



“Fair? Shared? Supported?
Examining expectations and realities for
Irish-medium practitioners”

Research Report on The Additional Competences and Associated
Workloads of the Irish-medium Practitioner by the Centre for Language
Education Research, Queen’s University Belfast



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Authorship and report citation

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1. Executive Summary and Recommendations

In Northern Ireland, teacher shortages and the lack of dedicated opportunities for Teacher Professional Learning (TPL) in the Irish Medium Education (IME) sector are recognised as some of the issues which have the potential to contribute to sustained educational underachievement for pupils in Northern Ireland (Fair Start Policy 2021). In order to better understand and evidence challenges for teachers and educational practitioners in the IME sector in Northern Ireland this research project undertook:

- 1) a comprehensive systematic-style literature review in relation to the competencies of bilingual/Irish-medium education practitioners
- 2) interviews with student teachers, teachers, principals, and teacher educators on the additional competencies and challenges of working in IME in Northern Ireland
- 3) the design of an action plan aimed at aiding teacher retention and helping to alleviating attrition rates of Irish-medium practitioners in Northern Ireland

The systematic literature review international research conducted in immersion education contexts sought to capture a clear and comprehensive picture of (i) the challenges associated with immersion education models, (ii) responses to those challenges, and (iii) teacher competencies involved in delivering instruction. 'Immersion' was broadly conceived as education that aims to develop bilingualism in pupils through language of instruction.

Key **challenges** to immersion teaching in peer-reviewed research:

- Immersion teaching requires more time than teaching in a shared dominant language
- Inappropriate assessment practices
- Lack of quality, relevant training in language and bilingual pedagogies
- Challenges associated with identifying and using appropriate materials and technology
- Wide variation in teacher and student abilities regarding language and academic skills
- Social pressures, inequity, and discrimination for teachers, students, and communities
- Inadequate financial resources to fund professional development and educational infrastructure.

Key **responses** to immersion teaching challenges in peer-reviewed research:

- Increased and specialised teacher training to improve linguistic and pedagogical skills
- Classroom practices that built upon students' linguistic and cultural assets (e.g., translanguaging, assets-based pedagogies, integration of home culture in class),
- Bespoke, teacher-developed additional practices in response to classroom and local conditions
- Redistribution of labour across more human resources (i.e., cooperation with colleagues, collaborative relationships, addition of teaching assistants)

Key **competencies** held by immersion teachers according to peer-reviewed research:

- Linguistic expertise
- Familiarity with minoritized cultural knowledge
- Expertise with plurilingual pedagogies
- Skill with materials development & technology
- Ability to integrate diverse subject matter and cultural content into instruction
- Understanding of political complexities relevant to specific immersion context
- Ability to liaise with parents and advocate for minoritized language students
- Reflexivity and awareness of power inequities inside and outside the classroom

To create a multi-perspectival and context sensitive view of IME competencies and challenges in NI, the research team conducted interviews with student teachers, teacher educators, teachers, and principals. The primary dataset of interviews evidences the experiences and perspectives of IME stakeholders working in the Northern Ireland context in 2023. The analysis of the interviews provides insight into the complexity of challenges for IME practitioners.

The substantial international research base identified in our review points to the additional challenges for bilingual/immersion educators (e.g., Poon and Lau, 2016). These worldwide challenges are echoed in the evidence from interviews conducted with IME stakeholders in a NI context which include:

- Immersion teaching requires more time than teaching in a shared dominant language.
- Inappropriate assessment practices
- Lack of relevant training in language and bilingual pedagogies
- Challenges associated with availability of appropriate materials and technology
- Variation in support for development of teacher and student language and academic skills
- Inadequate financial resources to fund professional development and educational infrastructure

In Northern Ireland teaching council documentation, there is only one reference to an additional professional competence for Irish medium/bilingual teachers. This is subsumed under item 3 (GTCNI, Professional Competence 3 (ii)), with generic reference to “sufficient linguistic and pedagogical knowledge” of immersion education. From the systematic review of international immersion contexts and the interview data in which participants report on the realities of being a teacher in Irish Medium Education in Northern Ireland, our analysis suggests that there are a number of additional competencies which are essential for IME practitioners, and their current workload is compounded by the lack of substantive support and recognition thereof.

