understanding of the importance of planning to take account of the language balance within teaching groups, and giving equal regard to L2 learning and promotion of L1 maintenance and enrichment (ibid). French Canadian immersion education has had to adapt immersion pedagogical strategies in response to changes in the learner group from the homogenous learner group of early immersion schooling to the more recent heterogeneous learner group (Lyster 2007). Research relating to these adaptations to immersion pedagogical practice may be of interest to Gaelic-medium teachers who work with predominantly heterogeneous pupil groups.

Because a higher proportion of Gaelic-medium classes are in composite classes, ranging from composite classes of two to seven stages (e.g. P2-3 or P1-7) with pupils at varying stages of language and curricular learning, teachers require professional learning in organization and management of differentiated groups and support in planning academic and language learning for a wider range of intellectual development than would be expected in the majority of mainstream contexts. Studies in other immersion settings recommend that this language-learning context and class composition necessitates immersion teachers to have specialist knowledge and understandings of second language acquisition and associated pedagogical strategies that should be available through professional learning programmes at all career stages (Baker 2011; Cammarata and Haley 2017; Hickey and de Meija 2014; Johnstone et.al. 1999; Johnstone 2002).

The language and curricular context

The importance of teacher professional learning in relation to bilingualism, bilingual education and associated pedagogies has been identified in a number of studies (Garcia 2009; Björklund, Mård-Miettinen and Savijärvi 2014; Hickey 2007; Hickey et.al. 2013; Hickey and de Meija 2014). May and Hill (2005) further argue that specialist learning in the locally adopted bilingual approach (i.e. immersion in the Gaelic-medium context) is essential for teachers to understand and address the complex issues that attend to teaching in an L2 as the language of instruction, and also teaching literacy in the L1 and L2 (2005:239). This is recommended in all bilingual immersion contexts but is especially pertinent where languages are endangered and education is part of a revitalization strategy (Hinton 2011; May and Hill 2005). Gaelic-medium teachers requested professional learning opportunities to develop a deeper understanding of the immersion approach in a recent on-line audit of professional learning needs (Education Scotland 2016).

In this next section I begin by examining the wider context of bilingual education. The Gaelic-medium immersion approach is then considered, followed by consideration of some important curricular issues linked to the practice of immersion. These issues relate to practice and are of potential interest to Gaelic-

medium teachers as relevance to practice is a known motivator for teacher professional learning (Menter et.al. 2010:33).

Bilingual and immersion education

Language immersion education falls within the broad category of bilingual education and has diversified internationally to meet local needs and contexts (Tedick, Christian and Fortune 2011b; Garcia 2009). Bilingual education has been described by Baker (2011) as ‘a simplistic label for a complex phenomenon’ (2011:207). He distinguishes between two categories of bilingual education:

- education that uses and promotes two languages in a classroom where bilingualism is fostered, and
- relatively monolingual education in a second language in a classroom where bilingual children are present but bilingualism is not promoted

Gaelic-medium immersion education, with its aim of achieving bilingualism and biliteracy (additive bilingualism), would be representative of the former, while the latter would be more representative of the experience of minority language pupils in Scottish mainstream classrooms. Baker (2011) advocates greater precision in defining bilingual programmes as the term is often used within academic literature and policy documents to refer both to contexts that promote bilingualism, and to those that teach bilingual pupils yet are monolingual in their practices and aims (2011:207). Baker (2011) and Garcia (2009) have provided a detailed typology to represent the many varieties of bilingual programmes internationally to show how notions of bilingualism fit various classroom environments (2011:210). I have included a few of these examples in Table 2.1 to exemplify the range of aims and outcomes within different programmes.

Table 2.1 Examples of types of bilingual programmes (adapted from Baker, 2011).

| Monolingual Forms of Education for Bilinguals | | | | |
|--|--|---|--|----------------------------------|
| Type of Programme | Typical Type of Child | Language of the Classroom | Societal and Educational Aim | Aim in Language Outcome |
| Mainstreaming/ Submersion | Language Minority | Majority Language | Assimilation / Subtractive | Monolingualism |
| Mainstreaming/ Submersion with withdrawal classes | Language Minority | Majority Language | Assimilation / Subtractive | Monolingualism |
| Weak Forms of Bilingual Education for Bilinguals | | | | |
| Transitional | Language Minority | Moves from minority to majority language | Assimilation / Subtractive | Relative Monolingualism |
| Mainstream with Foreign Language Teaching | Language Majority | Majority language with L2/FL lessons | Limited Enrichment | Limited Bilingualism |
| Strong Forms of Bilingual Education for Bilingualism and Bilingualism | | | | |
| Immersion | Language Majority | Bilingual with initial emphasis on L2 | Pluralism and Enrichment. Additive | Bilingualism and Bilingualism |
| Maintenance / Heritage language | Language minority | Bilingual with emphasis on L1 | Maintenance, Pluralism and Enrichment, Additive | Bilingualism and Bilingualism |
| Two way/ Dual language | Mixed language minority/ language majority | Minority and majority | Maintenance, Pluralism and Enrichment, Additive | Bilingualism and Bilingualism |
| Mainstream Bilingual | Language Majority | Two majority Languages. Pluralism | Maintenance and Bilingualism and Enrichment. Additive | Bilingualism |

An understanding of the range of aims and outcomes associated with different programmes would be valuable within professional learning programmes for Gaelic-medium teachers as current research and policy documents have evidenced a variation in the practice of immersion in Gaelic-medium schools that impacts on pupils' learning experiences (HMIe 2011; O'Hanlon, Paterson and McLeod 2012a). Immersion education is classified as a strong form of bilingual education.

Immersion education

Lyster (2007) defines immersion education as a form of bilingual education that aims for additive bilingualism, where the pupils gain another language, by providing pupils with a sheltered classroom environment in which they receive at least half their curriculum teaching through the medium of a language that they are learning as a second, foreign, heritage or indigenous language (Lyster 2007:8).

This term originated in Quebec, Canada in the 1960s to describe programmes in which French was used as the language of instruction for pupils whose home language was English, with the goal of developing literacy and fluency in both languages (Cummins 2005a). Pupils were ‘immersed’ in the second language for the initial two to three years, adding the second language to their repertory of skills. This development of additive bilingual and biliteracy skills was at no cost to pupils’ academic, linguistic or intellectual development (Genesee 1985). Subsequent research evidence has consistently shown that English-speaking pupils of various academic abilities, regardless of ethnic or socio-economic background, are able to achieve high levels of language proficiency in the immersion language (Genesee 1987, 2004; Lambert et.al.1993). At the same time they were achieving as well as, and sometimes better than non-immersion peers in standardized tests through the medium of English (Lambert et.al. 1993).

Swain and Johnson (1997) summarize eight core features of immersion programmes:

- i. the L2 is a medium of instruction
- ii. the immersion curriculum parallels the local L1 curriculum
- iii. overt support exists for the L1
- iv. the programme aims for additive bilingualism
- v. exposure to the L2 is largely confined to the classroom
- vi. students enter with similar (and limited) levels of L2 proficiency
- vii. the teachers are bilingual
- viii. the classroom culture is that of the local L1 community

The sixth core feature would not necessarily be reflective of the Gaelic-medium context as pupils may enter the schools with similar, limited levels of the L2 if they have attended local Sgoil Àraich⁹, but for geographic or personal reasons, pupils may not have had that pre-school experience or be L1 speakers and enter at different stages of linguistic development.

Immersion programmes also have a number of variable features. These include the:

- stage at which pupils can enter immersion education;
- amount of time devoted to the language in relation to the majority language in the school, and
- status of the immersion language (Johnstone 2002)

The immersion approach adopted in GME, which advocates the exclusive use of the TL in the classroom, is based on understandings from early Canadian immersion where it was assumed that the second language would be learned naturally (Fortune and Tedick 2009b; Genesee 2013:30; Walker and Tedick 2000:17). Essentially, curriculum content becomes the vehicle for teaching the second language and this pedagogical approach provides the learners with opportunity to both acquire and use the new language (Genesee 1994). Proficiency in the second language (i.e. Gaelic for most pupils in the Gaelic-medium sector) occurs from meaningful and sustained interactions with others and is often incidental to the learning of curriculum content (Genesee 2013:32; Tedick 2014; Lyster and Tedick 2014). This is sometimes referred to as the ‘two for one’ principle of language acquisition (Lightbown and Spada 2006).

Although the Canadian context is the main comparator in this study it is acknowledged that there are significant differences between these two sociolinguistic contexts. The Canadian context differs to the Scottish Gaelic context in a number of key ways: French, while a minority language, is a high status language in Canada, is a majority language in France and is spoken by 21% of the population, while Gaelic is an endangered minority language in Scotland spoken by only 1.1% of the

⁹ Pre-school provision or nursery.

population, and not a majority language anywhere. In the early Canadian immersion context, classes were homogenous with all children learning French as an L2, whereas Gaelic-medium classes include both children who have Gaelic as an L1 and those for whom it is an L2. Also, there is an explicit and implicit language curriculum in the Canadian immersion context, with language being the focus of language arts lessons (i.e. the explicit language curriculum) and language being the medium, but not the object, of teaching in all other subjects (i.e. the implicit curriculum) (Genesee 1994a). Gaelic has been taught implicitly in all curricular subjects in the Scottish context with learning objectives primarily focused on curricular learning.

Policy and research context of Gaelic-medium education

In the Scottish context, national, local authority and school-level policy documents refer to the second language acquisition approach practiced in GME as ‘immersion education’ where Gaelic is the exclusive language of the classroom and the curriculum is taught in its entirety through the medium of Gaelic (Education Scotland 2015:19). Recent Education Scotland advice recommends that children in Gaelic-medium schools are entitled to receive high quality experiences through total immersion in the early stage of learning (usually from Primary 1 until the end of Primary 3) where no other language is used, and in the immersion phase (from Primary 4 to Primary 7) where the curriculum in its entirety continues to be taught through the medium of Gaelic (Education Scotland 2015:9). In the immersion phase, English is taught through the medium of Gaelic. The aim is additive bilingualism, with pupils becoming equally confident in the use of Gaelic and English in a full range of situations within and outwith the school (Education Scotland 2015:8). Teachers’ knowledge and understanding of immersion education will impact the language practice in their classrooms and consequently the language and academic development of their pupils (Lyster 2007). Therefore, professional learning opportunities about the underpinning theories and outcomes of different types of immersion programmes are important in shaping the teachers’ understandings and practice, and learner outcomes.

Since the commencement of GME in the 1980s teachers have been exposed to a range of policy advice about immersion practice at varying stages in their careers. From the 1990s the term ‘immersion’ in GME has been commensurate with early years GME in policy documents (Bòrd na Gàidhlig [BnG] 2012; HMIe 2005; HMIe 2011; Scottish Office Education Department [SOED] 1993; SOED 1994). However, in the majority of documents the term ‘immersion’ has remained undefined, with an assumed shared understanding. The rhetoric of immersion is potentially confusing for teachers even in documents that offer an explanation. The *5-14 Curriculum Guidelines* suggested that teachers in the immersion phase were required to speak Gaelic ‘*extensively*’ (SOED 1993:25) and the 1994 HMIe report identified ‘aspects of good practice’ to include ‘the use of Gaelic as the *main, but not exclusive*, medium of teachers’ communication with children’ (SOED 1994:2). The later Curriculum for Excellence document (SG 2011b:6) states that ‘In Gàidhlig medium classes learning and teaching is wholly through Gàidhlig during the immersion phase from P1 to P3. English language is then gradually introduced through the medium of Gàidhlig, with Gàidhlig remaining the predominant language of the classroom in all areas of the curriculum’ (ibid). Teachers will therefore interpret this advice, on the balance of the use of Gaelic and English in the classroom, in varying ways. Moreover, because all children in a class have individual and varied language and learning needs, interpreting the advice requires a balance of knowledge, judgement and expertise which will lead to a range of practices. This brief historic glance at policy is necessary as all Gaelic-medium teachers who have taught for 7 years or more will have practiced within these differing understandings of the immersion approach. Professional learning to share current understandings and practices, together with the basis for these, would be valuable.

By 2011, the HMIe and BnG reports both identify immersion with the ‘*total immersion*’ model where teaching and learning is ‘wholly through Gàidhlig’ or ‘through the medium of Gaelic where no other language is used’ (BnG 2011:6; HMIe 2011:3). This model of immersion was shown to deliver a higher level of proficiency than other immersion models (Johnstone 2002). HMIe go further to link the purpose of the ‘best immersion practice’ with ‘children ... achiev(*ing*) equal

fluency and literacy in both Gaelic and English' (HMIe 2011:5,6). This shift in rhetoric demonstrates an understanding of the relationship between specific models of immersion and the outcomes for pupils. However, an overall lack of clarity on the immersion approach has left (and leaves) teachers, head teachers and local authorities to develop 'a variety of interpretations of immersion and total immersion across the country resulting in too great a variation in practice and in children's learning experiences' (HMIe 2011:6) and indicating a need for professional learning opportunities nationally to clarify teachers' understandings. While there is continuing debate about the relationship between professional learning and change to classroom practice, there is widespread professional agreement that they are interrelated (SG 2010b:45).

Johnstone (1994) defines immersion as occurring when 'children, normally from a majority language (L1) background, receive a significant amount of their education through a second language (L2) from teachers who are native speakers or highly fluent in the immersion language' (1994:43). This definition allows room for local and individual interpretation of immersion practice but, additionally, signals the importance of the level of language fluency of the Gaelic-medium teacher. A number of international immersion studies identify professional learning opportunities for the development of teacher language fluency as essential, and suggest they are available at all career stages (Bernhardt and Schrier 1992; May and Hill 2005; Walker and Tedick 2000). This prompted my interest to include a mix of L1 and L2 teachers for participation in the research sample.

The emphasis in the total immersion early stage is on the development of talking and listening skills, although language development through immersion remains a key focus at all stages in the primary classroom (SG 2010a; Education Scotland 2015; SOED 1993:7; Robertson 2013:276). Hickey and de Mejia (2014), in a paper examining issues relating to immersion education in the early years, highlight the need for access to ongoing professional learning in the immersion approach and, additionally, a broad range of development activities focused on improving teachers' interactions with children (2014:139). The quality of classroom talk is a significant

factor in pupil learning in general and the centrality of the class teacher in relation to pupil learning has been identified in numerous primary education studies (Alexander 2012; Boyd and Markarian 2011; Lingard et. al. 2003). As the focus of the immersion classroom is on real, authentic communication (Education Scotland 2015) immersion teachers have the additional responsibility of developing talk while pupils are at various of stages of language learning and, often, where the teacher is the sole role model of the L2. Genesee (1985), emphasizing the importance of this in immersion education, states that ‘the effectiveness of immersion education depends very much on the quality of the interaction between the teacher and the student (1985:543). In the study, I was interested to note whether participant teachers’ raised this pedagogical aspect of teaching the language as important to their personal professional learning.

Teaching and learning in a minority language context

A further facet of the language context for Gaelic-medium teachers is that they are teaching an endangered minority language, within a majority English-speaking culture, as a second language to most pupils. This raises issues relating to:

- language dominance within the school and classroom;
- the amount of TL exposure needed for L2 learners, and
- opportunities for the enriching of L1 pupil language.

The balance of majority and minority language pupils in a school or class has been identified as a key issue in second language education (Lindholm-Leary 2012) and particularly when the TL is an endangered minority language (Hickey 2001). Where the pupil balance is weighted towards the majority language (English), informal classroom language may turn to the majority language. This leads to language learning and literacy issues for both L1 and L2 pupils.

The issue of TL exposure time required to learn an L2 continues to be controversial (Genesee 2013) and is pertinent in the Gaelic-medium context as the majority of pupils are L2 learners. It is known that pupils in total immersion programmes

generally acquire greater L2 proficiency than pupils on partial immersion¹⁰ programmes (ibid). However, there is also significant evidence in the Canadian context that time alone does not account for the differences in achievement and that the nature and quality of curriculum and teaching can compensate for reduced exposure (Stevens 1983). Yet the importance of exposure time where there are issues of language status is recognized (Genesee 2013). Therefore exposure time is important in the GME context.

Associated with the issue of exposure time is the concept of a protected or ‘safe space’¹¹ for the TL in minority language classrooms. Because the majority of pupils in GME are learning Gaelic as an L2 the recent advice on the exclusive use of Gaelic in the classroom (Education Scotland 2015) is essentially identifying the classroom as a ‘safe space’ where only Gaelic is spoken. This is seen to be necessary to ensure the pupils have maximum exposure to the language, progress their proficiency and academic learning. The importance of preserving a safe space for the minority language, where there is increasing encroachment of the majority language, is a valid concern in order to maximize fluency, confidence and positive attitudes to the TL. The necessity of a safe or protected space for the TL is recognised by researchers in other contexts (Cammarata and Tedick 2012; Cummins 2014; Garcia 2009; Lewis et.al. 2012; Hickey 2016). It has been further argued that this need not be a rigid or static space, and while recognizing the importance of monolingual¹² teaching strategies in immersion education, these could be supplemented by the judicious use of bilingual strategies that focus on strengthening competences in both languages (Cook 2001; Cummins 2014; Garcia 2009). This latter concept is met with some reservation by researchers in minority language teaching contexts and will be discussed in Section 2 (Hickey 2016; Lyster 2015; Section 2, p75, 76).

¹⁰ Partial immersion is where learners receive part of their education through one language and part through another (one of the two often but not always being their first language) (Johnstone 2002).

¹¹ The concept of ‘breathing space’ or ‘safe space’ for a minority language refers to domains where the minority language, Gaelic, is safe from the majority language, English (Fishman 1991).

¹² Monolingual strategies represent strategies where only one language is used.

Issues arising from the mixing of L1 and L2 speakers in the same class, which is common practice in GME, is encapsulated in the title of an Irish study ‘Mixing beginners and native-speakers in minority language immersion: who is immersing whom?’ (Hickey 2001). This study found that Irish L1 pupils might not be gaining sufficient enrichment in their language as the learning focus was on the L2 learners. This and other studies have found that immersion teachers tailor their language to L2 learners, ask fewer questions in a mixed language group, offer more repetition for the benefit of L2 learners and give less feedback (Ramirez and Merino 1990). Pupils in the Irish study, even at pre-school level, seemed to be aware of the different status and power relationships between the languages and majority language pupils were found to immerse minority language pupils, curtailing L1 enrichment opportunities (Hickey 2001). From these studies professional learning regarding the awareness of majority-minority cross-language influence, and of the need to increase the use of the minority language in the classroom, is recommended and would be relevant in the Gaelic-medium teacher learning context also (Baker 2011:305).

Teaching the curriculum through a second language

A distinctive feature of immersion education is the integration of language learning and curriculum content learning (Coyle, Hood and Marsh 2010; Genesee 1994b, 2013). This is referred to as content-based instruction (CBI) in the Canadian literature. Essentially, content is the vehicle for teaching the TL, Gaelic, and curriculum teaching provides pupils with opportunities to acquire and use the TL in the same way that native speakers learn their L1 through sustained communication with others. Learning the TL is often incidental to the learning of curricular content (Genesee 2013:32). This approach has been adopted because language is most effectively acquired when it is learned in meaningful, significant social settings and because interesting curricular content provides pupils with an authentic and motivating basis for language learning and use (Genesee 1994b). In GME the expectation is that development of the second language occurs alongside the acquisition of content knowledge. Gaelic-medium policy recommends that ‘teachers lead learning in all curriculum areas, including English, through the medium of Gaelic’ (Education Scotland 2015), pointing towards the exclusive use of the Gaelic

language as the language of instruction and the incidental learning of Gaelic as a language.

However, alongside the extensive research showing that immersion learners attain an additional language at no cost to the majority language (Genesee 2013), there are signs that the ‘exclusive focus on meaning or the functional use of the L2 in immersion is not optimal for developing students’ L2 competence’ (Genesee 2013:32). Recent research has shown that initial conceptualizations of immersion underestimated the degree to which attention needed to be given to the development of the immersion language (Genesee 1994; Lyster 2007, 2015; Spada 1997). Fortune et.al (2009c) note that much still needs to be explored concerning how teachers shape the teaching of language, how they embed language in curriculum teaching, and design activities that offer opportunities to pupils for meaningful output (2009c:73). They further stress the importance of professional learning to help teachers learn how to integrate language and teaching in immersion classrooms, identifying it as the key focus of second language education in the 21st century (2009c:89).

While there has been no equivalent research in the Scottish Gaelic context identifying the need to give more attention to the explicit teaching of language in curricular content lessons, there are some indicators that there is an awareness of the need for more formal language instruction. Education Scotland (2015) identifies the teaching of grammar and specialist vocabulary as a suggested focus for CLPL (2015:13). Additionally, it is advised that grammar and specialist vocabulary are ‘embedded within learning and play through the use of Gaelic all of the time’ in the total immersion stage (2015:28). In the immersion phase

Particular points of grammar and specialist vocabulary are planned in programmes and courses across the curricular areas and contexts of the curriculum. (2015:28)

This would suggest a tacit acceptance that a more proactive approach is needed towards teaching the language. However, the document does not address the concerns identified in Fortune et.al (2009c) of *how* teachers integrate language and curriculum content in a coherent and meaningful way and the need for professional

learning in this. There is also an apparent contradiction between the recognition of the need for a more intentional focus on language and the belief, implied in policy documents, of the incidental acquisition of language solely through the exclusive use of the immersion language. This is suggestive of the need for professional learning opportunities to examine and resolve these issues, without compromising the principle of immersion for minority language acquisition, within the Gaelic-medium immersion approach.

The Gaelic-medium teacher as an individual

A sociocultural view of teacher learning identifies the individual teacher as one of a number of factors that influences teacher learning (Day and Sachs 2004; Kelly 2006). This includes the individual's past and present experiences, personal and educational, dispositions, values, beliefs and understandings and their impact on the professional identity of individual teachers. This perspective prompted me to examine teachers' personal histories, their life and career stage and experiences of initial and continuing professional education as an important part of the richer contextual picture relating to the main research question (Chapter 1, p13). Much recent literature highlights the importance of teacher identity while acknowledging the difficulty of defining the concept (Beauchamp and Thomas 2009; Sachs 2005). In a review of the literature of teacher identity Beijaard, Meijer and Verloop (2004) identify four key features of teacher identity which determine that:

- identity is an ongoing process, therefore dynamic rather than stable (associated with life-long learning opportunities);
- teachers learn professional characteristics within a context and adopt these in individual ways;
- teachers have sub-identities which may be more or less central to the overall identity (e.g. Gaelic-medium teacher; primary teacher; early years teacher; principal teacher), and
- comprises the notion of agency (active pursuit of personally identified professional learning opportunities). (2004:122)

For this study, how the Gaelic-medium teacher has acquired the language, and the desirable attributes for immersion teachers that have been identified in research

studies, are aspects of the teachers' identity that are of particular interest to the research question, alongside the school context. As the main research question seeks to gain teachers' own views of their professional learning needs, it will be interesting to consider if they identify the need for specialist professional learning in either of these areas.

The teacher and language acquisition

In Scotland, how teachers have acquired the language that they are teaching, and through which they teach, is an issue that is confined to the Gaelic-medium primary context and not one that needs to be addressed in the mainstream primary context. For teachers who are either native-speakers or learners of Gaelic there will then be professional learning implications for opportunities to maintain and develop the social and academic registers of the language that would be additional to their non-linguistic professional learning needs as primary teachers.

In mainstream primary education in Scotland teachers, in general, are teaching in their first language (English), having evidenced their levels of competence and confidence through the process of school and university qualifications and the teacher registration process (GTCS 2012a). All entrants to primary school teaching in Scotland are required by the GTCS to have gained English at Higher level (SCQF level 8). Teachers in the Gaelic-medium sector will be similarly qualified in English and in the standard eligibility requirements for primary education, but they are not required to formally demonstrate any competency in Gaelic other than fluency in the language (Chapter 1, p4). Fluency in this instance is usually defined as having communicative competence but not necessarily fluency across all aspects of literacy (Ward 2003). This context for Gaelic-medium teachers is replicated in other minority immersion contexts where minority language speakers have been educated through the majority language, with the minority language being restricted to the social and language community arena (May and Hill 2005; Walker and Tedick 2000).

Therefore consideration of the teacher's learning trajectory for Gaelic would seem important within the context of the research question. This is also of interest as Gaelic-medium teachers have already identified 'opportunities to maintain language

skills and fluency’ as a specific area of professional learning that they would value in a the online audit of career-long professional learning requirements for Gaelic-medium practitioners (Education Scotland 2016).

Part of the individual histories of Gaelic-medium teachers will include how they acquired the language. The second language learning literature (Auer and Wen 2007) identifies two methods by which people develop competencies in two languages:

- simultaneous bilingualism when two or more languages are acquired simultaneously in childhood, and
- sequential bilingualism when the second language is acquired after the first language has been established.

Some teachers will have acquired Gaelic and English simultaneously, with both languages being used in the home, or through media and community exposure to English alongside Gaelic in the home. Others will have acquired the languages sequentially through learning either Gaelic or English after one or other language is secure. This could include those whose home language was Gaelic who learn English at school, or those whose home language was English who learned Gaelic either through primary (GME), secondary, tertiary or adult education. Research shows that it is usual for L2 learners (i.e. Gaelic for many of the teachers) to speak somewhat differently to native speakers and that, although possible, it is difficult for an adult learner of an L2 to become a native speaker of the TL (Davies 2003:4). Lightbown (2003) similarly claims that, ‘for most adult learners, acquisition stops – “fossilizes” – before the learner has achieved native-like mastery of the TL’ (2003:8). However, Paikeday (1985) argues that ‘native-speakership should not be used as a criterion for excluding certain categories of people from language teaching’ but that proficiency in the language should be the key factor (1985:53). This language acquisition and proficiency factor is an aspect of individual teachers’ personal history that may influence the teachers’ own perceived professional learning needs. There would be no analogous topic identified in the professional learning of English-medium teachers.

Immersion teacher: qualities and expectations

A number of studies have identified key knowledge, qualities and skills that are expected of immersion teachers (Baker 2011; Björklund et al. 2014; Hickey 2007; Hickey and de-Mejía 2014; Hickey, Lewis and Baker 2013; Johnstone 2002; Walker and Tedick 2000). With the exception of Hickey et.al. (2013) and Walker and Tedick (2000) who researched teachers' own views, there is insufficient information to assess whether these qualities and skills were attributed *to* immersion teachers by researchers or came *from* teachers, and whether teachers view these skills as requiring further specialist professional learning. Knowledge of bilingual education, a high level of TL fluency and knowledge of immersion pedagogies are central expectations evidenced in the literature.

Johnstone (2002) suggests that the immersion teachers would need to be:

- native (or highly fluent) speakers of the immersion language, GTCS registered;
- committed to immersion education;
- knowledgeable about its underlying principles and about children's L1 and L2 development, and
- able to draw on a range of general and immersion-specific teaching strategies.

He further states that certain personal qualities could be important, e.g. capacity to withstand feelings of isolation (from mainstream colleagues in the same school) and uncertainty (about the eventual outcomes of the approach). Johnstone (2002) emphasizes the importance of support to develop the knowledge and skills required both through Initial Teacher Education (ITE) and through CPD opportunities (*ibid*). May and Hill (2005), in the Maori context, broadly mirror Johnstone's requirements and qualities for teaching in minority immersion contexts, emphasizing the need for both theoretical knowledge and understanding of the specialist language area, and support for developing immersion pedagogical practices (2005:399).

The centrality of a high level of fluency required to teach in the TL (Gaelic for Gaelic-medium teachers) is emphasized in a number of minority language studies

and seen to be a prerequisite to successful immersion education (Baker 2011; Hickey 2007; Hickey and de-Mejia 2014; May and Hill 2005). Concern for the teachers' fluency in Gaelic is noted in a recent HMIe (2017b) document which stated that, on occasion, teachers' limited fluency was preventing pupil learning being facilitated consistently through Gaelic (2017b:1). This is additionally important, as teachers are often the sole role models of the language for many L2 pupil learners. As fluency is equated to a high level of proficiency in all four aspects of literacy (reading, writing, speaking and listening) it is likely that individual aspects of literacy development could be a focus of professional learning and would be of potential interest to both native-speakers and learners. Knowledge *about* the language is also seen to be vital in order to explain language features to learners. Sangster, Anderson and O'Hara (2013), in a study of Scottish ITE students, argued that teachers' own knowledge should be secure and that, in order to pass on their knowledge about language to their pupils, it was necessary for them to possess a 'language for discussing language' (i.e. a metalanguage). This is important for immersion teachers who require to develop pupil language proficiency in the upper primary stages to progress grammatical accuracy.

While recognizing the importance of teacher language fluency, Netten and Spain (1989) contend that more than teacher fluency is required for immersion teaching and that the professional learning of immersion teachers needs to focus on a deeper knowledge of effective pedagogical strategies and classroom communication skills (1989:484). There is agreement among researchers that professional learning opportunities that focus on effective pedagogical strategies for L2 teaching and teaching the curriculum through the L2 are needed for immersion teachers (Baker 2011; Cammarata and Haley 2017; Garcia 2009; Hickey et.al 2013; Johnstone 2002; May and Hill 2005; Met 2009; Snow 1990b; Stephen et.al 2010). Much current professional learning for teachers in immersion education is known to be 'under the wing' as they are mentored by veteran teachers, or by 'the seat of their pants' as they seek to find their own ways of teaching' (Walker and Tedick 2000:15). Therefore professional learning opportunities that focus on pedagogical practices are important and noted in recent GM policy advice (Education Scotland 2015:13).

There is an expectation that Gaelic-medium teachers will have a repertoire of immersion specific pedagogical strategies, in addition to the general pedagogical strategies used by primary teachers (Hickey and de Mejía 2014; Johnstone 2002; May and Hill 2005). Some of these language specific pedagogies may not be exclusive to immersion or language education, but may be particularly effective for language acquisition (e.g. cooperative learning [Section 2, p82]). Other pedagogies such as bilingual strategies are specific to second language education (Section 2, p74). Professional learning that focuses on knowledge and understanding of these immersion specific pedagogies is important.

One of the main responsibilities of immersion teachers is to use the TL in a way that is easily understood by pupils. Teaching strategies that ensure the comprehensibility (Section 2, p47) of the curricular subject matter are central to immersion pedagogy and essential to pupil academic achievement (Baker 2011; Johnstone 2002; Lyster 2007; O’Ceallagh 2016). In the initial stages of language learning teachers will modify their speech by:

- talking more slowly;
- the vocabulary used will be deliberately limited with simplified grammar and syntax;
- building redundancy into their speech (i.e. repetition, modeling, paraphrasing, multiple examples);
- using pauses to allow the pupil time to process the new language and understand the meaning, and
- frequent questioning to check for pupil understanding. (Baker 2011; Lyster 2007)

Comprehension is further facilitated through the extensive use of body language, including gestures and facial expression and the use of visual aids. Immersion teachers also need to have a knowledge and understanding of teaching strategies to address language errors which are a usual and frequent part of language learning (Section 2, p54).

However, Lyster (2007) argues that ‘the continued use of strategies that rely too much on gestures and other visual and non-linguistic support may, over time, have negative effects on the development of students’ communicative ability in the second language (Lyster, 2007:61). It is also now well established in the immersion literature that second languages are not learned incidentally. The incidental approach to language learning results in high levels of comprehension skills, as well as fluency and confidence in speaking and writing, but immersion learners also show lower than expected levels of grammatical accuracy, vocabulary and appropriateness (Genesee 2004, 2013; Harley 1993; Lyster, 1987, 2007; Swain 1988). This suggests that extended exposure to the TL and opportunity to use the language in meaningful contexts do not necessarily, on their own, lead to continued language growth in immersion, and that a more intentional focus on language is required particularly in the middle and upper primary classes (Baker 2011; Genesee 2013; Johnstone 2002). In a study of language and culture in GME, Landgraf (2013) noted the need for a more intentional focus on language in the Gaelic-medium context, alongside the need for professional learning for Gaelic-medium teachers from ITE and across the career spectrum (2013:312).

Fortune, Tedick and Walker (2009) suggest that immersion teachers need strategies for becoming more ‘language aware’ and ‘language informed’, and professional learning opportunities to develop strategies for identifying specific language features to teach within curriculum lessons. Additionally, immersion teachers need to ensure that there are frequent, sustained opportunities for pupils to use the immersion language (Section 2, p48). This is important as practice is a means of developing fluency as well as pushing pupils to move from semantic processing, with a focus on meaning, to syntactic processing, with a focus on grammar (Lyster 2007:71). Pedagogical strategies that support this intentional focus on language in curriculum teaching, and the implication for teacher professional learning, will be discussed further in Section 2.

The specialist pedagogical expertise expected of immersion teachers, together with the knowledge of bilingual education and language fluency would indicate the need

for additional professional learning opportunities to maintain and develop these areas.

Stage of career and teacher learning

In UK studies, including Scotland, it has been argued that the priorities of teachers in relation to their professional development and learning vary at different stages of their career (Menter et.al 2010; Kelly 2006). This has not yet been examined in the Scottish Gaelic-medium sector. Career-long professional learning has been found to be desirable in sustaining teacher quality and retaining teachers within the profession (Day 1999).

In the study I was interested to include teachers at various stages of the career continuum to examine whether the language-related CPD needs of teachers differed according to their career stage. This was of interest as the teachers' personal histories in relation to Gaelic-medium teaching would vary and influence their perceived professional learning needs (Chapter 1, p8).

There have been numerous studies looking at frameworks for teacher learning, examining career stages and mapping the process from novice to expert (Berliner 2001; Brighouse 1995). These linear models do not appear to take account of teachers' life histories or the contexts of teacher professional learning. In contrast, Sammons et.al (2007), in a study of the phases of teachers' professional lives, drew attention to the importance of the interface between the personal and professional and highlights the challenges of sustaining commitment throughout a career and during times of educational reform. They further recommended that differentiated CPD for teachers in different career phases could influence commitment positively (2007:699). Whether professional learning needs for Gaelic-medium teachers would require differentiation based on career stage was a matter for enquiry in this study.

Induction¹³ Year

There have been a number of Scottish studies examining CPD following the McCrone Agreement (SEED 2001) which heralded the introduction of the one-year

¹³ *Induction* year and *probation* year are used interchangeably in Scotland, and in this study, denoting the one-year guaranteed employment for beginning teachers.

guaranteed training contract for beginning teachers (Fraser et al. 2007; Kennedy et al. 2008; MacDonald 2004; McNally 2006). These studies have focused either on the induction year teachers (year 1) or on teachers in their early career (years 2-6) and relate to English-medium education. No equivalent studies are available relating to the experiences of Gaelic-medium induction year teachers. All induction-year teachers have completed the Standard for Provisional Registration and will complete the Standard for Full Registration by the end of their induction year. Teachers at this early stage in their career are recognized to be at a crucial point in their teacher development as they begin to move from focusing on teaching as a personal performance to concern with pupil learning and their wider professional responsibilities (Kennedy 2007) and may therefore have different professional learning priorities. In the induction year there is considerable structured learning and mentoring available to support the beginning teacher to meet the Standard for Registration (GTCS 2012a). Wilson et al. (2006) noted that new teachers want their individual development needs to be met and are more likely to undertake CPD related to classroom management or specific aspects of the curriculum (ibid). A question in regard to Gaelic-medium probationer teachers would be whether the mentoring and support available relates to GME or is generic.

Hargreaves (2005), in a Canadian study examining the relationship of the emotions of teaching to teachers' age and career stages based on experiences of educational change, suggested that teachers in the first few years of their career were more flexible, adaptable, accepting and enthusiastic in relation to change (2005:972). He proposed that this was not just associated with their youth but that they had been actively prepared to deal with change within the educational reform environment of the time (ibid). What evidence is available seems to suggest that the needs of new teachers differ from those of their more experienced colleagues (Wilson et al. 2006:4).

Teachers in years 2-6

As there has not been research into early career teacher learning in GME, I consider general Scottish studies that have focused on teachers in years 2-6 of teaching. The demarcation of teachers' career stage at this point relates to the structure of CPD in

Scotland rather than to developmental stages of learning to teach (Kennedy and Clinton 2009). Following McCrone Agreement (SEED 2001) the induction year was signalled a clearly defined period. The then Chartered Teacher pathway for professional learning (GTCS 2006) could not be embarked on until completion of 6 years post-registration teaching. Therefore, the identification of years 2-6 in Scottish research is recognized to be a convenient point of delineation. *TSF* (2010) refers to the ‘early phase’ of teachers’ careers to include the period of initial teacher education and induction (a five-year experience for undergraduates and a two-year experience for postgraduates) (SG 2010:40). The subsequent ‘early career’ stage is undefined in the document but is directly linked to career-long professional learning (SG 2010:68).

Research on this early career year 2-6 stage indicates that there is a notable absence of continuing support and a hiatus in teacher learning (Fraser et al. 2007; Kennedy et al. 2008; Wilson et al. 2006). The support offered in the induction year is no longer available and the GTCS Professional Recognition for a particular area of interest is unavailable in years 2 and 3 post-registration. Local authorities also noted lack of momentum in teacher learning at this stage:

Teacher education feels disjointed with quite specific stages – the journey from ITE to experienced professional loses energy and focus after the probation stage. (SG 2010:59)

Teachers in Year 7+

There is ongoing debate in the literature about the later career stages of teachers and the needs associated with these stages. Fuller (1969) focuses on the progression between novice and expert that is characterized by a move from a concern for self (primary survival as a teacher) to a concern for the task (which focuses on actual performance) and concern for impact (relating to positive influence upon pupils) (1969). Similarly, Wilson (2006) suggests that more experienced teachers take a more holistic approach to their recall, performance and achievement of objectives (2006:4). Sammons et.al. (2007), however, reporting on the longitudinal research

project, the VITAE¹⁴ project, found no evidence of a simple linear association between age or years of experience and teachers' relative effectiveness.(2007:692). The VITAE study concluded that CPD alone was unlikely to exert a major impact on teacher effectiveness across the career spectrum unless it was set within professional, situated and personal contexts which support 'teachers' sense of positive identity and which contribute to their capacities to maintain upward trajectories of commitment' (Sammons 2007:686).

A finding that is of interest to the Gaelic immersion context is noted from a North American immersion study which identified the concept of '*awakening*' that was suggested to be associated with years of experience in immersion teaching (Cammarata and Tedick 2012:260). *Awakening* in the language immersion context was defined as the teacher learning journey that is linked to 'the quest and challenge of figuring out what language to focus on in the context of content instruction' (2012:257). It describes the immersion teacher's growing awareness, with experience, of the interdependence of language and content, and of language and cognitive development. It remains to be seen if teachers in this study identify professional learning needs associated with the interdependence of language and content and at what career stage this is identified.

In this research, I have selected teachers in the induction year, years 2-6, year 7+ and year 7+ (with a management role) to examine their teacher learning needs. The immersion literature does not delineate the professional learning needs of immersion teachers by career stage. However, there is demarcation by role where specific professional learning is identified for leaders (head teachers and principals) of immersion and bilingual schools (Baker 2011; Menken and Solorza 2014; Ward 2003).

Having examined the distinctive factors for Gaelic-medium teachers' professional learning, I now examine theories relating to bilingual and immersion education and their relevance to the potential professional learning needs of Gaelic-medium teachers in Scotland.

¹⁴ VITAE project: Variations in Teachers' Work, Lives and their Effects on Pupils (2001-2005)

SECTION 2

Theories of bilingual and immersion education

This section seeks to establish an additional context for immersion-specific professional learning by reviewing literature associated with language acquisition theories relevant to immersion education and cognitive theories of bilingualism, together with the implications of these for curriculum and classroom practice. It commences by briefly considering the early theoretical basis of the communicative language acquisition approach, followed by consideration of bilingual and immersion theories that have subsequently influenced the curricular and pedagogical practices in immersion education. Finally, the theoretical basis of key immersion pedagogies that could extend the pedagogical repertoire of Gaelic-medium teachers will be examined.

Theoretical basis of immersion education

Early forms of Canadian immersion education were based on naturalistic and communicative approaches to language acquisition which incorporate the notion that language can be learned implicitly, without the need for explicit teaching of grammar or form (Genesee 2013; Lyster and Tedick 2014). These approaches drew on the first language acquisition theories of Chomsky and the second language acquisition theories of Krashen.

In the 1960s Chomsky proposed a new way of thinking about first language acquisition, proposing the idea that children possess innate knowledge of language and of the principles that regulate the acquisition of languages (Benati and Angelovska 2016; Lightbown and Spada 2006). This became known as the theory of Universal Grammar, which accounts for children's innate predisposition to acquire and use language, and know how a linguistic feature works, without having been exposed to it (ibid).

Input hypothesis

Stephen Krashen (1982) drew on Chomsky's work when developing his input hypothesis that emphasized the need for teachers to provide 'comprehensible input', through the use of communicative activities in the classroom, so that meaning could be conveyed effectively to pupils, which would then enable them to produce appropriate responses (1982:76). The focus here was on the meaning and not on the form of the communication. Krashen suggested that the input should be at a level just beyond that of the learner, at 'level $i + 1$ ', 'i' being the present level of competence of the learner and '+1' being language that is just ahead of the learner's current level. In other words, language is acquired only when the learner understands language that contains structure that is 'a little beyond' their present stage. He therefore posited that sufficient comprehensible input, together with contextual and extra-linguistic information, would enable learners to formulate grammatical rules and be able to communicate (Krashen 1982:180). In essence, Krashen believed that second language learners acquired linguistic rules subconsciously and in a natural way - much like a child acquires his or her L1.

The communicative language teaching approach used in immersion programmes grew out of Krashen's approach and aims to use the target language (i.e. Gaelic in Gaelic medium education) as much as possible as a means of communication in a natural and meaningful way in the classroom (Lightbown and Spada 2006:38). This approach focuses on the communication of meaning rather than on the explicit teaching of grammar rules. The teaching of the curriculum content through the immersion language, referred to as content-based instruction (CBI) in Canadian literature, is deemed to provide ideal conditions for understanding and acquiring new language structures and patterns in a meaningful and motivational context (Lyster 2007:3). Pedagogies associated with CBI are examined later in this section.

While there has been much criticism of Krashen's theories, claiming a lack of empirical evidence to support many of his assertions (McLaughlin 1987), few researchers of second language acquisition would disagree with his emphasis on the value of communicative tasks and of the input hypothesis. Nonetheless, subsequent

research in second language and immersion education has shown that comprehensible input alone is not optimal for developing pupils' L2 competence (Swain 1988; Genesee 2013:32).

Output hypothesis

The fact that the speaking and writing skills of French immersion students were different to their native-speaker peers caused researchers to question Krashen's input hypothesis and question his argument that only comprehensible input was required for language acquisition (Krashen 1984; Swain 1988, 1993, 2000; Swain and Lapkin 1982). The difference between immersion and native-speaker students was attributed in part to the limited range of language forms and functions to which immersion pupils are exposed in a classroom setting. This led Swain (1988) to develop the output hypothesis which claims that 'the act of producing language (speaking or writing) constitutes, under certain circumstances, part of the process of second language learning' leading to fluency. She further suggests that the role of output in language acquisition extends beyond mere practice or conveying meaning, demonstrating the value of 'pushed' output where learners are required to reflect on their use of language and produce the immersion language grammatically and accurately (Swain 1993, 2000). This goes beyond planning learning activities that include talk for pupils which would be current practice in immersion classrooms. Swain describes three functions of output to illustrate this:

- i) the *noticing or triggering* function which she claims may cause a learner to notice gaps in their linguistic knowledge when they attempt to produce something accurately in the TL;
- ii) the *hypothesis testing* function allows the learner to try different ways of expressing ideas to see if the language works, and
- iii) the *metalinguistic (reflective)* function where language is used to reflect on the language produced by the learner (or others) which Swain claims is a process that mediates L2 learning. (Swain, 2000)

Swain further argues that output pushes learners to process language more deeply,

with more mental effort, than does input, and that it can stimulate learners to move from meaning-based processing to processing for more accurate production of language (2000:99). This suggests that more opportunities for sustained talk should be incorporated into curricular lessons, as this will provide both opportunities for variety and complexity of language use. It also forces the learner to pay attention to the content of what is expressed. What is less clear is whether these processes have any short or long-term impact on learners' interlanguage¹⁵ development (O'Duibhir 2009:32).

Another role of increased output is in giving pupils the opportunity to produce language that contains errors. Errors are a normal part of language learning and are to be welcomed as they give an indication of the current stage of the pupil's interlanguage and their understanding (or lack of understanding) of the TL grammar (Baker 2011). The learner is seen to progress through a series of stages to full language proficiency in the immersion language. Approaches proposed in the literature to address error correction will be examined together with the curricular and pedagogical implications of form-focused instruction (FFI). Alongside the interest in the role of corrective feedback within immersion-based programmes, research studies began to examine the role of teaching form within meaning-based second language programmes, an area that will be now examined further (Ellis 2001; Lightbown and Spada 1990; Swain 1988).

Research basis of form-focused instruction (FFI)

Following from the studies showing that language input alone was not optimal for L2 learning in immersion, researchers began to examine how best to address this issue. The call for a greater focus on language features, or focus on form (FOF), in immersion teaching is now almost unanimous in the literature, not only to improve learner language accuracy but also to enable learners to achieve the higher written and oral proficiency that is required for academic success (Lyster and Tedick 2014).

¹⁵ Interlanguage is viewed as a transitional stage between monolingualism and being proficient in the second language that is different from the target language system (Gaelic) and also different from the learner's native language system (English). It may have characteristics of the learner's L1, characteristics of the L2 and some characteristics that seem to be very general and tend to occur in all or most interlanguage systems. (Baker 2011; Lightbown and Spada 2006)

The teaching of grammar (also referred to as form-focused instruction (FFI)) has been defined by Ellis (2006) as:

any pedagogical strategy that draws learners attention to some specific grammatical form in such a way that it helps them either to understand the term metalinguistically and/or process it in comprehension and/or use it in output so that it can be internalized. (2006:84)

In the literature the term ‘form’ is sometimes used to refer exclusively to grammar but is also used more generally to denote any linguistic form (Ellis 2006, Long 1991; Lyster 2007). In immersion literature, and in this study, the noticing and drawing attention to specific linguistic forms in a lesson, whether planned or unplanned, is referred to as ‘focus on form’ and includes grammar and vocabulary or other discourse features (Ellis 2006; Lyster and Ranta 1997; Swain 1988).

As was noted in Section 1, Canadian studies in immersion revealed that while pupils demonstrated high levels of communicative ability, they were exhibiting lower than expected levels of linguistic accuracy (Harley 1993; Lyster, 1987, 2007; Swain 1988). Swain (1988), in examining the range of verb tenses used by French-immersion teachers, suggested that the content-based teaching of immersion programmes was not good language teaching on its own because of the limited range of language forms and functions to which pupils were exposed in the class context. She further argued that, even if the pupils were exposed to richer, more varied input, exposure alone would be insufficient (Swain 1988). Much of the literature since the 1990s has emphasized the integration of both form-focused and meaning-orientated approaches in second-language teaching (Lyster 2015). Further research has also shown that integrating form-focused teaching into regular curricular teaching in an immersion context can enhance the learners’ competence in the L2 (Ballinger 2013; Cammarata and Haley 2017; Norris and Ortega 2000).

When pupils are learning language alongside curricular content, and are less than fluent in the L2, attention to language learning and progression is key to meeting the goals of immersion education (Met 2009:51). This is particularly pertinent to GME where language revitalization is one of the goals. It has additionally been asserted that the co-construction of language and content in the immersion classroom may be

the determining factor in achieving a high standard of language production as well as quality academic experiences (Swain 2013; Walker and Tedick 2000).

In the Scottish context, Education Scotland (2015) advises of the need for a particular focus on embedding key grammar in the total immersion phase that may be considered more challenging to develop later as a discrete lesson in grammar (2015:28). They recommend that:

particular points of grammar and specialist vocabulary are planned in programmes and courses across the curricular areas and contexts of the curriculum. In doing this, schools need to have a clear framework for developing grammar which shows progression and coherence. (2015:28)

This advice accepts the need for a focus on form to address issues of language accuracy and improve pupil language fluency (ibid). However, it leaves some ambiguity about how to implement the focus on form (or grammatical feature), whether through a focus on language that is integrated into curriculum content lessons, implied by ‘planned in courses across the curricular areas’ or through discrete grammar lessons, that may be implied by ‘particular points of grammar... planned in programmes’. Teaching grammar in isolation has not proven to be very effective in progressing the spoken and written language of immersion learners (Swain and Carroll 1987; Swain 1996) leading researchers to examine ways of integrating the teaching of language intentionally into content lessons (ibid).

Although research in this area has not been conducted in Gaelic-medium schools, the weight of evidence from other immersion contexts would suggest that professional learning opportunities to consider a greater focus on teaching language *in* the curriculum, as well as *through* the curriculum, is required for Gaelic-medium teachers. This is particularly important as the underlying assumption of Gaelic-medium immersion is that the immersion language will be learned ‘incidentally’ through the exclusive use of Gaelic, the target language. A number of immersion studies have identified the need for teachers to have professional learning experiences to help them integrate language objectives in curriculum lessons (Cammarata and Haley 2017; Fortune, Tedick and Walker 2009c; O’Duibhir 2016). Fortune, Tedick and Walker (2009c) stress that this is a focus that cannot be

overemphasized (2009c:89).

As the ‘incidental’ learning of the immersion language is a central premise of GME, it is necessary to consider how this term is viewed in the literature. Lyster (2007) suggests that the term ‘incidental’ used in immersion contexts for the learning of language is problematic. The term was initially attributed to the process of teaching and learning language through curricular content and included the notion of ‘overtly draw(*ing*) students’ attention to linguistic elements as they arise incidentally in lessons whose over-riding focus is on meaning’ (Long 1991:46). However, Lyster (2007) argues that much incidental attention to language is ‘too brief and likely too perfunctory to convey sufficient information about certain grammatical subsystems’ and not systematic enough to make the most of curriculum-based teaching alone as a means for learning language (2007:27). A number of studies in primary immersion contexts showed that, while there was some attention to specific language features (usually through corrective feedback or word-meaning relationships), these were infrequent and unplanned, and that knowledge about language was viewed as less important than curricular knowledge by teachers in the studies (Lyster 2007; Walker and Tedick 2000). Additionally, studies found that certain language forms that do not feature in the everyday discourse of an immersion classroom need to be explicitly taught if pupils are to achieve a higher level of language proficiency (Lyster 2007; Swain 1988).

The complexity of learning content through a second language means that language learning must be a central focus of lesson planning, regardless of subject area, as words enable access to the ideas and content of the curriculum. The next section will address issues and teaching strategies that have been researched in classroom contexts that could be included in Gaelic-medium teachers’ professional learning to enhance pupil metalinguistic awareness, and also to integrate form-focused and curriculum-based strategies for teaching the immersion language.

Teacher learning implications of form-focused instruction

Cammarata and Tedick’s (2012) study of immersion teachers’ experience of balancing language and content teaching confirmed two issues that presented the

teachers with significant challenge: how to identify which immersion language feature to focus on in curricular lessons (2012:257), and how to find time to include language teaching in an already crowded curriculum (2012:258). Recognizing that problematic L2 features vary between different languages, Harley (1993) proposed the following target features that require explicit attention in any immersion classrooms:

- features that differ in unexpected or non-obvious ways to the L1;
- features that are irregular or infrequent, and
- features that do not carry a heavy communicative load.

She also noted that some features would require more explicit teaching than others, and that many target features do not require teaching at all because they could be easily acquired through extended exposure to the language. In the Scottish context, Gaelic-medium teachers are keen for professional learning that gives detailed guidance on when, where and how to include grammar (i.e. focus on form) in their teaching (Education Scotland 2016; Landgraf 2013).

The implementation of form-focused teaching has been categorized as either *proactive* or *reactive* (Doughty and Williams 2011:198). *Proactive* form-focused teaching is planned and intentional language teaching in order to make learners notice specific features of language in the context of a regular lesson (ibid.). It is considered to be most effective when embedded in communicative activities within curricular lessons and therefore different to traditional grammar lessons. *Reactive* form-focused teaching of language, such as corrective feedback, arises in response to learners' language production during a lesson (ibid.). Research that supports reactive instruction suggests that the point at which the learner has something to say may be the best time for feedback, rather than waiting until a subsequent lesson (Lightbown 1998).

A number of strategies, including the role of corrective feedback, have been researched and proposed to help immersion learners' language-learning and metalinguistic awareness, and to support immersion teachers in planning for a greater focus on form in curricular lessons (Ballinger 2013; Cummins 2014; Fortune and

Tedick 2009a; Lyster 2007; Met 2009). These are further considered and include an emphasis on:

- corrective feedback;
- the counterbalance hypothesis;
- noticing, awareness and practice;
- content obligatory and content compatible learning;
- vocabulary learning, and
- focus on meaning, language and language use.

Role of corrective feedback

The way that immersion teachers interact with their pupils is now considered to be central to immersion pedagogy (Lyster and Tedick 2014:215) with the combined elements of comprehensible input, comprehensible output and feedback being seen as crucial to second language acquisition (O’Ceallagh 2016; O’Duibhir 2009).

Providing corrective feedback during teacher-pupil interaction is one way in which teachers can focus on language within curricular lessons and scaffold learning of language and content. Although research focused solely on the role of corrective feedback has not been conducted in GME, Landgraf (2013) found that there was no consensus, among the teachers in her study, of the most effective ways of giving corrective feedback, and that there was some concern that giving feedback might demotivate learners from using the language:

Thàinig e am bàrr sna còmhraidhean mu cheist a' cheartachaidh nach eil aonta am measg an luchd-teagaisg ann am FMG dè an dòigh as èifeachdaiche gus a' chlànn a chumail ceart, gun a bhith gan dì-bhrosnachadh a' Ghàidhlig a chleachdadh idir. (2013:124)

It came to light in conversations (*with teachers*) about the issue of error correction that there is no consensus among GME teachers on the most effective method of correcting children’s errors without demotivating them from using Gaelic. (2013:124)

Additionally, she found that the Gaelic-medium teachers each used methods that they individually thought best, but, at the same time, were uncertain if these methods were effective, and that the teachers would welcome more professional learning to inform

their practice of corrective feedback (2013:126). This would suggest the need for further professional learning if the aspiration of ‘clear plans for developing fluency in a progressive and coherent way’ recommended by Education Scotland (2015:28) is to be realized.

Corrective feedback is defined as ‘responses to learner utterances containing an error’ (Ellis 2005:47). As noted earlier, errors are a natural and frequent part of language learning. In the early stages of immersion there will be a natural interlanguage that teachers will accept as a temporary stage in the language-learning journey. This may result from the functionally restricted use of language in the classroom (e.g. the overuse of the past and present tense, with little opportunity to talk or write in the future tense) or because many of the pupils only communicate with one another and the teacher. There is therefore little incentive for learners in the later stages of primary to improve accuracy as they are able to communicate their meaning with teachers and peers. At this later stage, research has shown that there is value in intervening to correct language errors and focusing on language form as well as meaning (Genesee 2013; Lyster 2007; Swain 1998). Education Scotland advises that there should be school-level policies on how to correct children and young people’s language errors. (Education Scotland, 2015:29). They further recommend that the use of corrective feedback should be part of the immersion teachers’ pedagogical repertoire (ibid). The document proposes that:

Teachers intervene sensitively and effectively to correct and model the correct use of language. The learner, in turn, sees the intervention and their repetition of the correct language as a natural part of the learning process. (Education Scotland 2015:28)

However, while identifying the benefit of corrective feedback, the document infers the use of only one type of corrective feedback, and there is some ambiguity if corrective feedback to improve accuracy and fluency is to be spontaneous (2015:28) or planned (2015:29) or both. It is therefore important for immersion teachers to have further understanding of different types of corrective feedback, and their associated efficacy, so that a planned, informed approach to corrective feedback can be developed at school and classroom level. Research on corrective feedback in other

immersion contexts offers insights into effective ways of improving accuracy and proficiency in the TL.

Early classroom observation research in the French-Canadian immersion context suggested that corrective feedback was not a priority for teachers with only 19% of overall grammatical errors corrected (Allen et.al. 1990). The study also noted inconsistency in teacher feedback. Later studies showed a higher rate of corrective feedback with 60% of overall errors being addressed (Lyster and Rannta1997).

Research interest has focused on the types of corrective feedback used, how frequently they were used, and how effective these were. The type of feedback most frequently used by immersion teachers was *recasts*, where the teacher reformulates the pupil's utterance, without the error. This also appeared to be the least effective type. The frequency of recasts in immersion classrooms is thought to be associated with the teachers' use of scaffolding to facilitate understanding in a meaning-based L2 learning environment (Lyster and Tedick 2014) and maintain the momentum of the lesson. Research suggests that *prompts* are more likely to be effective in an immersion environment where pupils are pushed to self-repair errors (Lyster & Mori 2006). However, this is acknowledged to be a complex area with research continuing to examine its role in the L2 classroom and its effect on L2 development. Table 2.2 summarizes different categories and types of error correction.

Table 2.2: Adapted from Lyster and Ranta 1997; Tedick and de Gortari 1998.

| <i>Category</i> | <i>Type of feedback</i> | <i>Definition</i> |
|-----------------|-------------------------|--|
| Reformulation | Recasts | The teacher implicitly reformulates the learner error, without indicating that the utterance was incorrect |
| | Explicit correction | The teacher provides the correct form, having clearly indicated that the learner utterance was incorrect |
| Prompts | Clarification request | The teacher indicated that the learner utterance contained a mistake, or was not understood, by asking for clarification (e.g. 'I don't understand?' 'Excuse me?') |
| | Metalinguistic cues | The teacher provides comment, or queries the learners' utterances, without providing the correct form (e.g. Is that how we say it?) |
| | Elicitation | The teacher asks directly for the correct form from the learner (e.g. How do we say that?) |
| | Repetition | The teacher repeats the learner error but uses intonation to highlight the error |

The effectiveness of corrective feedback has been demonstrated by recent meta-analysis that support the consensus that corrective feedback is advantageous (Russell and Spada 2006), and 'has significant and durable effects on target language' (Lyster Saito, & Sato 2013). While there is agreement that various feedback types are useful in L2 acquisition and development, considerable debate continues on which is more effective and why (O'Ceallagh 2016). The current consensus is that teachers should consider the whole range of feedback types rather than relying on recasts. This advice continues because of the multifaceted nature of different classrooms where teachers have to take account of linguistic targets, pupils' age, stage and language proficiency and the curricular and pedagogical contexts (Lyster et.al. 2013). Nonetheless, as it is suggested that corrective feedback plays a key role in continuing L2 growth, is potentially of value to all pupils, not just to the individual who receives it (ibid). It is an area of professional learning that we know to be of interest to Gaelic-medium immersion teachers (Landgraf 2013).

The counterbalance hypothesis

In order to support immersion teachers' focus on form Lyster (2007) suggests a counterbalanced approach to the integration of language teaching in content. His *counterbalance hypothesis* proposes that, when pupil language has reached a developmental plateau, the restructuring of their interlanguage is triggered by teaching interventions that points them in the opposite direction to which the TL has accustomed them (Lyster and Mori 2006; 2009). This is proposed as a core pedagogical strategy in immersion to target language features that have plateaued or fossilized (Lyster and Mori 2009).

Learners in language-focused classrooms are expected to benefit from a greater emphasis on substantive content that enriches classroom discourse and enhances their communicative abilities, and learners in content-based and communicatively oriented classrooms are expected to benefit from a greater focus on language that pushes them forward in their L2 development. (Lyster 2015:5)

Therefore, pupils experiencing language learning in a Gaelic-medium meaning-based classroom should experience more form-focused teaching to strike a balance between the two orientations and improve their language accuracy. In Gaelic-medium classrooms, teachers could work towards this balance by including language-specific learning outcomes in curriculum lessons, planning for progression in language learning. Lyster (2007) further suggests a strategy of 'noticing, awareness and practice'.

Noticing, awareness and practice

Lyster (2007), drawing on classroom-based research in a Canadian immersion context, suggests a sequence of 'noticing, awareness and practice' activities that can be used repeatedly to support language learning. *Noticing* activities include ones that draw learners' attention to grammatical form, which make the form more salient and/or more frequent through oral or written input (Lyster 2007:66). Noticing activities alone are insufficient without follow-up activities that focus the learners' *awareness* on specific form or rules in context. This occurs when they are required to identify or investigate the form in context (e.g. comparing and contrasting language patterns followed by metalinguistic information). Activities in the *practice* stage

involve the learners in tasks that oblige them to use the problematic form in a meaningful context, building on Swain's (1993, 2000) theory of 'pushed output' to improve grammatical accuracy. The need for immersion pupils to notice and become aware of key features in language input, in order to process them, is a critical first step in learning the language (O'Ceallagh 2016).

Education Scotland (2015) allude to awareness building when they suggest that children will become 'more aware' of the development of specific language areas (2015:28). The document links this to particular grammatical forms and specialist vocabulary, with advice that the inclusion of these particular features is included in programme and course planning across the curriculum (ibid). That this heightened awareness leads to planned learning activities, where learners have opportunity to use and apply grammar across the curriculum, is also suggested (2015:28).

Nonetheless there is evidence that immersion teachers would value professional learning on when, where and how grammatical forms should be taught (Education Scotland 2016:2). It will be interesting to see if similar professional learning issues are identified in this study.

Content obligatory and content compatible learning

In order to support teachers in planning for language-learning in curricular lessons, Snow, Met and Genesse (1989) identified two categories of language learning outcomes that could guide the framing of plans to teach language in the curriculum: content-obligatory and content-compatible language.

Content-obligatory language is subject-specific language that is essential for accessing the content of the curriculum. Pupils cannot master the subject content without knowing and understanding this language (e.g. specialist terminology for mathematics or science) (Met 2009). It is typically less transferable to other contexts. The specialist terminology of curricular areas is an area for professional learning noted by Gaelic-medium teachers in the recent online CLPL audit (Education Scotland 2016), and its significance is acknowledged in Gaelic policy advice (Education Scotland 2015:28). Teachers need to identify content-obligatory language

and plan conscientiously for the development of essential language skills in the course of curriculum teaching.

In contrast, content-compatible language offers teachers the opportunity of introducing additional language into a curriculum lesson that expands pupil vocabulary and enriches the quality of discussions. It is not required for accessing content knowledge and tends to be more social in nature, used to negotiate tasks and interact, and transferable to other situations (Cammarata and Tedick 2012). Learning outcomes for content-compatible language objectives are an important factor in pupils' continued language growth. They help teachers focus on how pupils' language skills can be stretched, refined, and expanded beyond their present level (Met 1994).

However, Cammarata and Tedick (2012) suggest that immersion teachers are trained to be curriculum content teachers and are typically unaware of the 'content' for language teaching (e.g. grammatical structures) and therefore lack the pedagogical knowledge for teaching language (2012:262). The need for teacher learning to address this gap has also been identified in a number of related immersion studies (Lyster and Mori 2009; O'Ceallagh 2016; O'Duibhir 2016). Although there are no equivalent studies in Scotland, it is likely that this would be replicated among Gaelic-medium teachers as no additional standards are required for teaching in the Gaelic-medium sector (GTCS 2012a).

The inclusion of content-compatible language offers teachers the prospect of systematic teaching of a wide range of aspects of language within the curriculum. Assessment of children's language learning and prior examination of texts to elicit content-obligatory and content-compatible features for learning in curriculum lessons could help teachers to identify language learning outcomes for curriculum lessons. Closely linked to learning outcomes for content-obligatory and content-compatible language features is the acquisition of vocabulary.

Vocabulary learning

Vocabulary knowledge has been defined to include not only knowing the meaning of words but also the contexts in which words are used, how they are similar to and different to synonymous words, and additionally having knowledge of their appropriate use (Met 2009). Vocabulary knowledge and teaching is a significant aspect of language learning in the total immersion stage and the immersion phase. This knowledge has been shown to be key to literacy and a strong predictor of successful literacy development. It would therefore seem appropriate that every lesson, curricular or language, should offer the opportunity to expand pupils' repertoire of words, word families and word use (Met 2009). This is particularly crucial in immersion contexts like Gaelic-medium where many children enter with little or no vocabulary knowledge in Gaelic.

A wide range of vocabulary is required to access content learning and also to demonstrate the understanding of curricular ideas through words. Met (2009) emphasizes the interdependence of vocabulary knowledge, curricular content knowledge and academic achievement. She exemplifies this by stating that the more pupils know about a specialist curricular area, the more likely they are to have acquired the corresponding specialist terminology for their knowledge, and then the more likely they are to understand direct teaching and texts on the curricular area. Consequently they extend both curricular and vocabulary knowledge (2009:52). As one of the aims of GME is the attainment of L1 (English) at or above the levels achieved by pupils in mainstream settings, the development of L2 (Gaelic) language and literacy, including vocabulary development, must be a priority for immersion teachers.

In the total immersion stage of oral language development, the growth of vocabulary knowledge is key to social interactions and also foundational to literacy development. The expansion of pupils' vocabulary in the immersion phase is viewed as equally important. Pupils at this stage require to be supported to expand their academic vocabulary so that deeper content knowledge can be accessed and expressed, alongside the extension of their social language and grammatical

accuracy. Beck et.al. (2002) suggest criteria to guide selection of content-compatible vocabulary:

- importance and utility: words that appear often across various domains;
- instructional potential: words that can be worked with in a variety of ways, and
- conceptual understanding: words that reflect precision and specificity in understanding a general concept. (2009:9)

It is important to note that the research in this area does not advocate a return to the formal, decontextualized teaching of vocabulary, but rather in complementing the incidental vocabulary learning that derives from the regular teaching and classroom interactions with explicit teaching embedded in the meaning-orientated context of the curriculum (Met 2009; Nation 2001). Strategies such as the content-compatible and content-obligatory strategies discussed earlier are designed to support teachers to identify language features and vocabulary on which to focus that lead pupils to a deeper understanding of meaning, and how the language features and vocabulary are then used. Attention to both planned comprehensible language input and opportunities for pupils to use new vocabulary through extended discussion (language output) remain central. However, it is also recognized that immersion teachers may need learning opportunities to identify the language to teach, as well as support to design tasks that require pupils to produce and use these new features (O’Ceallagh 2016; Fortune et.al. 2009; Lyster and Tedick 2014).

Focus on meaning, language and language use

Frameworks that can be used to guide teachers in the integration of language and content in immersion education have been proposed by Cummins (1998) and Gibbons (2002). These frameworks offer a similar three-phase pedagogical process with firstly a focus on meaning and a context for the language learning (i.e. the *message*). At this stage meaning and knowledge are constructed through the L2, making the language input comprehensible. Next, the focus shifts to the *language* itself, when the pupils’ attention could be drawn to specific language details (e.g. grammatical points, language forms and uses). At this point pupils learn about the

language itself. Lastly, there is the opportunity for language output or *use*, where pupils are given the opportunity to use the language to generate new knowledge in a meaning based context, learning again through language (Cammarata and Tedick 2012; Cummins 2005; Gibbons 2002). Important and interesting curriculum content in immersion programmes provides a ready-made meaningful basis for understanding and acquiring new language forms and is therefore well-suited for teaching about the language and providing opportunity for using new language forms. The frameworks' emphasis on teaching about language, and the importance of language output, could potentially support and enhance the teachers' classroom practice. However, there remain questions of how immersion teachers are to acquire the knowledge of language required to plan lessons that integrate language and content within a meaningful framework.

Recent literature underlines the importance of integrating form-focused teaching of language in curriculum lessons (Cammarata and Tedick 2012; Fortune et. al. 2009; Genesee 2013; Lyster 2007). Swain (1988) suggests that systematic planning for language learning outcomes is necessary for the optimal integration of language in curriculum lessons, suggesting that, in order to make subject content as comprehensible as possible, immersion teachers may rely on linguistic skills that pupils already possess rather than extending these. Nevertheless, Cammarata and Tedick (2012) recognize the challenges that this presents to teachers and state that this integration of language and content needs to be systematically addressed in initial teacher education (ITE) and in ongoing professional learning opportunities (2012:263). They further identify the need for more research to examine whether curriculum content knowledge may be compromised by a greater focus on language (ibid).

Immersion teachers' pedagogies and practices are also influenced by their knowledge and understandings of the cognitive aspects of bilingual language development. These will be examined next, prior to consideration of the implications of these theories for the practice and learning of immersion teachers.

Cognitive theories of bilingual and immersion education

The teachers' understandings of how languages develop, and the relationship between thinking, language and the curriculum, will influence the pedagogical approaches that they select (Baker 2011; Lyster 2007). Many immersion programmes have operated on the premise that the two school languages should be kept rigidly separate. Current thinking questions this rigid separation of the two languages and suggests that exploring bilingual¹⁶ teaching strategies, to complement monolingual strategies, may be beneficial to the bilingual development of both the L1 and L2 (Cummins 2005, 2014). There is, however, continuing debate regarding the role of the L1 in an L2 immersion classroom, especially in minority language contexts (Hickey 2016; Lyster 2016). Examining the theory and research basis of the classroom language(s) used by the teacher, alongside associated pedagogies, is of value in the professional learning of Gaelic-medium teachers as there is known variation in classroom language practice across the sector (Education Scotland 2015; O'Hanlon, Paterson and McLeod 2012). I will firstly consider the basis for current monolingual pedagogical practices and then examine research proposing the greater use of L1 in the L2 classroom, considering the potential implications of this for classroom practice in an endangered minority language setting such as the GME sector.

Separate Underlying Proficiency (SUP) Model

As noted earlier, the immersion approach adopted for GME has its foundations in the early conceptualizations of language immersion in Canada. This was based on the view that second language acquisition is primarily input driven and progresses best without the need for explicit teaching on form (Krashen 1982). Three overlapping assumptions, referred to as monolingual assumptions (Cummins 2014) dominated the implementation of the French immersion programmes and have remained unquestioned until recently. These relate to the separation of the two school languages that favoured:

- instruction being carried out exclusively in the target language without recourse to the pupil's L1 (clearly implied by the term 'immersion');

¹⁶ Bilingual strategies represent strategies where two languages are used.

- no translation between the pupils' L1 and L2; and
- the two languages being kept rigidly separate (termed the two-solitudes assumption). (Lambert 1984)

Gaelic-medium national policy and some school policies underline this view of language separation (Education Scotland 2015:17,19; Sgoil Ghàidhlig Ghlaschu 2017; Taobh na Pairce 2014). This emphasis on teaching entirely through Gaelic, the TL, has also developed in response to the local Scottish sociolinguistic context where English is the dominant language and because of the endangered nature of the Gaelic language.

The monolingual philosophy underlying French immersion programmes was further clarified by Lambert (1984):

No bilingual skills are required of the teacher, who plays the role of a monolingual in the target language ... and who never switches languages, reviews materials in the other language, or otherwise uses the child's native language in teacher-pupil interactions. In immersion programs, therefore, bilingualism is developed through two separate monolingual instructional routes. (1984:13)

Monolingual pedagogies that accompany these language separation assumptions, where the immersion language is used exclusively in teaching and learning activities, are associated with the view that bilinguals have two monolingual competences. This conceptualizes bilinguals as having two separate language areas or 'two language balloons' in the brain, operating separately without transfer between them and with a restricted amount of 'room' for languages (Baker 2011; Cummins 2005). Although this is now an outdated view, it remains the representation of language commonly held by many teachers and lay people (Baker 2011). Cummins (2000) termed this the Separate Underlying Proficiency (SUP) model of bilingualism (Figure 2.1). This model implies that proficiency in one language (L_x) is separate from proficiency in the other language (L_y) and that there is a direct relationship between exposure to a language and achievement in that language (Section 1, p31, 32).

Research evidence would now refute the assumption that the first and second languages are kept separately in the brain and suggest the opposite: that conceptual

knowledge and language skills transfer across languages (Baker 2011; Cummins 2005). For example, when children are taught to multiply numbers or use a dictionary in one language, these skills are easily transferable to another language. Some researchers claim that teaching learners as if they were monolinguals suppresses bilingual learners' natural process of using all their linguistic resources to make sense of new information (Cenoz and Gorter 2011; Garcia 2009). Cummins (2014) argues that the rigid separation of the two school languages or 'two solitudes' assumption discourages immersion teachers from employing empirically supported strategies that have been successfully implemented in other L2 teaching contexts such as drawing pupil attention to cognate relationships between the two school languages. It also discourages the integrated planning of curricular and language learning outcomes (2014:10). This led to the development of an alternative hypothesis by Cummins (2000) called the Common Underlying Proficiency CUP) model (Figure 2.1).

Figure 2.1 Separate Underlying Proficiency (SUP) and Common Underlying Proficiency (CUP) (graphic from Cummins 2005a).

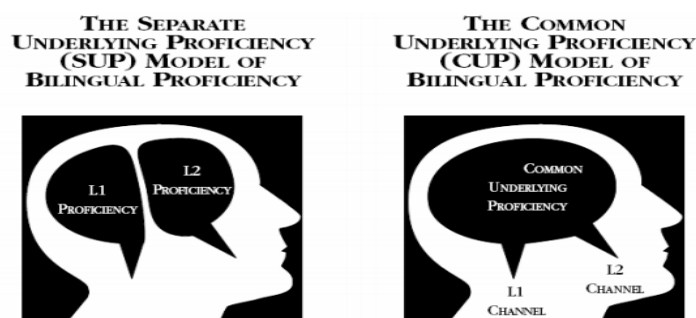


Figure 1. The Separate Underlying Proficiency Model

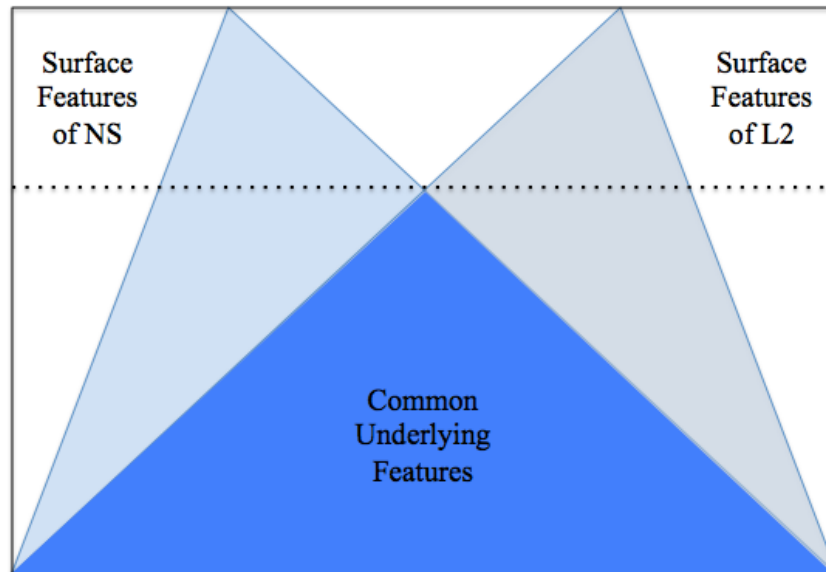
Figure 2. The Common Underlying Proficiency Model

Figure 2.1 provides a broad visual representation of the two models where languages are seen to occupy separate spaces in the brain in the SUP model, and where various aspects of a bilingual's proficiency in L1 and L2 are seen to occupy a common space in the CUP model.

Common Underlying Proficiency (CUP) Model

Much current thinking on the cognitive aspects of bilingualism is informed by the common underlying proficiency model which suggests that, although there are surface elements of language learning that may appear to be separate (e.g. vocabulary), there is a much greater common area of underlying cognitive/academic proficiency that is common across languages (e.g. literacy and communication skills) which serves to strengthen all the learner's languages (Baker 2011; Cummins 1979; Cummins 2014). This illustrates bilingual proficiency as a dual-iceberg graphic where the two languages are visibly different in outward conversation but underneath common cross-lingual proficiencies are fused and do not function separately (Figure 2.2). This means that Gaelic-medium pupils who are developing Gaelic reading and writing skills are also developing a deeper conceptual and linguistic expertise that contributes significantly to their literacy development in English.

Figure 2.2 Common Underlying Proficiency Model / Dual-iceberg representation (adapted from Cummins 2005a).



Baker (2011) summarizes the CUP model as follows:

- When a person owns two or more languages, there is one integrated source of thought
- People have the capacity to store two or more languages

- Information processing skills and school achievement can be developed through two languages as well as through one language
- The child's classroom language needs to be sufficiently well developed to process the cognitive challenges of learning
- Speaking, listening, reading or writing in the L1 or L2 helps the whole cognitive system to develop
- If one or both languages are not fully functioning, cognitive functioning and academic achievement may be negatively affected (Baker 2011:166)

This contrasts with the earlier conceptualization of the 'two-solitudes' assumption which implied that proficiency in L1 was separate from proficiency in L2. Cummins (2008) argues that recognizing the existence of the CUP frees language teachers from relying exclusively on monolingual pedagogical strategies and enables them to incorporate bilingual strategies that acknowledge the reality of cross-language transfer (2008:65). This then raises the issue of whether teachers should actively teach for transfer across languages in immersion education, using both school languages, a practice that would not currently be advised in GME where:

in (*the*) best practice, in the immersion phase teachers lead learning in all curriculum areas, including the newly introduced English, through the medium of Gaelic. (Education Scotland 2015:19)

This aspect of cross-linguistic transfer is further examined in relation to the interdependence hypothesis, which argues that certain L1 knowledge can be positively transferred during the process of L2 acquisition (Cummins 2005b).

The Interdependence Hypothesis

There has been some concern about the impact of extensive exposure to the L2 on achievement in the L1. That much research into immersion education focuses on the academic achievement of pupils in the majority language evidences this concern - in Scotland as in other immersion contexts. However, there is an extensive research-base which shows that there is little relationship between the time allocated to teaching through the majority language and the academic achievement in that language (Genesee 2013). Indeed the evidence across immersion contexts, including Gaelic-medium, has been that learners gain a reasonable level of fluency and literacy

in L2 at no apparent cost to their academic skills in L1 (Cummins 2000a; Genesee 2013; O'Hanlon, Paterson and McLeod 2013). This strongly suggests the interdependence of L1 and L2 academic skills, a principle that Cummins stated formally:

To the extent that that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency will occur provided there is adequate exposure to Ly (either in school or the environment) and adequate motivation to learn Ly. (Cummins 1981:29)

This hypothesis suggests that pupils' L2 competence is partly dependent on the level of competence achieved in the L1. Cummins (2008b) further suggests that there is evidence that interdependence across languages may also include transfer of conceptual elements, metacognitive and metalinguistic strategies, cognates, phonological and morphological awareness (2008b:69).

This thinking developed from earlier studies that had examined what level of language competence children required in both languages to accrue the cognitive benefits of bilingualism. The thresholds hypothesis, which partially portrays this, assumes that a child needs to achieve a certain level of proficiency in the first or second language to take advantage of the benefits of bilingualism and proposes that, if there is a low level of competence in both languages, there will likely be negative cognitive effects (Baker 2011:167). When children have age-appropriate ability in both languages they are likely to have positive cognitive advantages (ibid). While this theory is helpful in explaining the potential trajectory of bilingual development in children and the temporary lag in achievement in the early years of immersion education, it does not identify what particular language skills or proficiency require to be developed at various stages of children's L2 learning, two suggested topics for CLPL by Gaelic-medium teachers (Education Scotland 2016). An understanding of the temporary lag in achievement in the early years is particularly important in the assessment of bilingual children (Section 2, p80).

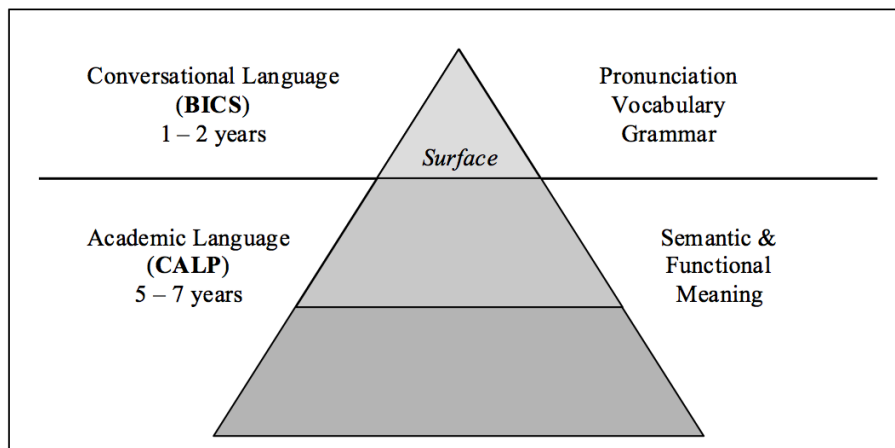
Alongside the development of the interdependence theory which has shaped recent thinking regarding the inclusion of bilingual pedagogies in the repertoire of bilingual

and immersion teachers, Cummins proposed a distinction between surface language fluency and the more sophisticated language skills required to negotiate academic learning (Cummins 2008). This has implications for teachers in the assessment and planning of children's learning through a second language.

Conversational and academic language development

Cummins (1979), examining the Canadian L2 education context, found that everyday conversational fluency could be acquired in two years while the more complex language skills necessary to navigate the curriculum could take five or seven or more years to acquire. The term *basic interpersonal communicative skills* (BICS) was given to the former, although sometimes referred to simply as *conversational fluency*, and likened to the social language required for children in the playground. BICS usually occurs in a 'context embedded' situation with accompanying contextual supports such as gestures or visual supports (Baker 2011) and is the main focus of oracy development in the pre-school and early years of GME. *Cognitive academic language proficiency* (CALP) or *academic language proficiency* is a code primarily related to the oral and written language of schooling that children acquire in school, and need to use effectively in order to access curricular content learning. It is the language of process, concepts and includes a deep, expansive vocabulary. CALP occurs in a more 'context reduced' academic situation and comprises more abstract language (e.g. analysis, evaluation, inferring, classifying, predicting) (Cummins 2008b). Immersion pupils' development of proficiency in academic language is particularly important, as academic knowledge is acquired and expressed through language and literacy that is increasingly decontextualized as they reach the middle to upper stages of primary schooling.

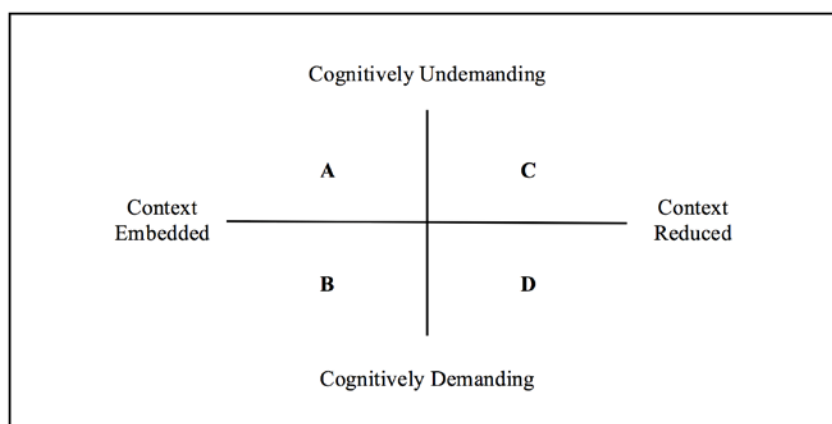
Figure 2.3 Academic language development (graphic based on Cummins 1979).



The BICS and CALP distinction has been criticized for being simplistic, for not taking account of the many dimensions of language competences, and because of its potential misuse through misguidedly labeling students (Baker 2011). Cummins (2000a, 2008a) counters these, emphasizing that it was a conceptual distinction intended for the educational context only, and not a complete theory of language proficiency.

This concept was further developed proposing two dimensions that could guide teacher planning to take account of the pupils' language development and their understanding of a curricular area to progress individual language proficiency and academic learning (Figure 2.4)

Figure 2.4 Contextual and cognitive involvement in language activities.



Both dimensions in this framework concern language proficiency. The horizontal axis represents the amount of contextual support available to pupils, for example the use of body language – eyes, hands, gestures, pointing and visual or concrete props to enable comprehension. In the early stages of language learning as in the total immersion stage, there would be a high level of contextual support. In context-reduced communication, few cues are given with the meaning being restricted to words.

The vertical axis addresses the level of cognitive demands needed for communication. Cognitively undemanding communication is where pupils' language skills are sufficient to sustain easy conversation. This is the point at which teachers may attribute a higher level of language proficiency to a pupil, assuming academic language proficiency because of their conversational proficiency. Where pupils are receiving much challenging information that requires quick processing, the communication is said to be cognitively demanding (Baker 2011: Cummins 2008a). Curriculum content that becomes more cognitively demanding in the immersion phase (P4-7) of Gaelic-medium immersion would be represented on this axis.

Learning identified within this framework has potential to progress communicative proficiency through oral or written learning opportunities (Cummins 2000:70). Individual teachers could identify optimal learning opportunities that include the degree of cognitive involvement and contextual support required for consolidating or progressing pupil communicative proficiency (Cummins 2000:68). The upper section of the horizontal axis could represent conversational opportunities that are highly context embedded and requiring little cognitive engagement (quadrant A), such as talking about the weather and telling stories, or tasks with reduced scaffolding such as memorizing a poem or describing a story on television (B). In the lower section of the horizontal axis tasks such as summarizing (C), or reflecting on feelings (D) would exemplify less contextually embedded activities with increasing cognitive demand. As immersion teachers are expected to have a high level of language proficiency, they would be expected to have linguistic resources which demonstrate their ability to operate in the fourth quadrant (D), where they are able to make complex meanings explicit through the use of language alone, with no cues. The

limitations of the theory have to be recognized and the complexities of each individual context taken into consideration.

For teachers this theory has led to a helpful awareness in both the planning and assessment of learning for bilingual pupils, particularly in relation to the amount of language support which pupils may require (Baker 2011:171). It is also potentially helpful in recognizing that Gaelic-medium teachers, whether native speaker or learners who require to be highly fluent, may need professional learning opportunities to support them in developing not only the specialist terminology of curriculum areas, but the wider vocabulary necessary for facilitating higher order discussions represented in the fourth quadrant (D).

The changes in knowledge and understanding of second language acquisition gained in recent years has led researchers to call for changes to be made to the pedagogical approaches used within bilingual and immersion programmes (Ballinger 2013; Cummins 2014; Garcia 2009), some of which will be considered next.

Implications for teacher learning and practice

Current research into bilingualism looks at bilinguals' linguistic competences as being dynamic and interlinked, calling for the inclusion of more bilingual strategies to reinforce and deepen learners' understandings of both content and language (Cummins 2005a; Garcia 2009; Garcia and Wei 2014; Jessner 2006). Garcia (2009) has noted that immersion classrooms are already bilingual classrooms, as learners covertly use more than one language during group work regardless of which is the official immersion language (2009:304). This supports learners' developing understandings and builds both conceptual and linguistic knowledge.

Cummins (2005a, 2008b, 2014) has argued that teaching from a monolingual pedagogical perspective, as advocated in many immersion programmes including Gaelic-medium, is 'counterproductive and inconsistent with the reality of interdependence across languages' (2005b:2). He reasons that, if cross-linguistic transfer is happening anyway, albeit covertly, educators should encourage and

facilitate this rather than discourage its use, and include bilingual strategies that focus directly on two-way transfer across both school languages (ibid). Nonetheless, he acknowledges that context will determine how much L1 and L2 instruction is appropriate, a factor that would be important to consider in the fragile sociolinguistic context of GME.

Researchers have suggested several bilingual strategies, based on studies in bilingual settings, to facilitate greater transfer across languages including: the use of bilingual reading books, developing literacy skills across languages, comparing cognates and morphology across languages (Cummins 2007, 2014; Hopewell and Escamilla 2014; Lyster, Collins, and Ballinger 2009; Lyster, Quiroga and Ballinger 2013). Two pedagogical strategies that have been a key focus of recent research in bilingual and immersion education, cross-linguistic transfer and translanguaging, will be examined further. This will be followed by consideration of how the literature views assessment of bilinguals, an element that is integral to all pedagogical strategies and pupil learning. Finally, three strategies that cross monolingual and bilingual boundaries will be discussed briefly.

Cross-linguistic transfer and translanguaging

A central rationale for integrating across languages is that learning efficiencies can be achieved by teachers' use of L1 in the L2 classroom through drawing attention to similarities and differences across the pupils' languages (Cook 2001; Cummins 2008b). It is also claimed that using cross-linguistic strategies strengthens biliteracy development (Cummins 2014). The benefit of using the L1 is further suggested because of the importance of activating the pupil's prior knowledge to scaffold learning, known to be a condition of effective learning. Cummins (2014) claimed this to be relevant, because if prior learning has been encoded in the pupil's L1, then the activation of this 'prior knowledge is inevitably mediated through the L1'.

Ballinger, in a French-Canadian study designed to enhance students' awareness of their own and their partner's language production, found that teachers and students 'believed that cross-linguistic teaching benefited students' overall understanding of

the language and content of the lessons'. In the study teachers were also impressed by students' ability to carry their knowledge across languages (Ballinger 2013). In a separate study focusing on morphological awareness for literacy development, and on cross-lingual connections for biliteracy development, Lyster, Quiroga and Ballinger (2013) found that the study yielded positive results for biliteracy development. The teachers in the study were impressed by their students' positive reactions to the biliteracy instruction, observing that students 'enjoyed making connections between the two languages' (Lyster, Quiroga and Ballinger 2013:187). Both studies highlighted the necessity for teacher professional learning and of teachers being given additional planning time, if these practices and their associated student benefits were to be part of sustainable practice.

Although the benefits of some L1 use in the L2 classroom is recognized by researchers, considerable debate continues about *how much* L1 should be used in L2 immersion teaching without compromising the known benefits of the immersion approach (Hickey 2016; Lyster 2016; Cammarata and Tedick 2012).

Cook (2001), a proponent of the use of L1 in the L2 classroom, has argued that it is often more efficient to use the first language in a second-language classroom to interlink the L1 and L2, convey content, build on existing knowledge and provide a short-cut for giving instructions or explanations (Cook 2001: 418). Practicing the use of the L1 in this intentional way, he suggests, has positive benefits and will reduce the use of the L1 as a 'guilt-making' necessity (2001:18), an attitude that was observed in the pilot study (Chapter 3, p89). While not disagreeing with the principle, Turnbull (2001), identified potential issues where teachers who may not be highly fluent in L2 are given the 'green light' for the use of L1, thereby contributing to the decrease of L2 use in the classroom (2001:536). This would be a potential issue for consideration in endangered minority languages where teacher language proficiency would span the bilingual spectrum.

Lyster (2016) counters the claim that it is beneficial to use the L1 to activate pupils' prior knowledge claiming that, if knowledge were irreversibly imprinted in memory in the first language of encoding, and if complex thinking occurs in L1 but not in L2, then the rationale for immersion programmes needs to be reconsidered. He further argues that, on the assumption that there is a CUP, the prior knowledge of French immersion students can be activated even if the knowledge has been initially encoded in English, and that French can be used to process complex curricular information (ibid).

The need for caution in adopting or developing bilingual strategies in threatened language minority settings is forefronted by Hickey (2016) and also acknowledged by Cummins (2008b) and Garcia (2009).

When there is unequal power between languages, then Fishman's warning (1991) to protect the minority language is still very relevant....it is important to preserve a space ...in which the minority language does not compete with the majority language. (Garcia 2009:301)

Many Gaelic-medium teachers might be hesitant about introducing English into the class through learning activities and concerned that it would 'legitimize' the social use of English in the class (McPake et. al. 2017). Furthermore, the historic memory of the early partial immersion model of GME introduced in the 1960s, with its subsequent difficulties in achieving the desired Gaelic language outcomes, may lead to resistance to the idea of using the L1 to scaffold L2 learning in the GM context.

However, there is also emerging recognition in immersion programmes that pupils' L1 can function as a cognitive and linguistic resource to scaffold more accomplished performance in the L2, suggesting that second language acquisition may be improved by allowing for some strategic use of the L1 (Baker 2011; Cummins 2006, 2014; Swain and Lapkin 2005). Therefore professional learning to support teachers in furthering their knowledge and understanding of the use of L1 would seem important.

Translanguaging, a developing term, is a pedagogical strategy worthy of

consideration within a Gaelic-medium teacher professional learning context because of the emerging evidence of the benefits of allowing use of the L1 in L2 learning. It has been defined by Baker (2011) as ‘the process of making meaning, shaping experiences, gaining understanding and knowledge through the use of two languages’ (2011:288). Translanguaging is concerned with effective communication and cognitive activity rather than the form of language. Garcia (2009) has widened the concept beyond the classroom suggesting that it is a typical way in which bilinguals make sense of their bilingual worlds with no clear-cut boundaries between their languages (2009:44). Further understanding by all teachers of the appropriate use of translanguaging, within the Gaelic-medium context, would enable teachers to make intentional decisions regarding its use, within a suite of language pedagogies, with the explicit purpose of strengthening children’s language and cognition.

This pedagogical strategy originated in the Welsh immersion context in the mid-1980s, created by Cen Williams, a Welsh educationalist, and facilitated the planned, systematic use of two languages in the same lesson (Lewis, Jones and Baker 2012). In a Gaelic-medium classroom, this could involve a lesson being planned where the input (reading or listening) is in English and the output (writing or speaking) being in Gaelic (e.g. where pupils explore a subject on the internet, through English, and write a report on this in Gaelic). This process could also be reversed with the input being in Gaelic and the output in English. It is described as a strong version of bilingual education that emphasizes bilingual processes rather than outcomes (Lewis et. al. 2012).

Baker (2011) argues that there are four potential benefits of translanguaging: (a) processing information in two languages may promote a deeper understanding of the content because the pupil has to fully understand information before it can be used successfully, (b) development of the weaker language may benefit as a result of support from the stronger language by transferring the language skills and conceptual knowledge developed in the input language to the output language, (c) home-school communications may be facilitated, and (d) the integration of L1 and L2 learners may be managed more easily in classes where both languages are used.

Reporting on a Welsh study conducted in 19 Welsh-medium primary schools and 10 secondary schools, Lewis, Jones and Baker (2013) found that translanguaging was not a widespread practice and tended to be associated with upper primary and secondary school stages, arts and humanities subjects and schools in Welsh-speaking communities (2013). No substantial research studies on the practice of cross-linguistic transfer or translanguaging have been conducted in the Gaelic-medium context. Baker (2011) argues that translanguaging may be best adopted when both languages are reasonably well-developed – a view that is contested by Garcia (2009) who thinks that translanguaging can be used from the start of schooling.

Although there is strong and emerging research demonstrating the benefits of translanguaging, caution is advocated for its implementation in minority language settings (Cammarata and Tedick 2012; Cummins 2014; Lewis et.al 2012, Hickey 2016).

Thus, whilst the deliberate and systematic use of two languages in the classroom can be of an advantage to children's learning, careful consideration must be given to the sociolinguistic contexts of the schools, especially in settings where a minority language coexists with a majority language. (Lewis, Jones and Baker 2012:664)

Therefore, while suggesting that learning opportunities for Gaelic-medium teachers to explore the bilingual pedagogies of cross-linguistic transfer and translanguaging would be beneficial, there is also an acknowledged tension between the status of the two languages that must be carefully considered (Hickey 2016). Without addressing this issue, or providing adequate professional learning for the teachers, the implementation of these strategies could potentially lead to unintended consequences and a detrimental impact on language acquisition and achievement without guidelines for teachers. Research in other immersion contexts has shown the challenges of sustaining bilingual pedagogies without adequate teacher professional learning and school support (Ballinger 2013).

Teachers must be trained in the approach, and administrators must seek logistical adjustments that facilitate the planning and sharing of classroom curriculum across languages. Otherwise, no matter how feasible, relevant, and potentially beneficial cross-linguistic teaching is for bilingual education, cross-linguistic pedagogy, like the intervention reported on here, will have no chance

of becoming sustainable practice. (Ballinger 2013:146)

Cummins (2014) while strongly advocating the opening up of bilingual pedagogies, such as cross-linguistic connections and translanguaging in the L2 classroom, acknowledges that this does not detract from the rationale of immersion education and the need to create separate spaces for each language. The importance of extensive input and output in the immersion language remain prerequisites for language acquisition (2014:17).

Assessment

Assessment processes in bilingual and immersion programmes are an area of continuing interest across many immersion programmes (Baker 2011; Garcia 2009; May and Hill 2005; Walker and Tedick 2000). Determining what pupils know, have learned and can do with the curriculum, and with the first and second language, is a matter of keen interest to teachers, schools, parents and authorities. This is an area of professional learning that has already been requested by teachers in the Gaelic-medium sector (Education Scotland 2016). All GME teachers will be familiar with assessment processes for mainstream education but may not have had opportunity for professional learning to equip them to develop, collect and interpret data in the immersion context appropriately and accurately. Assessment is additionally valuable for programme accountability and improvement.

Bilingual children's acquisition and knowledge of their two languages are different to the knowledge and acquisition of one language. The language proficiency of the children in each of their languages will be influenced not only by their language learning ability but also by the cumulative exposure that they have had to each language (Gathercole 2013)¹⁷. It is also thought that the language knowledge of bilinguals is shared across both languages and that both languages will interact with the social and cognitive development of the learner (Cummins 2005a). For example vocabulary knowledge is shared across both languages so that the L1 vocabulary of a

¹⁷ This does not contradict Genesee's argument that time/exposure alone does not lead to better L2 learning. Genesee would acknowledge that there is a lower limit of time that is essential (Genesee 2013:36)

bilingual may appear to be less than that of their monolingual peer, yet their overall vocabulary (L1 and L2) may be greater.