In summary, while there are several important themes arising from the analysis of the interview data, they are encompassed by two overarching themes: i) the resource gap and ii) the disparity/incongruity of systemic assessment. First, in relation to the resources gap, we use this phrase in our analysis to reference both material and human resources. Teaching and learning resources include classroom-based materials, subject-specific textbooks, exam preparation materials, language testing materials. Reference to material resources also includes the physicality of school buildings and facilities, which are becoming

overstretched as enrolment numbers increase. Regarding human resources, teachers in an immersion context hold a double role. Not only are they the 'human' resources employed to teach and prepare children and young people for their futures, as all teachers are, but immersion teachers are also the most significant 'language resource' through which pupils can develop their Irish language oracy and literacy. What is evidenced in the interview data is a consistent concern that these human resources are being overstretched in a number of ways and under resourced in others which includes subject specialist teachers for post-primary contexts. The matter of significant additional work to undertake as an immersion teacher is compounded by in the context of relatively new and growing sector of education for which IME tailored statutory support and recognition is yet to be fully woven into the current education system. This points to a significant risk, rather than a challenge to the IME sector.

From the interviews it is evident that stakeholders view assessment in the IME sector as a particularly underdeveloped high-stakes area. The impact of this underdevelopment is that it adds a considerable burden to teachers, not just in having to attempt to create their own assessments, or work with non-standardized tests, but also a challenge to their sense of professional identity where they find themselves having to, in the face of no alternative, use potentially invalid measures of assessment. Threats to their professional identity also emerge as they may undertake tasks for which they have received no specialist bilingual test-construction training or as they present candidates for examination knowing that their pupil's performance will be immediately devalued by having to await translation into English before being marked.

The extent to which parity of assessment in general and testing in particular is/has been achieved for IME sector in NI remains, from stakeholders' perspectives, uncertain. They report limited availability of suitable diagnostic assessment tools and standardized tests which are (or are evidenced to be) fair, valid, and reliable for use in an IME population in NI. The area of SEN assessment of IME pupils remains a significant area of concern for stakeholders, with teachers impacted by lack of tools for support in this regard. Interviewees report concerns about the relevance and appropriateness of IME students taking content-subject examinations designed for English speakers, disregarding the impact of translation on performance in examinations and failure to reward pupils' demonstration of additional cognitive skills therein.

These additional burdens and challenges over time may be said to be culminating, to some extent, in a fear for student teachers, teachers, principals and teacher educators that IME pupils may be being disadvantaged; pupils' potential for academic and employment success is not being fulfilled and/or those who require additional educational support are not receiving it or receiving it too late in compulsory schooling. Not only does this impact on pupils and teachers, but the ripple effects of underachievement will impact on school, parents, local communities, and society in NI as a result.

Based on the findings from this research, an inclusive eight-point action plan was developed and refined with feedback from key stakeholders to create a comprehensive process to enact more critical and sustainable practices that meet the needs of students, community, parents' and other stakeholders in IME in Northern Ireland over the mid to long-term.

In the short-term, and as a matter of urgency, based on our review of international research and the primary research conducted with practitioners we also make the following recommendations:

- 1) Conduct an evaluation of the measures which can offset the recognised and additional workload of IME teachers in Northern Ireland
- 2) Review current summative assessments for IME pupils in Northern Ireland
- 3) Investigate the impact of current examination procedures and assessments on IME pupils taking formal qualifications in Northern Ireland

2. Introduction

Language immersion education is a feature of many public education systems across the globe. From an international perspective, language immersion education is one of many approaches to bilingual education, an increasingly common choice for parents, children, and young people (Garcia and Baker, 2007). With the expansion of immersion education worldwide, research has continued to identify and track the advantages of developing bi/multilingualism and maintaining/reclaiming autochthonous languages (Tedick et al, 2011). So too has it paved a way to a better understanding of some of the global and context-specific challenges which language immersion education can face.

In Northern Ireland, teacher shortages and the lack of dedicated opportunities for Teacher Professional Learning (TPL) in the Irish Medium Education (IME) are recognised as some of the issues which have the potential to contribute to sustained educational underachievement for pupils (Fair Start Policy 2021). Opportunities for young adults to become IME practitioners are developing, with the increase in the number of places available for IME in initial teacher education in Northern Ireland. The IME sector is, itself, the fastest growing educational sector in Northern Ireland (Comhairle na Gaelscolaíochta, 2019; McVeigh, 2022) with growing numbers of school enrolments.

However, the IME sector has continued to face multiple challenges. Some of the challenges are similar to those evident in other school sectors (e.g. lack of early career support, flexible working patterns and career journeys), but some are unique to the IME sector in Northern Ireland. The extent and nature of a proportion of these additional challenges are known (e.g. extra workload as a result of IME sector advocacy, lack of appropriate assessment tools, shortage of teachers across all curriculum subjects). However, there are likely to be further and unreported challenges which may, until now, have been erroneously framed as individualized deficiencies. This potential scapegoating of teachers may mask the systemic lack of support and training to deal with issues specific to the IME sector in Northern Ireland. In order to better understand and evidence challenges for practitioners in the IME sector in Northern Ireland this research project undertook:

- 1) a comprehensive systematic-style literature review in relation to the competencies of bilingual/Irish-medium education practitioners
- 2) interviews with student teachers, teachers, principals, and teacher educators on the additional competencies and challenges of working in IME in Northern Ireland
- 3) the design of an action plan aimed at aiding teacher retention and helping to alleviating attrition rates of Irish-medium practitioners in Northern Ireland

In this report, we present the findings from this research and detail a proposed action plan.