Next, there are issues associated with the different rates of development of conversational and academic language in L2 learning (Figure 2.2, p67), factors that will influence how effectively children can access all areas of the curriculum, and also their ability to demonstrate the extent and limits of their knowledge and understanding. Moreover, when assessment of learning is through the L2 (e.g. Gaelic) there is the added issue of checking pupils' understanding of the assessment task. Baker (2011) further identifies three aspects of development that need to be kept distinct in assessment: L1 proficiency, L2 proficiency and the existence (or not) of physical, behavioural or learning difficulty (2011:348). This is essential so that temporary difficulties that may face bilinguals are differentiated from relatively more permanent learning issues. From my teaching experience in the sector, assessing and identifying these distinct areas continue to exercise Gaelic-medium teachers who desire more professional learning and resources to inform their understandings of assessment (Education Scotland 2016).

Assessment has been a major focus of recent Scottish policy, with *Building the Curriculum 5* (2011) being a key publication offering Scottish teachers guiding principles in the ongoing assessment of children's learning. This is supplemented for the Gaelic-medium sector by the Education Scotland *Advice on Gaelic Education* (2015) document and the recent publication of *Literacy and Gàidhlig Benchmarks* (Education Scotland 2017a). However, *Building the Curriculum 5* fails to acknowledge that assessment methods or patterns might differ for bilingual children, whether children in GME or children from the other 149 language groups in Scottish schools (SCILT 2017). The Education Scotland (2015) document identifies the altered rate of learning and progress of bilingual pupils and the inappropriateness of comparisons between bilingual and monolingual learners.

Due to the initial focus on language development, children learning through the medium of Gaelic will not be working at the same rate of learning and progress as their peers in English-medium education through the Curriculum for Excellence Experiences and Outcomes across the curricular areas. They will

demonstrate equal competence, if not better, by the end of P7. (Education Scotland 2015:17)

Although this document offers useful guidance on the expected achievement for bilingual children in GME by the end of P7, it does not outline the expected achievement of pupils at the earlier stages of language proficiency in both of the school languages and in curriculum content. On the other hand, the document creates an opportunity for teachers and schools to develop their own, appropriate assessment methods:

Through professional judgements, based on robust assessment and moderation, teachers can assess children's progress in total immersion. This needs to be confirmed by the arrangements for monitoring and tracking at whole-school level. (Education Scotland 2015:15)

Two further issues are highlighted in the literature: the use of monolingual assessment instruments and the translation of these for bilingual programmes. Assessment in many immersion programmes is based on assessments designed for the dominant monolingual group, a practice that may lead to the misidentification of pupils' abilities (Baker 2011; Gathercole 2013; May and Hill 2005). Teachers in dual-stream schools, prevalent in GME, may be expected to use standardized assessments to measure performance where head-teachers lack understanding of bilingual development (Education Scotland 2015; Walker and Tedick 2000). Subsequent comparisons made between bilinguals and monolinguals assume equal language facility across all domains, a practice known to be inequitable.

Translation of assessment instruments may be seen as an accommodation of bilingualism but these also do not represent children's learning accurately as 'tests in one or other language do not usually capture the complexity of the linguistic repertoire of the bilingual' (Garcia 2009:376). In GME, Education Scotland (2015) advises that direct translation in itself is insufficient and 'does not automatically lead to parity of assessing knowledge, skills and understanding' (2015:18). Donaldson (2016), in a paper examining spoken language development in GME, states that translation is not straightforward for assessing vocabulary comprehension where there may not be a direct translation equivalent for words, or for grammatical

abilities where there are differences between Gaelic and English language structures. However, she suggests a more promising approach would be to borrow some task formats from English tests (2016:15).

Although the wider literature clearly identifies issues relating to bilingual assessment and the need for development of assessment instruments specific to the language context, it offers limited solutions (Baker 2011; Cloud, Genesee and Hamayan 2000; Garcia 2009; Gathercole 2013). One suggested approach to assessment is dynamic assessment which views assessment as a process rather than an outcome (Baker 2011). Based on Vygotsky's Zone of Proximal Development (ZPD), it explores the co-construction of learning between teacher and pupil, and focuses on a student's potential language-learning skills or ability while assessing current learning also (2011:357). Similarly, Gaelic-medium teachers will have been working within the cyclical process of using assessment to set learning outcomes, design learning activities and resources, monitor progress and refine future learning outcomes which is embedded within the Curriculum for Excellence framework (SEED 2004).

The suggested focus of assessment in the CLPL Audit (Education Scotland 2016) appears to be primarily curriculum and achievement based (e.g. assessment materials for mathematics, reading, health and well-being, and evidence gathering). It is unclear whether the focus of assessment identified in the document was primarily related to resources for assessment, or whether there was an awareness of the additional knowledge and understanding required to assess pupils' bilingual language competence. Professional learning on assessment for immersion teachers should include an understanding of issues relating to the assessment of bilinguals, of typical bilingual development, and language proficiency for immersion pupils to enable them to design a range of appropriate assessment instruments with confidence.

Cooperative learning, differentiation and interdisciplinary learning

Included in strategies that are known to be beneficial for progressing language learning and proficiency are cooperative learning, differentiation and interdisciplinary learning (Baker 2011; Cummins 2000; Garcia 2009). Cooperative

learning has proved to be a highly effective strategy within bilingual education settings (Holt 1993). Its efficacy lies in offering enhanced opportunities for both language input and output, and it can be employed to encourage learners to focus on form. If the focus of the group is to practice a particular language feature, then homogeneous grouping is advantageous, while heterogeneous grouping can be used for peer-to-peer language support. Gibbons (2002) identifies reasons for the specific value of group work in bilingual settings:

- learners hear more language and a greater variety of language (more comprehensible input, Krashen 1984);
- learners have opportunity to interact more (more language output);
- the language and task are more contextualized;
- learners have more opportunity to ask questions;
- group work has positive affective consequences (reduces anxiety that can act as a barrier to learning), and
- learners construct talk jointly (scaffolded by the group). (Adapted from Gibbons 2002)

Baker (2011) additionally notes that, in contexts where pupils come from language minorities, cooperative learning can increase intergroup friendship, raise the achievement of minority pupils and increase their motivation and self-esteem (2011:328).

Differentiation of learning for pupils is most important in bilingual and immersion classrooms because children will not only be at different levels of understanding content but also at different linguistic levels, and are likely to display different aptitudes in different curricular areas (Baker 2011; Garcia 2009). This means that the teacher will be required to prepare multiple entry points for lessons, differentiating instruction and support, and also using a range of assessment methods. For example, additional scaffolding through the use of simplified language and visuals may be used with some pupils whose L2 is less developed with the learning activity appropriately adapted. A range of assessments would be designed to allow pupils to demonstrate their understandings in different ways (Baker 2011). This is additionally

important in the Gaelic-medium sector as many classes in the majority of schools are multi-composite, extending the range of language and ability needs.

Thematic work, referred to interchangeably as interdisciplinary learning in Scottish curriculum documents, offers further opportunities to bridge and contextualize learning across the curriculum. For example, it provides a natural situation in which vocabulary can be repeated, providing opportunity for consolidation of language across content knowledge, and also for extending learning (Freeman and Freeman 2000). Thematic work also provides an additional context for incorporating other pedagogical strategies that are beneficial to language and content learning in immersion settings.

The latter three pedagogical strategies are found in mainstream primary education practice and are likely to be part of the Gaelic-medium teachers' current repertoire of pedagogies. However, there may be less awareness of the specific benefits of these practices for bilingual and immersion learners, or that they can be used either monolingually or bilingually, and would therefore be of interest as an element of a professional learning programme.

Conclusion

The first section of the chapter has examined contextual and policy factors that necessitate Gaelic-medium teachers to have additional, specialized professional learning opportunities. The literature relating to bilingual and immersion education is examined to consider the potential influence on teacher learning of using an immersion approach to teaching and learning in a minority language context. This is a context specific to GME within the Scottish context. The need for specialized professional learning is explicit in national and international research studies, and acknowledged in some policy documents. A discussion of the literature brought into view research that is of direct relevance to immersion teachers' professional learning such as issues of teacher language proficiency, providing a protected space for acquiring the minority language and extending pedagogies for teaching the curriculum through a second language. There are no equivalent issues for

mainstream primary teachers and, if there is to be less variation in Gaelic-medium immersion practice, sector-specific professional learning for the teachers (and promoted staff) of Gaelic-medium schools will be necessary to enable them to access recent developments and literature within the wider immersion context.

The second section has situated immersion education within wider theoretical understandings of second language acquisition and related pedagogies, considering the implications of these for teacher learning. It explores the shift that has taken place within second language acquisition theories since the beginning of immersion education, particularly in relation to bilingual pedagogies. This shift has important implications both for teacher professional learning, and pupil language proficiency and academic achievement, in the Gaelic-medium context. There is an extensive literature addressing professional learning issues that are common across immersion contexts, such as teacher knowledge and understanding of the structure of the immersion language and improving pupil proficiency through a greater focus on form. The importance of specialized professional learning to support all immersion teachers with the complex task of addressing content, language and literacy development in two school languages is emphasized across the literature.

Chapter 3 Methodology

In this chapter, I will firstly outline the overall framework for the study. This will be followed by a brief outline of a pilot study and discussion of the resulting modifications made to the main study. Next there will be a description and discussion of the research design and the iterative nature of this process, offering a critical, reflective account of the methods that were used. Finally the method of analysis will be considered and reflected on. The research design is described in order to demonstrate that the credibility of the research was considered at each stage of the process.

Introduction

We have seen in the introductory chapter that teachers' professional learning and development was a central focus of the *Teaching Scotland's Future Report (TSF)* (SG 2010). Supporting and strengthening the quality of teaching was identified as one of the ways in which Scotland could achieve the high aspirations that it has for its young people (2010:19). The Report further emphasized the need for teachers to have 'access to high quality CPD for their subject and specialist area' at all stages of their career (*TSF* 2010:84, 99). This ongoing opportunity of specialist professional learning is important as the knowledge and understanding of the class teacher is central to the quality of teaching (Lingard et.al. 2003).

As discussed in the literature review, core to the practice and quality of Gaelic-medium teachers would be specialist knowledge and understanding of first and second language acquisition, bilingual and immersion education and immersion-specific pedagogies (Johnstone 2002). The literature review also showed that there seems to be little awareness of the specific skills required for teaching through the immersion approach, and limited opportunities for CPD specifically designed for Gaelic-medium teachers at all stages of their career (Chapter 2, p9). The study, therefore, aimed to investigate, as a key focus, what specialist professional learning opportunities Gaelic-medium teachers believed they need to teach Gaelic as a language and teach the curriculum through the medium of Gaelic. It further aimed to

examine whether these perceived needs differed by career stage or language background, and take account of contextual factors impacting on the teachers' professional learning.

The objectives of the study are:

- To contribute to the literature on immersion education, providing a detailed description of Gaelic-medium teachers' own views of their professional learning needs.
- To contribute to teacher professional learning programme and course design at university, school, local authority and national level of the specialist professional learning needs identified by participants and informed by the literature.

The research questions guiding the study were:

1. What do Gaelic-medium primary teachers perceive to be their professional learning needs in relation to teaching Gaelic as a language and to teaching the curriculum through the medium of Gaelic?
2. Do the perceived learning needs of Gaelic-medium primary teachers differ by career stage or language background?
3. What contextual factors facilitate or impede Gaelic-medium teachers' professional learning?

A mixed methods approach was taken to the study to further understanding through gaining in-depth data from multiple perspectives (Thomas 2013:23). The use of both quantitative and qualitative inquiry, to support and inform each other, seemed particularly appropriate in the complex context of language-related teacher learning because it enabled data gathering about both the individuals and the broader context (Dörnyei 2012:25). It was important to use an approach that allowed for the teachers' voice, noting the language used, nuances and non-verbal cues, to contribute to my understanding and interpretation of their perspectives (Silverman 2005, 2011). Further, because my understanding was grounded in the current literature relating to bilingual and immersion education, and teacher professional learning, where specific contexts are recognized to be important, seeing the teachers' school context aided my

understanding of their viewpoint. Additionally, as factors in the school and wider communities¹⁸ would influence their learning, data from interviews, questionnaires and official documents were examined to gain information from varied vantage points (Charmaz 2014). The study, therefore, has aimed to describe, understand and explain the perceived professional learning needs of the individual participants through analysing interactions, communications and relevant documents.

It should be noted that in the thesis the second language (L2) refers to the learning of Gaelic as the second language although it is recognized that for a minority of pupils Gaelic will be their first language (L1).

Pilot Study

Outline of pilot study

A pilot study was conducted consisting of visits over five days to a Gaelic-medium school to make observations of, and interview, three teachers. The pilot study aim was to identify the key features of teacher talk in the immersion classroom and examine what influenced the choice of language and pedagogical practice of the teacher. The pilot primary was selected because the teacher population was such that the school could later be included in the main study sample, should it meet the proposed selection criteria. This was important as there were only fifty-nine Gaelic-medium schools in total in Scotland and it was desirable not to exclude any schools that could be used in the main study.

The key focus of the pilot study was to test the research instruments to enable reflection on these and identify any necessary modifications in order to improve the main study data set. It was also important to identify any additional themes that had not been previously considered.

Access to primary teachers was arranged through the pilot school's head teacher, following the granting of research access by the local authority (LA). Written and

¹⁸Teacher learning would be influenced by personal factors, educational experiences, dominant language of the school and local community, local authority and national policies and priorities.

oral information about the research project was shared and its implications for the participants were discussed at an initial meeting (Appendix 1).

Observations and interviews are methods that are viewed to be appropriate for understanding a group of people, their thinking, and their ideas and how they construct their world (Thomas 2013:108). Non-participatory observations were made of the teachers in their classrooms and these were used to contextualize the interviews. In-depth interviews were conducted in Gaelic with the teachers. An A4 page questionnaire (Appendix 2) was used to elicit information associated with the teacher's personal history, educational background, professional learning and experience. Although this could be seen as being a small pilot, the data collection was detailed and the information gained directly useful in informing the main study.

Summary findings of pilot study

In analysis of the interview scripts the teachers highlighted their professional learning needs in relation to their practice, expressing the challenges for them of teaching in GME. This seemed to be an issue of importance that each teacher raised, voicing their need to learn much more in relation to language and pedagogy. They cited their main sources of professional learning were through Gaelic-medium colleagues and through 'trial and error'. Two of the teachers indicated that more Gaelic-specific learning was required at ITE and CPD level, and none had experienced immersion related professional learning at LA level. While describing a wide range of immersion pedagogical strategies, the teachers were unaware that they were known strategies for language teaching, and expressed uncertainty when talking of areas such as grammar teaching, corrective feedback and the use of the L1 in the L2 classroom. The latter was discussed apologetically. This suggested a gap in their knowledge and understanding of second language acquisition and in the findings from pedagogical studies in other immersion contexts. Observations of teacher talk in the classroom revealed a range of talk with one class talk being primarily instructionally based and another where there was an intentional focus on a range of social and academic talk. The findings raised a range of issues related to the teachers' understandings of the immersion approach in L2 teaching.

Further, it emerged that the aim of the pilot study to understand teachers' practice of language was too broad for a small-scale study and that a more focused understanding of teachers' perspectives in relation to the language was required. This led to a change in the investigative focus based on the participants' emphasis on their need for more professional learning in relation to language and pedagogy. As the *National Gaelic Education Strategy Steering Group (2016)* had identified teachers' professional learning as a priority area for development, this revised focus addressed both a current issue and addressed an identifiable gap in the immersion research literature. Findings could inform teacher CPD programmes and the development of courses in ITE Gaelic-medium teacher education courses.

Modifications for main study

Following the pilot study, a number of modifications were made in relation to the focus of the study and the methods used. Firstly, the focus of the main study was refined with teacher professional learning in relation to teaching Gaelic as a language and teaching the curriculum through Gaelic being the focus of the main study. Next, such a change of research focus resulting from the pilot study required additional questions incorporated into the questionnaire. The questionnaire in the pilot study had been disseminated to the participants electronically¹⁹ and in hard copy prior to the interview (Appendix 2). All of the participants returned the questionnaire in hard copy although electronic return had been requested to enable swifter collation of the information. Where possible, in the main study, the questionnaire would continue to be sent electronically to participants prior to the interview, but time would also be allowed for completion of the questionnaire immediately prior to the interview. This meant that eliciting the questionnaire information did not impinge on interview time. The return of one questionnaire in Gaelic and one in English, together with the observation that two of the three teachers read all the initial information regarding the research project and consent form in English suggested varied levels of confidence or fluency in Gaelic language and literacy.

¹⁹ The school management team had forwarded the questionnaire to participants.

A number of changes were made to the questionnaire prior to the main study (Appendix 3). The additional questions related to:

- teacher professional learning
- Gaelic and English language confidence
- class composition

As the revised focus was on professional learning, additional information about the influences shaping this aspect of practice would be valuable at the analysis stage. More focused information of the teachers' perceived language confidence and fluency could potentially add background to the understanding of their identified learning needs. Likewise, the inclusion of their current class stage and composition could influence choices in relation to pedagogical needs.

The timing of the interviews in relation to the observation in the class had been problematic in the pilot study. This was to do with teacher availability for the interviews and the range of activities pre-arranged for classes. The time delay of eight and thirteen days respectively in two of the interviews meant that the immediacy of the observation was significantly reduced. I decided not to include classroom observation in the main study as it would not be directly useful to the changed focus of the study.

Finally, early analysis of the interviews identified researcher practice that could be further developed. The practical arrangements in relation to the pilot interviews had worked well and teachers had been very willing to share their views. However, when listening to the interview tapes and analyzing the transcripts, it became apparent that probing the participants further to clarify certain points or give greater detail could enhance the quality of data. Although all participants had indicated that they could be contacted for clarification at any time following the interviews, further clarification could also be obtained during an interview.

The purpose of the pilot study was to determine whether the selected research tools (questionnaires, observations and interviews) were appropriate to answer the research questions and whether sufficiently rich data could be produced from these

methods. The modifications were designed to ensure a richer and fuller data-set that would provide a credible insight into the immersion-related professional learning needs of Gaelic-medium teachers.

Research Design

Research Location

Selecting the location of the research required careful consideration in order to capture as wide a range of teacher experiences as possible. As noted in Chapter 1 fourteen local authorities across Scotland offered Gaelic-medium primary education in fifty-nine Gaelic-medium primary schools in the school year 2015-16 (BnG 2015). Of these primary schools, fifty-four were dual-stream schools and five were freestanding Gaelic schools. As my approach to teacher learning was from a broadly sociocultural perspective where the school and authority context in which teachers work is acknowledged as a factor in shaping their teaching and professional learning (Kelly 2006), I identified three key elements in selecting the research locations.

Firstly, it was important to include both dual-stream and freestanding schools. Within the dual-stream schools, larger schools that had single year Gaelic-medium classes and smaller schools that had multi-composite Gaelic-medium classes were selected. This ensured the inclusion of teachers with both single and multi-composite classes in dual-stream schools whose diverse class contexts might lead to identifying or prioritizing different professional learning needs. Next, the community within which the school was situated was considered. Research suggests that greater exposure to the L2 in the community is associated with greater linguistic competence in the target L2 language (Baker 2011; Dorian 2006; Garcia 2009). Thus schools were selected in communities with a range of densities of Gaelic speakers in the community. Publicly available data (National Records of Scotland 2015) was used to identify how much Gaelic was used in the local communities. Finally, local authorities that had a dedicated Gaelic Language Officer, and local authorities where the responsibility for Gaelic development was included within a general languages remit were selected. This factor might offer insight into the immersion-specific professional learning opportunities and support available to Gaelic-medium teachers

at LA level, influencing the teachers' learning needs and priorities within these respective contexts. Pragmatically it was not going to be possible to visit a school in each of the fourteen authorities and therefore care was taken to include schools using the school, community and LA criteria outlined above.

Selecting a large freestanding school as a site for an in-depth case study of the professional learning needs of Gaelic-medium teachers was considered but rejected as this is an atypical context for the majority of Gaelic-medium primary teachers who teach in multi-composite dual-stream schools. No one school or LA would be representative of the wider Gaelic-medium educational community. In my study I wanted to capture the views of a range of teachers in a wide variety of contexts to identify potential teacher learning needs across the Gaelic-medium sector.

Taking account of the school and LA factors discussed above, the following schools and authorities were selected for the study (Table 3.1). The range of schools included freestanding Gaelic schools (GS), Gaelic-medium streams in English-medium primary schools (GMS), and Gaelic-medium primary schools with English-medium streams (EMS).

Table 3.1: School sample.

| SCHOOL TYPE²⁰ | AUTHORITY | Spoken Gaelic in the parish (%) |
|---------------------------------|-------------------|--|
| GS | City of Edinburgh | More than 0% to less than 1% |
| GS | City of Glasgow | More than 0% to less than 1% |
| GMS | CnES | 50% and over |
| GMS | CnES | 50% and over |
| GMS | East Ayrshire | More than 0% to less than 1% |
| GMS | Highland | 25% to less than 50% |
| EMS | Highland | 25% to less than 50% |
| GMS | Highland | 25% to less than 50% |
| GMS | North Lanarkshire | More than 0% to less than 1% |
| GMS | Stirling | More than 0% to less than 1% |

²⁰ Percentage of Gaelic-medium children within the whole school (Bòrd na Gàidhlig 2013-14)

Additionally, teachers with composite classes (P1-3 or P1-7) and teachers with one-stage classes were selected. This meant that participant teachers in as wide a range of settings as practically possible could be included in the study.

Participant sample

Having identified potential local authority and school locations it was then necessary to select the participant group within these locations to gain insights into teachers' perceived learning needs related to their Gaelic-medium context. Three factors were considered:

- teacher career stage
- teacher language background (L1 or L2)
- class stage

Career stage

As an aim of the research was to examine whether these perceived professional learning needs of Gaelic-medium teachers differed by the stage of career of the teacher it was necessary to ensure that the sample included participants from across the career continuum. Four broad categories were identified: probationer teachers, teachers with 2-6 years experience (SG 2010; Kennedy 2007), teachers with 7 + years of experience, and teachers with 7 + years of experience who were in management positions. The participant group included teachers whose professional experience spanned from one year to thirty-six years (Appendix 4). Within each of these four participant categories a further language criterion was introduced. The categories were informed by the principal aims of the study and existing knowledge of teacher professional learning (Ritchie et. al. 2014). Including Gaelic-medium teachers in all categories enabled me to examine whether and how GME teacher professional learning priorities might change over time.

In UK studies, including Scotland, it has been argued that the priorities of teachers in relation to their professional development and learning vary at different stages of their career (Chapter 2, p41; Menter et.al 2010; Kelly 2006). This has not yet been examined in the Scottish Gaelic-medium sector. Additionally, recent Scottish

Government reports have emphasized the need for rigorous and relevant continuing professional learning programmes spanning the career continuum, with the underlying assumption that teachers at various stages of their careers have different learning needs (SG 2010; SG 2011). I was therefore interested to include Gaelic-medium teachers across the career continuum to examine whether the perceived learning needs of Gaelic-medium primary teachers differed by stage of career (Table 3.2).

Table 3.2: Participant career stage and language background

| Career stage | Sample | Native speaker | Learner |
|--------------|--------|----------------|---------|
| Probationer | 5 | 2 | 3 |
| Year 2-6 | 5 | 3 | 2 |
| Year 7+ | 7 | 5 | 2 |
| Management | 8 | 6 | 2 |

Language

Further, as a high level of fluency is seen to be an important attribute of immersion teachers (Baker 2009; Johnstone 1994), each identified group included a mix of participants for whom Gaelic was their first language and those for whom Gaelic was a second language. This would provide opportunity to examine whether the perceived strengths and/or development needs across specific areas of language learning (talking, listening, reading, writing) differed within, or across, teachers who have come to language proficiency through different pathways.

I initially adopted the terms *fluent speaker* and *learner* to classify different types of teachers within the participant sample. These are the terms used for Gaelic subject categorization in Scottish secondary and tertiary education and would be readily recognized in the school context. The definition of *fluent speaker* includes pupils who come from Gaelic-speaking homes and those who have completed seven years of Gaelic-medium education. The *learner* category includes pupils who study Gaelic as a second language in secondary school or as adult learners of the language (Scottish Qualifications Agency 2015). It became clear, following the initial interviews, that this categorization was more complex than the definitions indicated.

Indeed, it was potentially misleading as teachers identifying as *learners* may have acquired some Gaelic from the age of 3 years, 5 years, as teenagers or as adults, with some being equally (or more) fluent than *fluent* speakers. The terms *native-speaker*,²¹ commonly used in the second language literature, and *learner* were adopted with participants self-categorizing. This removed the potential complexities associated with *fluency* in both categories. However, I was cautious about attaching too much significance to this categorization as there was no further examination of whether teachers who self-categorized as L1 or L2 participants were more or less ‘fluent’ in the language. It was informally assumed by the participant group that L1 participants were more ‘fluent’.

Teachers who taught across all the stages of language immersion were included (Table 3.3), as learning needs for pedagogical strategies and language proficiency may vary at different stages (Chapter 2, p45).

Table 3.3: Participant group and class stage

| | Probationer | Year 2-6 | Year 7+ | Management |
|-------------|-------------|----------|---------|------------|
| Primary 1 | | | 3 | 1 |
| Primary 1-2 | 1 | | | |
| Primary 1-3 | 1 | | 1 | |
| Primary 1-4 | | | 1 | |
| Primary 2-6 | | | | 1 |
| Primary 3-4 | 1 | 1 | | 1 |
| Primary 4 | 2 | 1 | | |
| Primary 4-7 | | 1 | | 1 |
| Primary 5 | | 1 | | |
| Primary 5-7 | | | | 2 |
| Primary 6 | | 1 | 1 | |
| All stages | | | 1 | 1 |
| No class | | | | 1 |

The different participant categories were designed to ensure that enough diversity was included in the study and it was also necessary, as the data collection progressed, to ensure there was sufficient representation within each category.

²¹ Teachers who self-categorized as *native-speakers* usually did so on the basis of having grown up in a Gaelic-speaking home.

Having detailed the approach used to identify school locations and participants, I now discuss ethical issues and the process of gaining access and informed consent.

Ethical considerations

Ethical considerations and values should be at the forefront of the researcher's thinking, from conception to completion of any research project. These cover our relationships with participants, with our research practice, with the academic community and with the wider community in which the research is set (Braun and Clarke 2013). This study was designed and conducted in accordance with the BERA Ethical Guidelines (BERA 2011) and I gained ethical approval from the School of Education's Ethics Committee prior to the commencement of the study. Subsequent research approval was gained from seven local authorities and permission to approach Gaelic-medium schools granted. Four of the local authorities required completion of a research conduct form that was then approved by a Research Committee. The Head of Service in the three remaining local authorities gave written consent. All the authorities were given full details of the research purpose and processes (Appendices 3, 5 and 6).

More generally, the teasing out of ethical principles in real-life situations proved to be complex, involving some ambiguity and compromise (see *Access and consent*). Pring (2001) argues that it is inevitable that the researcher will have to make judgments about the relevance of a particular ethical principle in a particular setting and also about the priority given to one principle over another in a given setting because of the complexity of situations involving participants, organizations, data and interpretations. Negotiating an ethically correct way forward necessitated the revisiting of the ethical dimension throughout the research process to reflect on and reconcile conflicting principles. This is further discussed in relation to the matter of obtaining access and informed consent from participants.

Access and consent

Obtaining access to and consent of participants proved to have unexpected layers of complexity. This was in part due to the number of local authorities involved, the geographic distribution of these and to the diverse range of staff with responsibility for Gaelic and research access across the respective authorities. At LA level, it was necessary to communicate with the Head of Service, a Research Committee, the Probationer Manager, the Education Officer with CPD responsibility, and the Gaelic Development Officer (or equivalent Languages Officer). At school level, head teachers and principal teachers with responsibility for Gaelic or for professional learning were contacted.

First, it was necessary to gain permission to undertake the research study in schools from the respective local authorities. An email was sent to individual Heads of Education and, where appropriate, to Gaelic Officers in eleven of the fourteen local authorities in which Gaelic-medium primary education is available. An outline of the research study and consent form was attached. Three authorities were not contacted at this stage because other authorities in closer geographic proximity to each other represented the type of school and context offered. Seven authorities gave permissions in the first two-month period.

Next, I had to contact the local authority Probation Managers to identify the Gaelic-medium schools with probationer teachers. The time taken to gain this information meant that I was limited in the number of probationers that could be interviewed before the end of the school year (June 2015). It was important to interview the probationer teachers before the end of the academic year, if possible, as they would have experienced planned professional learning in both the school and local authority and would be better able to reflect on these opportunities in relation to their personal professional learning towards the end of their probation year. Also, at this point in the school calendar probationer teachers would be preparing to teach in a new school and/or at a different class stage and therefore reflecting on their personal professional learning needs would be an area of immediate relevance to them.

Finally, following formal approval of the study, and having gained information about the location of probationers, contact was made with the head teachers of the Gaelic-medium schools to gain access to the teachers. Communication with head teachers was initially by email, followed by a phone call within a few days. An outline of the research study, questionnaire and copy of the consent forms were attached to the email (Appendices 3, 5 and 6) in order to give information regarding the purpose and scope of the research. Arrangements regarding the time, place and potential participants in the interviews were provisionally agreed with the head teachers. I requested access to the selected teachers (teacher email or telephone contact details) from the head teachers so that I could make prior contact with potential participants to explain the purpose of the study, clarify any queries or concerns and forward the questionnaire electronically. Although all head teachers made the interview arrangements willingly, none of the head teachers contacted in June 2015 forwarded the contact information to me to enable prior communications with the interview participants. This meant that the participants were unable to give prior thought to the subject area, which could potentially impact on the quality of the data and reduced the time for building a rapport with them. Some of the head teachers shared the written documentation with some of the interview participants but this was not consistently done. This necessitated an adaptation to the letter sent to head teachers subsequently where it was then requested explicitly that information be shared with potential participants prior to the interviews if I was unable have the opportunity of prior contact.

This circuitous route to participants raises some ethical issues. Once a head teacher had given consent and identified potential participants there was the possibility of teachers being under subtle pressure to participate. This raised ethical questions regarding the voluntary nature of their participation (Kvale and Brinkman 2009:71). Further, the head teacher acted as 'gatekeeper' in schools where they identified participants based on the shared categories (Chapter 3, p94) and local school factors (e.g. availability of teachers, prior school meetings, extracurricular commitments). While it is necessary as a researcher to be aware of the potential impact on data collection of these issues, it appeared, in the absence of evidence, that identification

of participants was genuinely based on the consideration of the shared categories, availability and willingness to participate. Head teachers were interested in the proposed area of study.

The importance of obtaining informed consent from each participant and of treating data with utmost care is central to all research. At the initial meeting both oral and written information about the project was shared with each individual teacher. All the participants made a positive choice to take part in the research and returned signed consent forms, with an understanding that consent could be withdrawn at any time. The consent forms were available in Gaelic and English. It could be suggested that teachers did not have sufficient time to reflect on the full implications of their consent when the information and sharing was included as part of the interview meeting. However, participants appeared eager to share their views and showed no reluctance to be included in the study. Only one teacher indicated that she had been directed by management to take part in an interview, without prior warning or discussion. Nonetheless, this teacher shared her views openly and was willing to be contacted afterwards, if necessary.

The explanation of the aims and purpose of the research project and ensuing interview conversation was conducted in Gaelic. Clarification was also offered about the process of data collection, storage and dissemination of information to allay any concerns regarding anonymity.

Anonymity

As the Gaelic-medium sector and associated cultural community are a small minority group that enables easier identification of individual schools and teachers, assurance was given that anonymity would be ensured, as far as possible, through the use of pseudonyms or codes. This information was important to the participants, as they might not wish their personal and professional views to be known within the wider Gaelic-medium education community or publicly. It could also affect the quality of information shared at interview. In the electronic storing of data and for the third-party transcription services numerical coding was used to anonymize individual

teachers, with letter coding being used to anonymize career stage and school. The use of the Census Report (2015) civil parish bands offers a further degree of anonymity to schools and LAs.

Reflexivity

It is recognized that there are challenges associated with interviewing as a method and that the design, purpose and process are influenced by the beliefs and assumptions of the researcher (Ritchie et. al. 2014:179). My previous experience as a teacher in the Gaelic-medium sector and as an L1 speaker of Gaelic from the islands could position me as an ‘insider’, which ‘allows for insights into processes, phenomena, and individual, cultural, or group dynamics that others cannot witness’ (Vickers 2002:619). Having knowledge and understanding of Gaelic-medium teaching and school contexts created a shared experience, which I suggest helped me to gain access to, and the trust of, the participants. Having an understanding of the opportunities and challenges of teaching Gaelic as a second language and teaching the curriculum through Gaelic could enable me to be more sensitive to nuanced statements in the interviews. Although this could have also positioned me as an ‘outsider’ should a participant be insecure in either language fluency or pedagogical practices, it appeared that participants viewed our shared teaching experience in the Gaelic-medium sector positively. My role as teacher educator could be perceived positively or negatively: as a potential agent for change in relation to Gaelic-medium teacher education or as an ‘expert’ perceived to hold theoretical ideals unrelated to practice.

Sensitivity to the impact resulting from these factors was required and the initial briefing meeting with participants was seen as an opportunity to build both trust and rapport (Ritchie 2014: 33). However, while there were many advantages to being accepted as an ‘insider’, it was also important to clarify my role as researcher, with the aim of exploring *their* views and understandings, and to recognize the potential ‘bias’ of my ex-practitioner status through reflecting on my own subjectivity at all stages of the study (Ritchie et.al. 2014:23).

Methods

A key consideration when examining different potential data-gathering tools was the appropriateness of the methods in providing the best dataset for answering the research questions. As I was interested to find out teachers' lived experience and understandings of their professional learning in relation to teaching in the Gaelic-medium sector in a range of contexts, it seemed fitting to use interviews to elicit teachers' perspectives, while gaining complementary information through questionnaires, field notes and documents. Combining these different methods allowed me to capture the complexity of participants' experience and enabled confidence in making claims (Cohen, Manion and Morrison (2011: 112). However, Hammersley (2008:9,10) cautions that combining methods does not guarantee truth but is of value by offering evidence to inform judgement. Each of the approaches will be examined for purpose and reflection on their efficacy.

Interviews

Factors influencing choice of interview as a method

Semi-structured interviews seemed fitting as a main method of data collection for exploring teachers' revealed perspectives of their professional learning. This method presented an opportunity to gain in-depth and rich insights into participants' social worlds, their experiences, motives and understandings of their own context (Ritchie et. al. 2014, Kvale and Brinkmann 2009). In addition the semi-structured interviews enabled me to explore the area of language and teacher learning more fully and gave latitude to probe further to obtain deeper understandings (Bryman 2004). This 'conversation with a purpose' aimed to represent the participant teachers' views fairly (Ritchie et. al. 2014) and the structure offered a flexible and adaptable way of gaining information.

It would have been possible to collect data for my research question through questionnaires to the total group of Gaelic-medium teachers. However, I was interested to see how the macro, meso and micro cultures of teachers influenced and shaped their perspectives on their professional learning and construction of knowledge. Interviews offered opportunity to discuss this within the school setting

and observe the learning culture within a school. Further, Education Scotland had conducted an online questionnaire survey of teacher professional learning three months prior to the start of my data collection and I was uncertain whether teachers would respond to a second questionnaire on a closely related subject within such a short timeframe.

Interview location

Although the criteria for school location and the participant group had been carefully considered, I had not initially reflected on the site of the actual interview other than to identify the necessity of a private space where the interview could be conducted undisturbed. I considered arranging participant interviews in a neutral, out of school venue as the constraints imposed by the school day and arranging the interviews through head teachers proved to be cumbersome. This seemed an attractive alternative as the teachers might share their views more freely, unhindered by the constraint of the hierarchical context of the school (MacDonald 2004). However, as I was approaching this study from a broadly sociocultural perspective, observing the ethos of the school, the language of environmental print and communications within the school, the ratio and physical location of the Gaelic classes provided important additional data. On balance, I considered that the benefits of the additional data gained through observation of the school context outweighed the benefits of an external location for interviewing. The majority of interviews (nineteen out of twenty-five) were conducted during the school day. The willingness of managers to accommodate the interview process within the school day appeared to stem from a mindfulness of their staff's time, acknowledging the additional commitment and hours that were willingly given and thus seeking to protect them from further 'out of hours' commitments. Of the six interviews conducted at the end of the school day, participants from each category were equally represented, and were from two urban schools.

Interview language

In the initial stages of considering the research focus, it seemed to me that the language of the interviews and documentation associated with the research should be

in Gaelic (Appendices 5, 6, 7). Gaelic-medium teachers are expected to have a high degree of fluency in the language (Baker 2011; Johnstone 2002) and as the research focus was on the language-related professional learning needs of participants, it seemed pertinent to discuss these needs in Gaelic. Also, Gaelic is the expected social, academic and professional language of Gaelic-medium schools. It therefore seemed both respectful and necessary to conduct the interviews in Gaelic and for documentation to the teachers, schools and authorities to be available in Gaelic. Additionally, using Gaelic as the language of the interview contributed to the development of rapport with the teacher(s) and potentially indicated to them that I had a good understanding of their context (Charmaz 2014; Kvale and Brinkman 2009).

Nevertheless, as the aim of the study was to examine the ongoing professional learning needs of Gaelic-medium teachers, from their perspective, it was vital that the language of the interview did not impede this. Therefore, prior to each interview I indicated that the interview could be conducted in either Gaelic or English, as understanding the participants' perspective was the central objective. It was not my intention to do a linguistic analysis of the teachers' language but a broad observation of the language(s) and the teachers' language preference would be of interest at the analysis stage. This could contribute to verifying the meaning of statements and provide another lens on the language confidence and/or language ability of the teacher (Charmaz 2014: 87; Kvale and Brinkman 2009:220). All participants used Gaelic as the interview language, although one switched between both languages for clarity.

A summary of the research study, and the consent form, was made available to all participants in Gaelic and English. All email correspondence to local authorities and to head teachers was in English unless I was aware that the Officer or head teacher spoke Gaelic, when I corresponded in Gaelic.

The complexity of interviewing through Gaelic emerged in the early interviews (Appendix 7). It was clear that, if the aim of the interview was to gather rich data, it

was important that the participants easily understood the terms used. Direct translation of a professional term might not convey the conceptual understanding of the term in the other language. This was evidenced through the use of the terms ‘continuing professional learning (CPD)’ or ‘ionnsachadh proifeiseanta leantaineach’, and ‘career-long professional learning (CLPL)’ or ‘ionnsachadh proifeiseanta fad dhreuchd’. While the terms and concepts are readily understood in English, the Gaelic equivalents did not appear to be commonly used and were associated with formal learning opportunities rather than including a wider spectrum of professional learning. In order to improve the preciseness of the interview questions, ‘ionnsachadh proifeiseanta’ (professional learning) or ‘d’ionnsachadh mar thidsear’ (teacher learning) were substituted or the question addressed obliquely. If these adaptations seemed unclear, then I used the abbreviation of ‘CPD’. The absence of the common usage of the terminology for continuing professional learning or teacher professional learning in Gaelic by the participant group was interesting in itself and possibly indicative of a gap in this area in the Gaelic-medium sector.

Interview participants

Interviews were conducted with probationer teachers, year 2-6 teachers, year 7+ teachers and Gaelic-medium teachers in management positions, at all primary school stages (Table 3.2; Appendix 4). In larger schools it was possible to do multiple single interviews, where there were class teachers at varying career stages. The geographic distribution of schools across seven LAs was challenging but necessary to ensure credibility for the study.

How many interviews

The quality and credibility of a study starts with the data construction. Twenty-five participant interviews were conducted over a ten-month period. The number of interviews was decided as the data collection proceeded to ensure sufficient interviews within the identified criteria were included. A further factor was the quality of the data gathered. Charmaz’s (2014:33) suggestion that researchers should plan to ‘gather sufficient data to fit your task and to give a full picture of the topic within the parameters of this task’ guided the number of interviews in this instance.

Questionnaire

Teachers bring different personal histories, professional experiences, beliefs, values and concepts of themselves as teachers. Moreover, in Gaelic-medium education the teachers will bring additional diversity in terms of educational experience of the language, language competence, fluency and cultural understandings (Pollock 2006:216). In order to elicit some of this information, a two-sided A4 page questionnaire was designed so that interview conversations could focus on the research questions (Appendix 3). This included relevant personal information, educational background and information about their professional learning and experience. The questions were largely closed, with some multiple-choice questions, seeking mostly factual information. The background and contextual information from the questionnaire provided additional information at the analysis stage of the research. I needed to be mindful of ‘prestige bias’ (Thomas 2013) where respondents want to look good or give what they perceive to be the ‘right answer’, especially in relation to the three questions where a scale was offered. Participants were given hard copies of the questionnaire in Gaelic and English at the initial meeting. Twenty-four of twenty-five questionnaires were returned, with all, apart from three, being completed in hard copy and returned on the day of the interview. The three that were completed online were returned in response to a reminder email²². Relevant information from these is included in the analysis and reported in the findings (Chapter 4).

Documents

A copy of the participant teachers’ CPD records for the school year prior to the interviews (2014-15) was requested. This was intended to provide additional evidence of recent professional learning undertaken by the participants, offering an important additional perspective that could be examined alongside the interview transcripts (Charmaz 2008:24). These were requested at the end of the interview with participants being assured that this was voluntary and that the information would be kept confidential. Seven out of twenty-five teachers forwarded or printed their CPD

²² Participant contact details were obtained at interview.

record. All other participants, except one, indicated willingness to share their record but did not forward this document subsequently. One reminder email was sent to participants which elicited one of the seven responses. The one teacher who expressed reluctance was willing to share the information ‘with the deputy head’s permission’, suggesting that s/he did not view herself/himself as having ownership of the CPD record or professional learning. This record was not received. Teachers’ own responsibility and ownership of professional learning is seen to be critical to their learning across the career spectrum (SG 2010:50).

Data Analysis

Thematic analysis was used to analyze twenty-five semi-structured interview data, identifying potential themes and sub-themes. It is a widely used approach that is not tied to any particular discipline or theoretical construct, although whether it is an approach or a method is subject to ongoing debate (Braun and Clarke 2006). Ritchie et.al. (2014) defines it as an approach ‘which involves discovering, interpreting and reporting patterns and clusters of meaning within the data’ by working through the text carefully and systematically (2014:271). It is an iterative process that involves searching across and within a data set. Braun and Clarke (2006) suggest that the two main advantages of using thematic analysis are its flexibility, and that it can be applied across a range of disciplines to provide a rich, detailed account of data. In using this method I aim to be explicit about the decisions made relating to the process and practice of the method so that the research can be evaluated.

The thematic framework that I used for analyzing the semi-structured interview transcripts was informed by the work of Gibbs (2007) and Braun and Clarke (2006) who identify six phases in the process of analysis:

- i. Familiarization with the data
- ii. Generating initial codes
- iii. Searching for themes
- iv. Reviewing and naming themes
- v. Revising themes
- vi. Final analysis and reporting

These phases are not linear but involve a constant moving back and forward between the whole data set while culminating in the final report. For example, from the early stages of familiarization with the interview data, ideas were being formed; codes and themes were being tentatively identified. Braun and Clarke define initial codes as the initial list of ideas generated from the data and what is interesting about them (Braun and Clarke 20016:88). The themes involve capturing something that is important about the data and represents a level of prevalence within or across the entire data set. Prevalence alone within the data set will not necessarily lead to identification as a theme, but a key consideration should be how the importance of the potential theme relates to the overall research question and whether, if or why a theme is important.

Language and analysis

Before describing and explaining the process of analysis, it seems important to consider briefly the impact of language on this process. As discussed earlier, this was a bilingual project where the interviews were conducted in Gaelic, with both languages being used in the analysis. The recordings and interview transcripts were in Gaelic. In the initial listening to the recordings, my notes were in a mix of Gaelic and English (verbatim and instantaneous translation) because I wanted to capture important elements, and listen to the entire recording uninterrupted, rather than be distracted by ensuring consistency in one or other language. At a later stage, when checking the transcripts with the recordings, annotations to the scripts were in English as codes and themes were, by then, being identified in English. At this point listening to the recording was more deliberate and involved repeated checking for accuracy and the highlighting of chunks of data. Translation of data extracts related to the developing themes and codes was then necessary to make the analytic process transparent to my supervisors, ensuring that a degree of objectivity was retained in the analysis. Translation was also necessary for inclusion of quotations in the thesis. This translation exercise proved invaluable in terms of returning repeatedly to the original data, ensuring that the participants' meaning and nuances were accurately embodied in translation. The use of Gaelic in the interviews proved positive as many

participants shared their views more frankly than would have been otherwise likely, as English would be associated with more formal, 'official' communications in the school context. However, the use of two languages was enormously time-consuming in the analysis process, as I needed to be mindful of not superimposing my own interpretation in translation.

Process of analysis

Early familiarization with the interview data was important in order to develop a closer relationship with the data and to guide and focus subsequent interview questions. A time delay in engaging with the data could influence the interpretive process through forgotten or distorted recollections. Braun and Clarke (2006) argue that the act of transcription is a key phase of analysis and 'an interpretive act where meanings are created' that the researcher should do (2006:88). However, for this study using a specialist Gaelic transcription service was judged to be necessary as it offered me extra time to comprehensively code the data.

I firstly listened uninterrupted to each of the interviews²³ in Gaelic, within 24 hours of the interviews to hear the spoken word and the manner in which they had been spoken. This was particularly important because of inevitable time delay in receiving the transcripts from the transcriber. Emerging interesting ideas or codes were noted (see above). Next, on receiving the transcripts of the first eight interviews, it was important to listen again to the original audio recordings to check the transcripts for accuracy. It was also important, even at this stage, to make notes and annotate the transcripts while actively listening and beginning to think analytically of potential codes and themes, and comparing these with the notes made on original listening to the recordings.

In the early listening and analysis of these transcripts, initial codes and some themes were identified (Appendix 8). I was also noticing, for subsequent interviews, areas that I could have probed further during the interviews. The initial codes and themes identified at this point were used in the analysis of later interviews, and were added

²³ The interviews were each between 45-60 minutes long.

to and refined at each stage of the analysis. This process was repeated with all of the subsequent interviews. These annotated transcripts were returned to time and again during the analysis process, and during the reporting of findings and discussion stages of the study to increase my understanding of their views and recall the contexts. An example of the codes and themes is given below (Table 3.4).

Table 3.4 Excerpts of initial themes and codes from Appendix 8.

Language needs

- Personal language needs and impact on teaching
- Grammar and structures

Teacher understanding of second language acquisition

- Trial and error method
- Error correction
- Consolidating talk

Teaching the curriculum through a second language

- The specialist language in curriculum areas
- Additional time required for teaching curriculum
- Relevance of professional learning in curriculum teaching
- Challenge of resources

The next stage of analysis involved grouping *participant* transcripts into the different career stage groups, and each transcript within each group analyzed and annotated drawing on the codes and themes identified earlier but also adding or refining these if necessary (Appendix 9). This grouping of the data would enable examination of perceived professional learning needs relating to each stage of career of the teachers (e.g. *teachers' language needs* examined by career stage). At this time data extracts that had been suggestive of the code or theme were being highlighted and collated within each career stage (Appendix 10). This illustrates the recursive nature of the analysis process. Themes continued to be added as necessary. The themes were identified in English because that was how I had recorded them during the first listening stage (see above) and the data extracts were, at this point, identified in the verbatim Gaelic form unless the teacher had made the comment in English. The data extracts were then translated into English. This was not entirely straightforward and was time-consuming, but was beneficial in that it forced me to look carefully at the extracts in their original context, and sometimes revise the translation. As nuances

and meaning can be lost in direct translation, I decided to be as faithful as possible to the original statement and, if necessary, to paraphrase the quotation if that made the meaning more clear. I was aware that a danger of this is that you can impose your own interpretation and meaning on the statement.

The data was then analyzed by *thematic* grouping to examine the data extracts associated with the four different career cohorts (Appendix 11). This enabled identification of how each career cohort viewed a particular theme (e.g. experience of formal school CPD for Gaelic). Themes were being reviewed and refined at each stage of the analysis (Appendix 12). The volume of data proved to be a challenge, increasing the time needed for careful analysis. Nevertheless, a small number of key themes related to the research questions and/or the literature were being identified across the data.

By the final stage, some of the themes were being analyzed across the different types of data included interview data, questionnaires and documents to gain greater depth of understanding of a theme (e.g. identification of the *teachers' own language needs* from the transcripts being examined alongside questionnaire data on *language confidence* and *educational background*). It is intended that the ensuing findings, explanation and discussion (Chapters 4 and 5) will set out to clarify the nature and interrelationships between various contributory factors (Ritchie et.al. 2014: 275). Systematic and rigorous analysis of the interviews, with additional information from the questionnaires, contributed to this explanation. Through careful and systematic analysis I have aimed to ensure that different viewpoints are included and that participants' words and ideas are fairly presented (Greener 2011:153).

Validity and reliability

Issues of validity and reliability are widely debated in qualitative research (Flyvbjerg 2004; Simons 2009; Stake 2005; Tight 2010). These debates and terms raise questions about the objectivity of knowledge and the nature of interview research (Kvale and Brinkman 2009: 242). As alternative concepts to validity and reliability, Lincoln and Guba (1985) have developed the concepts of 'trustworthiness' and

'authenticity', which are seen to be more appropriate for research where interviews are the main vehicle for data construction (cited in Braun and Clarke 2013).

Trustworthiness includes concepts of credibility, conformability, transferability and dependability while authenticity includes the concepts of fairness and respect for the participants' perspectives (Simons 2009:128).

In the context of this study, I consider the concept of trustworthiness to be the most appropriate approach. Trustworthiness relates to the craftsmanship of the process (Kvale and Brinkman 2009) and the accounts drawn from the data (Simons 2009). Care was taken throughout the research process, from conception through each stage of the research design and reporting of findings, to accurately document the process, reflecting the situation and its relevance (2009:128): evidence that was shared with research supervisors. Staying close to the evidence through repeatedly returning to the electronic data and transcripts helped me to remain reflexive throughout the process and should further help to establish the credibility of the research (2009:133).

Silverman (2005) suggests that the credibility and validity of qualitative research depends on the reliability of data, thoroughness of methods, validity of findings and rigor in the interpretation of data. The creation of an audit trail is one way to demonstrate the dependability of research and I have aimed to do this by including samples of documents, from each stage, as appendices. A clear record has been retained of interview data, transcripts, field notes, initial codes and potential themes and I have aimed for truthfulness in data collection and analysis. These will aid the reader in establishing the dependability and credibility of the study.

Generalization or transferability

Generalization in qualitative research is a further contested area. This concerns whether the findings of a study can be said to be of relevance beyond the sample and context and whether they can support wider inference (Ritchie et.al 2014:348).

Lincoln and Guba (1985) introduced the term ‘transferability’ referring to the degree to which aspects of study results can be transferred to other groups of people and contexts (cited in Braun and Clarke 2013:282). Associated with this is the need for ‘thick description’ that requires the researcher to provide detailed description to help the reader ‘assess the similarity of the setting described in the research report to settings in which he or she has personal experience’ (Seale 2012:537).

It would not be possible to generalize from an in-depth small-scale study but the aim would be to demonstrate how and in what way findings might be transferrable to other contexts (Simons 2009:164). While continuing to develop my personal stance, I am persuaded by Stake’s view that a good study is patient, reflective, willing to see another view, where an ethic of caution is not contradictory to an ethic of interpretation’ (Stake 1995:12). Transparency through careful documentation and explanation of the selection of the sample for the study (e.g. research location and participant sample), the degree to which the sample is representative of the total Gaelic-medium school population in Scotland, alongside the accuracy with which the data has been collected, will enable readers to assess the relevance of the study.

Conclusion

In this chapter, I have aimed to describe and explain the processes and methods used to examine my research questions. The thematic approach taken to analyze the data and the iterative process required to form codes and themes involved both induction and deduction. Ideas were formed inductively from the data but my reading of the literature before and during the process also shaped the identification of themes. I aimed to examine the data rigorously and systematically so that the ensuing findings and discussion offer a fair representation and explanation of the teachers’ perspectives.

Having discussed the research design and methods that I used for this study, I now move on to discuss the findings. A thematic approach is taken to the discussion of findings, drawing on the analysis described in this chapter and on relevant data from

the questionnaires. These themes highlight the teachers' perceived needs in relation to their professional learning.

Chapter 4 Findings

Introduction

The main aim of this research was to investigate the views of Gaelic-medium primary teachers, across the career continuum, of their professional learning as immersion teachers. The context of their specialist professional learning was a further investigative area. While there is an extensive international literature on immersion education, research in the Scottish immersion context is more limited and there is a gap within this literature to which my study has contributed. The study provides a fine-grained account of teachers' own views of their professional learning as immersion educators, identifying areas of need²⁴ and contextual factors that influence their learning.

In chapter two, I outlined the policy and sociocultural landscape within which Gaelic-medium teachers work. The participant group was selected from seven of the fourteen local authorities in which Gaelic-medium primary schools are situated, together with other key factors (Chapter 3, p94).

In the review of literature I demonstrated that Gaelic-medium primary teachers have additional professional learning needs relating to the teaching of Gaelic as a language and teaching the curriculum through the medium of a second language. This was based on my previous personal experience as a Gaelic-medium primary teacher and also on knowledge and understandings of national and international literature in bilingual and immersion education gained as a teacher educator.

In this chapter I outline the main findings from the participant teacher interviews centring on themes that emerged from the teachers own views of what their professional learning needs were in relation to teaching Gaelic as a language, and teaching the curriculum through Gaelic. These views have been examined alongside

²⁴ In this study the term 'need' or 'professional learning need' is not a negative concept, rather a term used to identify a specific area of learning that is either missing or requiring further development.

additional background information given by the teachers through questionnaires, together with consideration of their school and local context. Teacher-identified factors that facilitate or constrain the GME teachers' professional learning have also been examined. The complexity of these interacting factors serves to shed light on some individual comments, adding depth and value to the interviews. Further research would be needed to explore the significance of these factors.

In the interviews, participants identified two main areas in which they would value further professional learning. These were personal language-related needs as language educators, and language-related professional learning to enrich their classroom practices.²⁵ The former was to extend their linguistic competence as individuals, and the latter to further develop the teachers' understandings of second language learning and associated pedagogies to enhance their teaching in an immersion classroom. They perceived these areas of learning to be specific to their role as Gaelic-medium teachers.

I will firstly examine personal language-related learning needs identified by the teachers as significant to their role as language educators. Next, I will consider teachers' language-related needs linked to curriculum and pedagogical issues and children's learning. Collectively, these constitute the key areas that the participant teachers viewed as important for their professional learning, being perceived to be of benefit both to them as individuals and to their pupils through the enhancement of the teachers' classroom practices. Finally, I will consider contextual and external factors identified by the participants that acted either to facilitate or constrain professional learning appropriate to their needs as Gaelic-medium teachers, and briefly report on the findings from the teachers' personal CPD records.

The teachers' personal language needs

Research literature has noted the centrality of the teacher to the success of immersion programmes (Baker 2011; Johnstone 2002, Palmer et.al. 2014). Teachers, in an immersion context are expected to have a high or native-like level of fluency in the

²⁵ These two areas were identified as themes through the analysis (Appendix 12)

target language and be competent bilinguals (Baker 2011). This includes a high level of fluency in all elements of literacy in both the school languages. Landgraf (2013), in a small scale study of language and culture in Gaelic-medium education, suggested that teachers' language-related needs could influence children's language learning opportunities (2013:316). Although these observations have been made regarding teachers' characteristics and knowledge, there is no prior available literature examining primary teachers' own views of their language-related learning needs.

During the interviews the teachers were not asked directly about personal language needs relating to their linguistic competence. Nonetheless, when an open-ended enquiry was made probing their perceived professional learning needs, all the teachers identified personal Gaelic language-related needs prior to pedagogical or other needs. This prioritizing of the need for development of the teachers' personal language skills implied an understanding of, and concern for, the impact of their own stage of language learning and fluency on the pupils in their classes. The participant teachers were also acutely aware of their position as language educators and as role models of the language.

There was little or no hesitation by the participant teachers when identifying their personal language-related needs. This was consistent across teachers who were native speakers and learners, indicating that reflection on their personal language development was part of regular reflection on their teaching. This language awareness and foregrounding of language is unlikely to be replicated among other primary teachers, if we accept the findings of a recent Scottish study of Initial Teacher Education (ITE) students which showed that their levels of linguistic knowledge were generally low, and contrasted with their own more positive perceptions of their linguistic competence (Sangster et.al. 2013).

The teachers identified personal learning needs across the four elements of literacy although the productive skills (speaking and writing) were the most frequently cited. For learners of language, it is normal for productive skills to develop more slowly than receptive skills

(listening and reading) and it would be anticipated that these would continue to develop and consolidate over time (Cummins 2005a). It would also be usual for the teachers who were native speakers of a language to develop and extend their language skills over a teaching lifetime. Further, Gaelic-medium teachers who are native speakers may have entered teaching as fluent speakers but may not have fully developed skills in writing or grammatical structures unless they have studied Gaelic formally, as the majority of Gaelic speakers will have had their formal education through English (Appendix 13). The teachers positioned themselves on different points of the bilingual continuum and were keen to continue to progress their language development. It should be noted that all participants, with one exception who code-switched frequently, chose to conduct the interviews in Gaelic, demonstrating their fluency in the spoken language.

Development of the productive skills was the main area of language-related professional learning requested by the teachers, with some areas being described as language for conversational or academic purposes or further subdivided (e.g. vocabulary, grammar, pronunciation).

Conversational language

One experienced Gaelic-medium primary teacher found the use of Gaelic for the full school day to be a challenge. This teacher was an adult learner of Gaelic in a dual-stream school where the Gaelic-medium stream was a small minority situated in a predominantly monolingual community. S/he had taken every course available nationally to strengthen her/his language skills and was keen to continue her/his personal language development. Nonetheless, speaking Gaelic all day remained a struggle.

Tha trioblaid agam dìreach na cànan agus a' cleachdadh sin a h-uile là. Fad an là a h-uile là.

My difficulty is just the use of Gaelic every day – all day every day. (Year 7+ teacher L2)

S/he further described a reduction in her/his language fluency since becoming a teacher in Gaelic-medium:

Ach aig an àm sin bha mi a' smaoinneachadh gu bheil na Gàidhlig agam na fheàrr na tha e a nis agus tha e inntinneach air sgàth bha mi a' bruidhinn ri daoine a bha tro mheadhan na Gàidhlig, bha na cùrsa tro mheadhan na Gàidhlig is bha mi a' dèanamh tòrr sgrìobhadh agus èisteachd ... is rudan mar sin.

But at that time (*when doing SQA qualifications in Gaelic*) my Gaelic was better than it is now and that is interesting because I was speaking with people who were in Gaelic-medium education, but the course was through Gaelic and I was doing a lot of writing and listening...and things like that. (Year 7+ teacher L2)

The opportunity to speak Gaelic with only the children in the Gaelic-medium classes, and the lack of opportunity to speak Gaelic with other adults in school or in the community context, was what s/he identified as a reason for the diminution in her/his Gaelic fluency. All written and verbal communications within the school were in English, including the environmental print in the public areas. This teacher therefore lacked sufficient exposure to the language, at an appropriate level, to maintain and extend her/his speaking skills. S/he turned to English in the interview when emphasizing a point, inferring that s/he could not spontaneously convey this through Gaelic.

'S e an aon trioblaid nuair a tha thusa ag obair san sgoil fhèin agus tha thu dìreach a' bruidhinn ri cloinne beaga; tha ìre na cànan agad a' fàs nas miosa.

The one difficulty occurs when you are working only in the school and you converse only with young children, your level of language gets worse.

Looking at it realistically, I'm still here, I'm in a situation where no matter how much I want to speak Gaelic I'm drawn into English all the time. The head walks in - that's the first time I've heard her say 'madainn mhath' by the way... But you are conscious that because your opportunity to speak Gaelic is diminished, your language naturally goes down. And it's getting those opportunities for that. They are not informal because, if they are informal you are talking about the day-to-day things, but kind of semi-structured opportunities to speak at a level to keep your Gaelic going. (Year 7+ teacher L2)

This teacher suggested that the reduction in language fluency could be reversed by regular professional learning opportunities to develop her/his spoken language in

both the conversational and academic domains. S/he further suggested that professional learning opportunities to spend time in a Gaelic-speaking community and/or time teaching in either a Gaelic freestanding school or a larger Gaelic-medium dual stream school would ensure maintained fluency and potential for further development of skills (Chapter 6, p222).

Another teacher who was an adult learner and had been teaching for two decades in Gaelic-medium education, continued to develop her/his speaking skills through listening to the media and taking opportunity to listen and converse with fluent speakers. Nevertheless, s/he described her/himself as having a ‘weakness’ because her/his spoken language was not yet fluent. S/he and other teachers who were L2 learners appeared to measure their speaking skills against the ideal of a native speaker (Chapter 2, p37), being unaware that it is usual for L2 learners to speak somewhat differently to native speakers, or that L2 learners might have some lexical and grammatical influences from their first language. Language accuracy develops over time with experience (Baker 2011:302; Hinton 2011). This understanding in relation to attainable fluency for a second language learner impacts both on the self-perception and confidence of the teacher and may influence their perceived expectations of children who are second language learners (Chapter 5, p184).

Dhòmhsa 's e an laigse a th' agamsa, 's e gu bheil – chan eil mi fileanta fhathast. Tha mi fhathast a' feuchainn ri Gàidhlig ceart...bidh mi ag èisteachd tòrr ri prògraman agus tha e ga mo chuideachadh a bhith a measg tidsearan a tha fileanta cuideachd.

For me - my weakness is that I'm not fluent yet. I am still trying to speak proper Gaelic ... I listen to a lot of programmes and being among fluent teachers is also helping me. (Year 7+ teacher L2)

This teacher was able to articulate all her/his views clearly in Gaelic. Yet, it is interesting that s/he described her/his spoken language as a ‘weakness’, and aimed to speak ‘proper’ Gaelic (i.e. speak Gaelic like a native-speaker). In contrast to the previous teacher, this teacher was in a school with opportunities to converse with other professionals and adults in a range of registers and accents, with Gaelic print visible in the public areas of the school, providing an environment for informal professional learning in language.

Another teacher viewed development in her/his spoken language as a priority and recognized that language development was a continuous process. Recognition of the necessity for Gaelic-medium teachers to have a high degree of fluency that could continue to develop over a career was positive. However, the apparent aspiration to native-like fluency as an ultimate goal could potentially indicate a limited understanding of the development of bilingualism and language acquisition, based on a monolingual view of bilingualism where competence in the second language is measured against that of a native speaker of the language.

Tha mise eadar-dhealaichte air sgath tha mise a' smaoinichadh 's dòcha nach eil an dòigh labhairt agam ceart cho math ris an fheadhainn eile air sgath gur e daoine fileantachd a th' annta.

I am different because I think perhaps that it's the way I speak that is not as good as the others because they are fluent. (Year 7+ teacher L2)

The teachers who identified a desire to develop their conversational language were all experienced teachers and self-categorized learners of the language, in differing contexts. They each identified their level of Gaelic fluency at 4 out of 5 in the questionnaire. Opportunities to maintain and develop spoken language skills were important for the teachers. In many schools and communities, rural and urban, there were opportunities for informal conversation-based language development. However, for teachers in more isolated²⁶ circumstances more formal arrangements for conversational language development would need to be considered (Chapter 6, p221).

Academic language

Teachers expressed a range of views in relation to their academic language learning needs. In this context academic language refers to specialist terminology, and the extended vocabulary necessary to discuss the conceptual knowledge associated with the respective subject areas of the curriculum (e.g. mathematics, science, religious

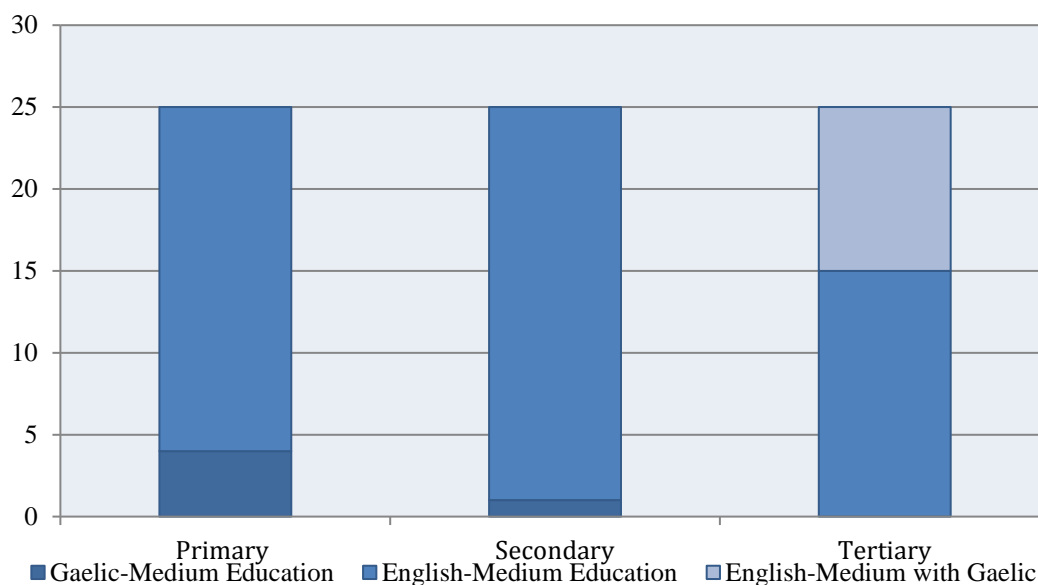
²⁶ Isolated may not be solely a geographic factor but may also reflect access to Gaelic speakers or language opportunities in the local community.

and moral education). There is debate among researchers about the use of the terms conversational and academic in bilingual development claiming that framing these separately encourages dichotomous thinking about language development (Hopewell and Escamilla 2014:182). However, the terms continue to be used in the wider immersion literature (Baker 2011; Cummins 2005a,b; Lyster and Tedick 2014) and in this study they more accurately describe the ways that the participants spoke of their specific learning needs.

In the Curriculum for Excellence (Chapter 1, p7) eight areas of the curriculum are identified with further subdivisions within these. Primary teachers in all sectors need to learn and ensure the correct usage of specialist terminology in the respective curricular areas. However, for English-medium primary teachers it is likely to be a recalling of terminology learned during their own schooling, whereas for many Gaelic-medium teachers it is the learning of new terminology in another language, unless they themselves have been educated through the medium of Gaelic. The majority of teachers²⁷ who have been educated through English-medium education would have to learn the Gaelic terminology for the specialist area prior to teaching the curriculum (Figure 4.1).

²⁷ Twenty-one out of twenty-five participants had been educated through English-medium primary education (Appendix 13).

Figure 4.1 Language of the teachers' education (Appendix 13).



Evidence from the interviews showed that it was teachers mainly in the early phase²⁸ of their career who expressed their need to extend the range of their academic language. Almost all the early phase teachers felt that some professional learning to familiarize them with terminology would be helpful, either as part of their ITE or LA probationer programme.

Tha mi ag ionnsachadh tòrr faclan ùr!
I am learning a huge number of new words! (Probationer teacher NS)

Ma tha fhios agad air dè tha thu a' teagasg sa Bheurla tha e simplidh gu leòr ga chuir anns a' Ghàidhlig, 's e dìreach a' faighinn ùine ga chuir as a' Ghàidhlig agus na faclan fhèin ionnsachadh oir uaireannan tha terminology ann, gu h-àraidh ceangailte, mar eisimpleir Renewable Energy is rudan mar sin.

If you know (*conceptual knowledge*) what you are teaching in English it is simple enough to put it into Gaelic. It is just getting enough time to translate it to Gaelic, and learn the terminology themselves (*as teachers*) as sometimes there is specific terminology linked to it, for example Renewable Energy and things like that. (Year 2-6 teacher NS)

²⁸ 'Early phase' refers to probationer teachers *and* early career teachers (i.e. Years 1-6).

Additional time in preparation and teaching of curricular content is a recognised challenge for teachers in immersion programmes (Cammarata and Tedick 2012). The time factor involved in learning new academic language appeared to be an important issue for these early phase teachers. Yet, the learning of specialist vocabulary by the teacher was an essential element for their classroom practice, and a necessary step in children's linguistic learning prior to teaching curricular content.

Tha agamsa air an ionnsachadh an toiseach, dhan cuir dhan a' Ghàidhlig, ach-
Tha e furasta gu leòr, 's e dìreach an uiread de dh'ùine a dh'fheumadh tu a
chuir seachad.

I have to learn it (*specialist vocabulary*) first, to put it into Gaelic, but - it is
easy enough, it's just the great amount of time you have to spend. (Year 2-6
teacher NS)

It was inferred by one teacher that not only was the specialist terminology a challenge but that the extended vocabulary required for higher order discussions at the upper stages of primary also needed to be acquired by the teacher. This was referred to as 'language you use in the classroom' with specialist terminology being identified as language 'for the curriculum'.

Agus tha e doirbh leis an cànan - tha an cànan cho diofraichte, cànan nach bidh
thu a' cleachdadh uair sam bith, a bhith a' feuchainn a' teagasg a leithid
saidheans, tha e car doirbh, briathrachas fhaighinn.... Bidh iadsan a' cleachdadh
cainnt nach do chleachd iad riamh agus a' feuchainn ri teagasg concepts
cuideachd.... Agus bha mi fhathast a' faireachdainn gun robh mi feumach air
barrachd, mar tidsear ùr, fiùs an cainnt a bhios tu a' cleachdadh as a
chlassroom, an curraicealam.

And it (*teaching the curriculum*) is difficult with the language - the language is
so different, language you don't use normally, trying to teach something like
science, it is very difficult to find the proper vocabulary... There are two things
(*terminology for the teacher and the learner*). They are using language that
they have not used before and are also trying to teach concepts... and I still feel
that I need more, as a new teacher, just the language you use in the classroom
and for the curriculum. (Year 2-6 teacher L2)

There was some evidence that the challenge of academic language was less of a concern for more experienced teachers (Year 7+) when the language of the

curriculum had been internalized and an extended vocabulary for discussion acquired.

Ach cha chanainn gu bheil mòran a' seasamh a-mach, sin uile tha mise air a bhith dèanamh còrr is deich bliadhna a nis, 's e a bhith a' teagasg tro mheadhan na Gàidhlig, gu bith dè an cuspair is chan eil e really gam chuir suas neo sìos.

But I would say that not much stands out (*relating to the curriculum*), that is all I have been doing over ten years now. I have taught in Gaelic-medium - what the subject matter is doesn't put me up nor down. (Year 7+ teacher NS)

Tha mi a' smaoinichadh – nuair a chaidh mise a-steach a theagaisg, ged a bha Gàidhlig agam fad mo bheatha, bha mi beagan iomagaineach mu dheidhinn a' dèiligeadh ri cuspairean mar maths as a' Ghàidhlig a thaobh briathrachas. Ach tha mi a' smaoinichadh fhad sa tha thu a' cur eòlas air, tha a dìreach....a' fàs nàdarach agus tha thu a' faicinn gu bheil luach ann a bhith a' teagasg a h-uile cuspair as a' churraicealam troimh Ghaidhlig.

I think...when I started to teach, even though I had spoken Gaelic all my life, I was a little anxious about teaching subjects like Maths through Gaelic because of the terminology. But I think, once you have mastered the terminology, it just becomes natural and you see the value of teaching every curricular area through Gaelic. (Teaching deputy head teacher NS)

It is interesting to note that it was L2 teachers, across the career continuum, who focused on the need for development of their conversational language, and predominantly early phase teachers requesting further learning in academic language (Chapter 5, pp183-5). However, as the teachers' focus was primarily on acquisition of essential terminology for teaching conceptual knowledge, it would be interesting to examine further whether or not the highly decontextualized academic vocabulary required for topic discussion is an area that might be identified for further professional learning.

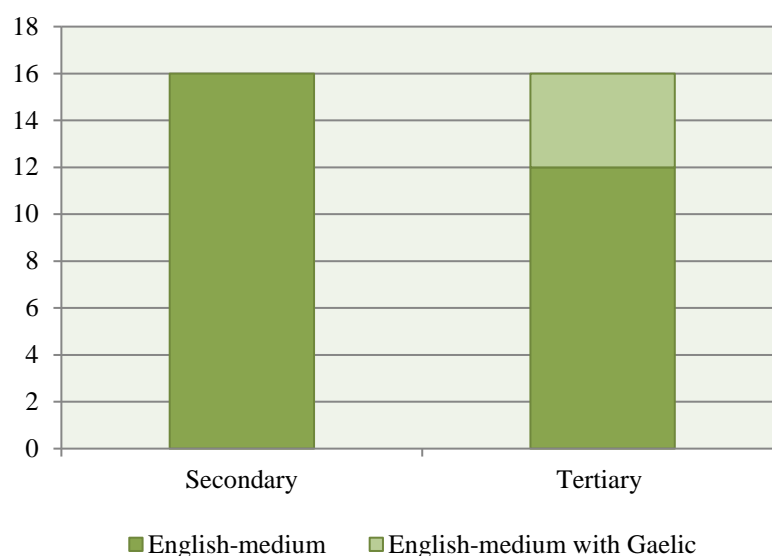
Grammar, vocabulary and enrichment

Teachers across the career continuum, although not explicitly indicating a need for professional learning in writing Gaelic, asked for CPD in writing-related elements such as grammar and spelling. Professional learning in Gaelic grammar was requested by all the teachers, whether native speakers or learners, with the exception of two in the probationer category. No conclusion can be drawn from the two

probationers' response as the information was obtained within the context of an open question about professional learning.

It is perhaps unsurprising that almost all participant teachers across the career continuum, regardless of language background, expressed a need for further professional development relating to grammar. The majority of teachers who identified as native speakers had not studied Gaelic formally within the education system (Figure 4.2). While confident in the grammatical accuracy of their spoken skills, the teachers did not feel equipped to explain or teach grammar, including syntax and morphology, to pupils in the immersion phase (primary 4-7).

Figure 4.2 Teachers (NS) and Gaelic as a subject in secondary or tertiary education.



Four of the teachers who identified as native speakers had studied Gaelic at tertiary level, yet felt that the availability of refresher courses in grammar, on a cyclical basis, would be personally beneficial. One of these teachers lacked confidence in lenition²⁹ which could impact on both written and spoken language.

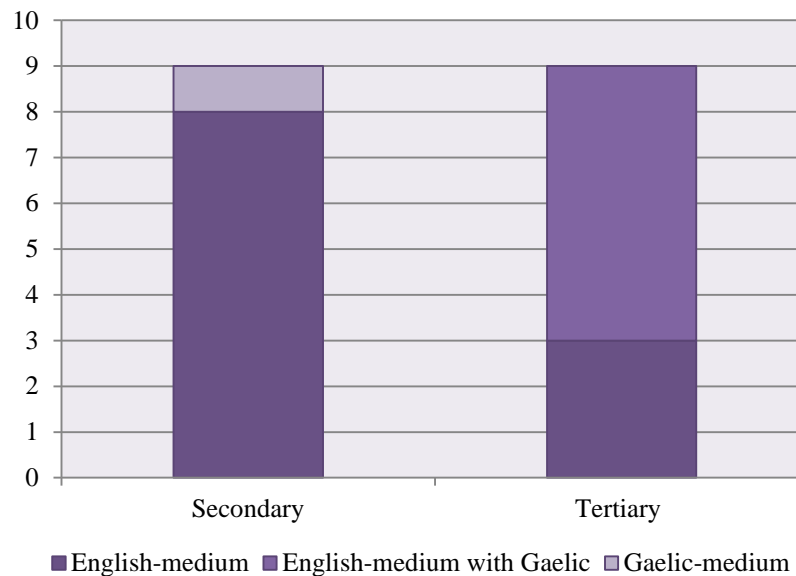
Tha fhios a'm gu bheil an gràmair agam fhèin caran lapach, tha mi a' suidhe sìos, 'a bheil lenition an seo neo nach eil? Tha fhios a'm gu bheil mi fhèin gu math lapach le sin.

²⁹ Lenition is an initial consonant mutation, which weakens the sound of the consonant at the beginning of a word.

I know that my own grammar is rather shaky.....Is there lenition here or not? I know that I am very weak with that. (Year 7+ teacher NS)

The teachers who identified as learners comprised of two who had been educated through Gaelic-medium schooling and seven who had learned the language as adults in further and tertiary education (Figure 4.3). They reported that they had acquired an understanding of grammar and grammatical structures through their studies but were aware that their speech and writing could still lack grammatical accuracy and felt that consolidation of skills was needed.

Figure 4.3 Teachers (L2) and Gaelic in secondary or tertiary education.



Furthering personal professional learning in grammar was sometimes linked with a need for development of skills in spelling and writing. One teacher had spent the majority of her/his career in English-medium. S/he had no formal learning in Gaelic as a language, and lacked confidence in writing-related skills.

Cha chanainn gu bheil mi math air litreachadh, cha chanainn gu bheil mi math air gràmair, tha fhios a'm nach eil mi math air gràmair is a thaobh – dìreach an rud tha sinn fhèin a' cleachdadh is a thaobh an litreachas.

I would not say that I was good at spelling. I would not say that I am good at grammar - I know that I am not good at grammar – just what I do naturally in

relation to literacy (*i.e. the teacher recognises correct grammatical structures from her/his speech*) (Year 7+ teaching head teacher NS)

The learning of Gaelic grammar within a university course was seen to be positive, but nonetheless insufficient over a 30-40 year career span, as was expressed by a native speaker who had studied grammar within a degree programme yet felt that her/his skills needed refreshing because of late entry into Gaelic-medium teaching:

Gràmair. Gràmair gun teagamh. Ged a rinn mise Gàidhlig as an oilthigh tha mi air tòrr dha na puingeana mu dheidhinn a' ghràmair dhìochuimhneachadh air sgàth nach deach mi a theagaisg as a bhad agus tha fios a'm – tha mi creidsinn...gum biodh beagan do brush-up air gràmair feumail.

Grammar, grammar without a doubt. Though I did Gaelic at university, I have forgotten a lot of the (*grammatical*) points as I did not go into teaching immediately and I know – I believe – that a little brush-up on grammar would be useful. (Year 7+ teaching deputy head NS).

Many of the teachers were quick to identify grammar and language structures as a professional learning need. They were very aware of their role as language teachers, modeling language use, and being able to explain language structures (Chapter 6, p209). An early career teacher who appeared confident in her/his generic teaching skills immediately identified grammar as her/his key learning need:

Chan eil an gràmair agamsa ro mhath airson Gàidhlig. Fiù 's – bruidhinn, ceart gu leòr ach, dhomh fhèin gràmair – 's e – bidh mise a' dol gu (*tidsear eile*) daonna airson gràmair.....Dhomhsa, bhiodh sin feumail dhomhsa, oir sin na feumalachdan agamsa.

My Gaelic grammar is not so good. Speaking is fine...but for me – grammar – I constantly go to (*teacher x*) for my grammar (*to check it*)...For me, it (*grammar*) would be useful because that is my learning need. (Year 2-6 teacher NS)

Grammatical needs: native speakers and learners

There was a perceived difference reported by both native speakers and learners in the grammatical needs of native speakers versus learners, with native speakers' needs being identified, by the participants, as greater in this area. Native speaker teachers acknowledged the strong language skills of learner colleagues, making reference to their more advanced understandings of grammar.

Tha luchd ionnsachaidh uabhasach math air gràmair seach mise. Tha iad air sin ionnsachadh ach mar neach fileanta, tha fhios agad gur e sin mar a tha, chan eil fhios agad carson. 'Se dìreach - sin mar a tha e.

(Gaelic) learners are much better at grammar than I am. They have learned that but, as a fluent speaker, you know what it is (*the correct way*) but you don't know why that is –that's just how it is. (Year 7+ teacher NS)

It seemed that, for the majority of the native speakers, lack of formal study of Gaelic as a language contributed to a lack of confidence in the areas of grammar, spelling and writing. One teacher stated that s/he would be delighted if s/he 'could write accurately' and would be happy to attend 'grammar for four CPD sessions (*a year*)!' (Year 7+). A teaching deputy head teacher thought that professional learning in grammar, available at all career stages, would contribute positively to teachers' confidence.

Tha mi a' smaoinichadh gum bi rudeigin mar sin (*ionnsachadh ann an gràmair*) feumail. Dìreach airson misneachd thidsearan a thogail.

I think that something like that (*CPD in grammar*) would be useful. Just to increase teachers' confidence. (Year 7+ teaching deputy head)

While almost all the interviewees agreed that further professional learning in grammar would be beneficial, one principal teacher reported that some Gaelic-medium teachers in her school had not appreciated the relevance of this when s/he had organised a 2-day intensive session focussed on grammar. The Gaelic-medium teachers felt that the professional learning sessions for the English-medium sector of the school, offered concurrently, were of greater relevance to them. This was a large dual-stream school with a small Gaelic-medium stream. It was not possible to explore further the reasons for this view of professional learning in the school, but a limited understanding of the immersion approach was observed which may have been a contributory factor. Landgraf (2013) suggests that, as it is possible to transfer from English-medium primary teaching to the Gaelic-medium sector if you are a Gaelic speaker without any further education, it is unsurprising that some Gaelic-medium teachers do not understand that different knowledge and skills are required (2013:345).

Language enrichment

The requests for professional learning opportunities for the development of language skills to include ‘richness of language’ came from more experienced staff who were native-speakers. This referred to knowledge and use of features such as proverbs, idiom and common sayings, and the varied vocabulary associated with different localities. The desire for this was to extend the children’s language base to make it more authentic and fluent, thereby countering the lower levels of ‘appropriateness’ found in immersion pupils (Chapter 2, p41).

Dìreach gum bi Gàidhlig nàdarrach siubhlach aig a' chlann.

Just that they (*the pupils*) will have more natural and fluent Gaelic. (Teaching deputy-head teacher NS)

This ‘richness of language’ was viewed to be the distinguishing factor between native-speakers and learners of the language, and teacher knowledge and language proficiency was seen to be an important contributing factor to this aspect of pupil language development.

Beartas cànan a nì an diofar eadar luchd-ionnsachaidh is luchd-fileanta, chanainnsa. Ach a bheil am misneachd aig na tidsearan? A bheil am beartas cànan sin acasan, a bheil cothrom aca leasachadh proifeasanta gus sin a thogail?

Richness of language is what makes the difference between learners and native-speakers. But do the teachers have the confidence (*to teach this*)? Do they (*the teachers*) themselves have this richness of language, do they have opportunity for professional learning to acquire this? (Year 7+ teacher)

Some of the teachers were emphatic about the need for professional learning to support teachers in developing this ‘richness of language’.

Chanainnsa beartas cànan, gu deimhinne. Gnàthsan cainnte a thaobh an tuigse a th' aca air a' chànan, air na freumhan. Bidh rudan mar sin gu math cuideachail.

I would definitely say richness of language...idiom in relation to their understanding of the language, and the roots (*of words and phrases*). Things like that will be very helpful. (Year 7+ teacher)

Leadachadh a' chànan, sean-fhacal, blas na cànan is gnàthasan cainnt.

Breadth of language, proverbs, natural language and idiom. (Year 7+ teacher)

The prominence given, by the majority of the participant group, to professional learning to progress their own language-related needs demonstrated the teachers' awareness of their responsibilities as language educators, and also the desire to be confident in their own spoken and written language skills. This language-related need was further evidenced when 10 participants categorised their Gaelic fluency at 4 out of 5 in the questionnaire (Appendix 14).

The teachers' justification for additional language learning

All the Gaelic-medium teachers were eager to further develop their personal language skills. It is important to note that personal language-related professional learning was the main, and often first area, identified by almost all of participants when suggesting professional learning needs. This points to the centrality of language skills to the teachers. Further professional learning would offer the opportunity to enhance their knowledge and understanding of the formal aspects of language learning, and of their receptive and productive skills.

Three main reasons were given by the teachers for the desire to improve their personal language skills. These included the teachers' awareness of;

- their responsibility, as language educators, in developing pupil language fluency and accuracy, and the importance of their personal language skills in their ability to teach language, and in the teaching of the curriculum;
- the importance of the teacher's role as language model for the class;
- the potential impact of the teacher's language skills on school and parental communications.

Raising teacher self-confidence was an additional reason identified by one teacher-manager (Chapter 4, p129) implying that, in some instances, lack of confidence rather than lack of knowledge might be the issue.

Teachers who were in management positions were particularly vocal about the importance of teacher language proficiency and its impact on teaching language and language features to pupils. Several echoed the sentiment offered by this teaching deputy head:

Ma tha thu dol a' theagaisg cànanain dhan a chloinn feumaidh e (*an cànan*) a bhith gu math làidir agad fhèin.

If you are going to teach the language to children your own language must be very strong. (Teaching deputy-head teacher)

One teacher shared why enhancement of personal language skills was important to her/him, as s/he wrestled with the challenge of balancing language acquisition, curriculum content, and the quality of teaching and learning in her/his class. This teacher perceived language-related professional learning could provide her/him with 'one less hurdle' in addressing these classroom practice dilemmas.

I'm very conscious that I would want to give the children the quality of education and the enriched language use in Gaelic, as I would in English. And that's where I fall down; because I have that high expectation of myself and can't do it. And then you try to do it, and try to talk about some of the big ideas and your language falls down. So what – where do you make that call of what's to give? Do we just not talk about things like euthanasia because you don't have the language or do you slip into English? (Year 7+ teacher)

Another teacher indicated that some teachers' knowledge about the language could be a factor constraining the stage at which teachers selected to teach. The knowledge of Gaelic grammar and structures required at the upper stages of primary was not perceived to be good enough, by some teachers, to explain and teach the language at these stages.

Tha cuid de na tidsearan, chan eil iad airson a' dol ceann shuas na sgoile air sgàth gu bheil iad a' smaoinichadh gu bheil an cuid gràmair aca math gu leòr airson a bhith a' toirt teagasg seachad dhan fheadhainn nas aosda san sgoil.

Some of the teachers don't want to teach in the upper stages because they don't think that their grammar is good enough to teach the older ones in school. (Year 7+ teacher)

O'Hanlon, Paterson and Mcleod (2012) recorded a variation in practice in the use of

Gaelic for teaching the curriculum. This varied from providers in which Gaelic is the medium of instruction of nearly all teaching time throughout the primary school stages to a small number of providers in which Gaelic is the medium of instruction of nearly all teaching time in the first two primary-school stages, and then falls steadily to reach about one half of teaching time in Primary 6 and 7. O'Hanlon et.al. (2012) suggested that further investigation would be required to elicit what factors might influence the variation in practice, including factors relating to the supply of suitably qualified teachers, policies and the pedagogical approaches to learning and teaching language in the school. From this present study, Gaelic-medium teachers' confidence in their personal language skills could be a further contributing factor.

Gaelic-medium teachers are often the sole language model in the classroom. This role is especially significant as the majority of Gaelic-medium children are L2 learners. The children's exposure to the language is often confined to school hours and therefore the children's learning of the language is perceived to be largely the teacher's responsibility.

Chanainnsa mar thidsear, feumaidh mi a bhith gu math mothachail mu dheidhinn na goireasan a tha mi a' cleachdadh is na rudan a tha mise a' cur air beulaibh a' chlann is a' dèanamh cinnteach gu bheil a h-uile càil gu tur ceart. Cha chuirinnsa rud sam bith suas mura robh mi cinnteach gu robh e buileach ceart. Dìreach o chionn chan eil e a' cuideachadh gu feum sam bith dhaibh ma tha e ceàrr agus tha iad ga thogail ceàrr. Chanain cuideachd an aon rud ris a' chànan agam fhèin agus na seòrsa cainnt a th' agamsa agus gun fheum e a bhith gu math faiceallach.

I would say that, as a teacher, I have to be very mindful of the resources that I use and what I present to the children and make sure that everything is absolutely correct. I would not display anything if I was uncertain about its accuracy. Just because it would not be helpful, not be any use for them if it (*the resource*) is incorrect and they learn it (*the incorrect language*). I would say the same about my own speech and the kind of language that I use and I need to be careful there too. (Probationer teacher)

This teacher, who was him/herself a learner, elaborated on the issue of grammatical errors in the teacher's spoken language, noting the challenge of correcting established errors in children's language.

Chanain gur e sin (*gràmar math*) aon de na rudan as motha is as cudromaiche o chionn mura bheil e aig na tidsearan, cha bhi e aig a' chlann agus bidh a' chlann a' togail rudan ann an dòigh cheàrr is tha e cho doirbh a chuir ceart a-rithist.

I would say that (*good grammar*) is the biggest and most important thing because if the teacher doesn't have it, the children won't have it and the children will be picking up incorrect constructions and it is so difficult to then correct that. (Probationer teacher)

There was also some evidence that lack of confidence in writing Gaelic influences the communications with parents (O'Hanlon et. al. 2012b). One teaching head teacher reported that, rather than sending out parental communications bilingually which s/he felt would be more appropriate, the communications were in English only due to her/his lack of confidence in writing skills.

Uill, mar a tha mise cur a-mach brath dha na pàrantan, tha còrr agam a bhith gan chur ann an Gàidhlig cuideachd ach chan eil uair sam bith, chan eil mi fhèin comhfhurtail a dèanamh siud..... 'Nist, tha mi nas eòlaich air a bhith litreachas agus a' sgrìobhadh ach tha e gu math doirbh fhathast, chan eil cus misneachd agam ann a bhith a' sgrìobhadh Gàidhlig.

Well, if I am sending out information to parents, I should be doing that in Gaelic as well but I never do that, I am uncomfortable doing that..... I am now better at literacy and writing (*than before*) but it is still hard, I don't have much confidence in writing Gaelic. (Teaching head teacher)

In summary, the participant teachers perceived the availability of professional learning in language skills on a regular basis for all Gaelic-medium teachers, regardless of language background, would enable them to further develop their personal proficiency in the language. This, in turn, would contribute and enhance classroom practice and school communications. The further development of their linguistic expertise could enable immersion teachers to contribute to a more focused attention to the systematic inclusion of language in content teaching (Lyster 2015). The importance of this is further emphasized by Tedick (2014) who suggests that compromising on the continuing development of teacher language proficiency may undermine the goals of immersion education that is known to be a challenge.

Teacher learning needs: immersion, the curriculum and pedagogy

The desire for professional learning to further improve their personal language proficiency and understanding of language was strongly linked to the teachers' desire to improve their day-to-day classroom practice, thereby advancing pupil learning in both language learning and curriculum content learning. The teachers also identified immersion-specific professional learning needs in which they would value extending their knowledge and understandings. This included extending teachers' knowledge and understanding of:

- Bilingual and immersion education
- Language acquisition
- Teaching language and content

The range of issues raised within these broad headings, in which they would value further learning opportunities, begins to illustrate the complexity of the task facing immersion teachers and the need for professional learning opportunities to be available at all career stages. Similar issues from teachers' day-to-day classroom practice have been recognized in other immersion contexts (Walker and Tedick 2000).

Bilingual and immersion education

The need of Gaelic-medium teachers to extend their knowledge and understanding of bilingual and immersion education was explicitly requested by many of the teachers in the interviews. The questionnaires showed how few of the participant cohort had formal learning in bilingual or immersion education in their ITE programmes (Figure 4.4, p137). Additionally, the teachers' varied understandings of the implementation of immersion in the Gaelic context that was demonstrated in the interviews, and evidenced in other studies (Landgraf 2013; O'Hanlon et.al. 2012a), would suggest the need for professional learning in bilingual and immersion education.

One teacher expressed a desire to learn about bilingualism and immersion in the wider international context, with a particular interest in what could be learned for the

Gaelic-medium sector from similar minority contexts such as Wales and Ireland.

This echoed the views of other participants:

Bhiodh e math faighinn a-mach beagan a bharrachd mu dheidhinn bilingualism, dà chànanas ann an dùthchannan eile, dè tha a' tachairt ann an àiteachan eile, ciamar a tha e ag obair dhaibhsan agus dè na rudan a tha ag obair gu math ann an àiteachan mar a' Chuimrigh agus ann an Èirinn, chan eil mi a' faireachdainn gu bheil gu leòr air a dhèanamh eadar na ceangail eadar na dùthchannan agus sinn fhèin.

It would be good to find out a little more about bilingualism, bilingualism in other countries, what is happening in other countries - how (*immersion*) works for them and what is working well in places such as Wales and Ireland. I do not feel that enough is made of the relationship between the countries and us.
(Year 7+ teacher)

Another teacher emphasized the need for the learning to be tailored to Gaelic-medium education. This was in response to a common assumption at school and local authority level that professional learning in 'English as an Additional Language' was equally appropriate for Gaelic-medium teaching (Chapter 4, p173).

Bilingualism ach ann an dòigh GAL.³⁰ Bhiodh e inntineach a dhol gu sgoil ann an dùthaich eile far am bheil iad coltach rinn fhèin.

Bilingualism (*would be good*) but in a GAL way. It would be interesting to visit an (*immersion*) school in another country where they are like ourselves.
(Year 7+ teacher)

A probationer teacher was reflecting on her/his ITE experience and identifying a gap in their learning about the principles and practice of bilingual and immersion education.

Bidh ise (*an tidsear eile*) ag ràdh gum bi iad a' dèanamh rudan mu dheidhinn a' teagasg tro mheadhan na Gàidhlig (*air STREAP*) oir tha e cho eadar-dhealaichte bho Beurla ach cha robh sin againne nuair a bha sinne san oilthigh so tha mi a' smaointinn gum biodh sin feumail.

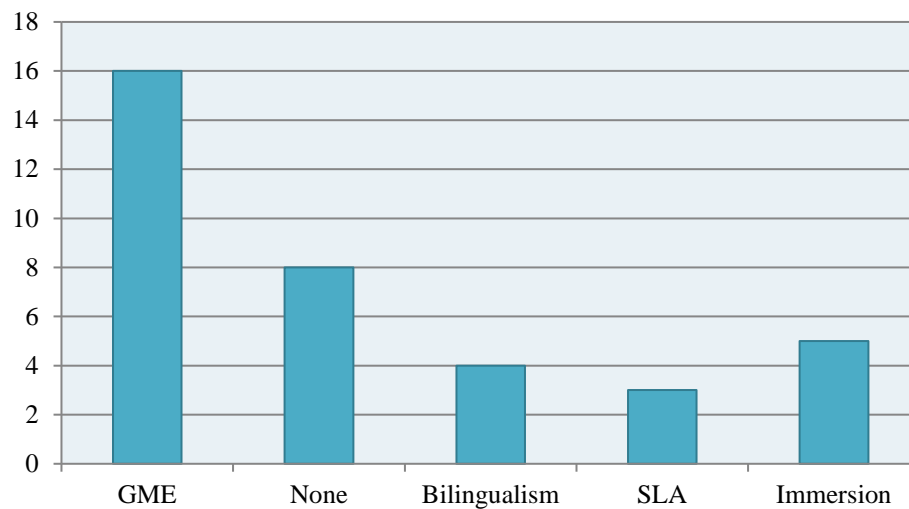
S/he (*the other teacher*) says that they learn about teaching in Gaelic-medium (*on STREAP*) as it is so different from mainstream teaching. But we did not

³⁰ GAL: Gaelic as an additional language.

have that at university and I think that it would be really useful. (Probationer teacher)

Only a small number of the twenty-five participant teachers reported having any theoretical input on bilingual and immersion education in their initial teacher education (Figure 4.4) with the majority not having any input. Three teachers described having formal teaching on bilingual and immersion education through completing the STREAP³¹ postgraduate course.

Figure 4.4 Teacher learning related to language education in ITE.



The need for professional learning on bilingual and immersion education was further evidenced through the range of teacher views on the implementation of the immersion approach. As discussed in Chapter 2, *total immersion* is defined as ‘the early stage of learning through the medium of Gaelic where no other language is used’ with the curriculum, in its entirety, continuing to be taught across all four aspects of learning in the *immersion phase* (Chapter 2, p28). The advisory document states that all the benefits of bilingualism will be accrued through the practice of these principles of immersion (Education Scotland 2015:8). There is an assumption that there are agreed principles of immersion education in the Scottish context and that all Gaelic-medium teachers know, understand and are able to implement these

³¹ STREAP: a postgraduate teaching certificate in Gaelic-medium education (SQF level 10) offered jointly by the University of Aberdeen and SMO

principles (Chapter 2, p29), yet the interviews evidenced a variety of interpretations of these (Chapter 4, pp135-145).

The interview discussions offered me an insight into the teachers' understandings of immersion education in a range of different local contexts, and within the broader area of bilingual education. I was surprised at the willingness of the teachers to discuss their personal and local understandings of immersion as it could be anticipated, in an interview situation, that they reiterate the policy advice given by Education Scotland (2015). Their frankness may have been because of my previous experience as a teacher in the sector, or because the interviews were conducted in Gaelic, making the interview appear more of an informal conversation.

The data showed a range of teacher perspectives of immersion practice at class-level, school-level, in localized contexts and through trial and error.

Immersion at class level

Immersion was understood broadly by many of the teachers as focusing on talking Gaelic the whole time and developing the pupils' listening and understanding skills, especially in the early stages (Primary 1-3). The emphasis was on listening and understanding and on opportunities for teacher and pupil talk. Two teachers, teaching primary 1 and primary 4 respectively, emphasized this aspect:

Bogadh– cànan, cànan, cànan fad na t-side.

Immersion – language, language, language all the time (*meaning talking and listening*). (Year 7+ principal teacher)

Bogadh – ‘Uill, chanain a bhith a' bruidhinn is a' cluinntinn a' chànan fad na h-ùine. Sin a rinn mise.