3. Literature Review

3.1 Methods and Procedures

This investigation of the competencies and challenges of immersion education in Northern Ireland is positioned from a systematic review of research studies on immersion and bilingual education across the globe. The advantages of a systematic-style literature review two fold: i) it can capture an extensive range of research and ii) it reduces the risk of ‘cherry-picking’ or bias in the selection of research evidence (Kugley et al., 2015; Zawacki-Richter et al., 2020). Following Newman and Gough (2019), a detailed purposive search strategy was developed for this systematic-style literature review and a protocol was designed (see Appendix 1). The development of this protocol was informed by Chong and Plonsky’s (2021) methodological framework for a qualitative research synthesis.

Key to this review were the questions focused on the descriptions of challenges facing immersion and bilingual education teachers as well as any responses to those challenges. These were:

- RQ1: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language education settings face?
 - RQ1.1: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language education settings face in their daily practice?
 - RQ1.2: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language education settings face in their professional development?
 - RQ1.3: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language settings face in their career trajectories?
- RQ2: How do IME teachers and other teachers in immersive non-ELT language education settings respond to these additional challenges and with what resources?

A search string using Boolean search terms was developed (see Table 1), which was designed to capture research evidence from the range of relevant immersion and bilingual educational contexts. The search was conducted in two databases (see Table 2) which ensured a range of publication type (e.g. research articles, position papers, review articles) and methodological approaches (e.g. quantitative and qualitative). Publication types such as book chapters, unpublished student dissertations, and organization reports were not included in the review. Having undergone a peer-review process, journal articles were the focal publications in this review as they are considered to be the representative benchmark of standards in research reporting.

("immersion" or "*medium education" or "*medium of instruction" or "bilingual education") AND ("instructor*" or "teacher*" or "practitioner*") AND ("competenc*" or "skill*" or "abilit*" or "method*")

Table 1 List of search strings used in systematic review

Database	No. of articles
Scopus	858
ERIC	236
Total	1094

Table 2 List of databases searched and number of articles identified using search strings

As displayed in Table 2, 1094 journal papers were returned as a result of the database search. These results were uploaded directly from the two databases to an online application (Rayyan) designed to support collaborative systematic literature reviews. Using the application’s duplication detection feature, 141 duplicate articles were eliminated. As part of the screening processes, inclusion and exclusion criteria were applied to the abstracts of the remaining records (see Appendix 1) and a total of 774 were excluded. The remaining 179 records were sought for retrieval and assessed for eligibility (See Figure 1).