Immersion- well, talking and hearing the language the whole time..that's what I did. (Probationer teacher)

Both the teachers were in classes with a high number of L2 learners and in local contexts with a very small percentage of Gaelic spoken, and were considering

immersion from the perspective of their own practice and class. A complete focus on oral language development (*'the whole time'*) in the early stages (for three years) reflected the teachers' understanding of the most effective method for developing the second language of children when school is the main or only setting where children are exposed to the minority language. Research has shown this to be the most effective way for most pupils to attain native-like performance in the receptive skills in the second language, without loss of achievement in first language skills (Chapter 2, p26). However, what is interpreted as 'total' varies between immersion programmes internationally, and we know that there is also a variation in practice in the use of Gaelic in Gaelic-medium schools (O'Hanlon et.al 2012a).

Immersion at school level

Other views expressed indicated a range of understandings and practices, going beyond a focus on their class or stage to articulating immersion as a whole school entity. A primary 1/2 probationer teacher, in a dual-stream school where the majority of pupils were in Gaelic-medium, shared her/his view of a whole school approach to immersion. This teacher had previous experience of teaching a second language in a European country and appeared to be trying to make connections between her/his current context, previous learning, teaching experiences in other language settings and her/his own beliefs.

Agus tha mi a' smaointinn gu bheil rud cudromach, gu h-àraidh troimh mheadhan na Gàidhlig, gu bheil sibh a' bruidhinn Gàidhlig fad na h-ùine,.....– bu chòir e a bhith mar sin fad na h-ùine tro an sgoil air fad. Agus as dèidh sin, a' toirt gu na clann cothroman Gàidhlig a' bruidhinn agus a' leughadh, so air feadh a' chlas gum bidh a h-uile rud ann an Gàidhlig agus gum bidh thu.....feumaidh tu Gàidhlig a' bruidhinn fad na h-ùine agus sin tha mi a' smaoinichadh far a bheil trioblaid ann uaireannan.

And I think that it is important, especially in Gaelic-medium, that we speak Gaelic the whole time...it should be like that throughout the whole school all the time. And after that, giving the children opportunity to speak and read Gaelic, and everything in the class should be in Gaelic.....and you need to speak Gaelic the whole time – that is where the problem lies sometimes.
(Probationer Teacher)

The teacher was stressing the importance of whole-school approaches to language

and the role of staff in normalizing the use of the immersion language throughout the school. This would provide children with the opportunity to hear the language beyond the classroom, giving additional opportunity for exposure, learning and interacting. Although the school had a higher proportion of Gaelic-medium pupils, Gaelic was minimally visible outside classrooms or on the school webpages. The probationer teacher had views on how to strengthen the school's Gaelic ethos but had no forum for discussion of these because of her/his position as a probationer³² and the hierarchical nature of Scottish primary schools (MacDonald 2004).

The dominance of English pervaded dual-stream schools in the study, in terms of language and curricular dominance, planning, CPD opportunities and environment even where Gaelic-medium pupils outnumbered EME pupils. Minority language streams in mainstream schools are perceived to be less effective than stand-alone schools at creating opportunities for the use of the minority language outwith the classroom and so creating opportunities for language use which foster greater levels of fluency among pupils. This impacts L2 learners of Gaelic whose opportunities to use the language are largely confined to the school environment (Jones and Wilson 2012).

Localized understanding of the immersion phase

A primary five teacher described her/his school's understanding of the immersion phase³³. In this school the teaching of language alternated between Gaelic and English on a weekly basis during the immersion phase. Alongside this was a requirement that information and work in classrooms should be displayed, in equal measure in Gaelic and English, and that Gaelic-medium teachers' planning and reporting documents were to be bilingual. There was lack of clarity about the language practice and the basis on which decisions were made, with three

³² Probationer teachers in Scotland have a one-year contract in order to become fully registered. They are dependent on the school management to support them towards full registration, and also for a recommendation for a permanent teaching position on completion of the year.

³³ In the 'immersion phase' the curriculum in its entirety continues to be taught through the medium of Gaelic across all four aspects of learning (Education Scotland 2015:9)

participants in the school each describing different versions of the immersion approach.

Nuair a tha displays agad sa chlas tha feum air cuid Gàidhlig agus Beurla a bhith agad so chan e dìreach a' deanamh fear suas ann am Beurla idir, ach feumaidh Gàidhlig agus Beurla a bhith suas.....Sin dè tha iad ag iarraidh san sgoil, ceart gu leòr, so sin – on a tha iad a' deanamh Gàidhlig agus Beurla sa chlas tha feum aig Gàidhlig agus Beurla a bhith suas (*air a bhalla*). Chan fheum a h-uile sian a bhith – seo a bhith Gàidhlig, seo a bhith Beurla ach fhad sa tha fiosrachadh agad suas ann an Gàidhlig agus fiosrachadh suas agad ann am Beurla is ma tha thu a' deanamh, mar eisimpleir, creideamh – aon teirm tha display agad ann an Gàidhlig agus an ath theirm tha display agad ann am Beurla' 'Tha e ceart gu leòr, uaireannan tha e a' togail tòrr ùine, mar is àbhaist ach tha e feumail dhan a' chlann so tha sinn ga dhèanamh.

When you have displays in the class, some need to be in Gaelic and some need to be in English; so not just doing (*a display*) in English only – it has to be in Gaelic and English. That is just what they want in the school, all right, so that - because they do Gaelic and English in class we are required to display Gaelic and English. Not everything needs to be in Gaelic and in English - but you put the information up in the Gaelic and put the information up in English and if you do, for example, religion - one term your display is in Gaelic and the next term your display is in English. It is okay, sometimes it takes a lot of time, usually, but it is beneficial for the children - so we do it. (Year 2-6 teacher)

The teacher justified this practice on the basis of it being 'beneficial for the children' although the benefit described seemed to be confined to the acquisition of specialist vocabulary in English. Her/his tone of voice indicated resignation to this practice rather than conviction of its efficacy. While there was an acceptance of the school policy in immersion by the teacher, s/he was eager to further her/ his professional learning in teaching a second language and in deepening her/his understanding of immersion education, together with strengthening personal language skills. S/he was using informal personal networks to further her/his understanding of immersion teaching as s/he had no formal teaching in Gaelic or in teaching through Gaelic and had repeatedly emphasized how difficult³⁴ Gaelic-medium teaching was.

³⁴ This teacher used the word 'doirbh' (*difficult*) 19 times in a 44-minute interview.

A primary four and primary six teacher focussed on providing opportunities for language production as a key element in their understanding and practice of the immersion phase

Agus a' toirt cothroman dhaibh a bhith bruidhinn air feadh an latha air beulaibh duine eile..... Dìreach bruidhinn, bruidhinn, bruidhinn.

And give them opportunities to speak throughout the day in front of other people just talk, talk, talk. (Year 2-6 teachers)

Their school had written guidance on its expected implementation of immersion which foregrounded exposure to the language, with gradual progression from listening, to understanding, to engaging, to talking and to conversing occurring. There was a continuous focus on extending Gaelic language skills at all stages.

Immersion understood by personal exploration: trial and error

Neither the Standard for Provisional Registration nor the Standard for Full Registration (GTCS 2012) include any standards for teaching in Gaelic-medium education (Chapter 1, p3). We also know that, until 2014, no fully Gaelic-medium teacher education pathway has been available³⁵ although some Gaelic modules and Gaelic-medium school placements have been available in ITE programmes for many years (Pollock 2006:232). It is therefore unsurprising that a number of teachers described their learning in the area of immersion in terms of a 'trial and error' process.

In the study, there were teachers at all stages who described their learning about teaching in the immersion context as being a process of trial and error: They frequently linked this to lack of preparation in the available ITE programmes or insufficient guidance when they started teaching (or both). It was also associated with a limited understanding of second language acquisition.

One experienced teacher, who had been placed in a remote location with a multi-composite class in a dual-stream school for her/his induction year, said that her/his

³⁵ The University of Edinburgh has offered two bespoke degrees for Gaelic-medium teachers from 2014 and the University of the Highlands and Islands offered a fully Gaelic-medium pathway from 2017.

ITE programme had not offered much guidance on how to teach Gaelic as a second language and s/he had just experimented with the teaching of the language:

Cha d' rinn mi mòran ionnsachadh air a bhith a' teagasg Gàidhlig mar dara cànan, 's e dìreach – rinn sinn e!

I did not learn much about teaching Gaelic as a second language. It was just that we did it! (Year 7+ Teacher)

There was neither another Gaelic-medium teacher in the school nor informed management support, and finding her/his own way of teaching Gaelic was the only alternative. S/he sought to progress her/his professional learning through personal scholarly reading and informal personal networks across Scotland. This teacher was a native-speaker with no formal learning in language education who exemplified the need for the availability of Gaelic-specific CPD, on an ongoing basis, for teachers at all stages in the career. This would seem essential to meet the knowledge and practice related needs of Gaelic-medium teachers, and has been identified as a need in other immersion contexts (Hickey et.al 2013; Cammarata and Tedick 2012; May and Hill 2005).

A recently qualified early career teacher understood immersion to involve maximum exposure to the language. S/he then explained the necessity to implement immersion in the way s/he felt was most appropriate for the pupil group (a trial and error method) citing, as justification, the lack of a structured language-learning framework, which s/he felt could have offered some guidance regarding language progression.

Chan fhaod sinn a bhith a' bruidhinn Beurla sa chlas idir. Oir chaneil prògram againn - so tha e cho math dhuinn dìreach ga dhèanamh san dòigh tha sinne a tha a' smaoinichadh a tha freagarrach.

We cannot speak English in the class at all. So there is no (*language*) programme and it is just as well to do it in the way that we think ourselves is appropriate. (Year 2-6 Teacher)

This raised a number of issues in relation to knowledge and understanding of bilingual and immersion education. The teacher would value more guidance on the implementation of the immersion approach within the Gaelic-medium context.

Alongside this many of the teachers expressed their need of a structured language-learning framework³⁶ to act as a guide for teaching. This could, on the one hand, infer a need for a greater understanding of second language acquisition to ensure that children's language learning is progressing appropriately or may indicate an uncertainty relating to issues of assessment of bilinguals, known to be a concern for immersion teachers internationally (Walker and Tedick 2000).

The data showed that three teachers who had studied on the STREAP postgraduate programme had a more extended understanding of immersion education, evidencing the benefits of specialist professional learning. They identified wider issues in Gaelic-medium teaching and suggested potential solutions. These teachers described the personal learning benefits of academic readings related to bilingualism and second language learning internationally. This research literature had given them knowledge and insights into issues that they were facing in Gaelic-medium schools, such as corrective feedback, and minority language challenges. They were encouraged to examine its relevance for their class and school contexts. The teachers were better informed about different models of immersion and their outcomes, and also aware of specific language pedagogies. One of the teachers was recommending that all Gaelic-medium teachers have opportunity to do the programme, or an equivalent course tailored for immersion education, and was unhesitating in stating its benefits for her/his classroom practice. This teacher viewed current ITE programmes as preparing student teachers for a monolingual context only:

Tha iad (na tidsearan oga) air tighinn a-mach, tha na curscaichean aca – tha an ionnsachadh mar gum biodh iad ann an clas Beurla.

They (*the young teachers*) are coming out- their courses, their learning is as if they were going to teach in an English class. (Year 7+ teacher)

Additionally, it was suggested by a number of the more experienced teachers that this extended knowledge and understanding of Gaelic and bilingual and immersion education be included in the GTCS Standards³⁷. They perceived that this would

³⁶ The *Literacy and Gàidhlig Benchmarks 2017* (Education Scotland) have been subsequently published.

³⁷ The Standards for Registration (2012), and the Standard for Career-long Professional Learning (2012).

better prepare Gaelic-medium teachers, ensure quality and raise the status of Gaelic-medium teaching.

Johnstone (2002) emphasized the importance of immersion teachers being knowledgeable about bilingualism and bilingual development in learners, plus the principles, processes and outcomes of bilingual or immersion education. The data showed that many of the participants identified a greater understanding of bilingual and immersion education as a professional learning need. The need for this is further underlined by the variation in practice of the immersion approach described by participants, which was previously noted by O'Hanlon et.al (2012), and also by the greater understanding evidenced by the teachers who had completed the STREAP course. This would require teachers to have formal learning opportunities to learn about bilingual and immersion education in ITE programmes and through CPD (Chapter 6, p222).

Language acquisition and learning

A primary focus of all teachers in the study was the issue of children's language learning and therefore foremost in their consideration for professional learning. One deputy head teacher emphasized the link between the teacher's understanding of second language acquisition in children and teacher's ability to take children's language learning forward.

Tha e fìor chudromach gu bheil tuigse aig na tidsearan mar a tha clann ag ionnsachadh cànan, is gu bheil iad a' faighinn an cànan.

It is very important that the teachers understand how children learn a language, and that they (*the children*) acquire Gaelic. (Deputy head teacher)

Participant teachers across stages identified second language (Gaelic) development as an area in which they would value further knowledge and understanding. Within this area, they identified assessment of children's learning across the curriculum in both languages, assessment of children with potential learning needs and corrective feedback as specific areas for professional learning.

The questionnaires indicated that the teachers' initial teacher education programmes had not addressed these second language specific aspects (Figure 4.4 p.137) and yet the teachers' knowledge and understanding of them influenced their classroom practice. There was some evidence of teachers accessing some informal learning in the areas through peer support in schools or personal networks.

Gaelic language development

At the time of the study there was no national framework³⁸ available for children's Gaelic language development to act as guidance for teachers in Gaelic-medium education. The majority of the participants felt that some guidance on children's language development and progression would be of benefit to teachers, children and parents. They thought this could act as guidance for teachers in both teaching and assessment of language. Some teachers at the immersion phase (Primary 4-7) expressed uncertainty about whether they should be teaching grammar, which elements of grammar to teach, and how or when to introduce this. This uncertainty about language development could be a factor in the variety of practices across the country (Chapter 2, p29).

Professional learning that focused on language development and progression was requested by all teachers across stages. Probationer teachers were more acutely aware that they did not have the knowledge and understanding of which features of language could be expected at various stages in a child's development of a second language or of the progression that could reasonably be expected within a school year. There was an anxiety within this group of teachers that they might be failing children through having inappropriate expectations of language development – expectations that were either too demanding or insufficiently challenging.

Cuideachd dìreach barrachd mu dheidhinn cànan aig diofar ìre ann an Gàidhlig cuideachd. Gum bi barrachd misneachd agad . Chan eil fhios am càite a bheil iad is càite am bu choir iad a bhith', chan eil fhios am. Dh' fhaodadh sin a bhith fada nas fheàrr tha mi a' smaointinn troimh mheadhan na Gàidhlig.

³⁸ The *Literacy and Gàidhlig Benchmarks* (Education Scotland) were published in 2017.

Also more about (*Gaelic*) language at each stage so that you have more confidence. I don't know where they (*the children*) are at, and where they should be (*with Gaelic language learning*). That could be much better in GME, I think. (Probationer teacher)

There were added complexities for the teachers when this was overlaid with taking account of differentiating for pupil diversity within a class. The Curriculum for Excellence experiences and outcomes for Literacy and Gàidhlig, which could potentially offer guidance on language progression, broadly mirror the curriculum for Literacy and English experiences and outcomes and do not make explicit the altered language development patterns of children in immersion schooling (Baker 2011). Although a similar uncertainty, associated with being a novice teacher, might be found in beginning teachers in the English-medium sector this uncertainty about expectations of language development was echoed by teachers at all stages in the participant group, indicating a more specific second language related issue.

Teachers across the career continuum indicated that, alongside a language framework to guide them about Gaelic language development in children, they would value professional learning opportunities in second language acquisition.

Bhiodh sin (*ionnsachadh mun dara cànan*) gu feum dhuinne co-dhiù. Chan eil fhios agamsa a bheil mise a' teagasg dhaibh- a bheil na faclan a bhios mi a' teagasg dhaibh ro dhoirbh dhaibh aig an ìre seo, no a bheil iad ro fhurasta.

Learning about that (*teaching a second language*) would be useful to us anyway. I do not know if what I am teaching – if the words that I am teaching them are too difficult for them at this point, or if they are too easy. (Year 2-6 teacher)

Bhiodh e math 's dòcha rudeigin a thaobh cànan (*an dara cànan*) neo sin a dhèanamh.

It would be good to do something perhaps about language (*second language*). (Year 7+ teacher)

It would seem from the literature that inclusion of learning opportunities in first and second language acquisition is necessary for immersion teachers (Johnstone 2002; May and Hill 2005). Greater understanding of children's language acquisition and

development would increase immersion teacher confidence about stage-related language development.

Assessment

The success of Gaelic-medium education is often measured at LA and national level by pupil achievement in English tests with test results being used for comparative purposes. It is expected that by the end of primary school, GME pupils will achieve as well as, and for some surpass, their monolingual peers in first language attainment (Chapter 2, p26). Content achievement is therefore important to teachers, parents, the school and local authority. There is less external scrutiny of Gaelic language proficiency but nonetheless it was a continuing issue for the participant teachers, with probationer teachers requesting learning opportunities in the assessment of Gaelic language. Finding or developing suitable assessment instruments to measure pupils' language and curricular content learning, in both languages, was perceived as a challenge.

As discussed in the literature review (Chapter 2, pp69, 71) pupils in total immersion programmes do not tend to progress in the first language (English) at the same pace as their monolingual peers in mainstream for three or four years. After approximately six years of immersion schooling, immersion pupils have typically caught up with their monolingual counterparts in English-medium schools (Baker 2011:266). Research shows that a bilingual's language and curricular performance should not be compared with a monolingual's English language competence as this assumes equal language facility across all domains (Baker 2011:355). It was observation of this different pattern of achievement that caused the teachers issues with assessment and prompted their need of greater knowledge and understanding of assessment in bilinguals. This was expressed through frustrations about the use of monolingual assessment instruments.

In several Gaelic-medium schools it was expected that testing through English could begin at primary three, while pupils were still at the total immersion stage. In some

schools baseline testing³⁹, designed for mainstream children, is carried out in primary one.

Sin an rud eile a tha doirbh ann am foghlam tro mheadhan na Gàidhlig. Tha sinn a' dèanamh baselines ann am Beurla ach tha e doirbh fios a bhith againn aig dè an ìre bu choir dhuinn a bhith a' leum a-steach.

That's the other thing that is difficult in Gaelic-medium education. We do baseline tests in English but it is hard because we do not know (*from the test results*) at what level we ought to be jumping in (*what the starting point for learning is*). (Year 7+ teacher)

The baseline tests are designed to enable teachers to set realistic targets and monitor student progress. However, as the tests relate to the mainstream curriculum and the main focus of children in Gaelic-medium is listening and speaking in the total immersion stage, the teachers reported that they were unable to act on the assessment information from the baseline tests, limiting their usefulness.

One teacher, who had resisted children in primary three being assessed in English, as English literacy had not yet been introduced by this school stage, felt it was still unfair to introduce the assessments at the beginning of Primary 4.

Bha iad ga dhèanamh air prìomh a trì ach bha sinn a' smaointinn aig an ìre sin, cha b' urrainn dhaibh really measadh a dhèanamh ann an sgrìobhadh Beurla is eile, cha do sgrìobh iad aon facal. Tha iad ga dhèanamh an toiseach aig prìomh a' ceithir. Tha sin fhathast ceàrr.

They were doing (*the English testing*) in primary three but we thought that they couldn't really test English writing at that stage before they had ever written a word (*of English*). They do it (*the assessment*) at the beginning of primary four. That is still wrong. (Year 2-6 teacher)

Many of the teachers expressed reservations about the practice of assessing the children, through English, as early as possible with standardized assessments that are used for the English-medium sector across Scotland, sensing that it was unfair and inequitable, but expressed uncertainty about how best to assess immersion learners.

³⁹ Primary one baseline testing combines teacher observation with a computer-adaptive assessment in specific areas of learning and development in Literacy, Numeracy and Personal, Social and Emotional Development.

The pressure to use the standardized assessments appeared to come from head teachers and local authorities (see below).

'S e ach chan urrainn dhuinn am measadh a dhèanamh san aon dòigh sa tha clas a h-aon, 's e sin an aon rud a tha diofraichte ach tha a h-uile sgoilear ann clas a ceithir, a h-uile sgoil ann an xxxxxxx, tha iad uile a' dèanamh an aon measadh.

But we can't do the (*standardised assessments*) in the same way in primary one, that's the only thing that is different but every pupil in primary four, in all the schools in xxxxxxx, they all do the same tests. (Year 7+ teacher)

The process of moderation recommended by local authorities for assessments was also based on processes designed for English-medium schools which presented Gaelic-medium schools, especially small dual-stream schools or remote schools, with particular challenges as they might not have staff at the appropriate stage to take part in moderation.

'S e dùbhlán a th' ann am measadh co-dhiù.... ma tha thu a' feuchainn ri moderation a dhèanamh còmhla ri cuideigin air pìos obrach, uaireannan chan eil e furasta cuideigin a' lorg a tha ag obair aig an aon ìre is tha eòlach air an ìre a th' agad..... Ach 's e dùbhlán a tha sin bho àm gu àm cuideachd. Agus an t-slighe tha sinn a' dol sìos le co-mheasadh a' gabhail àite, uill tha còrr e a' gabhail àite fad an tìde, tha sin gu bhith duilich dha sgoiltean iomallach sin air a' Chomhairle, agus far a bheil 's dòcha dithis ann an sgoil, aon duine aig na tràth ìrean is cuideigin eile aig an darna ìre, chan eil e buileach fair iarraidh air cuideigin a clas aon is a dhà a' coimhead ri obair cuideigin ann an clas seachd is mar sin air adhart.

Assesment is a challenge anyway...if you are trying to do moderation on a piece of work with a colleague, sometimes it is not easy to find someone who is working at that same stage or familiar with that stage....and that's a challenge sometimes. And the direction that we are going in with peer-moderation –well, we are supposed to do that continuously – that is going to be difficult for remote schools in the authority, and where there are only two teachers in the school: one at the early stages and one at the second level – it is not exactly fair to ask someone in primary two to moderate the work of someone in primary 7 and so on. (Teaching deputy head teacher)

Finding or developing suitable assessment instruments to measure pupils' language and curricular content learning was a challenge for the teachers with both rural and urban contexts presenting different issues in relation to moderation of assessments.

This area challenges immersion teachers internationally (Gathercole 2013; Walker and Tedick 2000) and is an area in which teachers require to be better informed to progress and enhance pupil learning.

Importantly, an area that exercised the teachers, which they also identified as a learning need, was how to distinguish between a pupil who had language delay and a pupil who had learning needs. Accurate assessment of pupils was important in order that temporary difficulties faced by bilingual children were not misidentified and were distinguished from longer-term difficulties requiring specialist intervention by an *Additional Support Needs* professional (Baker 2011).

Bhiodh cuideachadh le sin gu math feumail, chanainnsa, mar taic airson ionnsachadh. A bheil iad a' togail a' chanan ro shlaodach, a bheil sin a' sealltainn gu bheil rudeigin eile ceàrr orra neo a bheil feumalachdan a bharrachd aca a thaobh ionnsachadh neo an e dìreach gu bheil iad slaodach a dol gu cànan, 's dòcha gu bheil iad comasach ann an rudan eile ach air sgàth gu bheil iad a' faighinn a' togail cànan gu math doirbh, tha sin a' dèanamh a h-uile rud eile nas dorra dhaibh, chan eil mise a' faireachdainn gun d' fhuair mi riamh trèanadh gu leòr neo taic gu leòr ann a bhith ag aithneachadh cuin am bu choir dhuinn a bhith a' toirt dhaibh barrachd taic nan àbhaist.

Some support with that would be very useful, I would say, for example additional support for learning. Are they learning the language too slowly, does that mean that there is something else wrong with them or do they have additional needs in relation to learning, or is it just that they are slow at picking up the language; maybe they are able in other directions but because they are finding learning the language difficult, that makes everything else difficult for them. I don't feel that I ever got enough training or support to recognise when I should be giving them additional help. (Year 7+ teacher)

The concern for the participant teachers was furthering their knowledge and understanding, through learning opportunities, to enable accurate assessment of the pupils' need so that the pupils could be supported. As there are few *Additional Support for Learning* teachers with Gaelic in the sector and many small rural schools would not have regular access to a specialist teacher, teachers need to be well informed in these assessment practices.

Corrective feedback

How to correct errors in pupil language effectively without demotivating learners was a second language issue raised by a number of teachers, and emphatically identified as a learning need by one experienced teacher. Even after many years of immersion exposure, pupils show lower than expected levels of grammatical accuracy and they develop an interlanguage⁴⁰ that may include consistent errors (Chapter 2, p40). However, teachers also recognized that language errors are a usual and frequent part of learning a language (Baker 2011). Judging how or when to intervene to correct errors was the challenge for the participants. One teacher suggested that professional learning courses for correcting language errors would be beneficial:

Bhiodh e math cùrsaichean dìreach mar sin,dìreach mearachdan cumanta cudromach.

It would be good to have courses like that (*error correction*)just common but important errors. (Year 2-6 teacher)

Another teacher was eager to share what she had learned on a post-graduate course that she had completed, which included reading of different strategies for dealing with errors in a second language learning context and how this had shaped her practice. She identified this as a needed area of professional learning.

Ann an tòrr diofar dòighean. Ma tha ùine againn – peancal is bòrd geal; ma tha ceangal ann am Mirean coimheadaidh sinn ann an sin; Bheir sinn orra a ràdh a rithist is dòcha a' sgrìobhadh sios dhuinn fhèin – is dòcha coimhead air sin a rithist... repetition.

In many different ways: if you have time, you use the white-board; if there is a link to Mirean⁴¹ we will look at that; we get them (*the pupil[s]*) to repeat the word/phrase and maybe note it down in the teacher's notebook for future action; repetition. (Year 7+ teacher)

⁴⁰ Interlanguage refers to the variety of language that has been developed by a learner of a second language who is not yet proficient, including some features from their first language (Lightbown and Spada 2006).

⁴¹ *Mirean* is an online resource for Gaelic teachers that provides guidance on the main grammatical patterns of the Gaelic language and how teachers can teach and reinforce these in class (Stòrlann Nàiseanta na Gàidhlig).

With the exception of the teacher who had been on the post-graduate course, the other participants appeared to be developing their own individual strategies for this issue. In her study, Landgraf (2013) noted that there was no consensus among the GME participant teachers of the most effective ways of giving corrective feedback (Chapter 2, p54), which offers additional evidence for more professional learning in this area of second language acquisition.

The teachers were aware of the potential of the danger of over-correction of errors. On the other hand when a pupil, or several pupils, make the same mistake repeatedly they felt that would be helpful for them to have more knowledge of the most effective strategies to interrupt these errors. Research conducted in other immersion contexts shows that pupils are likely to benefit from a range of feedback types rather than any one type (Chapter 2, p57; Lyster & Tedick 2014) and state the necessity for corrective feedback, particularly in the upper stages of primary, to progress pupil language proficiency. Further knowledge and understanding of different types of corrective feedback, and their known efficacy in immersion education, was requested. This could then further inform the Gaelic-medium teachers' practice.

Enhancing teachers' classroom practices: curriculum and pedagogy

In the interviews, when either identifying learning needs for teaching Gaelic as a language or for teaching the curriculum through Gaelic, the teachers' conversation returned repeatedly to language and the pivotal importance of language to them. They had identified personal language-related needs and specific issues in teaching language, such as error correction and assessment, in which they would value further knowledge and understanding. From their perspective, this enhanced personal learning would enable them to improve their teaching skills and consequently impact positively on children's language learning and attainment (Chapter 4, p131).

The findings also indicate that *how* to teach Gaelic as a language was a further area of learning that was crucial to the teachers in order to achieve these aspirations. This request of *how* to teach Gaelic included addressing issues of balancing language and

curricular teaching, *how* to teach grammar, and learning more about effective pedagogies for language teaching. One teacher encapsulated this:

Tha mi a' smaoineachadh bu thoil leum dìreach...fhaighinn a-mach barrachd mar a tha thu a' teagasg rudan a thaobh cànan.

I thought that I would just like to...find out more about **how** you teach things relating to language. (Year 2-6 teacher)

Balancing language and content

Although the participants did not use the term 'balancing language with content' it was clear from the issues that they raised in relation to teaching the curriculum through Gaelic, and the associated learning requested, that this was a key area for further professional learning. Two main issues were highlighted alongside the desire to know more of *how* to teach language (i.e. more about immersion pedagogies). Many participants raised the time-consuming nature of teaching through the immersion language, ensuring pupils' comprehension, in a curriculum already crowded with content knowledge. Then there was the additional awareness of the need to teach language and grammar more intentionally. Together they presented the challenge of balancing language learning with curriculum content learning. This challenge increases in the immersion phase as pupils are expected to meet the same curricular standards as EME pupils by the end of primary seven.

Meantime, there was an apparent contradiction in the request about *how* to teach language, as most of the teachers also claimed to be teaching Gaelic 'all the time' (Chapter 4, pp138, 139). From the data it seemed that 'all the time' involved the teacher using Gaelic as the sole classroom language. This was also often associated with teaching specialist terminology in the curriculum or clarifying vocabulary.

A probationer teacher in the immersion phase noted that s/he always had to consider the language element first in curriculum lessons to ensure that the pupils had sufficient language and comprehension to facilitate a deeper understanding and

discussion of the content. S/he expressed the complexity of teaching the curriculum through Gaelic:

Tha cànan cho cudromach gu bheil a h-uile rud eile anns a churraicealam (*tha thu a dhèanamh*) ach tha thu daonnan a' smaoinichadh mu dheidhinn cànan an toiseach, chan urrainn dhut càil eile sa churraicealam a dhèanamh gus am bidh tuigse aca is chan urrainn dhut math dh' fhaoidte coimhead air rudan cho mionaideach mar a bha thu ann an clas Beurla mar nach eil thu a' chiad phìos a dhèanamh, mar nach eil a' chànan aca chan urrainn dhut càil eile a dhèanamh.

Language is as important as everything else in the curriculum, but you are always needing to think of language first. You cannot do anything else in the curriculum until they (*the pupils*) have understanding (*terminology and the vocabulary to discuss it*) and you can't look at things in the same depth as in an English-medium class if they don't have the language. It is the first building block and until they have that – you can't do anything else. (Probationer teacher: immersion phase)

The teacher perceived that pupil language proficiency had to be sufficiently strong to engage with more complex content knowledge. This implied her/his understanding of the interdependence of language learning and academic learning (Met 2009). It is interesting that the participants who were demonstrating an awareness of the extended vocabulary required for deeper discussion were not, with the exception of one experienced teacher, among those requesting professional learning for specialist terminology. This could indicate the need for graded language learning opportunities for teacher learning (Chapter 6, p224).

The impact of language in curricular content teaching is further illustrated by a teaching principal teacher who commented on the necessity of incidental language learning in the classroom to illuminate subject knowledge. S/he perceived language to 'dominate' all subject teaching. However, it also illustrates the integrated nature of language learning in the meaningful context of curriculum content learning, a known strength of the immersion approach (Chapter 2, pp33,47).

But just by the nature of it, it always seems very language dominated and it's very easy that you are in the middle of something and you have to take that side-step to do a wee bit of the language just so that what you are doing elsewhere starts to make sense. (Teaching principal teacher)

The teaching of language ‘all the time’ was perceived as an added hurdle when teaching content because of the additional curricular time required to teach the specialist vocabulary and/or the need of simplified language for clarifying content.

Tha e a' toirt tòrr ùine (*teagasg a' churraicealam*) agus cuideachd le bhith a' teagasg rudan mar saidheans s e gu bheil, a-rithist briathrachas aig a' chlann..... Ach fhathast tha e doirbh cuspairean car doirbh a' mhìneachadh dhaibh ann an cànan a thuigeas iad. Tha sin doirbh, feumaidh tu a bhith dealasach is diofar dhòighean.

It (*teaching the curriculum*) takes a lot of time and also in teaching science and things like that, it's making sure that the children have the vocabulary... But it is still difficult explaining difficult subjects to them in language they can understand. That is difficult, you have to be flexible and try different ways. (Year 2-6 teacher)

The preoccupation with the additional time taken to teach language in the curriculum was closely associated with the perception of an overcrowded curriculum. This challenge of finding time for language teaching in curriculum lessons has been also been noted as an issue for teachers in a Spanish immersion context (Walker and Tedick 2000). The extra time was perceived to necessitate teachers in this present study having to make choices in relation to the teaching of curriculum content.

Mar is trice, leis an fhirinn, tha mise a' fàgail a-mach rudan. Is gu math tric a' feuchainn...ma tha sinn a' dèanamh topic air rudeigin feuchaidh mi ri eòlas air fhaighinn air staigh, 's urrainn dhut ga dhèanamh. Cha b' urrainn dhut, can, a h-uile càil a theagasg a h-uile seachdain, cha ghabh e dèanamh. Ma tha thu ag iarraidh cànan a' chumail riutha cuideachd. Tha e doirbh.

Often, to tell the truth, I leave things out (*of the curriculum*). And quite often, if we are doing a topic, I try to include knowledge of it elsewhere – you can do that. You couldn't cover, for example, every curricular area in a week – it just can't be done if you want to progress their language. It is difficult. (Year 2-6 teacher)

These dilemmas in balancing language and curriculum teaching were further elaborated by another teacher describing decisions about which areas of the curriculum to prioritize given its breadth, alongside managing parental and management expectations and the constraints of time. In addition the teacher needed to consider differentiating learning (Chapter 2, p83) for pupils of different abilities

and at varying stages of language development so that content learning was not compromised.

I think the biggest challenge is balancing the curriculum, particularly when you are working in a multi-composite class and particularly with new learners, new Gaelic speakers..... So before you do a writing exercise, if you are going to do a script, you have to do a wee drama, you need to get them talking. Everything, for me anyway, everything seem to take so much longer.

You could do language all day, you are in the middle of a science lesson and suddenly a word comes up and it takes you off into a language lesson again because there's briathrachas ùr (*new vocabulary*)...I think because of the language you feel as if you could do language, maths and then everything else just kind of has to get lumped together or you have that big, broad encompassing curriculum but something has to take, there's no – to me, in the hours that we've got you can't do it all, so you have to decide where you are going to prioritize, and that becomes difficult because the expectations, the parental expectation and the management expectation is you will do all these other things as well. (Teaching principal teacher)

While the teachers did not explicitly identify the issues of time and curricular coverage for professional learning, they were raised within the context of their need for further professional learning on *how* to teach the language and 'balancing the curriculum', and would be legitimate areas for discussion in that context.

From examining the views of the teachers in relation to the practice of immersion education, alongside their views on teaching the curriculum through Gaelic, it would appear that many participants viewed the learning of Gaelic as an incidental effect of using the language as a vehicle for teaching (Chapter 2, p27). There was a consensus that, in curricular teaching, specialist (content-obligatory) vocabulary was an element to be explicitly taught. Nonetheless, a number of more experienced teachers had an increased awareness of the need for more focused language teaching, identifying when and how to teach grammar systematically as a professional learning need. Included in this was how to teach grammar in content lessons.

Cuspair a bhiodh feumail do tidsearan bun-sgoil– cha b'urrainn dhuinn a' dhol tharais air canan, ..mar a dh'ionnsaicheas tu sgilean grammar dhan chloinn.

A subject that would be useful for primary school teachers - you could not go beyond language.... and how you would teach grammar skills to children.
(Year 7+ teacher)

The *awakening*, evidenced in more experienced immersion teachers, shows a growing awareness of the need for learners to have strong language proficiency to enable access to increasingly complex curricular material (Chapter 2, p45). The teaching of grammar, and the need for a specific focus on form, is advised in a recent Education Scotland policy document (Chapter 2, p51) but the document is not explicit about *how* grammar will be taught demonstrating the need for professional learning to link the policy to practice. One teacher who requested more learning in this area described her/his current practice:

Tha mi a' dèanamh tòrr eacarsaich gràmair, chan eil mi a' dèanamh mòran mar sin sa Bheurla, tha e dìreach – tha e a' tighinn tro bruidhinn – bruidhinn, bruidhinn.

I do a lot of grammar exercises (*for Gaelic*). I don't do much of that for English – it just comes from speaking. (Teaching principal teacher)

S/he was identifying the need to teach grammatical forms in Gaelic, through grammar exercises, for pupils to acquire greater proficiency in a way that s/he perceived was not necessary in an English-medium class where s/he supposed language accuracy would come naturally to the pupils. This pointed to the need for professional learning about the importance of integrating language learning outcomes and content learning outcomes in curricular lessons. Research literature has shown that the teaching of grammar in isolation has not proven to be very effective in progressing the spoken and written language of immersion learners. Language features (grammar) learned in the meaningful context of the curriculum lessons are known to be more easily retrieved in subsequent communicative contexts (Chapter 2, p53).

....the grammar gets more complicated, that's the kind of – in English, coming from an English teaching background you would know where to make the cut, this is pushing it too far or – it's very difficult to know in terms of where to go. Do we touch on the conditional tense? Well it comes up in the reading books so we kind of skirt round about it but do we teach it formally? Will we start

writing in the... 'if I won the lottery then I would...' we try and talk about things like that but then you are conscious of your own linguistic capacity as well. (Teaching principal teacher)

This teacher, when elaborating on the need for professional learning on *how* or *how much* grammar to teach, illustrated the need for the teaching of specific features (i.e. a focus on form).⁴² S/he used the conditional verb as an example of a form that does not occur frequently in classroom conversation, and is therefore unlikely to be incorporated accurately into learners' speech. The need for professional learning to support teachers in identifying specific language features to teach, and in designing lessons that integrate these features in curriculum lessons, has been emphasized in a number of international studies also (Chapter 2, p51).

Finally, one experienced teacher cited the need for immersion teachers to understand the importance of vocabulary teaching and of teaching not only the meaning of words but also the contexts in which words are used, and similarities and differences between words. This was exemplified through the value of making cross-linguistic connections:

Ach aig an aon àm tha e math na ceanglaichean sin a dhèanamh: oct, ochd, octo, fhios agad? Tha thu dèanamh na ceanglaichean sin ach a thaobh terminology, tha e tòrr nas fhasa ann an Gàidhlig, chanainsa.

But at the same time it is good to make these connections (*between languages*): oct, ochd, octo, do you know? You make these connections. (Teaching head teacher)

These findings showed that participants highlighted a number of key areas relating to teaching language, and the balancing of language and content, in which they would value further professional learning. Learning how to make a more systematic focus on form a reality in their classrooms, alongside discussion of issues such as curriculum coverage and the value of making cross-linguistic connections, were included. Such learning opportunities would incorporate support to plan for both content and language objectives in curricular teaching and discussion of effective immersion pedagogies.

⁴² See Chapter 2, p49 and Chapter 5, p189 for further discussion on 'focus on form'.

Language immersion pedagogies

As noted earlier, all the participants were eager to learn more of effective pedagogies for teaching Gaelic-medium pupils. One probationer teacher articulated this:

Bu toil leamsa a' faighinn a-mach mu dheidhinn diofar dhòighean teagasg sònraichte airson cànan – aig gach ìre.

I would like to learn about specific language pedagogies – for each stage.
(Probationer teacher)

Cooperative learning, interdisciplinary learning and differentiation were pedagogical strategies specifically requested for further professional learning. The teachers collectively gave extensive examples of pedagogies that they found to be effective for teaching and enhancing the language such as:

- providing contextual support for the language being used (e.g. body language, gestures, facial expression and acting);
- extensive use of visual materials – concrete objects, pictures and audio-visual materials;
- obtaining constant feedback regarding the pupils' levels of understanding;
- using simplified language;
- using repetition, summaries, restatement to ensure pupils' understanding;
- being a language role model;
- giving feedback on language errors, and
- designing a range of learning activities to engage children's interest.

While some of these strategies could be found in any primary classroom, they have been identified as being particularly effective for facilitating L2 learning (Garcia 2009; Snow 1990b). Interestingly, the teachers were unaware of literature relating to language pedagogies and had learned of the efficacy of these pedagogies for immersion through speaking with colleagues in the Gaelic-medium sector or through trial and error. This would suggest a need for professional learning to raise Gaelic-medium teachers' awareness of the knowledge base of language pedagogies to reinforce current good practice (Krashen 1984; Cummins 2000b; Garcia 2009; Lyster

2007).

A number of the teachers spoke of having to be more creative in their teaching in order to engage and motivate children. They suggested that this was more important than in mainstream classes because of the relative difficulty for children learning content through a second language.

Dìreach a bhith a' smaointinn air dòighean a bhith libhrigeadh a h-uile cuspair agus a bhith a' dèanamh cinnteach gun robh a' chlann a' tuigsinn agus gun robh iad – nach robh an cànan a' dol ann an rathad air an ionnsachadh, gu bheil e a' dèanamh bacadh air an ionnsachadh aca, tha mi a' smaointinn gu feumaidh sinn a bhith faiceallach mu dheidhinn sin agus cruthachail.

Just thinking of ways to deliver every subject and ensuring that the children understand and that – that the language is not a barrier to their learning, that it is not hindering their learning. I think that we need to be careful about that and be creative. (Year 7+ teacher)

Cooperative learning, interdisciplinary learning and differentiation, which participants identified specifically for further learning, have been shown to be particularly important in immersion classrooms as they offer additional opportunities for interaction, more individualized and contextualized learning (Baker 2011; Cummins 2000a; Garcia 2009). Translanguaging, a more recent pedagogical strategy that emerged from the Welsh immersion context, which suggests the planned and systematic use of two languages inside the same lesson, is discussed in Chapter 5. Although not identified by participants, translanguaging is of interest for discussion as a number of the teachers expressed uncertainty about their practice of using L1 in an L2 classroom.

Cooperative learning

Cooperative learning is an important strategy for immersion teachers as it emphasizes teamwork, interdependence and social interaction and has been shown to be highly effective with minority language pupils (Baker 2011). This strategy is useful for developing talk but also encourages pupils to focus on the form and function of language (Garcia 2009). A small number of teachers identified this as a potential area for professional learning, including one experienced teacher who had

previous CPD in cooperative learning. This would suggest that the other participants were unaware of the potential value of cooperative learning in immersion education.

Bha an rud Cooperative Learning really math, chuir sinn seachad trì là as na làithean saora sin a dhèanamh, bha e gu math intense ach bha e glè mhath agus really feumail gu ìre, bha an fheadhainn bheaga Ghàidhlig agamsa aig an àm sin ach dh' fheumainn refresherach bha pìosan ann airson a' bhun sgoil a bha math. Sin am fear a bha a' seasamh a-mach ach dh' fheumainn beagan refresh a dhèanamh.

The Cooperative Learning course was really good. We spent three days in our holidays learning about it. It was quite intense but it was pretty good and very useful to an extent. I had the little ones in Gaelic at the time ...but I would now need a refresher...but there were parts of it that were really good for the primary school. That course stands out for me but I would need a little refresher. (Year 7+ teacher)

This teacher had intuitively or reflectively identified cooperative learning as a useful strategy, but was unaware of its value as a language-learning strategy, and had thought of it as a good general strategy. The lack of awareness may have been partially formed in response to CPD sessions which were open to all primary and secondary teachers. This would indicate a need for Gaelic-medium teachers to have additional time following mainstream CPD to consider the application and relevance of the learning within a language teaching context.

Interdisciplinary learning

Interdisciplinary learning (IDL) was a further strategy that teachers, at nearly all stages, were eager to have further learning in (Appendix 15).

Seòrsa rud mar IDL - chan eil mi cinnteach cia mhead seòrsa cuspairean bu chòir a bhith a measg IDL.

Something like IDL – I am unsure how many subject areas should be included in an IDL project. (Probationer teacher)

This teacher's concern was with the planning and management of IDL, an aspect that s/he attributed to her stage of career. However, the value of IDL as a language pedagogy, known to be successful in progressing learning in minority language

contexts, provides a natural situation in which vocabulary is repeated, and offers an opportunity for consolidation of language across content knowledge (Garcia 2009). The teachers' interest in IDL may have been linked to the prominence given to interdisciplinary learning in the Curriculum for Excellence supporting document *Building the Curriculum 3: a framework for learning and teaching*.

Differentiation

Differentiation of learning seemed to be an important area to the probationer and early career teachers who identified this as a learning need. Differentiation is a particular challenge as children will not only be at different levels of understanding content but also at different linguistic levels, and are likely to display different aptitudes in different areas of the curriculum. This means that the teacher will be required to prepare multiple entry points for lessons, differentiating instruction and support and also using a range of assessment methods. As many Gaelic-medium classes in the majority of schools are multi-composite (Chapter 1, p6), this is additionally challenging.

Differentiation, dìreach mar a bhiodh tu a' dèiligeadh le diofar chomasan anns a' chlas, o chionn gheibh thu rudan mar sin san oilthigh ach tha mise a' smaointinn gur e gu tur diofraichte, 's dòcha gu bheil cuideigin agadsa aig nach eil tuigse sa Ghàidhlig ach bhiodh tuigse aca sa Bheurla, bhiodh iad a' tuigsinn, tha iad fìor mhath air maths o chionn 's e – tha iad a' coimhead air is...tha sin doirbh, nuair nach eil an coimeas cànan aca a' dol leis an coimeas air a' chuspair.

Differentiation – just how you would be managing different ability levels in the class, and although you get things like that at university I think it is totally different (*in practice and in GME*). Maybe you have someone who doesn't understand in Gaelic but would have that understanding in English – they are very good at Maths because - they look at it – that is really hard when their linguistic ability is hindering their progress in the subject knowledge.
(Probationer teacher)

Use of L1 in L2 classroom

The use of the L1 in teaching was described as a pedagogical strategy by a number of teachers, albeit hesitantly. This was justified on the basis of lack of appropriate Gaelic resources. There was evident ambivalence about 'confessing' to the use of

English (L1) in a Gaelic-medium classroom, indicating both an awareness of a discrepancy between policy and practice, and also a lack of understanding of the benefits associated with the judicious use of L1 in the L2 classroom (Chapter 2, pp74, 75). One teacher described her/his practice of the use of L1, emphasizing to the pupils that their discussion, questions and all further work would be through Gaelic:

....agus bha goireasan uabhasach math air, air GLOW is (tick tack) neo rudeigin, dìreach bhideois beag goirid ann am Beurla agus bha agam ri faighneachd an robh e ok sin a chleachdadh air sgath – tha iad a' mìneachadh an concept agus bidh (iad) uile a' tuigsinn agus an uair sin bidh sinn a' bruidhinn mu dheidhinn ann an Gàidhlig, bha sin ceadaichte ann an dòigh.

....and there were really good resources on GLOW (tick tack) or something, just short little videos in English, and I had to ask if that was okay for me to use because – (understanding) the concept is crucial and they all understand, and we then discuss it in Gaelic. That was allowed.

In summary, while the teachers described practices that included extensive pedagogies that were supportive of language acquisition, they requested additional learning to extend their understanding of these, being unaware of the theoretical and research underpinnings of their practice. The findings also demonstrated that participants identified a greater focus on the teaching of language features (i.e. a focus on form) as a professional learning need. Further, the literature review showed that, although there is much still to be learned about how to integrate the teaching of language and curriculum content, there is also much known about strategies and frameworks that strengthen minority pupils language learning (e.g. the inclusion of content-compatible language alongside the content-obligatory language required for curriculum teaching) (Chapter 2, pp54-62). These language, curriculum and pedagogy issues were identified alongside the participants' desire to extend their knowledge and understanding of the broader fields of immersion education and second language acquisition. These learning needs were usually described within the participants' school and/or wider context which will be considered next.

Contexts for language-related professional learning

Although the primary focus of the study was to examine the participant teachers' perceptions of their professional learning needs as Gaelic-medium primary teachers,

the teachers' views of the contexts of their professional learning was a related area of focus (Chapter 3, p92).

Many of the participants, in common with findings in the wider profession (Kennedy 2005; Patrick, Forde and McPhee 2003), defined professional learning in terms of external short or accredited courses initially. However, they also evidenced a range of professional learning opportunities and influences (Appendix 16) beyond these: school mentor support for probationers; peer observations (within school and in other Gaelic-medium schools); school collaborative working groups; school-level formal meetings; stage partner meetings; informal national networks (other teachers, friends, parents); personal scholarship; personal reflection; internet resources; Facebook; Gaelic-medium staffroom (social media site); GLOW; Education Scotland website.

Of the many interacting factors that influence teacher learning, the participants viewed the class, school and local authority contexts as being pivotal in facilitating or impeding their professional learning. The teachers described both opportunities and constraints in their contexts, although the balance between these varied. School and staff composition, and knowledge and understanding of the GME sector, were core factors that were perceived to influence language-related professional learning opportunities. The participants viewed head teachers to be key in relation to content of, and access to professional learning opportunities. Additionally, many of the experienced teachers understood the role of national and local authority priorities in shaping professional learning. There was also a good understanding, by teachers at all stages, of nationally organized professional learning specifically for Gaelic-medium teachers. Finally, the role of individual teacher agency to proactively influence professional learning, which was less clearly evidenced, will be discussed.

Schools and Gaelic-medium professional learning

School composition and size were factors that were perceived by many participants to facilitate or impede professional learning. A key factor for the participant teachers

was whether the school was a freestanding GME school or dual-stream school,⁴³ with school size being a related issue.

Freestanding schools

Freestanding GME schools were seen by participants to facilitate more professional learning opportunities specific to GME. This was demonstrated through both the informal and formal learning opportunities described by the teachers. These included informal language learning opportunities through environmental print which was almost entirely in Gaelic; through Gaelic being the language of verbal and written communications throughout the schools; and through daily opportunities for peer interaction. Formal opportunities for all teachers to be involved in collaborative learning through Gaelic-medium working groups developing GME curricular or policy related projects were also reported. From the teachers' perspective this context offered a very supportive learning environment:

Tha mi cho fortanach gu bheil mi timcheall air tòrr dhaoine, chànain na tidsearan air fad, chan eil duine sam bith sa luchd-obrach nach biodh dèonach do chuideachadh ann an dòigh sam bith.... Tha mi a' faireachdainn dìreach cho fortanach. Chanain nach eil dùbhlain sam bith againn – tha tòrr dhùbhlain againn ach tha mi air a bhith gu math fortanach is gu bheil daoine timcheall orm.

I am so fortunate to be surrounded by many people – I would say that among all the teachers there is not one who would not be willing to help in any way possibleI feel so very privileged. We have no real issues – we have lots of challenges but I have been so fortunate to be surrounded by (*supportive*) colleagues. (Freestanding school)

Two early career teachers further emphasized the importance of Gaelic-medium peer support stating that 'this work would be impossible, I would say, without your colleagues'. How the availability of peer support in your specialist area impacts on teacher learning and future professional development was not a focus of this study but would be interesting to examine in subsequent research, particularly in relation to probationer and early career Gaelic-medium teachers.

⁴³ A dual-stream school can be a EME primary school with a GME stream or a GME primary with an EME stream.

Dual-stream schools and school size

The teachers perceived that opportunities for immersion-related professional learning were, in general, more constrained in dual-stream schools. They described factors such as the composition of the dual-stream school, and school size, to be important influencing factors. For example, whether it was an EM primary school with a GME stream or a GM primary with an EME stream. Schools were often referred to by participants as ‘small’ or ‘large’ depending on the ratio of Gaelic-medium teachers to English-medium teachers in the school, a ratio determined by pupil numbers in each stream. A ‘large’ English-medium teacher cohort in dual-stream schools was seen to be a strong contributing factor to the dominant focus of professional learning towards mainstream primary teaching needs, and the concomitant lack of focus on immersion-related learning needs. The findings reflect some of the complexities of the professional learning contexts, and offer insights into the impact of these on immersion-related professional learning opportunities.

The dual-stream school contexts examined in the study offered a variable picture of the opportunities and constraints associated with these contexts. The teacher who had considered her/his position in a freestanding school as ‘privileged’ contrasted this with the position of peers in smaller schools where s/he viewed the contexts to be very difficult and constraining:

Tha tòrr dhe na charaidean agam air a bhith ann an sgoiltean leotha fhèin agus a' teagasg clasaichean mòra – chan e tòrr sgoilearan ach bho clas aon gu seachd san aon chlas, chanain ma tha thu leat fhèin mar sin, air an iomall, bhiodh sin gu math doirbh.

Many of my contemporaries have been in school on their own, teaching large classes – not large numerically but with a composite P1 –P7 class. I would say that if you are on your own there, on the edges (*isolated locations*), it would be very difficult. (Probationer teacher)

A probationer teacher from a large dual-stream school where the Gaelic-medium stream was numerically small demonstrated professional learning constraints that s/he attributed to the school size (a small Gaelic stream in large English-medium school):

Is math dh' fhaoidte is coireach gu bheil sinne gu math beag an seo cuideachd, cha robh tòrr daoine ag ràdh 'dè tha thu a' smaointinn mu dheidhinn sin?' 'A bheil mi dèanamh seo anns an dòigh cheart?' Chan eil fhios am, tha sin air a bhith caran doirbh, dìreach air a bhith mi fhìn airson a mhòr chuid den ùine.....'S math dh'fhaoidte mar bha mi ann an àite nas motha na seo bhiodh e diofraichte ach bhiodh tòrr daoine ann dh'fhaodadh tu dhol, 'O, chan eil fhios am mu dheidhinn sin, a bheil seo ceart?' Ach an seo, tha sinn gu math beag so cha robh an cothrom sin agam.

Maybe the problem is that we are a small unit and there weren't people to say (or ask) 'What do you think of this? Is this the right way?' That has been a bit tough, being on my own for most of the time.....Maybe it would be different if I was in a larger school where there were many people you could approach – 'Oh, I don't know about that, is this right?' But we are very small here and I don't have that opportunity. (Dual-stream school)

This probationer teacher was in an isolated position significantly constraining her/his professional learning opportunities. There was no Gaelic environmental print evident in the school, raising questions of language status, and no other full-time Gaelic-medium teacher to act as peer support or mentor. The focus of the school-based CPD programme was on issues relating solely to English-medium context, and there was no forum within the school for Gaelic-medium professional learning. This teacher's access to immersion-related professional learning was confined to personal networks, on-line resources and platforms, 'trial and error' and the one-day national Probationer conference.

Interestingly, opportunities to design professional learning appropriate to the needs of Gaelic-medium teachers was facilitated in some schools where the Gaelic stream was numerically larger, whether the overall population of the school was high or not.

These opportunities were described in one context:

Tha sinn a' dèanamh tòrr air là inservice agus rudan le chèile a bhith ag obair air a' churraicealam neo air measadh neo pròiseactan...Tha cothrom againn obrachadh as na buidhnean ach tha tòrr – mothachaidh tu gu bheil tòrr Gàidhlig air a bhruidhinn fiùs as na staff room, fiùs le na tidsearan Beurla.

We do a lot of joint working on inservice days – working together on the curriculum, or on assessment or on projects..We have opportunities to work within our own groups (Gaelic-medium and English-medium) – you will notice that there is a lot of Gaelic spoken here, even in the staffroom and even by the English-medium teachers. (Dual-stream school)

However, there was also some evidence that being in a school where the Gaelic-stream was the numerically larger group did not, on its own, lead to a facilitating context for Gaelic-medium professional learning. In one such school, teachers claimed that the school-based professional learning programme was designed around mainstream teacher needs and priorities. There was a memory of having sector-specialist learning opportunities within the school, but this was reported to have ceased over time.

B' àbhaist coinneamhan a bhith againn ach chan eil cuimhne agam an turas mu dheireadh bha coinneamh Gàidhlig againn. Bha e math air sgath gun robh sinn a' faighinn coinneamh gach mìos is faodaidh tu dol thairis air na trioblaidean a bha san sgoil neo tidsearan sònraichte neo dè na rudan a bha sinn air a bhith ag ionnsachadh.

We used to have (Gaelic) meetings but I can't remember the last time we had a Gaelic meeting. It was good because, when we had monthly meetings, you could go over the problems specific to the school or to particular teachers or what we had learned. (Dual-stream school)

Surprisingly, in the same school, the interview conversation with the Gaelic-medium deputy head teacher offered a contradictory account:

Uill, tha coinneamhan Gàidhlig againn, dìreach airson na tidsearan Gàidhlig is bidh sinn a' bruidhinn mu dheidhinn, is a' deasbad le chèile, mu dheidhinn na rudan tha sinn a' faireachdainn dh' fheumadh sinn obrachadh air.

Well, we have Gaelic meetings, just for the Gaelic teachers, and we talk and discuss areas that we feel we need to address. (Dual-stream school)

The complexity of the contexts of dual-stream schools became increasingly evident during the data collection and the analysis stage, showing that there were contributing factors, in addition to the freestanding/ dual-stream school dichotomy, influencing the professional learning opportunities of immersion teachers, which were not possible to explore in this study. There was evidence of hierarchical structures in some schools that, when combined with a lack of understanding of the GME sector, acted to impede Gaelic-medium CPD opportunities.

Hierarchy and deference

A hierarchical and deferential ethos was evidenced in one school where both class teachers and a Gaelic-medium senior staff member distanced themselves from final responsibility in relation to professional learning, deferring to higher authorities. In the context of a conversation where a senior staff member was recognising the need for greater advocacy of Gaelic-medium professional learning within the management team, the senior member of staff suggested that s/he could not 'speak outwith my role/status' ('chan urrainn dhomh a bhith bruidhinn a-mach às m' àite nas motha'). This deputy head teacher felt unable to represent the learning needs of the immersion teachers within a small management team because of the hierarchical culture within the school, a culture that is reportedly not uncommon in Scottish primary schools (MacDonald 2004). It was not possible to gauge from the data whether the deputy head teacher leading the Gaelic-medium stream had equal status within the management team or not, or whether the issue was one of school culture or of lack of personal agency. Hierarchical deference was further evidenced by a class teacher in the same school: on requesting confidential access to the teacher's CPD record to complement the interview data, a class teacher responded that s/he could only share her/his personal CPD record 'with the deputy head's permission', evidencing lack of ownership of her/his professional learning. This perceived lack of professional autonomy stands in contrast to the expectation in *TSF* (2010) for teachers to take responsibility for their own professional learning (2010:85).

Understanding of GME: school and local authority

The knowledge and understanding of mainstream colleagues, particularly of head teachers, of the aims and practice of Gaelic-medium education was an additional factor that was viewed to influence immersion-related teacher learning opportunities in dual-stream schools. A lack of understanding was evidenced in some schools. This was described by a number of participants, with an experienced mid-career teacher in a dual-stream school describing a lack of understanding by her/his head teacher and by teachers in the English-medium section of the school:

Chaneil tuigse aig duine aca de cho eadar-dhealaichte 'sa tha an dà rud.
Chaneil tuigse aig na tidsearan Beurla, neo aig a cheannard.....Tha an
ceannard gu math taiceil ach chaneil an eolas sin aige.

None of them have an understanding of how different the two things are
(*teaching in a Gaelic-medium and an English-medium setting*). Neither the
English-medium teachers, nor the head teacher....The head teacher is very
supportive but does not have that knowledge and expertise. (Dual-stream
school)

This example was expressed in the context of a discussion relating to school-based
professional learning opportunities. The head teacher was acknowledged to be
supportive of staff in general, but lacked specialist knowledge or understanding of
what teaching in the Gaelic-medium sector involved and was therefore unable to
differentiate for the Gaelic-medium staff's professional learning needs. This
impacted both on the content of school professional learning, and on the lack of
regular planned time allocated to Gaelic-medium related professional learning. In
this context, where the Gaelic-medium stream was a significant proportion of the
whole school, there was no formal, planned Gaelic-medium CPD although some
time was allowed, on an ad hoc basis, for informal CPD by the Gaelic senior staff.
Another teacher in the same school identified a lack of understanding of the
difference between teaching a *minority* language (*Gaelic*) and a *majority* language
(*English*) as an issue leading to misunderstandings:

Cuimhnich dha na tidsearan gu bheil EAL gu math nas fhasa na bhith a'
deanamh Gàidhlig. Tha iad (*a' chlann*) air an cuairtachadh le Beurla. Feumaidh
barrachd taic a thoirt do chlann Gàidhlig. Barrachd taobh a-muigh na sgoile.

Remind the teachers that English as an Additional Language (EAL) is much
easier than doing Gaelic-medium. They (*the children*) are surrounded by
English. The Gaelic-medium children require much more support. More extra-
curricular (*language*) support. (Dual-stream school)

This implied the need for professional learning about bilingual and immersion
education, for all staff in dual-stream schools, to reduce misunderstandings.

The literature review showed that all school leaders who work in bilingual settings
would benefit from specialized knowledge and understanding of the principles and

practice of bilingual and immersion education (Coffman 1992; Johnstone 2002; Menkin and Solorza 2014). This would shape whole-school approaches to professional learning and ensure that head teachers prioritized and facilitated professional learning at school level from a more informed perspective, taking account of the needs of all staff. The role of head teachers in shaping professional learning opportunities was raised by nearly all the participants. Participants understood head teachers to be the principal decision-makers in the design of school-based teacher learning, and also to be gatekeepers of external learning opportunities.

Uaireannan 's ann dìreach as an sgoil fhèin a tha e (*an t-ionnsachadh*) agus tha sin a' tighinn bho stiùireadh a' cheannard agus mar is trice tha e ceangailte ris an School Improvement Plan agus chan eil adhbhar gu bheil – ma tha Gàidhlig as an School Improvement Plan 's dòcha gun ionnsaich sinn rudeigin ceangailte ris a sin... A-rithist, tha sin a' tighinn bhon cheannard mar buidheann Gàidhlig a bhith a' coimhead air gnothaichean Gàidhlig, chan eil mòran cothroman ann a thaobh ùine

Sometimes we are just in the school (*for inservice*) and that comes from the head teacher's guidance, and is usually tied to the School Improvement Framework and there is no reason why – if Gaelic is included in the School Improvement Framework then we might learn something about that....Again, whether or not a Gaelic-medium group looks at Gaelic issues comes from the head teacher. (Dual-stream school)

Participants recognized that head teachers of dual-stream schools had to balance the needs of Gaelic-medium and English-medium teachers and take account of school, local authority and national priorities (Chapter 2, p19), but suggested that in many dual-stream schools immersion-related professional learning was not included in the overall CPD programmes.

Feelings of isolation that were generated by the lack or limited understanding of colleagues in schools and leaders of CPD events were evident. The participant teachers and managers felt isolated within their specialism. This was experienced more acutely in dual-stream schools, especially where the Gaelic-stream was a small section within much larger schools:

Uaireannan tha thu a' faireachdainn beagan aonranach air sgàth bha mise ann an sgoil – chan eil mi annsa a' Ghàidhealtachd, chan eil mi ann am baile mòr mar Glaschu neo Dùn Èideann far a bheil sgoiltean le tòrr tidsearan, bha mi dìreach ann an aonad mi fhèin neo le tidsear, aon neo dhà eile.

Sometimes you feel a little lonely because I am in a school- I am not in the Highlands, I am not in a large city like Glasgow or Edinburgh where there are schools with lots of (*Gaelic-medium*) teachers, I am just in a unit all alone, or with one or maybe two others. (Dual-stream school)

The lack of understanding of GME that impeded immersion-related learning opportunities was further described in local authorities. One probationer teacher, who spoke positively about the Induction Training Programme offered by the local authority, evidenced frustration at the lack of understanding by staff delivering the programme of a fundamental difference between Gaelic-medium primary teachers' immersion contexts and other Scottish primary teachers' contexts. In this situation, senior staff delivering the Induction Training Programme did not understand that immersion education meant that the whole curriculum was taught through Gaelic or that teaching a minority language (Gaelic) to majority language pupils (English), in a majority language cultural setting, differs to teaching a majority language (English) to minority language pupils (English as an additional language) within an English-language dominant context.

Cha robh sgot aig daoine sam bith..... bha sinn ag ràdh 'Chan obraicheadh sin leis a' Ghàidhlig.' 'Carson nach obraicheadh?' Cha robh tuigse aig daoine gum biodh sinn a' teagasg tro mheadhan na Gàidhlig.

There was no-one (*at the local authority Probationer CPD course*) who had a clue...we would say 'That won't work in Gaelic' 'Why won't it work?' No one had any understanding that we would be teaching through the medium of Gaelic. (Probationer teacher)

While acknowledging the potential value of the professional learning opportunities being offered, the probationer teacher required support from someone with specialist knowledge and understanding to enable her/him to make sense of the learning, and then judge whether the CPD could or should be transferred to the Gaelic-medium context. The senior colleagues offering the CPD were unable to give support to the probationer in this process as it seemed that they did not understand the practice or

aims of Gaelic-medium education. In this instance, the Gaelic-medium probationer teacher perceived him/herself to represent an invisible subset within the wider probationer cohort whose specialist professional learning needs were, at that stage, being unmet. Research in Wales and England has shown that the knowledge and understanding of leaders in the area of second language acquisition and associated pedagogical practices is crucial in order to inspire and empower staff (Baker 2011:307; Edwards 2009:116). This is discussed further in chapter five.

This lack of understanding was not confined to one local authority and was additionally evidenced in staff with specialist language roles, as well as probationer support staff. A probationer in another local authority, with a specialist literacy hub, noted a similar response where the language specialist was unaware that Gaelic was the language of all classroom interaction, including the curriculum.

You are the Gaelic one?' 'Yes.' Is cha robh iad a' tuigsinn – tha literacy hub anns an roinn seo is tha iadsan a' dèanamh obair le tòrr de na diofar coimhearsnachd mun cuairt Alba is bha mi fhèin a' suidhe an sin agus bha mi ag ràdh, 'airson mi fhèin, a' teagasg clas a h-aon sa dha, ciamar a dhèanamh sibh seo?' 'Uil, blah, blah.' Ach tha mise ag ràdh, 'Uill, tha mise a' bruidhinn Gàidhlig fad na h-ùine.' 'Oh, sorry.' Rudan mar sin nach eil fhios aca an seo.

You are the Gaelic one? Colleagues in the literacy hub in this LA work with many different areas across Scotland and they did not understand. I would sit there and ask 'How will this work with my P1/2?' They would reply 'Blah, blah' and I would say 'But I teach through Gaelic the whole time' 'O sorry' They don't understand things like that here. (Probationer teacher)

An experienced teacher in another local authority commented on the impact of the loss of an experienced Gaelic-speaking Education Officer who was replaced by a staff member with no educational experience.

Cha d' fhuair sinn stiùireadh sam bith bhon a' chomhairle. On a dh' fhalbh GG (*Gaelic-speaking officer*) tha e air a dhol bhuaithe, chan fhaic thu duine – bha HH ann – gun fheum, cha robh e ag iarraidh a' tighinn, cha robh e ag iarraidh freagairt. 'Ach chan eil fhios agam mu dheidhinn teagaisg', cha robh sin na thaic dha duine beò!

We have not got any guidance from the LA. Since GG (*Gaelic-speaking officer*) has left, you don't see anyone - HH was there - useless, did not want to

come, did not want to answer (*queries*). 'But I do not know (*anything*) about teaching' - that wasn't offering support to any living person! (Year 7+)

The lack of specialist understanding of immersion education by staff in key positions was reported in a number of LAs. Only two of the seven LAs in the sample reported offering immersion-related professional learning opportunities to practicing teachers.

The lack of understanding described at school and LA level, together with the lower status of Gaelic as a language, impacted on the professional learning of Gaelic-medium teachers. This was evidenced through decisions made by senior staff about teacher/ head teacher attendance at CPD events. One GME head teacher was asked to prioritize CPD designed for EME head teachers over a relevant immersion-related CPD session arranged by the LA, even though s/he identified the GME CPD as directly relevant to her/his teaching and management context also. Further, a probationer teacher, in a different LA, was directed to attend a local induction CPD session when it clashed with the one day Gaelic-medium probationer conference organized by BnG. In these examples, managers prioritized the importance of EME professional learning over and above GME professional learning.

Participants perceived the knowledge and understanding of the aims and practice of GME by key staff at school and LA level to be an important factor in facilitating or impeding their immersion-related learning opportunities.

National immersion-related CPD

The findings showed that nationally organized immersion-related CPD was highly valued by the participant group. This was especially valued by teachers in remote or isolated contexts. One probationer teacher described its benefit to her/him, as it was the only GME CPD session in her/his experience that academic year (the final month of the induction period).

Bha aon rud ann – bha aon là aig Bòrd na Gàidhlig ann an Glaschu. Bha an là sin gu math feumail, 's e dìreach cothrom a' faighinn le chèile le a h-uile duine eile a bha a' dèanamh an aon rud agus bha dhà neo thrì tidsearan aca'....' bha ise a' bruidhinn mu dheidhinn a bhios i a' cleachdadh airson cànan, dìreach ag innse beagan mu dheidhinn air ciamar a bha ise a' smaointinn air teagasg ann

an Gàidhlig' 'fhaoidte (nach) urrainn dhut smaoineachadh mu dheidhinn'.
'Chòrd an latha sin ruim. Bha e math!

The BnG probationer day was very useful....the opportunity to get together with all the others who are doing the same as you....we learned how a teacher taught the language..and a little about how to teach in Gaelic-medium. You might not think of these yourself. I loved that day. It was great! (Probationer teacher)

An t-Alltan, the annual conference organized by Stòrlann, is a context for professional learning much appreciated by teachers across the career continuum. This was valued because it was designed solely for Gaelic and Gaelic-medium teachers,⁴⁴ with Gaelic teaching and GME being the focus of the conference.

Tha mi a' smaoineachadh gu bheil suidheachadh mar sin, far a bheil tidsearan Gàidhlig agus tidsearan tro mheadhan na Gàidhlig a' tighinn còmhla, is gu bheil na buidheann obrach is na h-òraidean stèidhte mar a tha cùisean ann am Foghlam na Gàidhlig; tha e a' toirt focus a' choireigin nas fheàrr is nas mionaideach na an ionnsachadh proifeasanta tha sinn a' faighinn dìreach as a chumantas. Gu math tric 's e na cothroman còmhraidh na rudan as prìseil, beachdan fhaighinn is faicinn de na dùbhlain is dè na freagairtean a th'aig daoine eile is na smaointean aca cuideachd.

I think that such a situation, where Gaelic teachers and Gaelic-medium teachers come together, and where the workshops and lectures are all focused on Gaelic education – it gives a somewhat better and more precise focus to our professional learning than what we commonly experience. Often the most precious parts are the opportunities to discuss, and get the views and thoughts of others, and what their solutions are to the challenges (*of immersion*).
(Deputy head teacher)

The data showed that, although the opportunity of the national conference was valued by teachers at all stages, the teachers in management positions accessed this more often. The difficulty in getting supply teacher cover for class teachers was cited as a possible reason.

Teacher agency

What was surprising, given the strength of feeling and frustration expressed about the lack of understanding of professional colleagues, and the impact of this on the

⁴⁴ An t-Alltan is for secondary teachers of Gaelic and primary Gaelic-medium teachers.

professional learning and practice of Gaelic-medium teachers, was the apparent acceptance of this by many of the teachers. Only a small number considered that their own knowledge and understanding could empower them to suggest and justify alternative possibilities and practices.

Fiùs diofar thidsearan, tha diofar bheachdan ann cuideachd, feumaidh tu a bhith gu math làidir is dìreach a ràdh, 'chan eil mi ag iarraidh sin, chan eil e gu bhith a' tachairt' ach an rud tha mise a' dèanamh a-nis – sin as coireach gu bheil mi a' leughadh na poileasaidhean is eile; gu bheil rud agam a dh' fhaodainn a ràdh 'uill, seo mar is còir rud a bhith' agus feumaidh tu a bhith a' dèanamh rud beag strì.

Even different teachers, there are different views too (*on how to teach through immersion*), you must be very strong and just say, 'I do not want that, it is not going to happen, but the thing I now do - that is why I read the policies and other stuff; so that I can say 'well, this is how it should be' and you need to be a little rebellious. (Year 2-6 teacher)

This was in the context of a dual-stream school where the teacher was being asked to change practice in a way that s/he thought would be detrimental to children's language learning. In order to counter this, the teacher was drawing on knowledge from personal reading and Gaelic education policy advice, and suggesting that it was necessary to take a stand in these circumstances. All participants did not share this level of confidence and agency. A probationer teacher explained his/her reticence to be more assertive in proposing topics for school-based professional learning:

Mar is trice, chan eil mise a' smaointinn gu bheil sinn ro mhath air a bhith a' faighneachd airson rudan agus tha e doirbh nuair a tha thu nad probationer a' faighneachd o chionn chan eil obair agad airson a' bhliadhna as dèidh sin, chan eil thu airson a bhith nad – troublemaker, chan eil thu airson cus a ràdh ach chanain gum bu chòir dhaibh faighneachd dhuinne dè tha sinn ag iarraidh is dè tha gu feum o chionn 's e sinne a tha teagasg fad an là.

Mostly we are not good at asking for specific things and it is difficult as a probationer because you don't have work for the following year and you don't want to be a troublemaker. You don't want to say too much but I think that they should ask us what we need and want because we are the ones who are teaching all day. (Probationer teacher)

This probationer was in a supportive school environment, yet was inhibited by the hierarchical and power structures of the school.

An experienced teacher who spoke confidently and knowledgeably about her/his role as a primary language teacher did not transfer this professional self-confidence to contexts shared with the wider primary teacher cohort.

Na do thidsear Gaidhlig, tha thu an comhnaidh a faireachdainn nas isle na tidsearan eile. Nuair a tha thu aig coinneamhean chaneil sinn cho math air bruidhinn a mach, chaneil but misneach againn; chaneil mise cho clever ri daoine eile..... Tha sinn a' ceisneachadh a h-uile dad a tha sinn a deanamh.

As a Gaelic teacher, you always feel inferior to other teachers. When you are at meetings, we are not so good at speaking out because we have no confidence. I am not as clever as other people.....we question everything we do. (Year 7+ teacher)

This feeling of inferiority seemed to be associated with the lower status of Gaelic in the wider societal context, underlined by the lack of understanding within the school of the aims and practice of immersion education. This inhibited full participation in wider professional discourse for this teacher. The findings related to teacher agency leave many questions unanswered, not least whether more knowledge and understanding of bilingual and immersion education, through immersion-related professional learning, would play a role in increasing GME teacher confidence and agency.

Teachers' CPD records

Finally, the findings from the teachers' CPD records were not examined alongside the transcripts as an additional source of information, as only seven of the twenty-five requested were obtained. It was noteworthy that of the seven records obtained from teachers, from three different LAs, only one teacher evidenced having attended an immersion-related professional learning session at local authority or school level in the previous school year. One other teacher was engaging with learning through an online course in Gaelic grammar, and one evidenced personal reading related to immersion education. The majority of courses attended were policy or process based. Although not possible in this study, it would be interesting to further examine the reasons for the absence of records from the remaining eighteen.

Conclusion

The findings from the study offer an insight into two broad areas of professional learning in which Gaelic-medium teachers would value further professional learning. The teachers highlighted their need of learning opportunities to further develop their personal language proficiency. They identified the productive skills, their understanding of Gaelic grammar, and language enrichment as areas for development. They felt that further development of these skills would enhance their practice as language educators, as role models of the language in the class, and also in home-school communications. Importantly, the participants viewed that continued development of their personal language skills would impact on their classroom practice and on learner language proficiency.

Next the teachers perceived that better understanding of bilingual and immersion education, and of children's second language development, could further inform their classroom practice. They identified issues relating to teaching language and the curriculum, particularly identifying their need to extend their learning in *how* to teach language more systematically in the curriculum. This was associated with their desire to know more about language specific pedagogies, including what the literature terms 'focus on form' (Chapter 2, p49). The literature also notes the link between teachers' knowledge of language and the ability to integrate the teaching of language in curriculum teaching (Chapter 2, p39). This will be discussed in chapter five.

The teachers also identified elements that facilitated and impeded their language-related professional learning within their respective contexts. The findings demonstrated the complexity of contexts as a factor in the participants' professional learning. Freestanding schools, and larger schools,⁴⁵ were viewed by teachers across the career continuum, as beneficial for providing specialist opportunities for professional learning support and exchange of ideas. The teachers perceived dual-

⁴⁵ 'Larger' being equated with larger dual-stream schools that had a critical mass of Gaelic-medium teachers to offer peer support.

stream schools in general to constrain language-related professional learning opportunities, although the data did not show this uniformly. Lack of knowledge and understanding of colleagues, and specifically of head teachers and key LA staff, of the aims and practice of GME was viewed as a factor that limited language-related professional learning opportunities. However, while it was not possible to examine all the factors associated with dual-stream schools, the ratio of English-medium to Gaelic-medium teachers in the school, the strength or absence of language in the locality, and the geographic location of the school were further possible influencing factors.

In the chapter that follows, I return to the research questions and discuss the implications of the themes identified through the analysis in relation to the literature.

Chapter 5: Discussion: Gaelic-medium teachers' perceptions of their learning needs

Introduction

This study had the aim of exploring Gaelic-medium teachers' own views of their language-related professional learning needs. This did not seek to underestimate what the teachers already thought, knew and could do, but rather to identify areas in which the teachers sought to extend their knowledge and expertise. The teachers identified their need of specialist learning for immersion teaching, already recognized in the international literature (Hickey et. al. 2013; Jones and Wilson 2012; Johnstone 2002; Landgraf 2013; Lyster and Tedick 2014; O'Hanlon et. al. 2012; Stephen et.al. 2012).

The study brought a number of interesting issues to the fore. Language-related issues were central to participants' identified learning needs when considering both teaching Gaelic as a language and teaching the curriculum. This centrality of language as a learning priority is unlikely to be replicated by mainstream teachers (Sangster 2013). One interesting finding was that almost all the participant teachers prioritized an aspiration to develop their personal Gaelic language proficiency *prior* to stating other professional learning needs. From the participant perspective, language proficiency was perceived as having a command of the spoken and written language necessary for Gaelic-medium schooling, including knowledge *about* the Gaelic language, evidenced through accuracy, idiom and an extensive vocabulary (Chapter 4, p130). The teachers believed this to be vital to their ability to teach and explain language features to pupils, impacting pupil language accuracy, and enrich their teaching of curriculum through Gaelic. Researchers in the similarly endangered language contexts of Māori-medium education and Irish-medium education identified the development of the teachers' language proficiency, through initial teacher education (ITE) and in-service programmes, as a professional learning need for serious and urgent consideration (May and Hill 2005; O'Duibhir 2006; O'Duibhir et.al 2016).

Another key finding related to the teachers' keen desire to further enhance their knowledge and understanding of the teaching and learning of Gaelic as a second language (L2) through the immersion approach, and of how to include more teaching of language in lessons. This request indicated an openness to develop the current practice of Gaelic being learned solely *through* the curriculum to Gaelic being taught intentionally *in* the curriculum. This integration of language *and* curriculum content teaching is a distinctive feature of immersion education (Genesee 2013) although adapted to suit respective immersion contexts.

The teachers' focus on teaching Gaelic as an L2 reflected the demographic of their classes where most pupils were learning Gaelic as an L2. Interestingly, a number of the participants viewed L1 learners as useful additional role models of the language inferring that they did not require specific language teaching. This teacher perspective has been noted in Ireland also and would point to the need for professional learning about the teaching of the immersion language to mixed language groups (Chapter 2, p22; Hickey 2001, 2007).

Additionally, it was noted that teachers identified Gaelic language-related learning needs across all career stages, with expertise in this area not being confined to any career stage or to teachers who were native-speakers or learners of the language (Chapter 4, pp118-129). Contextual factors, such as the knowledge and understanding of immersion education by key personnel and the location and composition of the school community, were perceived to facilitate or impede specialist learning opportunities (Chapter 4, p173).

Many of the specific areas of further development that the teachers raised were in accord with areas that have been identified through research in other immersion contexts (Walker and Tedick 2000; Lyster and Ballinger 2011), indicating that some lessons may be learned from these. Although each immersion setting is unique, many of the guiding principles, aims and main curricular and pedagogical practices of immersion programmes overlap. It would therefore seem judicious, through

professional learning opportunities, to be informed of potentially enlightened findings from other immersion contexts.

These broad teacher-identified findings related to professional learning will be discussed in relation to the research questions. Firstly, the main research question which explored what Gaelic-medium teachers perceived to be their professional learning needs in relation to teaching Gaelic as a language, and the curriculum through the medium of Gaelic, will be discussed. Next, whether the perceived learning needs of Gaelic-medium primary teachers differed by career stage or language background will be considered. Finally, the teachers' views about the influence of context on their professional learning will be addressed.

Research Question 1: What do Gaelic-medium primary teachers perceive to be their professional learning needs in relation to teaching Gaelic as a language and the curriculum through the medium of Gaelic?

Two main themes emerged in response to question one. Firstly, the teachers' need of professional learning to develop their own Gaelic language proficiency, and secondly the further knowledge and understanding they required to teach the language more effectively while simultaneously attending to curriculum learning through the immersion approach. The latter included an interest to extend their knowledge of bilingual and immersion education internationally. These will be discussed below.

A number of topics were identified specifically for professional learning (e.g. additional support for learning needs and assessment) that were included in the last chapter. These are not discussed individually in this chapter, but it is acknowledged that it would be important to include them, in a programme of specialist professional learning, within discussion of bilingual and immersion education.

Teacher learning needs: personal language development

The emphasis and prioritization of the participant group on learning opportunities to progress their *personal* Gaelic language proficiency is a key finding of the study.

This was identified explicitly, before language-related needs for classroom practice, by almost all of the teachers, native-speaker and learner, regardless of their stage of career (Chapter 4, p117). A high level of language proficiency and fluency is important and expected of immersion teachers, and known to be central to the success of immersion programmes (Baker 2011; Palmer et.al.2014). This therefore was a legitimate priority for the participants. Participants linked this closely to their everyday practice and impact on learners: modelling the language, teaching Gaelic and the curriculum through Gaelic, and progressing pupil language proficiency and cognitive development. The importance of teacher fluency has previously been identified in GME (Johnstone 2002), but the teachers' own perspective of specific areas of language proficiency for their professional learning has not been empirically identified before in the Gaelic-medium context. They identified conversational and academic language, and grammatical skills, specifically.

The question of teacher Gaelic language proficiency, and consequently professional learning opportunities for its continued development, is clearly important, as many studies have noted that the extent to which immersion teaching is language-rich and discourse-rich will impact on pupil language and cognitive development (Cummins 2000a; Genesee 2013; Hickey and de Mejia 2014; Lyster 2007; Met 2009). Considerable debate continues among applied linguists about the concept of language proficiency but Cummins' (2008a) argues that the BICS and CALP conceptual framework (Chapter 2, p70) is designed specifically for the education context. It has been influential for policy and practice in relation to teaching and assessment, and valued by teachers in planning pupil language support (Baker 2011). Although the two-dimensional nature of the framework may not fit with the language development needs of Gaelic-medium teachers, the extended notion of CALP has potential in planning professional learning to meet their academic language needs. Interestingly, while unfamiliar with Cummins' framework, participants described their language-learning needs in similar terms, with teachers who were learners focusing on professional needs linked to conversational language, and academic language development needs being identified mostly by early phase teachers (Chapter 4, pp121, 123).

Conversational language proficiency

It is now well established in the literature that languages operate through one central operating system in the brain, transferring conceptual knowledge and language skills across languages (Chapter 2, pp67, 68). Knowledge and understanding of this literature through professional learning would be important for Gaelic-medium teachers, and especially for teachers who are learners, identifying conversational language needs, where there is a high, and possibly unrealistic, expectation of native-like fluency in the immersion language (Chapter 4, p120). That bilinguals should demonstrate equal and strong competence in both languages is known to be rare (Baker 2011:16; Chapter 2, p23). Research has also shown that it is usual for second language learners to speak somewhat differently to native-speakers (Davies 2003:4; Lyster and Tedick 2014) and suggests that a more helpful and attainable aspiration for learners would be to aim for a high proficiency in linguistic and communicative competence (Davies 2003:8). Knowledge of this more attainable goal in language learning would impact on the teachers' self-confidence and importantly on their classroom practice.

In the L2 literature the focus of teacher language proficiency, including fluency, has also been related to the role of the teachers as models of the language and on the impact of teachers' fluency on learners' language acquisition and attainment (Hinton 2011; Lyster 2007). This would include the importance of exhibiting the high quality spoken and written Gaelic that is deemed essential if cognitively stimulating teaching is to be modelled to the pupils (Lindholm-Leary 2001). In wider literacy-based studies, the quality of teacher talk has been shown to be a significant factor in pupil learning, and especially so in pupil spoken language development (Alexander 2012; Boyd and Markarian 2011). It can therefore be suggested that learning opportunities should be prioritized for Gaelic-medium teachers who self-categorize their need of conversational/social language, as the literature shows that the limitations of the resulting classroom discourse has the potential to impact on pupil language and academic development. Additionally, if BICS and CALP conceptual distinction is accepted, then teachers who have learning needs associated with BICS may also

need learning opportunities with CALP which takes longer to acquire (Chapter 2, p70).

Academic language proficiency

Professional learning in academic language proficiency was identified as a need by almost all the early phase teachers in this study and by one experienced teacher (Chapter 4, pp123, 124). In common with Spanish immersion teachers in the US, the academic language features that participants identified as a learning need were nouns serving as key curricular concepts (Fortune et.al 2009). This is of interest as the literature would extend academic language proficiency to include not only nouns related to key concepts, but also the highly decontextualized language, written and spoken, described in Cummins' conceptual framework needed to teach the curriculum (Chapter 2, p71), an extensive vocabulary, and different genres of academic writing (e.g. narrative and expository) (Fortune and Tedick 2009). That the early phase Gaelic-medium teachers only described nouns might reflect their career-stage and/or stage of academic language development as academic language development takes significantly longer to acquire than conversational language. These early phase teachers were all either at the end of their probation year or at the very beginning of year 2. It seems reasonable to suggest that professional learning offering opportunities to develop teacher academic language proficiency, as described in the literature, is vital to teachers' ability to teach the subject specific vocabulary, different academic genres and facilitate the decontextualized discussion essential for progressing pupil language and academic learning.

The high level of teacher proficiency and fluency expected in the literature, and to which participants sought to aspire includes language accuracy and appropriateness in reading, writing, speaking, listening, comprehension, and an extensive vocabulary. The data showed that almost all participants requested further learning opportunities to hone their knowledge about the language so that they are better equipped to explain language features to pupils, thereby progressing pupil language proficiency.

Grammatical proficiency

The immersion teachers' grasp of the grammatical structures of the TL has been a recent area of research interest internationally, and studies have shown the need for a greater focus on form in immersion settings to enable immersion pupils to develop even higher levels of language proficiency (Lyster 2007; Swain 1988). The teacher's own knowledge and understanding of the structure of the language and idiom will influence her/his ability to explain specific language features to the pupils (Sangster 2013), a factor identified by some participants in the study (Chapter 4, p132). We know from recent Canadian studies that the linguistic knowledge required for teachers to plan form-focused tasks that are well-integrated across content areas was a challenge for the immersion teachers where the key issue was knowing which language feature to focus on (Cammarata and Tedick 2012; Lyster 2015). Professional learning to equip immersion teachers with a sound knowledge of the grammatical structures of the TL is now viewed as essential. This is necessary not only for the personal proficiency and confidence of the teacher, but also for progressing and enhancing the language proficiency and cognitive development of pupils (O'Ceallagh 2016).

The need for professional learning opportunities across the career continuum to maintain or develop the teachers' language proficiency has been further recognised as essential in the international literature (Bernhardt and Schrier 1992; Walker and Tedick 2000). This has been identified as particularly crucial in endangered minority languages, similar to the Gaelic context, where many of the teachers are L2 learners of the language (Hinton 2011; May and Hill 2005). The teachers' request for more professional learning to enhance their language proficiency was closely linked to their desire for a greater understanding of bilingual and immersion education and how to include more teaching of language in their classroom practice (Chapter 4, p154).

Teacher learning needs: language teaching in curriculum lessons

The findings presented in the previous chapter reveal that the teachers identified the need for learning opportunities to extend their conceptual understanding of the

immersion approach, the teaching of the immersion language through a greater focus on form and through a wider range of language-related pedagogical practices (Chapter 4, p160).

Immersion approach in bilingual education

The teachers, at all career stages, expressed a strong desire for professional learning that would be designed to enhance their knowledge and understanding of bilingual and immersion education, drawing on Scottish and international immersion research (Appendix 15; Chapter 4, p136). They expressed uncertainty about what they could expect in terms of pupil language development at different stages due to lack of knowledge of children's L2 development (Chapter 4, p146). These issues, however, are not peculiar to the teachers in this study and are identified across a number of other studies (Baker 2011; Johnstone 2002; Hickey and de Mejia 2014; Lyster and Ballinger 2011; Lyster and Tedick 2014). Johnstone (2002), in his review of the international research into immersion in a second or additional language at school, specifically identified the need for teachers to have more focused learning about immersion education and about children's L1 and L2 development.

Other immersion contexts have recognized the vital importance of professional learning at ITE level and through ongoing CPD in further developing immersion teachers' understandings (Fortune, Tedick and Walker 2009; Hickey and de Mejia 2014; Lyster and Ballinger 2011). The need for the teachers to have knowledge about the underlying principles of bilingual and immersion education alongside a high level of fluency in the immersion language could be considered as crucial, if we follow current theory in immersion, which proposes that a richly interactive environment is provided, by highly proficient teachers, using language pedagogies and with explicit teaching of language forms (Fortune, Tedick and Walker 2009; Lyster 2015). In terms of impact on practice and most importantly, actual impact on learners and learning, a number of studies identify this as being a key factor (Baker 2011; Ballinger 2013; Lyster 2015). The concerns of the teachers in this study, therefore, appear to be well founded. This knowledge of the underlying principles of bilingual and immersion education would include an understanding of the goals of

Gaelic-medium education and the outcomes of different models of immersion education within a minority language context (Johnstone 2002; Jones and Wilson 2012).

Language and the curriculum

The teachers' request for professional learning to enhance their knowledge and understanding of how to include the teaching of the formal aspects of language into their practice, and which language aspects to focus on, was a significant theme in the study (Chapter 4, p153). They identified this as the teaching of grammar: the forms and structures of the language, including vocabulary knowledge. This was foregrounded through teachers' requests for the enhancement of their own grammatical understanding, and of ways to progress pupil language proficiency (Chapter 4, p128). On the one hand this seems a surprising request, as the integration of language teaching in curricular teaching, which includes the teaching of language features as they arise incidentally, has been a distinctive feature of immersion education with many participant teachers claiming that they 'teach language all the time' (Chapter 4, p138). This approach provides the cognitive basis for language learning and motivational basis for purposeful communication. On the other hand, the teachers' experience seems to be consistent with Lyster's (2007) assertion that the 'incidental' focus on language in immersion education is too brief to embed less common or irregular language features (Chapter 2, p52), necessitating a more intentional focus on form within language teaching.

The literature review indicated that the integration of language and content, and the kind of teaching that has to occur to facilitate this, is a key focus for 21st century language education. This is seen to be especially important where the second language is used as the medium for teaching (e.g. Gaelic in Gaelic-medium education) (Fortune, Tedick and Walker 2008). The participants' emphasis on professional learning to understand how to teach grammar and progress pupil language proficiency, enriching pupil language and improving pupil language accuracy, points towards a pressing need for professional learning on this key aspect of immersion education. Their emphasis on this aspect of their practice reflects

acknowledged issues in the wider immersion literature (O’Ceallagh 2016; Lyster and Tedick 2014; Walker and Tedick 2000). Yet, while research has identified the critical connection between language and content and the learner’s language and academic development (Cammarata and Tedick 2012; Met 2009) the process of *how* this can be enacted in the immersion classroom is acknowledged to present challenges and continues to be further explored.

If immersion teachers are to extend their knowledge of how to balance the teaching of language and content and include more language features in their practice, existing research would propose that two important changes would be required: a change in teachers’ belief system about immersion, and more professional learning support for immersion teachers at ITE level, and through CPD, in how to achieve a balance between curriculum content and language teaching in the classroom (Walker and Tedick 2000).

Second language acquisition beliefs

The ‘two for one’ belief that holds to the view that the immersion language (e.g. Gaelic) is acquired through extensive exposure in a meaningful context (e.g. the curriculum) is underscored in Gaelic policy documents and in many Gaelic-medium school language policies (Chapter 2, p65). However, this belief was at variance with participants’ classroom experience where they identified learner issues with language accuracy (Chapter 4, p152), and with an extensive body of research in North America (Chapter 2, p50). Indeed, it also appears to be somewhat at variance with Gaelic policy advice in relation to the teaching of grammar in immersion schooling (Chapter 2, p34). We now know that the immersion language is not learned by osmosis, and that the inaccuracies described by participants in this research study have been similarly and consistently documented in international studies for a number of decades (Chapter 2, p41). In programmes where revitalisation of the immersion language is an aim, it is particularly important that current knowledge and understanding of language acquisition and pedagogical practices are shared with practitioners. Therefore, the study data and literature would indicate a need for professional learning that includes the theoretical basis of language acquisition prior

to or alongside knowledge of immersion-based empirical research related to pedagogies and practice, to challenge and inform outdated views and address the teaching of language and content. Only then will pupil language learning be optimised (Hickey et.al. 2013; Lyster 2007; May and Hill 2005).

Focus on form

The call for a greater focus on teaching language features which participants identified as a professional learning need, not only to improve learner language accuracy but also to enable learners to achieve the higher written and oral proficiency required for academic success, is now almost unanimous in the literature (Lyster and Tedick 2014). North American studies have shown that learner language proficiency and academic achievement in both languages could be impacted positively through a greater systematic focus on language teaching in the curriculum (Genesee 2013; Lyster and Tedick 2014; Met 2009). It should be emphasized that these studies are advocating a focus on language *within* curriculum content lessons, and not a return to the decontextualized teaching of grammar common until the mid-twentieth century where the emphasis was on understanding the language system rather than learning how to use the language for communicative purposes (Crighton 2011). This would be welcome to participants who found time to balance teaching language and curriculum a challenge (Chapter 4, p157). Research evidence suggests that effective immersion pedagogy needs to include both form-orientated and meaning-orientated approaches, with a greater emphasis on more intentional teaching of language and error correction to promote greater accuracy in the use of the target language (Chapter 2, p53; Lyster 2007; Lyster and Ranta 1997; O’Duibhir 2009, 2016). Indeed, the ability to integrate form-orientated instruction with content-based instruction is now perceived to be a critical element of immersion teachers’ knowledge base (O’Ceallagh 2016). As revitalization of the language is an important aim of Gaelic-medium education, it would seem to be vitally important that opportunities for pupils to acquire more accurate and lexically appropriate forms of the language, through the systematic and planned teaching of language forms in curricular lessons, are considered.

Although previous international research has identified the need for more professional learning opportunities for immersion teachers in relation to the inclusion of systematic teaching of the target language in the curriculum (Ballinger 2013; Lyster 2015; Walker and Tedick 2000) this has not previously been identified, from the teachers' perspective, within the Gaelic-medium context. This study provides such evidence. The literature, together with the study findings (Chapter 4, p154), would question whether the balance of teaching language *in* the curriculum, as well as *through* the curriculum, needs to be reconsidered in Gaelic-medium education and whether professional learning opportunities in this area need to be prioritized. Participants perceived that current CPD available to Gaelic-medium teachers does not support them to know how to address this issue. Knowledge of pedagogical practices that support a focus on form in order to strengthen pupil language proficiency would be a necessary part of planned professional learning meeting teacher needs (Cummins 2007; Lyster 2007; O'Duibhir et.al.2016).

Pedagogy, theory and professional learning

Study participants were keen to extend their pedagogical repertoire (Chapter 4, p160), especially where there was evidence of pupil language proficiency gain. They described a range of language-related pedagogical practices, yet were uncertain of which pedagogies were supportive of language acquisition, evidencing an important gap in their learning. Therefore it would be appropriate and necessary to include discussion of current classroom-based research examining bilingual pedagogies, as well as monolingual pedagogies, in planning Gaelic-medium teacher learning.

Central to current discussions on language pedagogies is the debate surrounding the use of L1 in the L2 classroom (Chapter 2, pp74, 75). The literature would suggest that teachers' beliefs about the use of the L1 (i.e. English for most Gaelic-medium pupils) should be reconsidered (Cummins 2014; Lewis, Jones and Baker 2012). Recent studies, not only in the Canadian context⁴⁶ but also in the language minority context of Wales, suggest that L2 acquisition in immersion may be improved by allowing some strategic use of pupils' L1 (Baker 2011; Cammarata and Tedick 2012;

⁴⁶ French and English are two high status languages in Canada.

Cummins 2014). It is argued that pedagogical strategies that use both languages to make meaning and maximize learning have cognitive benefits and linguistic benefits for both school languages (Baker 2011; Cook 2001; Cummins 2000). This concept is, however, counter-intuitive to Gaelic-medium teachers because of the emphasis on speaking Gaelic exclusively in the classroom, as found in a recent small-scale study exploring Gaelic-medium teachers' perspectives on the potential of translanguaging as a pedagogical strategy (McPake et.al. 2017:40). This accepted norm makes it difficult for the Gaelic-medium teachers to think about the strategic incorporation of English into lessons, which was further illustrated in this present study by participants who described their use of English in curriculum lessons covertly. This use of L1 was justified through lack of Gaelic resources (Chapter 4, p163) because participants were unaware of research or pupil benefits of the planned, strategic use of the L1.

The benefits of some use of the L1 in the L2 classroom is widely recognized, and it is therefore important that immersion teachers have knowledge and understanding of the implications of this for pedagogies and practice. *How much* the L1 should be used, and at what *stage* of language learning bilingual pedagogies should be introduced continues to be debated, particularly in language minority contexts (Chapter 2, pp75, 76). It is important to note that proponents of the judicious use of L1 to promote proficiency in both languages suggest that opening up the opportunity to use bilingual pedagogies does not in any way require the abandoning of the rationale and justification for immersion education (Cammarata and Tedick 2012; Cummins 2014). Safe or protected spaces for low status and/or endangered languages, to ensure the pupils have maximum exposure to the language, progress their proficiency and academic learning, continues to be important (Garcia 2009; Genesee 2013). Nevertheless, we see from the data, and from research, that the L1 is already used in some immersion classrooms (Chapter 4, p164), and professional learning would equip teachers to make informed decisions about the planned, intentional use of L1 in the classroom, while ensuring that the principles of immersion are not compromised.

The literature review also showed that, while research into classroom pedagogies and practices is a developing area, a number of strategies and frameworks have been researched and proposed to support immersion teaching (Chapter 2, pp54-64). At the heart of these is the concept of strengthening pupil language proficiency in both languages. If current theory and research relating to the interdependence of languages and language input and output is accepted, then Gaelic-medium teachers' pedagogical repertoire needs to be extended to include bilingual strategies such as cross-linguistic transfer and translanguaging, alongside corrective feedback and the strategies explicitly requested by participants. These additional pedagogical approaches, including a greater focus on form, and pedagogies designed to offer more opportunities for language output, collaboration and consolidation (e.g. corrective feedback, cooperative learning, thematic work), will offer additional ways of including language teaching in classroom practice. Importantly, they will have the added impact for learners of providing opportunity for improving learners' productive skills, and offer teachers' professional learning connected to practice (Darling Hammond et.al. 2007).

Meeting the teachers' request for professional learning to support them in teaching more of the immersion language will require a multipronged approach. This will necessitate broadening knowledge and understanding of immersion education, changes in conceptual thinking, consolidating teacher-identified pedagogical strategies and introducing new bilingual pedagogical practices if pupils' language productive skills are to be impacted positively.

Research question 2: Do the perceived learning needs of Gaelic-medium primary teachers differ by career stage or language background?

It is important to reiterate that this question was not the main focus of the study, yet these two factors were considered to offer relevant supplementary information to the main study question. I have been unable to source studies in the immersion literature

that examined whether career stage or language background⁴⁷ influenced professional learning needs, internationally or within the Welsh, Irish or Scottish Gaelic contexts. The study findings, therefore, offer a contribution to this aspect of immersion teacher professional learning. The following discussion integrates career stage and language background, except where one or other feature has been shown to be distinct.

For the most part language-related professional learning needs did not vary across career stages or by language background. Almost all the language-related learning needs identified by teachers across career stages, including teachers who were native-speakers and learners, were of common interest (Appendix 13; Chapter 4, p117). This would suggest that, in respect of language-related needs, the notion of expertise progression associated with career stages proposed in some research (Chapter 2, p42) is not mirrored in the study participants. An exception to this was the area of specialist terminology required for curriculum teaching that was most strongly identified as a need by probationer and early career teaching, common both to teachers who were native-speakers and learners of the language (Chapter 4, pp123, 124). Only one of the experienced participant group indicated a professional learning need in this area, suggesting that the experienced teacher group had developed this vocabulary and proficiency expertise over time.

The literature review revealed that studies of teacher learning in relation to career stage largely focus on frameworks that map the process from novice to expert without consideration of teachers' life histories. However, research examining the interface between the personal and professional aspects of teachers' lives, and teacher attitudes to change across career stage and age, offer the immersion context more helpful insights (Hargreaves 2005; Sammons et.al. 2007). These factors are particularly important in the Scottish immersion context, particularly in relation to language proficiency where teachers enter Gaelic-medium teaching with wide-ranging personal, educational and linguistic experiences (Appendix 13). Research

⁴⁷ Language background included whether teachers were self-categorized learners of Gaelic or native-speakers, along with their educational experiences of the language (Appendix13).

would suggest that taking account of these factors on teacher learning is important because of the potential impact on pupil learning and teacher effectiveness (Sammons et.al. 2007). The data showed that participants viewed personal and professional factors to be important influences on their professional learning.

The literature further suggests that differentiated CPD for teachers at different career stages could influence the sustaining of commitment across a career positively (Day 1999; Humes 2001; Sammons et.al. 2007). Differentiated CPD already occurs to a limited extent in the Scottish context through structured professional learning at the probation and leadership/management stages with similar, if restricted, opportunity offered at these stages in immersion education⁴⁸ (Education Scotland 2016). Because teachers who are native-speakers and learners enter the profession with varied linguistic proficiency and knowledge of the Gaelic language, differentiated professional learning opportunities to strengthen language skills would seem to be necessary in maintaining and developing the high level of language fluency deemed essential for the success of immersion education (Chapter 2, p38). The findings would suggest that differentiated CPD for Gaelic-medium teachers would be best defined by language-related needs rather than career-stage. This would offer teachers opportunity to select professional learning suited to their individual language-related needs.

Many researchers accept the notion of teachers developing through a series of career stages or phases, each associated with specific needs and concerns (Wilson et.al 2006). These needs are not well defined in research. However, it was interesting that this study found that only the experienced teacher group (7+ years and management) identified the need for learning about additional ways of teaching immersion language features intentionally, recognizing a need for stronger pupil language proficiency in order to access curriculum content. This included finding a balance between language teaching, which many teachers perceived to be a feature of their teaching already, and curricular content teaching. It also seemed to be consistent with findings from Cammarata and Tedick's 2012 study where they described this

⁴⁸ The BnG probationer day and the Gaelic leadership award (Social Enterprise and Education Scotland).

increased desire to figure out how and what language features to include in content lessons, by more experienced immersion teachers, as an ‘awakening’ (Chapter 2, p45).

The findings in relation to language background are limited by the self-categorization of teachers as native-speakers or learners of Gaelic (Chapter 3, p96), that did not take account of factors such as the diverse personal, educational and CPD language experiences of the teachers (Appendix 13; Figure 4.4, p137). It should be noted that all teachers conducted the interviews entirely in Gaelic, with one exception who moved between the two languages. Nonetheless, it is interesting that it was experienced teachers who were learners of the immersion language who requested professional learning in conversational language, which is conceptualized as the surface element in educational language proficiency (Chapter 2, p67). This raised the question of whether there was a degree of self-deprecation in relation to spoken language on the part of these participants, or whether they were demonstrating an increased awareness of the high degree of fluency necessary for immersion teaching. Yet, there was clear evidence that a number of participants were requesting professional learning to extend their conversational skills. The impact of teacher fluency, including their command of both conversational and academic language, on learners in terms of pupil language acquisition, access to the curriculum and achievement has been identified as crucial in the international literature (Cummins 2000; Lyster 2007; Met 2009).

This question has identified a number of interesting issues relating to career stage and language background in the Gaelic-medium context but leaves many questions unanswered, particularly in relation to language background which would merit further exploration to further inform ITE and professional learning programme content and design.

Research question 3: What contextual factors facilitate or impede Gaelic-medium teachers' professional learning?

The key factors impinging on Gaelic-medium teachers professional learning, to facilitate or impede learning, were situated factors associated with people and location. The knowledge and understanding of colleagues in key leadership positions (e.g. school or local authority management) and staff collegiality were important, as was the school's physical location.

People and professional learning

Studies have found supportive school cultures to be of vital importance to teachers' sense of effectiveness and the strongest positive influence on career development (Sammons et. al. 2007; Wilson et.al 2006). The knowledge and understanding of school staff, and in particular management staff, of the aims and practice of GME were perceived by participants to influence school culture (Chapter 4, p170). This impacted on formal and informal immersion-related professional learning, acting to facilitate or impede learning opportunities, and was noted in an HMIE Report (2011) to be an impeding factor in some cases in GME schools.

The scant research available in immersion contexts would emphasize the need for leaders of immersion or bilingual schools to be knowledgeable about the goals of immersion education, the theories of first and second language acquisition and immersion pedagogies (Chapter 2, pp19, 20). Gaelic-medium policy and research stress the key role that head teachers have in shaping school language policy and designing school-level teacher learning, thereby having great power to shape the form and focus of teacher learning and the education of emerging bilinguals (GTCS 2012c; Menken and Solorza 2014). Wider Scottish policy would further expect head teachers and school management teams to engage with knowledge and research in teaching and learning so that they can offer pedagogical leadership, meeting the professional needs of immersion teachers with the concurrent aim of improving outcomes for pupils (GTCS 2012c). This level of specialist knowledge and pedagogical leadership was unavailable from many head teachers in dual-stream

schools (Chapter 4, p168), thereby limiting Gaelic-medium teachers' formal school-based immersion-related learning opportunities. There was also evidence in this study that Gaelic-medium teachers' access to external immersion-related external opportunities were sometimes impeded. Participants' identification of the lack of understanding and knowledge of school leaders and EME colleagues as an impeding factor in school-based specialist professional learning would therefore appear to be legitimate. The lack of knowledge and understanding was further mirrored in key personnel designing and delivering probationer professional learning programmes at local authority level (Chapter 4, p173). This is suggestive of the necessity of specialist professional learning for all key staff with responsibility for Gaelic-medium education in schools and the local authorities.

The importance of the role of school leaders (head teachers and management) in creating an inclusive, respectful and informed school culture cannot be overestimated. The knowledge and understanding of school leaders is key to this and will contribute positively to leading learning for Gaelic-medium teachers, thereby also contributing to pupil learning.

Location and professional learning

The complexity of location became increasingly evident during the data collection and analysis stages. Three factors in relation to location were perceived by participants to impact on professional learning:

- whether the Gaelic-medium school was freestanding or dual-stream
- the size of the Gaelic-medium school or stream
- the geographic location of the Gaelic-medium school

The findings of the study showed how the contrasting school cultures of freestanding Gaelic schools and dual-stream schools impacted on immersion-related teacher learning opportunities. Freestanding Gaelic schools were described as offering access to more bespoke school-based planned learning opportunities, including collaborative working groups, and daily informal language and pedagogical learning opportunities (Chapter 4, p166). In contrast, participants in dual-stream schools

reported dissonance between the specialist learning needed for teaching in Gaelic-medium education and the learning needs of the English-medium teachers, with the learning needs of the English-medium stream taking precedence (Chapter 4, p169). As teachers' language, classroom practices and knowledge and understanding continue to develop over time, it seems likely that not only teacher learning is facilitated or impeded by this aspect of context, but also that learner experiences may also be impacted (O'Duibhir et.al 2016).

I have been unable to source research comparing immersion-related learning opportunities in freestanding schools and dual-stream schools. Current thinking on CPD indicates that teacher learning is most effective when it is site-based and when it fits in with existing school culture, is peer-led and collaborative (Darling Hammond et.al 2009; Menter et. al 2010a). As the school culture of freestanding schools is focused primarily on the delivery of high quality Gaelic-medium education, the school-based professional learning programmes are therefore likely to have the immersion-related learning needs of teachers as a key focus, alongside local and national priorities. There was some evidence from this study that school culture of dual-stream schools tended to the dominant⁴⁹ culture, language and professional learning needs of the English-medium teachers (Chapter 4, pp168-9), even in some schools where the English-medium stream was a numerical minority. To counter this head teachers would need to intentionally design school-based CPD that achieves a blend of learning opportunities to meet the needs of the Gaelic-medium and English-medium teachers in the school.

Although it was not possible in this study to explore the influence of societal power relations which influence the ways in which educators define their roles and the structures of schooling, Cummins (2000)⁵⁰ suggests that the concepts of power and status are key to understanding the contexts and processes of language minority learning. He suggests that power relationships within bilingual and immersion

⁴⁹ Dominant culture and language here refer to the most powerful culture within a school, and the language with higher status.

⁵⁰ Cummins' (2000, 2009) theoretical framework relates to policy, politics, provision and practice with language minority students.

schools range from collaborative to coercive, a framework that could be examined in relation to teacher professional learning in dual-stream schools. Head teachers' knowledge about the aims and practice of immersion education, and additionally about the influence of language status on L1 and L2 acquisition, is essential if the professional learning needs of immersion teachers are to be equally attended to in dual-stream schools (Coffman 1992).

School size was another factor found to impact specialist professional learning opportunities, with the number of Gaelic-medium staff⁵¹ in a school being perceived to influence opportunities for informal and formal professional learning (Chapter 4, p167). The opportunity for collaborative learning within a school is known, from the literature review, to benefit teacher learning especially when connected to practice (Darling Hammond 2009; HMIE 2007). This was reported to occur more often in larger schools but not in smaller dual-stream schools,⁵² with school size being a factor in facilitating or impeding this professional learning opportunity. Informal learning opportunities, and the possibility of learning from an experienced mentor, which are also known to present valuable learning opportunities (Menter et.al. 2010), are also significantly reduced in smaller Gaelic-medium streams. The absence of mentor support in small rural schools is not a factor unique to the Gaelic-medium sector but, arguably, more critical because of the reduced support for Gaelic-medium teachers in most LAs, and their access to fewer resources.

School geographic location was found to be a further factor influencing teacher learning, as opportunities for collaboration within a school cluster,⁵³ for example with assessment moderation, were reduced or not possible depending on geographic location (Chapter 4, p150). This was found to impact not only on opportunities for teacher learning but also on the form of learning available where schools are geographically dispersed (Chapter 2, p21), whether in rural, island or urban settings.

⁵¹ The ratio of Gaelic-medium to English-medium staff in a school is based on pupil numbers in each stream.

⁵² Often there may only be one or two Gaelic-medium teachers.

⁵³ Primary school clusters are groups of 4-6 primary schools formed to combine resources relating to professional and policy issues, including professional learning opportunities. They are usually based on geographic proximity or associated with a common feeder secondary school.

The study highlighted the complexity of the interface between school size, composition and geographic location in relation to facilitating or impeding professional learning opportunities. Further research would be required to examine this in-depth.

National CPD

Finally, the importance of nationally organised specialist learning opportunities⁵⁴ and specialist accredited courses⁵⁵ that were highly valued by all participants, needs to be noted (Chapter 4, p175). The conferences were perceived to offer intensive professional learning solely for Gaelic-medium teachers, through Gaelic and connected to practice, with opportunity to speak and hear the language, for collaborative learning and networking: elements that are known to create a facilitative context for professional learning (Darling Hammond 2009). However, access to the conferences was through head teachers, with issues of power, priority and knowledge of immersion education being factors influencing whether access was facilitated or impeded (Chapter 4, p169). Participants who had completed the specialist STREAP accredited course found the high-quality sustained study of practice-related issues, and the integrated approach to theory and practice valuable for furthering their understanding of immersion education and pedagogies and influencing their classroom practice.

Conclusion

The discussion of literature and findings in this chapter serves to show the wide-ranging nature of the professional learning needs identified by the participant teacher group. However, two important interconnected themes emerged: the crucial importance of professional learning opportunities to maintain and develop the teachers' own language proficiency, including knowledge about the language, and their desire for more professional learning of how to teach the language in and through the curriculum, with the attendant conceptual and pedagogical knowledge required to do that effectively. Teachers did not question the need for specialist

⁵⁴ An t-Alltan and the Probationer Day Conferences.

⁵⁵ STREAP

language-related professional learning, and requested knowledge in these areas to enhance their classroom practice and improve pupil language proficiency, showing an awareness of the impact of teacher language on pupil language.

The importance of the crucial need for professional learning to maintain and/or develop teacher language proficiency, through professional learning opportunities, was identified not only by the prioritization attributed to it by the participants but also by the prominence given to it in the minority immersion literature. The latter underlined the vital importance of this in contexts where revitalization of the language was an aim, and also to pupil academic achievement. This raised questions of differentiated learning opportunities for all Gaelic-medium teachers, whether self-categorized as native-speakers or learners, on distinct aspects of language proficiency such as conversational/social and academic language, extended and enriched vocabulary, and grammar.

The literature indicates that the teacher-expressed need to learn more of *how* to teach Gaelic as a language and to add to their repertoire of language pedagogies requires not only more knowledge *about* the language, but also more current knowledge and understanding of L2 acquisition, and of cognitive development in bilingual and immersion education. Changes in the conceptual thinking of immersion teachers is required if their range of language pedagogies is to be extended. Key to this is the concept of both languages operating through a central processing system, and the concept of the interdependence of the L1 and L2. These present a challenge and opportunity for Gaelic-medium professional learning because of current beliefs in the Gaelic-medium sector about language acquisition and practice. This indicates a need for further research in the Gaelic-medium context, and of professional learning so that teachers can discuss how bilingual pedagogies, that have been shown to be effective in other immersion contexts, may be added to the teachers' repertoires without compromising the principles of total immersion.

The chapter also raised additional questions about the need for specialist professional learning for staff, in schools and local authorities, where Gaelic-medium education is

practiced so that they have a knowledge and understanding of the aims and practice of bilingual and immersion education. This is especially vital for head teachers and leaders of professional learning who have power to facilitate or impede Gaelic-medium teachers' professional learning opportunities. Finally, the complexity of the physical contexts for learning was identified indicating a need for consideration of this from national and local perspectives to ensure equality of access to high quality specialist learning for all teachers.

The next chapter will discuss further the implications of the study findings for professional learning and practice.

Chapter 6 Conclusion

Introduction

The underlying supposition of this study was that there are ways in which language-related professional learning for Gaelic-medium teachers can be improved and that the views of Gaelic-medium teachers are important in informing future professional learning initiatives at university, school, local authority (LA) and national levels. The study provides a detailed account of what form and focus of professional learning Gaelic-medium teachers viewed as important to their specialist area.

The thesis reports the findings of research whose main goal was aimed at answering the following question:

- What do Gaelic-medium primary teachers perceive to be their professional learning needs in relation to teaching Gaelic as a language and to teaching the curriculum through the medium of Gaelic?

Two further related questions were also addressed:

- Do the perceived learning needs of Gaelic-medium teachers differ by stage of career or language background?
- What contextual factors facilitate or impede Gaelic-medium teachers' professional learning?

This chapter aims to summarize and reflect on the process of the research, bring together the findings from the previous two chapters and consider the implications for policy, practice and research.

Research summary

In chapter one, I contextualized the professional learning of Gaelic-medium teachers within the wider Scottish policy and practice framework for teacher professional learning. This outlined the professional learning structure within which Gaelic-medium teachers' learning is situated, offering both opportunities and challenges. Current Scottish policy is supportive of teachers having access to high quality CPD for their specialist subject area at all stages of their career, thus providing a potentially propitious opportunity for the further development of immersion-related CPD for Gaelic-medium primary teachers. However, it was also noted that the

current availability of specialist professional learning opportunities for Gaelic-medium teachers is limited. Teachers in the study perceived lack of knowledge and understanding of immersion education of key staff in schools and LAs to be a factor in this, together with the predominant provision of Gaelic-medium education through dual-stream schools.

I suggested that the distinctiveness of the professional learning needs of teachers in the Gaelic-medium sector lies in the need for *additional* professional understandings in relation to teaching Gaelic as a language, and teaching the curriculum through Gaelic, not in denying the potential benefits of accessing professional learning opportunities available to primary teachers in general. This was borne out in the study findings as Gaelic-medium teachers identified additional professional learning needs essential for them as language and curricular educators of children learning and progressing Gaelic language either as their L1 or L2.

The literature review noted the paucity of studies examining the teachers' views of their professional learning in international immersion settings and specifically the absence of these in the Gaelic-medium setting. While many studies state what researchers recommend for teacher learning in immersion settings, this study examined Gaelic-medium teachers' own views in relation to their professional learning needs in their specialist area of teaching in and through Gaelic as a target language. The potential challenge and tension in meeting Gaelic-medium teacher professional learning needs while maintaining a balance between these, the needs of other teachers in the schools,⁵⁶ school management level needs and policy needs, is acknowledged.

The vital importance of more formal learning opportunities for immersion teachers is emphasized in both the Scottish and international literature (Hickey and de Mejía 2014; Stephen, et. al. 2012). The current main forms of professional learning are by 'trial and error' where teachers explore their own ways of working and learning or

⁵⁶ Especially in dual-stream schools where the needs of GME and EME teachers are addressed within one school-based professional learning programme.

where teachers are being supported by more experienced colleagues (Pollock 2006:232; Walker and Tedick 2000:15). While the value of learning from mentors and of learning in and through classroom practice is recognized, formal learning opportunities for immersion teachers are seen to be pivotal to the success of immersion programmes (Johnstone 2002; May and Hill 2005). These provide opportunity to further extend specialist knowledge in the complex area of teaching curriculum through a second language, and the teaching of academic literacy in both the L1 and L2 (Cammarata 2010).

Literature at the interface of teacher learning and classroom practice was examined, as this was relevant to the first research question and was also recognized to be an area of likely interest to the teachers. The review of literature revealed that the question of immersion teachers' language proficiency, and the need for professional learning opportunities to develop teacher linguistic knowledge and competence, is a crucial issue in many immersion contexts (May and Hill 2005:396; Walker and Tedick 2000:14). This is recognized as a particular issue in minority language contexts, similar to the Gaelic context, where there is a limited population of speakers of the language, where many teachers are themselves L2 learners and where there are acknowledged teacher recruitment problems. Further, the link between teacher linguistic knowledge and effective pedagogical language-focused strategies is noted (Ballinger 2013; Lyster 2015). This literature proved to be of interest as the participants prioritized personal language development as an area of need for professional learning.

Second language learning theories relevant to bilingual education and immersion in general, and to the Scottish Gaelic immersion context in particular, were then explored as most children in the Gaelic-medium sector are learning the language as an L2. Alongside this, theoretical perspectives that enable a better understanding of the development of bilingualism and bilingual education were examined to see how these might inform areas of professional learning identified by the participants. These understandings are especially pertinent to areas such as immersion pedagogies and the greater integration of language in curricular areas that were of specific interest to the teachers.

Recent theoretical concepts propose different ways of thinking about bilingualism and the bilingual brain. Key theories proposing that bilinguals have a single area of linguistic proficiency, and that there is a relationship between a learner's L1 and L2, have significant implications for professional learning and classroom practice (Cummins 1976, 2000, 2014). These theories have informed and shaped recent practice and research in immersion education internationally, and have the potential to inform Gaelic-medium teachers' professional learning and impact on their classroom practice in a way that is appropriate to the Gaelic sociolinguistic context.

As professional learning related to teaching Gaelic as a language was a focus of the first research question, examining theories and research that promote children's language development offered an opportunity to reflect on the current recommended practice of Gaelic being used exclusively in the total immersion and immersion phase and associated monolingual pedagogies. Classroom-based research examined in the literature review would support the inclusion of bilingual pedagogies to facilitate the transfer of information processing skills, literacy and other cognitive skills from one language to another to the benefit of the learners. Further studies identified organizational frameworks and pedagogical strategies from other immersion contexts that could offer Gaelic-medium teachers, through professional learning opportunities, access to additional pedagogical strategies that address some of their identified learning needs.

It is interesting that many issues identified by participants for professional learning (e.g. issues of pupil language proficiency at the upper primary stages) have been recognized within international immersion settings and researched within these contexts. A key area of the immersion literature that was examined was the teaching of language and content, specifically recent theoretical debates in relation to the teaching of language and linguistic features more systematically in curricular content lessons, referred to as form-focused instruction or focus-on-form. This is noteworthy in the Gaelic-medium context as awareness of the limitations of the current model was evidenced within the participant teacher group, prompting the request for professional learning on how to teach grammar more effectively within the constraints of the current curriculum.

The literature on the form-focused teaching of language assumed a significant focus in the study as there was an interdependence between the teachers' request for professional learning to enhance their language proficiency, their understanding of grammar and their desire to teach and explain more language (i.e. linguistic features) in the curricular lessons.

Finally, the literature review examined a range of contextual influences on professional learning, examining the impact of these in relation to the Gaelic-medium context. Issues of local and national policies, the influence of career stage, and the contexts of professional learning were examined. Of special interest was literature on the influence of the specialist knowledge and understanding of school leadership and management teams on teacher professional learning and immersion school success (Baker 2011; Menken and Solorzo 2014: 18).

A general picture emerged from the national and international immersion literature that offers new insights into areas of language-related professional learning, identified as important by the participants. These insights have the potential to advance the language proficiency of teachers, extend their range of pedagogical practices and progress pupil language and academic performance. While each national immersion setting is distinctive in context and learner population, the principles, aims and main curricular and pedagogical practices of immersion education overlap and can enhance teacher learning and practices across immersion contexts.

The methods and processes used for conducting and analysing the research were outlined in the third chapter. The Gaelic-medium sector is relatively small but diverse and, in order to include the views of as wide a range of teachers and settings as possible, a number of criteria were identified for selecting participants and their school locations. These included identifying freestanding and dual-stream schools and taking account of geographic factors (e.g. rural, island or urban areas), the dominant language of the community and local authority. Teachers across the career continuum were selected, comprising those who self-categorized as native speakers and learners of Gaelic. Realizing this aspiration proved to be an interesting and

challenging exercise as practical travel arrangements, seasonal ferry timetables, time constraints, school events and access to participants through local authority and school management shaped the final selection of participants. Nonetheless, the aim of including as wide a range as possible, within these constraints, was achieved.

The categorization of participant teachers as either native speakers or learners of Gaelic, which was initially conceived as a factor to ensure as wide a participant range as possible, proved to be interesting and a factor that has not been considered in previous Gaelic-medium studies. The complexity of the teacher language landscape became evident early in the study, leading to revision of the original categorization of ‘fluent speaker’⁵⁷ and ‘learner’ used by the SQA to ‘native speaker’ and ‘learner’. The term ‘fluent speaker’ was problematic as it was a category to which all Gaelic-medium teachers could lay claim and its replacement with ‘native-speaker’ is a recognized term in immersion literature. A more fine-grained identification of language was not possible in this small-scale study, and therefore self-categorization by the participants was viewed to be the most appropriate way to identify the teacher’s language status. In general, teachers who had Gaelic as a first language in the home, or where Gaelic was the spoken language of parents in the home, self-categorized as native speakers. The native speaker categorization proved to encompass a broad spectrum of spoken language proficiency. Participants who had learned Gaelic at primary or secondary school or as adults self-categorized as learners, essentially being L2 speakers. I recognize the limitations of self-categorization but it enabled the inclusion of participants across the bilingual continuum that was important for this study.

Gaelic was the chosen language for the interview conversations, as this offered opportunity to gain in-depth insights into the teachers’ perceived learning needs. This was intentional and important, as the interviews were located in the participants’ schools where Gaelic is expected to be the language of communication. It was also known to participants that I had formerly taught in the Gaelic-medium primary sector

⁵⁷ SQA categorization includes all who have been educated wholly or mainly through the medium of Gaelic in primary school and those who come from a Gaelic-speaking background and are able to speak Gaelic (SQA 2015).

and was a native speaker. Using Gaelic enabled the interviews to be more conversational as this would be our usual social language, with English being associated with more formal events or contexts. This was advantageous as participants shared their professional learning needs and related issues freely, but it required additional discipline to retain the key focus of the interviews. Interestingly, sometimes a lack of shared terminology to discuss specific professional learning issues in Gaelic required code-switching, simplification of terminology or clarifications because English is the usual language of the great majority of teacher professional learning.

A drawback of this 'insider' perspective was the possibility of assuming that my experience of the Gaelic-medium sector was 'typical', or potentially superimposing personal views in relation to professional needs, based on prior experience, at the analysis stage. Also, participants who lacked confidence in either language fluency or pedagogical practices might overemphasize their needs in relation to these areas if they viewed me to be 'expert'.

The recordings were transcribed in Gaelic and analysed through thematic analysis. This analytic process enabled the foregrounding of professional learning issues that were of key importance to the immersion teachers. The themes and data extracts were identified from the transcriptions and translated from Gaelic to English. This process necessitated returning repeatedly to the original recordings for contextual clues to ensure that accuracy of meaning was conveyed, as direct translation from the transcripts could produce ambiguities. The process of checking and rechecking that translations were an accurate representation of the meaning that participants had conveyed was helpful to me, as the researcher, in paying closer attention to the context of quotations and the details within conversations. However, the time involved in translations and re-checking were factors that I had not considered sufficiently prior to the study.

Teacher views on professional learning

The findings in chapter four identified three interlinked areas for professional learning which the participant Gaelic-medium teachers perceived to be important and interlinked for their teaching of Gaelic as a language and for teaching the curriculum through Gaelic. These comprised professional learning to further develop:

- the teachers' personal language proficiency, including a knowledge of Gaelic grammar
- a better understanding of bilingual and immersion education and language acquisition
- a more intentional focus on language in curriculum lessons, including more knowledge of effective immersion pedagogies

The teachers identified that learning opportunities to develop their *personal language proficiency* were of key importance to them. Specifically, they expressed an interest in expanding their conversational and curricular language repertoires to enhance their language proficiency. Both learner and native speaker teachers expressed this. The focus in conversational language was mainly from L2 teachers 'becoming more fluent', although L1 and L2 teachers expressed a desire for learning that would expand their knowledge of idiom, proverbs, pronunciation and 'richness of language'. Learning opportunities to enhance specialist curricular vocabulary and domain-specific expressions were sought largely by the early career teachers. I did not perceive this prioritization of personal language development as a deficit position, but rather as a positive recognition, by the teachers, of language learning as a continuum, and of the necessity to maintain and enhance their language proficiency through career-long professional learning opportunities.

Teachers across the career continuum requested professional learning to improve their understanding and command of Gaelic grammar, an aspect that is vital if the teachers are to model the high quality language necessary for pupils to acquire a high level of language proficiency and achieve even greater academic success. The teachers reported an enhanced understanding of grammar would better equip them to explain language features to pupils. Research has further noted the necessity for

immersion teachers to have the grammatical knowledge and understanding to teach language features and implement effective language-specific pedagogies (Ballinger 2013; Tedick and Fortune 2013). This suggests an important link between all three key professional learning areas identified by the participants.

The teachers further requested opportunities to expand their understanding of immersion education beyond the Scottish context, learning about *bilingual and immersion education* in other contexts. Participants perceived that some lessons could be learned from research in other minority immersion contexts in relation to immersion practices. Alongside this they were keen to learn about how a second language is acquired and developed so that they could have appropriate expectations of children's language progression, demonstrating the importance to them of professional learning that could improve their classroom practice and benefit learners.

Moreover, the study showed that many teachers, chiefly the more experienced teacher group, voiced their desire for professional learning that would support them in having a more *planned and intentional focus on language* in the curriculum. The emphasis in immersion teaching has been on teaching the curriculum through the language, believing that language development would happen naturally through extended exposure to the language. Nevertheless, the teachers' experience and reflections had led them to conclude that formal teaching of language was necessary, as exposure alone was not yielding the levels of language proficiency which were required for in-depth discussion of the curriculum at the upper stages of primary school. The primary focus of this requested professional learning was to enable teachers to enhance their classroom practices so that pupil language and cognitive development could be maximized. Recent immersion research makes a compelling case for the inclusion of more planned teaching of language in curriculum lessons, including a focus on form (Genesee 2013; Lyster 2007). The teachers already attended to language issues on a responsive basis, where clarification or correction was required, but nonetheless wanted professional learning to support them in having

a more planned and intentional focus on language in the curriculum, a focus that is necessary if pupils are to attain even higher levels of proficiency (Lyster 2007).

Pedagogical strategies to develop language in immersion education are a further area of learning that most of the teachers requested. Teachers across the career continuum were interested to learn of new pedagogies to facilitate pupil language learning. Almost all of the probationer and some of the early career teachers were keen to consolidate learning in specific areas, such as differentiation, cooperative learning and interdisciplinary learning, possibly from an organizational and class management perspective, while the more experienced teachers were interested in adding new pedagogies that could enhance pupil language learning.

Teacher views on career-stage and language background

Many researchers accept that members of the teaching profession develop through a series of career stages, each of which is associated with specific needs and concerns that influence their professional learning needs (Conway and Clark 2003; Fuller 1969; Wilson 2006). One such model proposes that the needs of the teacher represent a transition from a focus on self and survival to a focus on performance and finally on impact on pupil learning (Fuller 1969). However, the specific needs associated with each stage have not been well defined by research and remain contested. This study could not draw such finely staged distinctions across the participant group.

The findings indicated that teachers at all stages, including leaders and management, identified broadly similar professional learning needs related to teaching Gaelic and teaching the curriculum through Gaelic. Teachers from across the career continuum requested professional learning in the area of teaching Gaelic as a language, bilingual and immersion education and immersion pedagogies. These were not uniformly requested, indicating that teachers were reflecting individually on their personal needs and identifying learning opportunities to meet these. It is perhaps unsurprising that experienced teachers (years 7+) and managers⁵⁸ also identified professional learning needs in these areas as all managers, with one exception, had teaching

⁵⁸ Principal teachers, deputy head teachers, head teachers.

responsibilities, and were aware of their role as mentors. Additionally, the majority of the experienced teacher group and managers had little formal learning in relation to bilingual and immersion education.

All learner and native-speaker teachers were interested to further develop their language proficiency, in relation to Gaelic grammar. Conversational language opportunities were sought exclusively by teachers, across the career continuum, who self-categorized as learners, while language opportunities to develop specialist curricular language was requested mainly by early career teachers, including both learner and native-speakers. This was the only area where learner and native-speaker learning needs differed. There was some evidence from two schools that the respective strengths of the learner and native-speakers teachers complemented one another and that this was used in formal and informal learning opportunities.

Professional learning to extend teachers' knowledge of idiom, proverbs, pronunciation and 'richness of language' was requested by the more experienced group, perhaps indicating an understanding of the impact of this on the development of pupil language proficiency. This more experienced group were also interested in learning about new pedagogical practices for language learning, while the early career teachers were primarily seeking consolidation of current practices (e.g. differentiation, collaborative learning). A further difference was noted in relation to curriculum teaching where the more experienced teachers were keen to learn how to include language teaching in curriculum lessons in order to improve pupil language proficiency and curriculum content learning, while the early career teachers' focus was on the specialist language of curricular teaching. However, it cannot be concluded that the early career teachers were unconcerned about pupil language proficiency and content learning but that they identified a more immediate need. Further research would be required to examine whether these differences identified in relation to career stage were generalizable to the wider Gaelic-medium sector as the numbers demonstrating these differences were small.

Teachers' views on the contexts for learning

The teachers raised contextual issues that were, from their perspective, integral to and inseparable from their experience of professional learning. Factors that they perceived important in facilitating or impeding their learning opportunities included the school community, local authority and national priorities, and the role of national bodies in professional learning.

The prevalence or absence of Gaelic in the community was identified as a factor influencing learning opportunities to maintain or develop spoken fluency or contributing to the diminution of fluency where teachers were in isolated settings. Gaelic-speaking staff numbers, school composition and immersion expertise were reported to be important factors acting to facilitate or impede formal and informal mentoring opportunities for learning. Participants were emphatic when highlighting these issues. Informal peer learning opportunities were highly valued, as were infrequent opportunities to observe practice in other GM schools.

The participants raised important questions about the scarcity of specialist professional learning for teachers in the Gaelic-medium sector, with a number of participants voicing that *any* CPD in Gaelic would be appreciated. The study showed that teachers valued the annual professional learning events provided at a national level⁵⁹ because they were specifically focused on GME and provided opportunity for staff to share learning from practice formally and informally. However, only a limited number of staff could be released to attend these national events because of teacher replacement difficulties. In contrast, the teachers reported that almost all the formal CPD to which they had access at school and LA level was designed primarily for mainstream educators, with minimal or no regard to transferring this learning to the Gaelic-medium sector.

The study highlighted a considerable gap in the availability of specialist professional learning opportunities for immersion teachers at school and LA level. There was

⁵⁹ An t-Alltan organized by Stòrlann Nàiseanta na h-Alba, and the Bòrd na Gàidhlig Probationer Day.

little evidence of specialist CPD at LA level.⁶⁰ A significant factor in the availability of learning opportunities at school and LA level was a perceived lack of understanding of bilingual and immersion education at leadership and management level. In freestanding Gaelic schools, where there was a Gaelic-speaking head teacher with experience of teaching in an immersion context, there was evidence of greater opportunities for specialist professional learning. Concerningly, these opportunities were not generally mirrored in dual-stream schools, often a small stream within a larger English-medium school, where teachers additionally reported significant misunderstandings among colleagues and managers about the aims and practice of immersion education. This contributed to some Gaelic-medium teachers feeling isolated and/or marginalized.

This finding raised questions not only about specialist learning opportunities for teachers but also about the need for specialist learning opportunities for LA education officers, head teachers and the management team in all schools with Gaelic-medium provision. These leaders, as designers and implementers of CPD and staff development programmes, would require an understanding of how to include staff development relevant to teaching in an immersion context.

The findings have significant implications for the professional learning of Gaelic-medium teachers and, arguably, also for the language proficiency and academic achievement of pupils, and revitalization of the Gaelic language. The language proficiency of pupils and their academic achievement is, in large part, dependent on the linguistic and pedagogical expertise of the teacher. Teachers in the study highlighted specific professional learning needs that they perceived to be essential to maintaining and/or enhancing their language proficiency and pedagogical expertise. The importance of the teachers' prioritization of personal language proficiency, focus on form and extending pedagogical repertoires for professional learning cannot be overemphasized and reflects recent literature findings.

⁶⁰ Two of the seven local authorities were reported to provide Gaelic-specific CPD.

The study would therefore point to reviewing the provision of professional learning for Gaelic-medium teachers, taking account of school, community and geographic factors in designing professional learning that is both accessible and relevant to Gaelic-medium teachers across the career continuum. Additionally, a suite of professional learning opportunities that meet Gaelic-medium teachers' needs at all career stages is required to support teachers in further developing their language proficiency, knowledge of bilingual and immersion education, language pedagogies, and the integration of language teaching in the curriculum. This is essential if teachers are to fulfil their role of modelling the language, ensuring that high quality Gaelic is the language of learning and of communication.

Contribution to the literature

This research extends our knowledge of immersion-related professional learning needs from a teacher perspective. The findings have gone some way to enhancing our understanding of why Gaelic-medium teachers emphasize their need of professional learning to develop their language proficiency. It is the first empirical study of Gaelic-medium teachers' professional learning needs and will serve as a basis for future enquiry. A key strength of the study was the opportunity to conduct the data collection and analysis bilingually. The findings could be used to help develop and prioritize immersion teacher professional learning at all levels, across organizations, which I discuss in the next section.

Recommendations

This research has shown that Gaelic-medium teachers perceive specialist professional learning related to their role as language educators to be vital for the enhancement of their knowledge and practices in immersion education. The necessity of specialist professional learning, to meet the teachers' needs as language educators, was universally voiced by participants. Although the need for access to high-quality CLPL to support GM teachers has been noted in recent policy documents (Education Scotland 2015; Scottish Government 2010), this study shows that the specialist professional learning needs of the participant teachers are not

currently being met and that there is an urgent need for additional learning opportunities for Gaelic-medium teachers. This is especially important as informal professional learning from other teachers and colleagues was cited to have a strong influence on how the majority of the participants taught (Appendix 15). The recommendations address issues identified from the study and literature.

Form of professional learning

The teacher learner journey begins in ITE as student teachers and continues throughout their career. Therefore, the findings have a number of important implications for all bodies involved in Gaelic-medium professional learning: universities, schools, LAs, GTCS, Education Scotland, Bòrd na Gàidhlig and Stòrlann Nàiseanta na h-Alba. The form and structure of teacher professional learning for Gaelic-medium teachers needs to be prioritized at national and local level, with resources allocated to its development. There is a further need for national organizations and local authorities to consider facilitating formal partnerships between experienced practitioners and universities to combine theoretical and practice expertise in devising professional learning programmes.

National initiatives

The positive response from participant teachers across the career spectrum to national level CPD would point toward the importance of increased availability of specialist learning opportunities at a national level. Proposals at national level include:

- Bòrd na Gàidhlig (BnG) should appoint a national Coordinator of Professional Learning (Gaelic-medium Education);
- BnG should consult⁶¹ with LAs and Higher education institutions to assess current provision;
- BnG should work alongside all LA induction programme managers, with responsibility for Gaelic-medium inductees, to highlight the necessity of inductee access to specialist professional learning, and
- BnG should partner with other organizations and LAs to facilitate

⁶¹ BnG met with the university sector in a scoping exercise in May 2017.

nationally organized Gaelic-medium teacher learning opportunities (e.g. conferences, working groups, learning communities, professional enquiry groups, teacher exchange opportunities).

A national-level Coordinator would have an overview of developments across local authority boundaries and could develop effective mechanisms for sharing knowledge and practice expertise. This would not preclude local responsibilities or initiatives for developing and delivering professional learning, but would supplement these.

- Stòrlann Nàiseanta na h-Alba should continue to organize the annual *An t-Alltan* conference for Gaelic teachers across the primary and secondary sectors
- Stòrlann Nàiseanta na h-Alba should continue to partner with schools, LAs, universities and BnG to produce and extend online resources to support teacher learning
- Universities should ensure that undergraduate programmes designed for Gaelic-medium teachers include courses in Gaelic language, theory and practice of bilingual and immersion education, second language acquisition and language pedagogies
- Universities should consider the provision of postgraduate⁶² courses to meet the specific needs of Gaelic-medium teachers
- Universities should consider the inclusion of optional modules specific to GME within regular undergraduate programmes and postgraduate teacher diploma programmes

Local initiatives

- Local authority staff with responsibility for GM should have learning opportunities to develop their knowledge and understanding of bilingual and immersion education
- Local authorities that have GM schools should ensure the regular availability and access to specialist CPD for all teachers in the GM sector

⁶² Currently, STREAP is the only postgraduate certificate available for GME teachers.

- Local authorities should ensure that GM sector staff are allocated additional time to transfer learning from LA professional learning sessions designed for mainstream teachers
- Dual-stream schools should ensure that a proportion of the school-based CPD sessions meet the specialist needs of GM teachers
- School leaders and managers of dual-stream schools should have learning opportunities to develop knowledge and understanding of bilingual and immersion education
- Schools should consider the establishment of collegiate time specifically for GM staff to develop language skills and school or class-based professional learning priorities
- School-based mentors for GM teachers should be within the Gaelic-medium sector, with appropriate expertise, and this should be organized internally, or with another GM school

Flexible models

To address contextual issues raised by participants, consideration should be given to methods of making professional learning opportunities available to all GME teachers on a regular basis. Flexible delivery models that take account of school, community and geographic factors are important when designing professional learning programmes for GM teachers. This would ensure the availability and accessibility of learning opportunities to all GM teachers. For example a three-month full-time course in Gaelic language and immersion pedagogies could be made available as a six-month part-time distance-learning course to widen access. Consideration should be given to:

- cyclical availability of professional learning topics to maximize staff participation;
- different modes of delivery;
- differentiated learning opportunities, and
- accredited learning opportunities.

For example, identified professional learning needs could be addressed for Gaelic-medium teachers in more isolated⁶³ contexts through regular peer telephone conversations, facilitated centrally through a national database. Also, consideration should be given to facilitating a short-term teacher exchange programme to enable teachers who are learners of Gaelic, in isolated contexts, opportunity to spend time teaching in either a Gaelic freestanding school or a larger Gaelic-medium dual stream school. This would ensure opportunity for maintaining or further development of linguistic skills and sharing of pedagogical practices.

Integrated programmes

Further consideration should be given to developing integrated programmes of professional learning rather than a single topic/ single episode model. For example, a course on Gaelic grammar should be integrated with courses on corrective feedback, writing or integrated language and content teaching. This would enable the exploration of the relationships between different areas of learning and practice and opportunity for the development of deeper specialist knowledge of immersion education.

Focus of professional learning

Based on the findings from this study and the literature, the following language-related focus of professional learning should be included in CPD programme development:

- (i) bilingual and immersion education and its theoretical foundations
- (ii) teacher language development
- (iii) teaching language in and through the curriculum, and assessment
- (iv) immersion pedagogies

(i) Bilingual and immersion education and its theoretical foundations

Many of the teachers expressed an interest in the wider bilingual and immersion landscape, with a small number of participants voicing the desire to know more of

⁶³ Whether isolated geographically, or because there is limited Gaelic available in the community, or because they are lone practitioners.

Welsh and Irish research findings that they thought could offer useful insights for Gaelic-medium immersion contexts. The teachers, who are central to the implementation of GME, identified a need to extend their understanding of bilingual and immersion education, through professional learning opportunities, that could include:

- different types of bilingual and immersion education;
- varied outcomes of different types of immersion programmes;
- theoretical foundations of bilingual and immersion education;
- second language acquisition in minority language contexts;
- principles of immersion education, and
- knowledge of recent research findings in immersion education.

Professional learning that sets Gaelic-medium immersion within this wider framework of bilingual and immersion education would enable the teachers to extend their understandings of the educational landscape within which they are working, both nationally and internationally. It would further equip them in making more informed choices for classroom practices and enable them to contribute more confidently to Gaelic language policies at school level. The requested additional knowledge base would be particularly important for mentors and/or supporter teachers of probationer and early phase teachers, and also for teachers who identify their main professional learning to have been through ‘trial and error’.

Moreover, specialist immersion learning opportunities in this area would be potentially encouraging for teachers who are already demonstrating effective immersion practices, extending their understandings, and also supportive in progressing the understandings of less effective teachers, thus potentially reducing the known variation in practice. Therefore universities, local authorities, Education Scotland and national organizations, such as Bòrd na Gàidhlig and Stòrlann, should work together to identify the most effective way of designing professional learning that draws together the theory and practice of bilingual and immersion education.

(ii) Teacher language development

The study showed that almost all teachers sought opportunities, spanning all four aspects of literacy in Gaelic, in order to further enhance areas of their language proficiency. It is essential that these identified professional learning opportunities are available to native speaker and learner teachers, at all career stages, as language development is a continuous process.

The research findings highlighted areas of teacher language development for professional learning that should begin to be addressed in ITE and continued across the career continuum:

- conversational /social language
- curricular / academic language
- extended vocabulary required for higher-order classroom discussions
- grammatical knowledge
- language enrichment (e.g.idiom)

I would suggest that, in the context of Gaelic-medium education where degrees of fluency and expertise will vary and overlap between learner and native speaker teachers, a range of graded language development opportunities would be beneficial to all teachers to further progress their proficiency.

As Gaelic-medium teachers are language educators as well as primary teachers, it is imperative that they are confident in their knowledge of the grammar and structures of the language, an area highlighted by nearly all the participants. Learning opportunities focused on Gaelic grammar could be made available as part of the regular suite of CPD courses at local authority level,⁶⁴ drawing on expertise from secondary Gaelic specialists and/or from universities. If the teachers are to teach the wide array of forms and functions that comprise Gaelic, on-going professional development experiences that deepen their academic understanding of these forms and functions is a necessity.

⁶⁴ One local authority is currently developing a course to enhance teachers' grammatical knowledge which is hoped to be further developed for online availability by Stòrlann.

(iii) *Teaching language in and through the curriculum, and assessment*

It was apparent from the study that many Gaelic-medium teachers already teach language informally in curricular lessons, sometimes in response to language errors or to comprehension difficulties and as part of subject specific vocabulary development. Yet, *how* to teach language more intentionally to enhance pupil language proficiency, particularly in the upper stages of primary schooling was identified as a professional learning need. The need to include the teaching of language more formally (i.e. form focused instruction) into curriculum teaching to enhance pupil language proficiency is perceived to be an essential and critical component of immersion teacher knowledge in the literature (Tedick and Fortune 2012).

Inclusion of the research basis for the planned focus on language in curricular lessons would need to be part of professional learning to meet this participant request, as it would initially appear to be in contradiction with current understandings of Gaelic immersion that language is learned *through* the curriculum. The literature emphasizes the importance of integrating form-focused instruction into regular curricular teaching, in contrast to stand-alone grammar lessons, to allow pupils to notice otherwise infrequent language features. Gaelic-medium teachers' request infers a need of learning opportunities that will support their ability to plan curricular lessons and activities that integrate language and content. It would be desirable that these professional learning sessions would be designed in conjunction with learning opportunities on grammar, as identifying which language features to focus on in curricular lessons is an issue that has been noted as a challenge for teachers in other immersion contexts (Walker and Tedick 2000).

Next, teachers requested professional learning to further their knowledge and understanding of issues relating to the assessment of bilinguals. Assessment is an integral element of teaching both language and curricular content, as it is necessary to assess what learning has taken place and to inform future teaching. Associated with this request was the teachers' desire to understand typical bilingual

development and assessment of language proficiency in both school languages. This professional learning is necessary to increase teacher confidence in developing appropriate assessment instruments. The knowledge would also enable Gaelic-medium teachers to distinguish between children who have language delay or language difficulties, an area of further learning voiced by a number of participants. Professional learning should be designed to support teachers to apply the principles of assessment to their context, drawing on understandings of L1 and L2 acquisition, and bilingual assessment in other immersion contexts.

(iv) Immersion pedagogies: bilingual and monolingual

Pedagogies that are particularly beneficial to language development, such as cooperative learning, differentiation and interdisciplinary learning, which participants identified for professional development, should be included within professional development programmes. However, these could equally be addressed in regular CPD sessions for mainstream primary teachers, with Gaelic-medium teachers being given additional time to examine how the strategies might be adapted to their respective contexts to maximize pupil language learning.

The study showed that participants were keen, additionally, to extend their range of language-related pedagogical strategies. Learning opportunities should be offered that invest teachers with knowledge of findings in classroom-based research that will enable them to reflect further and experiment with a wider range of pedagogical practices. This would include bilingual strategies which promote more cognitively engaged learning, giving teachers the opportunity to consider how these might be adapted appropriately for inclusion within their pedagogical repertoire. These strategies would complement current monolingual strategies in order to develop children's language and cognitive development. Strategies that have been researched and proposed to help pupil language learning are also recommended for professional learning programmes. Professional learning opportunities to facilitate more informed discussion of pedagogical strategies, their basis and role within minority language immersion, would have the potential of enabling teachers to plan systematically for the inclusion of appropriate bilingual pedagogies that promote children's learning,

cognitively and linguistically (Baker 2011) without compromising the principles of immersion.

Limitations and future research

Because of the diverse nature of the Gaelic-medium education sector, a wide sample of participants was selected. The sample was limited to staff who were available in school on the agreed days for interviewing and, in larger schools, the head teacher selected the teachers for interview based on the research criteria. While the criteria for the sample was met, it is unclear why particular teachers had been selected in these schools. This may have limited the data. Next, the self-categorization of teachers as native speakers or learners of the language, while of overall benefit to the sample selection, had clear limitations and masked the more complex picture of language proficiency that emerged in the interviews and analysis. This, therefore, made it difficult to make secure claims about the influence of language background. Further research into the professional learning language needs of Gaelic-medium teachers could be of interest where the teacher's language proficiency is more rigorously assessed in the sample. While using Gaelic as the language of the interview was positive in obtaining rich data on the teachers' professional learning, it is possible that the translation did not always convey the full meaning or emotion expressed.

As there are no other studies of teacher professional learning in the Gaelic-medium sector it would be interesting to undertake research in the following areas:

- the impact of professional learning on the integration of teaching of language and content;
- how head teachers of dual-stream schools and Gaelic-designated schools balance the learning needs of both the Gaelic-medium and the English-medium staff, and
- what the focus of immersion-specific professional learning is at school and LA level.

It would also be interesting to examine further what teaching strategies are used to teach language in curricular lessons as this was an important area of interest to teachers in this study.

Concluding Comments

This study has shown that Gaelic-medium teachers identify and prioritize areas of professional learning that are crucial for enhancing their personal practice as language educators, and important for pupil language proficiency and academic achievement. It is clear that there is a scarcity of Gaelic-specific professional learning, and that the recommendation of *Teaching Scotland's Future* (Scottish Government 2011) that teachers should have access to high-quality CPD in relation to their subject, and other specialist responsibilities, is still to be realised in the Gaelic-medium sector. Additionally, the notion of professional learning presented in the literature as ongoing, intensive and connected to practice, with a focus on the teaching and learning of specific academic content literature (Darling Hammond et al 2009), is particularly important for Gaelic-medium teachers who have entered GME with a varied range of teaching and linguistic expertise. This would offer Gaelic-medium teachers opportunity to gain in-depth specialist knowledge of complex issues associated with teaching through an immersion approach. Teachers in the study requested this.

Engaging with Gaelic-medium teachers in the study provided me with an insight into their keen desire for more learning and understanding of their specialist area. Many of the teachers have developed informal networks, locally and across authorities, and engage in personal search of knowledge to support their professional learning. However, I suggest it is essential that structured professional learning, developed at national, local authority and school level, be made available to inform and develop teachers' knowledge of the immersion language, and meet their professional learning needs. It is vital that a national level approach is taken to professional development, drawing on cross-sector expertise, because of limited resources and knowledge base in Gaelic and Gaelic-medium education. This would complement school and local authority responsibilities to offer specialist, immersion-related learning opportunities

within their CPD programmes and contribute towards a sustainable future for Gaelic and Gaelic-medium education.

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Appendix 1

PROJECT OUTLINE FOR SCHOOLS AND EDUCATION AUTHORITIES

Aims of the research:

To observe the types of talk that occurs in immersion classrooms (Primary 1, 2, 3).

To investigate teachers' rationale for the ways they use Gaelic in the classroom.

To evaluate the findings so that it might support immersion teachers to reflect on the nature and purpose of talk in their classroom.

Rationale

The benefits of bilingualism have been evidenced through a growing research base over the past five decades. A recent Scottish Government report, *Language Learning in Scotland: A 1+2 Approach* (2012), acknowledged the positive educational benefits of learning an additional language, including cognitive and linguistic advantages, and also recognized the substantive position that Gaelic-medium education has within this approach. As it is suggested that 'early total immersion' is the strongest model in immersion education, particularly in developing the spoken language, it would seem important to examine the factors influencing the choice of language model/practice in the early years stages.

The quality of classroom talk is a significant factor in children's learning, and the centrality of the class teacher in relation to pupil learning has been identified in studies nationally and internationally. This is especially so, in relation to the development of talk where children's own talk is primarily facilitated through the teacher's talk. The role of the immersion teacher in the success of the development of Gaelic, and learning, of children is equally central. It could be argued that the position of the immersion teacher is additionally vital as they are often the sole role model of the language and require additional teaching strategies. Therefore, it is important to observe the teachers' classroom practice and elicit their own views of the thinking behind their classroom actions. The class teachers' understanding of the importance of talking and listening in the early years, together with their interpretation of the multiple-layers of policy and guidance, are central to the practices they adopt.

Method

Firstly, teachers from primary one, two and three who have volunteered to take part in the study will be sent a brief questionnaire to elicit some relevant background information. Secondly, they will be observed teaching in their class for a short period. The observation will be a starting point for understanding what the teachers do in relation to teaching Gaelic and why they do it. During the observation, short field notes will be made which will be expanded afterwards. Notes may also be made of timetables, facilities, activities, and environmental print to gain a more holistic view. If possible, the Gaelic Language, and Teaching and Learning policies of the schools will be examined.

Finally, semi-structured interviews will then be conducted with the participating teachers. Interviewing after the observation will provide the opportunity to use the information gained as a focus for discussion and to explore the teachers' thinking of what had been successful during the observation in order to achieve their goals. They will be used to explore how the teachers construe their own practice and conceptualize their teaching. The aim of the interviews is to gain an in-depth understanding of what is important and meaningful to the teachers, and what ideas and values shape their actions. All interviews will be conducted in Gaelic as the immersion stage is the focus of the study. The interviews will be transcribed into Gaelic, with relevant sections further translated into English. The analysis and discussion will be in English. A summary of the research findings will be sent to each participating school following completion of the research.

Appendix 2: Pilot Study Questionnaire

CEISTEACHAN

A. FIOSRACHADH PEARSANTA

- a) Ainm:.....
- b) Gnè: Fireann Boireann
- c) Aois: 20-29 30-39 40-49 thar 50
- d) Dè am bun-sgoil anns an d'fhuair thu foghlam?
- e) Cia mheud cànan a bhruidhneas tu? (innis dè na cànanan a tha sin)

.....

Dearbh am bheil tuigse agad/ am bruidhinn thu/ an leugh thu/an sgrìobh thu na cànanan eile sin.....

- f) Dè an ìre sgrùdadh as àirde gu bheil thu air na cànanan eile a thoirt? (a bharrachd air an fheadhainn gu h-àrd).....
- g) Cuin is càite an do dh'ionnsaich thu a' Ghàidhlig?.....
- h) Eachdraidh foghlaim: Ceum le prìomh chuspair
Teisteanas foghlaim sam bith eile.....

B. FOGHLAM AGUS EÒLAS TIDSEIR

- a) Dè an t-oilthigh no a' cholaiste san do chrìochnaich thu do theisteanas foghlaim airson teagasg?.....
- b) Dè an teisteanas teagaisg a chrìochnaich thu?
BEd PGDE Teisteanas ann am Foghlam
Teisteanas eile (innis dè).....
- c) Sa chùrsa teagaisg agad, an d' fhuair thu teagasg air:

| | |
|---|-----------------------|
| Foghlam tro Mheadhan na Gaidhlig (FtMG) | Fhuair/ Cha d' fhuair |
| Dà-chànanas no iomadh-cànanas | Fhuair/ Cha d' fhuair |
| Dà-litearrachd | Fhuair/ Cha d' fhuair |
| Togail Dàrna Cànan | Fhuair/ Cha d' fhuair |
| Foghlam bogaidh | Fhuair/ Cha d' fhuair |
- d) Bliadhnaichean teagaisg:.....bliadhna(chan).
- e) Ainmich na sgoiltean sam bheil thu air a bhi a' teagasg:.....
- f) Dè an ùine a tha thu air a bhi teagasg ann am FtMG?.....bliadhna(ichean).
- g) Dè an ùine a tha thu air teagasg ann am foghlam àbhaisteach?..... bliadhna(ichean).
- h) Eòlas teagaisg eile (innis dè).....
- i) Dè an ùine a tha thu air a bhith a' teagasg s na tràth-ìrean ann am FtMG (P1, 2 no 3)?.....bliadhna(ichean)

QUESTIONNAIRE

A. PERSONAL INFORMATION

- a) Name:.....
- b) Gender: Male Female
- c) Age: 20-29 30-39 40-49 over 50
- d) What Primary School did you attend?.....
- e) How many languages do you speak (specify)?.....
Identify whether you can understand/ speak/read/write the additional
languages.....
- f) What is the highest level to which you have studied other languages (in addition to the
above)?.....
- g) When and where did you learn Gaelic?.....
- h) Educational background: First degree/diploma with main subject
Highest educational qualifications.....

B. TEACHER EDUCATION AND EXPERIENCE

- a) In which university or college did you complete your teacher education
qualification?.....
- b) What qualification did you complete?
BEEd PGDE Diploma in Education Other (state).....
- c) In your teacher education course, did you get teaching or opportunities to study the following:
 - Gaelic Medium Education Yes/ No
 - Bilingualism or multilingualism Yes/ No
 - Biliteracy Yes/ No
 - Second Language Acquisition Yes/ No
 - Immersion education Yes/ No
- d) Years of teaching (please don't count career breaks):.....yrs
- e) Name the schools in which you have taught:.....
- f) How many years have you taught in Gaelic-medium education.....yrs
- g) How many years have you taught in English-medium education?..... yrs
- h) Other teaching experience (specify).....
- i) How many years have you taught at the early stages in GME (P1, 2 or 3)?.....yrs

Appendix 3 CEISTEACHAN

A. FIOSRACHADH PEARSANTA

- i) Ainm:.....
- j) Gnè: Fireann Boireann
- k) Aois: 20-29 30-39 40-49 thar 50
- l) Dè am bun-sgoil anns an d'fhuair thu foghlam?
- m) Comharraich na cànanan is urrainn dhut a bhruidhinn/ a leughadh/a sgrìobhadh no a thuigsinn? Cuir stràc airson sealltainn co dhuibh is urrainn dhut tuigsinn agus/no bruidhinn agus/ no leughadh agus/no sgrìobhadh a chànan.

| CANAN (comharraich) | tuigsinn | bruidhinn | leughadh | sgrìobhadh |
|------------------------|----------|-----------|----------|------------|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |

- n) Dè an ìre sgrùdadh as àirde gu bheil thu air na cànanan eile a thoirt? (a bharrachd air an fheadhainn gu h-àrd).....
- o) Cuin is càite an do dh'ionnsaich thu a' Ghàidhlig?.....
- p) Cuir stràc airson sealltainn d'fhileantachd ann an Gàidhlig is Beurla air sceile 1-5 (1= beagan fileantachd; 5= fileantachd iomlan)

| | 1 | 2 | 3 | 4 | 5 |
|----------|---|---|---|---|---|
| Gàidhlig | | | | | |
| Beurla | | | | | |

- q) Eachdraidh foghlaim: Ceum le prìomh chuspair
- Teisteanas foghlaim sam bith eile.....

B. FOGHLAM AGUS EÒLAS TIDSEIR

- a) Dè an t-oilthigh no a' cholaiste san do chrìochnaich thu do theisteanas foghlaim airson teagasg?.....
- b) Dè an teisteanas teagaisg a chrìochnaich thu?
- BEd PGDE Teisteanas ann am Foghlam
- Teisteanas eile (innis dè).....
- c) Sa chùrsa teagaisg agad, an d' fhuair thu teagasg air:
- Foghlam tro Mheadhan na Gàidhlig (FtMG) Fhuair/ Cha d' fhuair
- Dà-chànanas no iomadh-cànanas Fhuair/ Cha d' fhuair

Dà-litarrachd

Fhuair/ Cha d' fhuair

Togail Dàrna Cànan

Fhuair/ Cha d' fhuair

Foghlam bogaidh

Fhuair/ Cha d' fhuair

- d) Bliadhnachan teagasg:.....bliadhna(ichean).
- e) Ainmich na sgoiltean sam bheil thu air a bhi a teagasg:.....
- f) Dè an ùine a tha thu air a bhi teagasg ann am FtMG?..... ..bliadhna(ichean).
- g) Dè an ùine a tha thu air teagasg ann am foghlam àbhaisteach?..... bliadhna(ichean).
- h) Eòlas teagasg eile (innis dè).....
- i) Dè an ùine a tha thu air a bhith a' teagasg s na tràth-ìrean ann am FtMG (P1, 2 neo 3)?.....
.....bliadhna(ichean)

C. IONNSACHADH DREUCHDAIL

De na buaidhean as cudromaiche air do theagasg? Cuir stràc air a h-uile fear as urrainn dhut..

| BUAIDHEAN | Buaidh làidir | Buaidh mheadhanach | Buaidh bheag |
|---|---------------|--------------------|--------------|
| Poileasaidh Sgoile (Poileasaidh Cànan Gàidhlig no Poileasaidh Teagasg is Ionnsachadh) | | | |
| Poileasaidh Ughdarras Ionadail | | | |
| Curraicealam airson Sàr-mhathais | | | |
| Paipear(ean) HMiE no Foghlam Alba | | | |
| CPD | | | |
| Mo bheachdan fhein mu ionnsachadh 's mo theagasg | | | |
| Sùileachadh pàrant | | | |
| Mo theisteanas foghlaim (oilthigh no colaiste) | | | |
| Tidsearan eile/ co-obraiche | | | |
| Tuilleadh (ainmich) | | | |
| Tuilleadh (ainmich) | | | |

D. FIOSRACHADH MUN CHLAS A' THAGAD AN-DRASDA

Cuir stràc anns a bhocsa iomchaidh, is thoir dhomh do bheachd mas ann an 'Eile' a tha'n stràc (m.e. Cl 1-4 no Cl 1-7).

| | | | | | | | | | | | | | | |
|---|-----|---|-----|---|-------|-----|---|-----|---|-----|---|-----|---|------|
| 1 | 1/2 | 2 | 2/3 | 3 | 1/2/3 | 3/4 | 4 | 4/5 | 5 | 5/6 | 6 | 6/7 | 7 | Eile |
| | | | | | | | | | | | | | | |

Appendix 3 QUESTIONNAIRE

B. PERSONAL INFORMATION

- a) Name:.....
- b) Gender: Male Female
- c) Age: 20-29 30-39 40-49 over 50
- d) What Primary School did you attend?.....
- e) Specify the languages that you can speak/ read/ write or understand (Please include Gaelic and English). Tick to indicate whether you can understand and/or speak and/or read and /or write the language.

| LANGUAGE (specify) | understand | speak | read | write |
|-----------------------|------------|-------|------|-------|
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |

- f) What is the highest level to which you have studied languages?.....
- g) When and where did you learn Gaelic?.....
- h) Please tick to indicate your level of fluency in Gaelic and English on a scale of 1-5 (1= low level of overall fluency; 5 = high level of overall fluency)

| | 1 | 2 | 3 | 4 | 5 |
|---------|---|---|---|---|---|
| Gaelic | | | | | |
| English | | | | | |

- i) Educational background: First degree/diploma with main subject
Highest educational qualifications.....

B. TEACHER EDUCATION AND EXPERIENCE

- a) In which university or college did you complete your teacher education qualification?.....
- b) What qualification did you complete?
BEEd PGDE Diploma in Education Other (state).....
- c) In your teacher education course, did you get teaching or opportunities to study the following:
 - Gaelic Medium Education Yes/ No
 - Bilingualism or multilingualism Yes/ No
 - Biliteracy Yes/ No

Second Language Acquisition Yes/ No

Immersion education Yes/ No

- d) Years of teaching (please don't count career breaks):.....yrs
- e) Name the schools in which you have taught:.....
- f) How many years have you taught in Gaelic-medium education.....yrs
- g) How many years have you taught in English-medium education?.....yrs
- h) Other teaching experience (specify).....
- i) How many years have you taught at the early stages in GME (P1, 2 or3)?.....yrs

C. PROFESSIONAL LEARNING

Please identify the key influences on how you teach? Tick as many as are applicable.

| INFLUENCES | Strong influence | Some influence | Little influence |
|---|------------------|----------------|------------------|
| School Policy (Gaelic Language or Teaching & Learning Policy) | | | |
| Local Authority Policy | | | |
| Curriculum for Excellence | | | |
| HMiE and/or Education Scotland document(s) | | | |
| CPD | | | |
| My own beliefs about learning and teaching | | | |
| Parental expectation | | | |
| My teacher education (university or college) | | | |
| Other teachers/ colleagues | | | |
| Other | | | |
| Other | | | |

D. CURRENT CLASS INFORMATION

Please tick the relevant box to identify the composition of your current class. If 'Other' is relevant, please state the nature of the composite class in the box (e.g. P1-7)

| 1 | 1/2 | 2 | 2/3 | 3 | 1/2/3 | 3/4 | 4 | 4/5 | 5 | 5/6 | 6 | 6/7 | 7 | Other |
|---|-----|---|-----|---|-------|-----|---|-----|---|-----|---|-----|---|-------|
| | | | | | | | | | | | | | | |

Appendix 4 PARTICIPANT SAMPLE

| Career Stage | % Gaelic spoken in the parish ⁶⁵ | Gaelic NS or L2 ⁶⁶ | Years teaching | Class |
|-------------------------------|---|-------------------------------|----------------|------------|
| Probationer | <0% and >1% | L2 | 1 | P4 |
| Probationer | <0% and >1% | L2 | 1 | P4 |
| Probationer | <0% and >1% | L2 | 1 | P1-3 |
| Probationer | <0% and >1% | NS | 1 | P1-2 |
| Probationer | Over 50% | NS | 1 | P3-4 |
| Year 2-6 Class Teacher | | | | |
| Year 2-6 Class Teacher | 25% to >50% | L2 | 2 | P3-4 |
| Year 2-6 Class Teacher | 25% to >50% | NS | 6 | P4-7 |
| Year 2-6 Class Teacher | <0% and >1% | L2 | 2 | P4 |
| Year 2-6 Class Teacher | <0% and >1% | NS | 2 | P6 |
| Year 2-6 Class Teacher | <0% and >1% | NS | 6 | P5 |
| Year 7+ Class Teacher | | | | |
| Year 7+ Class Teacher | <0% and >1% | L2 | 7 | P6 |
| Year 7+ Class Teacher | <0% and >1% | L2 | 20 | P1 |
| Year 7+ Class Teacher | Over 50% | NS | 23 | P1 |
| Year 7+ Class Teacher | 25% to >50% | NS | 20 | P1-3 |
| Year 7+ Class Teacher | 25% to >50% | NS | 9 | All stages |
| Year 7+ Class Teacher | 25% to >50% | NS | 20+ | P1 |
| Year 7+ Class Teacher | 25% to >50% | NS | 11 | P1-4 |
| Year 7+ Promoted DHT | | | | |
| Year 7+ Promoted DHT | <0% and >1% | NS | 28 | No class |
| Year 7+ Promoted DHT | Over 50% | NS | 8 | P5-7 |
| Year 7+ Promoted HT | | | | |
| Year 7+ Promoted HT | Over 50% | NS | 36 | P2-6 |
| Year 7+ Promoted HT | 25% to >50% | NS | 28 | P3-4 |
| Year 7+ Promoted HT | 25% to >50% | L2 | 20 | P5-7 |
| Year 7+ Promoted PT | | | | |
| Year 7+ Promoted PT | <0% and >1% | L2 | 16 | P4-7 |
| Year 7+ Promoted PT | <0% and >1% | NS | 12 | P1 |
| Year 7+ Promoted PT | <0% and >1% | NS | 12 | No class |

Deputy head teacher (DHT)

Head teacher (HT)

Principal teacher (PT)

⁶⁵ Census 2011: Gaelic Report (Part 1) National Records of Scotland

⁶⁶ The participants self categorized as Gaelic language learners (L2) or native speakers (NS)

Appendix 5

MÌNEACHADH PRÒISEICT AIRSON SGOILTEAN AGUS ÙGH DARRASAN FOGHLAIM

Amasan an Rannsachaidh:

- Beachd a ghabhail air ionnsachadh proifeiseanta thidsearan bun-sgoil a thaobh teagasg Gàidhlig mar chànan agus teagasg an curraicealam troimh mheadhan na Gàidhlig.
- Tha dùil na toraidhean a chleachdadh airson cùrsaichean ionnsachadh proifeiseanta a leasachadh dha thidsearan ann am foghlam troimh Ghàidhlig, agus brath a thoirt air programan oileanaich.

Feallsanachd

Bha ionnsachadh is leasachadh proifeiseanta thidsearan mar chuspair bhunaiteach ann an aithisg *Teaching Scotland's Future (TSF)* aig Graham Donaldson (Riaghaltas Alba 2010). B' e cuideachadh is neartachadh inbheachd teagasg aon de na dòighean a bha air ainmeachadh airson cothroman is àrd-mhiann a thoirt do dh'òigridh Alba. Mhol an aithisg cothroman ionnsachaidh is leasachaidh a thoirt do thidsearan aig a h-uile ìre den dreuchd aca, oir tha fios gu bheil ionnsachadh is tuigse tidsear bhunaiteach a thaobh deaseachd teagasg. Tha rannsachadh nàiseanta is eadar-nàiseanta a sealltainn gu bheil an tidsear fhèin cudromach do ionnsachadh sgoilear. Tha e follaiseach cuideachd gu bheil buaidh bhunaiteach aig tidsearan troimh mheadhan na Gàidhlig air soirbheachd dà-chànanais na cloinne.

Chuir an aithisg *TSF* cuideam mhòr air cothroman a thoirt do thidsearan uallach a' ghabhail airson an Ionnsachadh Proifeiseanta Leantaineach (IPL) aca agus 'cothrom IPL fhaighinn airson a' chuspair sàr-eolaiche aca fhèin (*TSF* 2010:99). Thug *TSF* iomradh cuideachd air miann thidsearan bun-sgoile air tuilleadh fiosrachadh is tuigse fhaighinn mu chuspairean tharais a' churraicealam.

Le sin, ma dh'fhaodte, bhiodh e cudthromach is feumail na beachdan aca fhèin a' shireadh air dè na cuspairean ceangailte ri ionnsachadh proifeiseanta a' mholadh tidsearan bunsgoil foghlam Gàidhlig fhèin dhuinn – dè raghnaicheadh iad airson feum a' dheanamh dhaibh a thaobh an t-tuigse is an ionnsachadh aca a' neartachadh anns a' chuspair is an suidheachadh sònraichte aca fhèin.

Modh-obrach

Thèid agallamhan, a bhios air an dealbhadh gu ìre, a ghabhail os làimh leis na tidsearan a bhios a' gabhail compàirt. Bheir na h-agallamhan cothrom dha na tidsearan am beachdan a thoirt seachad air na feuman aca fhèin a thaobh teagasg Gàidhlig mar chànan agus teagasg an curraicealam troimh mheadhan na Gàidhlig.

Tha an dùil agallamhan a shireadh le tidsearan deuchainniche, tidsearan eadar 2-6 bliadhna agus feadhainn aig gach ìre dreuchdail tharais air sin. Bi tidsearan a tha fileanta is feadhainn a dh'ionnsaich Gàidhlig cuideachd 'sa bhuidheann. A bharrachd air sin, bi agallamhan air an iarraidh le ceannardan neo tidsear a tha an ceann na Gàidhlig anns an sgoil airson tuigse fhaighinn air ciamar a tha ionnsachadh proifeiseanta air a' chuir air dòigh anns an sgoil.

'S e amas nan agallamhan tuigse dhomhainn fhaighinn air beachdan na tidsearan fhèin a thaobh ionnsachadh proifeiseanta airson foghlam troimh mheadhan na Gàidhlig. Thèid na h-agallamhan a chumail sa Ghàidhlig (no Beurla mas e is fhèrr leotha). Thèid na h-agallamhan a thar-sgrìobhadh sa Ghàidhlig, le earrannan iomchaidh air an eadar-theangachadh dhan Bheurla. Bidh am mion-sgrùdadh agus an deasbaireachd ann am Beurla. Thèid geàrr-chunntas mu na toraidhean rannsachaidh a chur gu gach sgoil chompàrteach às dèidh dhan rannsachadh a bhith air a chrìochnachadh.

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PROJECT OUTLINE FOR SCHOOLS AND EDUCATION AUTHORITIES

Aims of the research

- To examine what the ongoing professional learning needs of Gaelic-medium primary teachers are in relation to teaching Gaelic as a language and to teaching the curriculum through the medium of Gaelic.
- To use the findings to inform development of CLPL courses for Gaelic-medium teachers, and also to inform the PGDE and undergraduate programmes for Gaelic-medium students

Rationale

Teachers' professional learning and development was a central focus of the *Teaching Scotland's Future (TSF)* report by Graham Donaldson (Scottish Government 2010). Supporting and strengthening the quality of teaching was identified as one of the ways in which Scotland could achieve the high aspirations that it has for its young people. The report recommended that teachers have access to development and learning opportunities at all stages of their career as the knowledge and understanding of the class teacher is central to the quality of teaching. The centrality of the class teacher in relation to pupil learning has been identified in studies nationally and internationally. The role of the Gaelic-medium teacher in the success of the second language development and learning of the children is recognized to be equally central.

The *TSF* report further emphasized the need for teachers to own and be responsible for their own Continuing Professional Development (CPD) and to have 'access to high quality CPD for their subject and specialist area' (*TSF* 2010:99). *TSF* also reported that primary teachers would welcome more knowledge and understanding in subjects across the curriculum.

It would, therefore, be helpful to know which areas of professional learning the Gaelic-medium primary teachers themselves would identify as useful for furthering their knowledge and understanding in their specialist area.

Method

Semi-structured interviews will be sought with Gaelic-medium primary teachers to examine their views of their ongoing professional learning needs in relation to teaching Gaelic as a language and to teaching the curriculum through the medium of Gaelic.

It is intended that different categories of teachers (probationer, year 2-6 early career and post year 6 teachers) and as wide a range as possible of class stages within the primary school will be represented in the study. Teachers who are native speakers of Gaelic and teachers who were learners of the language will be included. Moreover, individual interviews will be sought with the head teacher (and/or the principal teacher with overall responsibility for CPD and Gaelic provision) to understand how teacher professional learning is organized within their school.

The aim of the interviews is to gain an in-depth understanding of their views regarding Gaelic-medium professional learning. Interviews will be conducted in Gaelic (or English if preferred). The interviews will be transcribed into Gaelic, with relevant sections further translated into English. The analysis and discussion will be in English. A summary of the research findings will be available to each participating school following completion of the research.

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Foirm Cead Fiosraichte

Tìotal a' Phròiseict: *Sgrùdadh de dh'fheuman ionnsachadh proifeiseanta tidsearan Foghlam troimh Mheadhon na Gàidhlig, aig ìre Bun-sgoil chànan, a thaobh teagasg na Gàidhlig mar chànan is teagasg an curraicealam troimh mheadhan na Gàidhlig.*

Ainm an Rannsaiche: *Màiri Anndra*

Tha mi a' toirt seachad mo chead airson com-pàirt a ghabhail ann an agallamh, agus a' lìonadh ceisteachan, air an gabhail os làimh le Màiri Anndra bho Oilthigh Dhùn Èideann, agus tha mi a' tuigsinn na leanas:

1. Chaidh geàrr-chunntas a thoirt dhomh den rannsachadh le mìneachadh labhairteach agus tha mi gu tur a' tuigsinn adhbhar an sgrùdaidh.
2. Tha mi a' tuigsinn mo dhreuchd fhèin san sgrùdadh agus tha mi air foighneachd dhan rannsaiche mu cheistean sam bith nach robh soilleir dhomh.
3. Tha mo chead gu tur saor-thoileach agus tha mi mothachail gum faod mi tarraing a-mach à bhith a' gabhail com-pàirt, aig àm sam bith, gun adhbhar a thoirt seachad.
4. Tha mi mothachail gum biodh an dàta a dheidheadh a chruinneachadh air a chleachdadh ann am pròiseact rannsachaidh a dh'fhaodadh leantainn air adhart gu ceum dotaireil agus foillseachaidhean sgoilearach.
5. Tha mi a' tuigsinn nach tèid an sgoil agam no mi fhèin ainmeachadh no aithneachadh air dhòigh sam bith.
6. Bidh cothrom agam aithisg gheàrr-chunntasach fhaicinn às dèidh dhan sgrùdadh a bhith air a chrìochnachadh.
7. Tha mi a' toirt cead seachad an t-agallamh a chlàradh.

Ainm-sgrìobhte a' chom-pàirtiche:

Ceann-latha:

Ainm a' chom-pàirtiche:

Ceann-latha:

Appendix 6



THE UNIVERSITY
of EDINBURGH

Moray House School of Education
The University of Edinburgh
Old Moray House
Holyrood Road
Edinburgh EH8 8AQ

Informed Consent Form

Title of Project: *A study of the professional learning needs of Gaelic-medium primary teachers in relation to teaching Gaelic as a language and teaching the curriculum through the medium of Gaelic.*

Name of Researcher: *Mary Andrew*

I give my permission to participate in an interview, and the completion of a questionnaire, conducted by Mary Andrew of the University of Edinburgh, and understands the following:

1. I have been given an outline of the research with an oral explanation and I fully understand the purpose of the study.
2. I understand my role in the study and have asked the researcher about any issues that were unclear to me.
3. My consent is completely voluntary and I am aware that I am free to withdraw from participating, at anytime, without giving a reason.
4. I am aware that the data gathered would be used in a research project that may lead to a doctoral degree and academic publications.
5. I understand that neither my school nor I will be named or otherwise identified.
6. I will be given access to a summary report following completion of the study.
7. I give my permission for the interview to be recorded.

Participant's signature:

Date:

Participant's name:

Date:

Appendix 7 Agallamh

Reflect on recent professional learning

1. Innis dhomh mun an ionnsachadh proifeiseanta agad anns a bhliadhna chaidh seachad.
 - a. Ciamar a tha thu air d'ionnsachadh a' leasachadh?
 - b. Dè seorsa rudan a tha thu air a dheanamh airson do chuideachadh mar thidsear ?
 - c. .Co ris a tha e coltach a bhi a teagasg clann ann an dara cànan neo/agus feadhainn aig am bheil Gàidhlig mu thrath?

Reflect on professional learning related to their specialism

2. Dè tha thu a smuaineachadh a bhiodh feumail do thidsearan Gàidhlig airson taic a thoirt dhaibh ann an teagasg cànan?
 - a. Dè seorsa ionnsachadh is fhearr leat, no as feumail dhut?
 - b. Dè seorsa ionnsachadh anns am bheil thu air a bhith an sàs?
 - c. Innis dhomh mu na cothroman a tha air a bhi agad air do bheachdan fhèin a chuir air adhart a thaobh rudan a bhiodh feumail dhut fhein
3. Innis dhomh cò ris a tha e coltach a bhith a teagasg a' churraicealam troimh mheadhain an Gàidhlig.
 - a. Innis dhomh de an ionnsachadh a fhuair thu am bliadhna a thaobh seo
 - b. Dè bhiodh feumail a thaobh seo? Dè seorsa ionnsachadh?
4. Innis dhomh man an ionnsachadh proifeiseanta as feumail neo as fhearr a fhuair thu airson teagasg troimh mheadhain na Gàidhlig.....
5. Dè tha thu a smuaineachadh a bhios feumail dhut mar a tha thu a dol air adhart le teagasg ann am foghlam troimh mheadhain na Gàidhlig?
6. Innis dhomh dè an cothrom a th'agad ionnsachadh proifeiseanta airson do shuidheachadh ann an FtMG fhaighinn bhon an roinn no anns an sgoil?

Reflect on future specialist professional learning

7. Dè bu toil leat fhein ionnsachadh mu dheidhinn anns an ath bhliadhna no dhà...a thaobh teagasg Gàidhlig mar chànan neo teagasg a' churraicealam troimh mheadhan na Gàidhlig?

Appendix 7 Teacher interview outline

Reflect on recent professional learning

1. Tell me about your professional learning over the past year
 - a. How have you developed your learning?
 - b. What kinds of things have you done to help you as a teacher?
 - c. What is it like teaching Gaelic to children as a second language, and/or those who already have the language?

Reflect on professional learning related to their specialism

2. What type of learning (CPD) would be useful for Gaelic-medium teachers to help them to teach the language?
 - a. Describe what type of learning do you prefer, or is most useful to you?
 - b. What types (and focus) of learning have you been involved in?
 - c. Tell me about the opportunities that you've had to express/choose learning that would be useful to you.
3. Can you tell me what it's like teaching the curriculum through Gaelic?
 - a. Describe what professional learning you have had in relation to that this year.
 - b. What would be useful in relation to this (focus)? What type (form) of learning?
4. Tell me about the most useful and/or enjoyable learning (CPD) you have experienced for teaching in Gaelic-medium.
5. What (learning) do you think would be useful for you as you continue teaching in Gaelic-medium education?
6. Can you describe for me the professional learning opportunities that you have had related to GME teaching in the local authority or school?

Reflect on future specialist professional learning

7. What learning would you like to have in relation to teaching Gaelic as a language and teaching the curriculum through Gaelic in the next year?

Appendix 8 Initial themes and codes

- 1. Teaching in Gaelic-medium (GM) is different**
 - Immersion is not known or understood by other teachers
 - Resources need to be created / adapted
- 2. Context of the school and personal history matters**
 - Influence of school size on professional learning opportunities
 - Influence of wider community
 - Influence of staff composition on professional learning opportunities
 - Influence of educational and professional history
- 3. Teacher's self confidence/ personal identity**
 - Relating to personal professional learning
 - Learning and support networks
 - Overlapping with language needs
- 4. Language needs**
 - Personal language needs and impact on teaching
 - Grammar and structures
- 5. Teacher understanding of second language acquisition**
 - Trial and error method
 - Error correction
 - Consolidating talk
- 6. Teaching the curriculum through a second language**
 - The specialist language in curriculum areas
 - Additional time required for teaching curriculum
 - Relevance of professional learning in curriculum teaching
 - Challenges of resources
- 7. Need for national/ inter-authority approach to GM professional learning**
 - Benefits of 'cross-fertilization'

Appendix 9

Developing and re-ordering of themes and codes from analysis of individual transcripts

1. Teaching in Gaelic-medium is different

- 1.1 Immersion is not known or understood by other teachers
- 7.5 Power/hierarchy influence + 7.4 Opportunity to choose/ influence CPD

2. Context of the school and personal history matters

- 2.1 Influence of school size on professional learning opportunities
- 2.2 Influence of wider community

3. Teacher's self confidence/ personal identity

- 3.1 Relating to personal professional learning
- 2.3 Influence of educational and professional history
 - 2.3.1 Influence of ITE
 - 2.3.2 Influence of university education

4. Language needs

5. Teacher understanding of second language acquisition and development

- 5.1 Demonstrated through description of practice related to second language pedagogies
- 5.2 Learning associated with teaching Gaelic in a second language
- 5.3 Empathy of CT is L2 learner
- 5.4 The L1 learner in the immersion class

6. Teaching the curriculum through a second language

- 6.1 The specialist language in curriculum areas
- 6.2 Additional time required for teaching curriculum
- 6.4 Relevance of professional learning in curriculum teaching
- 6.5 Dissonance between curriculum coverage and teaching of language

7. CPD needs identified

- 7.1 Class management and organisation
- 7.2 Understand children's stage of learning in Gàidhlig language
- 7.3 Explicitly identified needs + 9. Need for national/ inter-authority approach to GM professional learning
 - 1.2 Resources need to be created / adapted + 6.3 Challenges of resource
 - 10.1.2 CPD time for transfer of learning from EM to GME

8. Types of professional learning experienced

- 8.1 Working Group (collaborative)
- 8.2 Peer Observation
- 8.3 Personal search
- 8.4 Learning through experience (trial and error)
- 8.5 Preferred format of CPD
- 8.6 Personal reflection
- 8.7 Sharing/ discussion with teachers at same stage + 2.3 Influence of other teachers
- 8.8 Working/ observing in other schools
- 8.9 Policy / HMIe or Education Scotland
- 8.10 IT
- 8.11 Learning from other types of (teaching) experience

10 Perspectives on CPD (incorporated 9 'Need for national/ inter-authority approach to GM professional learning)

10.1 Perspective on LA CPD

10.1.1 CPD for all teachers

10.1.2 CPD relevant to GME

10.2 Perspective on formal CPD in School(s)

10.3 Perspective on informal CPD support

10.4 Perspective on national CPD

10.5 Barriers to CPD (inserted group 4)

11. CPD perceptions

11.1 Conceptual

11.2 Benefits – variety, relevance to teaching & learning, resources, transferable learning (personal growth A1p2)

11.3 'Not so useful'

11.4 Benefits of CPD

Appendix 10 Example of a theme, code and instances (data extracts) from probationer transcripts (analysis by group)

| 2. Context of the school and personal history matters | <i>Data extract</i> |
|---|---|
| 2.1 Influence of school size on professional learning opportunities | <p>‘tha sinn cho fortanach gu bheil mi timcheall air tòrr dhaoine, chàinain na tidsearan air fad, chan eil daoine sam bith sa luchd-obrach nach biodh dèonach do chuideachadh ann an dòigh sam bith’ <i>[We are so fortunate to be surrounded by many people – I would say that among all the teachers there is no-one who would not be willing to help in any way possible.]</i></p> <p>‘Tha mi a' faireachdainn dìreach cho fortanach. Chanain nach eil dùbhlain sam bith againn – tha tòrr dhùbhlain againn ach tha mi air a bhith gu math fortanach is gu bheil daoine timcheall orm’ <i>[I feel so privileged. We have no real issues – we have lots of challenges but am so fortunate to be surrounded by (supportive) colleagues.]</i></p> <p>‘Is math dh' fhaoidte is coireach gu bheil sinne gu math beag an seo cuideachd, cha robh tòrr daoine ag ràdh 'dè tha thu a' smaointinn mu dheidhinn sin?' 'A bheil mi dèanamh seo anns an dòigh cheart?' Chan eil fhios am, tha sin air a bhith caran doirbh, dìreach air a bhith mi fhìn airson a mhòr chuid den ùine’ <i>[Maybe the problem is that we are a small unit and there is no-one of whom to ask ‘What do you think of this? Is this the right way?’ That has been a bit tough, being on my own for most of the time.]</i></p> <p>‘S math dh'fhaoidte mar bha mi ann an àite nas motha na seo bhiodh e diofraichte ach bhiodh tòrr daoine ann dh'fhaodadh tu dhol, 'O, chan eil fhios am mu dheidhinn sin, a bheil seo cheart?' Ach an seo, tha sinn gu math beag so cha robh an cothrom sin agam’ <i>[Maybe it would be different if I was in a larger school where there were many people you could approach – ‘Oh, I don’t know about that, is this right?’ But we are very small here and I don’t have that opportunity]</i></p> |

Appendix 11 Example of a theme, code and instances (data extracts) from transcripts (analysis across stages).

| Perspective on national CPD | Data extract |
|---|--|
| <p>10.4 Perspective on national CPD 8.9 Policy / HMIe or Education Scotland</p> | <p>Bha an là sin (BnG Probationer Day) math is gun fhuair sinn cothrom ri bruidhinn ri chèile, na probationers air fad, dìreach mu dheidhinn ciamar a bha cuisean a' dol is rudan mar sin, bha sin feumail cuideachd – ma tha cuideigin eile san aon suidheachadh ma tha aon-trì is tha thusa ag ràdh 'tha mise san aon rud', tha sin – tha thu a' faireachdainn rud beag nas fheàrr as dèidh sin cuideachd, chan eil thu a' smaointinn tha thu dìreach air dèanamh thu fhèin. Chòrd an latha sin ruim. Bha e math! (Sa chiad bliadhna) B2:3</p> <p><i>That day (BnG Probationer day) was very good. It was good to speak to all the other probationers about how things were for them and if you met someone with the same classes (1-3) as you, you felt better because you don't feel you are all alone. I loved that day. It was great! (Probationer)</i></p> <p>Bha sin (Advice on Gaelic Education 2015) uabhasach feumail dhomhsa, tha mise air a bhith ga chleachdadh a' dol timcheall na sgoiltean àraich airson fhaighinn air ais gu dè na rudan as cudromaiche as an sgoil àraich?' G3:2</p> <p><i>'That (Advice on Gaelic Education 2015) was very helpful to me, I have been using it going round the nurseries to get back to what the most important in the nursery school?' Year 2-6.</i></p> <p>Thairis air na bliadhnaichean tha mi a' smaoinichadh gur e na cothroman nas fheàrr a fhuair mise 's ann aig an t-Alltan,gach uair tha rudeigin math ann co-dhiù. Agus tha mi a' smaoinichadh gu bheil suidheachadh mar sin, far a bheil tidsearan Gàidhlig agus tidsearan tro mheadhan na Gàidhlig a' tighinn còmhla, is gu bheil na buidhteann obrach is na h-àraidean stèidhte mar a tha cuisean ann am foghlam na Gàidhlig; tha e a' toirt focus a' choireigin nas fheàrr is nas mionaideach na an ionnsachadh proifeasanta tha sinn a' faighinn dìreach as a chumantas.F1:1</p> <p><i>Over the years, the best CPD that I've had has been at An t-Alltan (arranged by Storlann). I think that a context like that, where Gaelic teachers (secondary) and GME come together, and where the talks & workshops are focused on Gaelic education – it gives a better (more relevant) focus than our regular CPD. (Head teacher)</i></p> |

Appendix 12

Simplified example of theme development

Initial themes →

- Teaching in Gaelic-medium (GM) is different
- Context of the school and personal history matters
- Teacher's self confidence/ personal identity
- Language needs
- Teacher understanding of second language acquisition
- Teaching the curriculum through a second language
- Need for national/ inter-authority approach to GM professional learning

Themes added / revised → (example)

1. Immersion understanding
2. School context
3. Self-confidence and influences
4. Language needs
5. L2 acquisition and understanding
6. Teaching the curriculum through L2
7. CPD needs
8. Resources
9. Opportunity to choose CPD
10. Perspective on school CPD
11. Perspective on LA CPD
12. Perspective on national CPD
13. Personal search and reflection

Themes grouped → (example)

1. Immersion understanding
2. School context
9. Opportunity to choose CPD
3. Self-confidence and influences
4. Language needs
5. L2 acquisition and understanding
6. Teaching the curriculum through L2
7. CPD needs
13. Personal search and reflection
8. Resources
10. Perspective on school CPD
11. Perspective on LA CPD
12. Perspective on national CPD

Examples of some specific requests within revised themes

Teachers' own language needs:

Any Gaelic CPD
Gaelic as a language
Grammar
Language enrichment

Needs related to L2 understanding:

Teaching an L2
Immersion education
Bilingual education

Needs relating L2 pedagogies:

Any language pedagogies
Interdisciplinary learning
Differentiation
Cooperative learning
Error correction
Comprehension
Additional support needs
Assessment
L2 language progression

Appendix 13

Language of the teachers' education: primary, secondary and tertiary

| Career Stage | Gaelic NS* | Gaelic L2* | Primary | Secondary | Tertiary (degree level) |
|------------------------|------------|------------|------------|-----------|-------------------------|
| Probationer | | L2 | GME | GM | EM with Gaelic** |
| Probationer | | L2 | EME | EM | EM with Gaelic |
| Probationer | | L2 | GME | EM | EM with Gaelic |
| Probationer | NS | | EME | EM | EM |
| Probationer | NS | | GME | EM | EM with Gaelic |
| Year 2-6 Class Teacher | NS | | EME | EM | EM |
| Year 2-6 Class Teacher | | L2 | EME | EM | EM with Gaelic |
| Year 2-6 Class Teacher | NS | | EME | EM | EM |
| Year 2-6 Class Teacher | | L2 | EME | EM | EM with Gaelic |
| Year 2-6 Class Teacher | NS | | EME | EM | EM with Gaelic |
| Year 7+ Class Teacher | | L2 | EME | EM | EM with Gaelic |
| Year 7+ Class Teacher | | L2 | EME | EM | EM |
| Year 7+ Class Teacher | NS | | EME | EM | EM |
| Year 7+ Class Teacher | NS | | EME | EM | EM |
| Year 7+ Class Teacher | NS | | EME | EM | EM |
| Year 7+ Class Teacher | NS | | GME | EM | EM with Gaelic |
| Year 7+ Class Teacher | NS | | EME | EM | EM |
| Year 7+ Promoted DHT | NS | | EME | EM | EM |
| Year 7+ Promoted DHT | NS | | EME | EM | EM with Gaelic |
| Year 7+ Promoted HT | NS | | EME | EM | EM |
| Year 7+ Promoted DHT | NS | | EME | EM | EM |
| Year 7+ Promoted HT | | L2 | EME | EM | EM |
| Year 7+ Promoted PT | | L2 | EME | EM | EM |
| Year 7+ Promoted PT | NS | | EME | EM | EM |
| Year 7+ Promoted PT | NS | | EME | EM | EM |

* The participants self-categorized as Gaelic language learners (L2) or native speakers (NS)

** 'with Gaelic' denotes that a module(s) in Gaelic or in a Gaelic-related subject was core or included in the degree

Appendix 14

Participant language fluency in Gaelic and English on a scale of 1-5 (identified from questionnaires)

(1= low level of overall fluency; 5= high level of overall fluency)

| Gaelic NS or L2 | Gaelic fluency (1-5) | English fluency (1-5) |
|-----------------|----------------------|-----------------------|
| L2 | 5 | 5 |
| L2 | 4 | 5 |
| L2 | 4 | 5 |
| NS | 3 | 5 |
| NS | 5 | 5 |
| L2 | 4 | 5 |
| NS | 4 | 5 |
| L2 | 5 | 5 |
| NS | 5 | 5 |
| NS | 3 | 5 |
| L2 | 4 | 5 |
| L2 | 4 | 5 |
| NS | 5 | 5 |
| NS | 4 | 5 |
| NS | 5 | 5 |
| NS | 5 | 5 |
| NS | 5 | 5 |
| NS | 5 | 5 |
| NS | 5 | 5 |
| NS | 5 | 5 |
| NS | 5 | 5 |
| L2 | 4 | 5 |
| L2 | 3 | 5 |
| NS | 4 | 5 |
| NS | 4 | 5 |

Appendix 15

Intersection of themes and specific language-related learning needs requested (identified from transcripts)

| Focus of learning | Probationer | Years 1-6 | Years 7+ | Years 7+ with management |
|--|-------------|-----------|----------|--------------------------|
| Teachers' own language learning needs | | | | |
| Any Gaelic CPD | | x* | x | x |
| Gaelic as a language | x | x | x | x |
| Grammar | x | x | x | x |
| Richness of language (e.g. idiom) | | x | x | x |
| Specialist vocabulary | x | x | | x |
| Learning needs relating to L2 understanding | | | | |
| Teaching Gaelic as an L2 | x | | x | x |
| Immersion education | | x | x | |
| Bilingual education | x | x | x | x |
| Learning needs relating to L2 pedagogies | | | | |
| Language pedagogies | x | x | | x |
| Interdisciplinary Learning | x | x | | x |
| Differentiation | x | | | |
| Cooperative learning | x | | x | |
| Comprehension | x | | x | |
| Error correction | | x | | x |
| Additional Support Needs | x | x | x | |
| Assessment | x | | x | x |
| Language progression | x | x | x | x |
| Learning needs relating to GME | | | | |
| Teaching reading in Gaelic | x | | | |
| Phonics | | | x | |
| Teaching writing in Gaelic | x | | x | |
| Leadership | | | | x |

* x represents the area that participants identified in which they would value further professional learning sessions. It may represent either a single instance of the identified area by a specific group or a number of instances by the group. The aim was to record all reported areas of learning needs, acknowledging the value of each to the participant(s), rather than enumerating the number of instances identified in a specific area by each group.

Appendix 16

Professional Learning (Questionnaire data)

Please identify the key influences on how you teach? Tick as many as are applicable.

| INFLUENCES | Strong influence | Some influence | Little influence |
|--|-------------------------|-----------------------|-------------------------|
| School Policy | 16 | 4 | 4 |
| Local Authority Policy | 5 | 15 | 3 |
| Curriculum for Excellence | 21 | 3 | 0 |
| HMiE document(s) | 6 | 14 | 4 |
| CPD | 9 | 14 | 1 |
| My own beliefs about learning and teaching | 13 | 9 | 1 |
| Parental expectation | 8 | 11 | 5 |
| My teacher education | 8 | 10 | 6 |
| Other teachers/ colleagues | 16 | 8 | 0 |
| Other | Children's interests 1 | | |