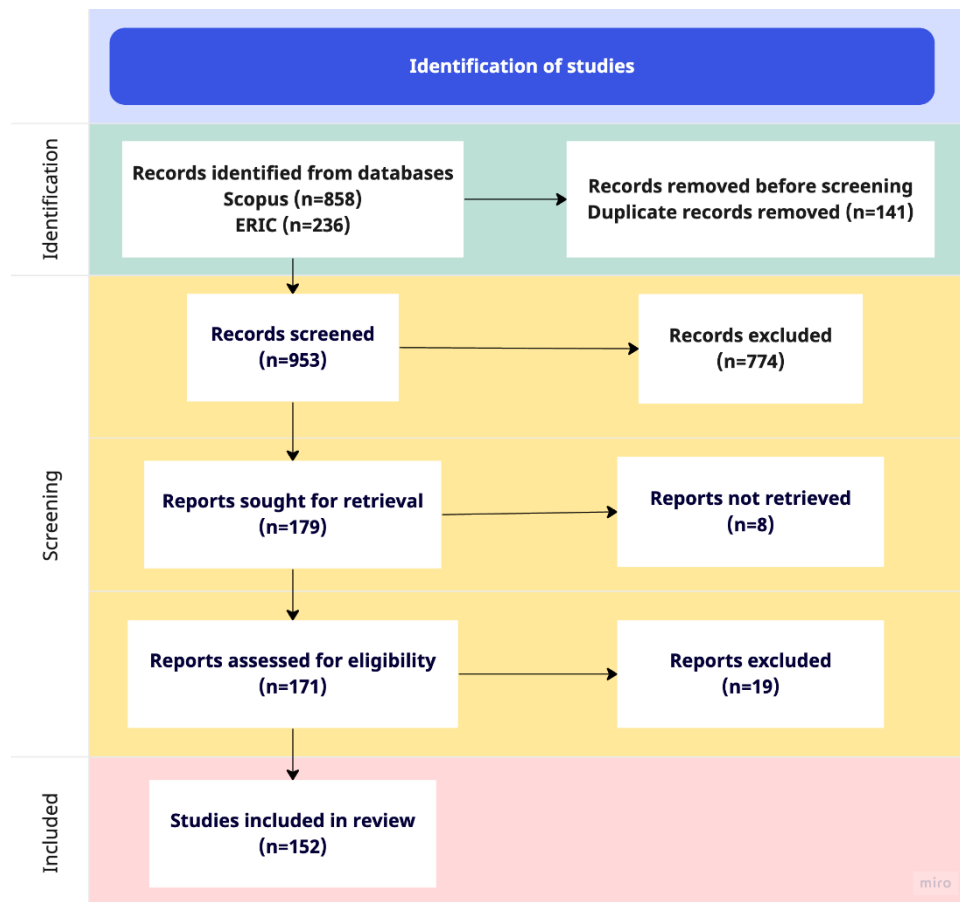


Figure 1 Identification, screening, and inclusion of studies

After retrieving all possible articles members of the research team read each article and noted relevant information to an extraction form (see Appendix 1) which was developed to facilitate further analysis of each article. The read-through of the 171 remaining articles served as a second screening process. Articles that did not evidence discussion of teacher challenges and competencies in immersion, CLIL, or other bilingual models of education were eliminated from the review and their extraction forms were removed from the pool of studies (n=19). Information from the extraction forms for the remaining articles were

collated into an Excel spreadsheet. We then applied preliminary descriptive codes (Saldaña, 2016) to the verbatim text that was extracted. This initial analysis conducted individually by research team members generated codes which corresponded to categories of teacher challenges and teacher competencies as well as descriptions of conditions, skills, materials, and practices associated with immersion teaching, broadly conceived. Further coding of the studies was the result of collective decision-making by the research team in order to better organise relationships among the data and attend to “coding compatibility” (Saldaña, 2016:56). This resulted in the development of a matrix through which to ensure all the information collected and coded was analysed with rigour.

Competencies	Content Curriculum/Subject matter knowledge Content knowledge for teaching Knowledge of language for teaching Pedagogical knowledge Language pedagogy knowledge Sociocultural knowledge Policy knowledge Teacher positioning on policy Practices: Language practices (e.g. translanguaging); Pedagogical practices (e.g. materials development); Reflective practices Attributes Language Proficiency Technology/ICT/Digital literacy Motivation of students Awareness of SEN Leadership
Models of immersion	Definitions of (immersion/dual language/bilingual) programmes Variations in (immersion/bilingual) programmes
Cultures, communities, and collaborations	Relationships Advocacy School-home Leadership
Ideologies	Language/s Language learning Language use
Resources/Materials	Teaching/curriculum materials resources Assessment and examination materials/resources
School- home	Parental perspectives

Table 3 Coding matrix for systematic literature review

The results of the analysis of over 100 articles on the challenges facing immersion and bilingual education teachers with evidence-based responses to those challenges (where provided) are presented below.

3.2 Results of systematic literature review

The systematic literature review sought to capture a clear and comprehensive picture of (i) the challenges associated with immersion education models, (ii) responses to those

challenges, and (iii) teacher competencies involved in delivering instruction. ‘Immersion’ was broadly conceived as education that aims to develop bilingualism in pupils through language of instruction. International evidence was provided by the 152 articles included in the review, spanning a broad range of pedagogical, linguistic, and geographical contexts.

Challenges to immersion

From empirical studies conducted in Scotland, Hong Kong, Spain, Canada, China, Italy, USA, Colombia, Malaysia, Sub-Saharan Africa, Bolivia, Germany, Uganda, Botswana, Turkey, Belgium, and Ireland (see Appendix 6), research identifies challenges to immersion that originate within and beyond the classroom. Immersion education’s dual focus on language and content presents a series of challenges to which research locates with the teacher as an individual practitioner, the profession, and the institutional and social environment. Our review has categorised the challenges identified in these empirical studies into five categories: 1) training and development ii) teaching and learning iii) classroom environment iv) social and affective factors and v) profession. The widely documented need for higher-quality training (e.g., Delany-Barmann, 2009; Lo & Macaro, 2012; Murtagh & Seoighe, 2022; Ozfidan, 2014; Palmer et al., 2016; Rodríguez-Valls et al., 2017; Uys et al., 2007) across 5 different continents demonstrates the significance of teacher knowledge to successful immersion efforts. The need for more knowledge of immersion pedagogies, such as Content Language Integrated Learning (CLIL), stands out as the most commonly cited challenge to teaching and learning (e.g., Benson 2010; Hill, 2022; Ní Dhiorbháin & Ó Duibhir, 2017; Tedick & Wesely, 2015). Studies also commonly demonstrate specific needs for training on how to better integrate technology (e.g., McClintic, 2022; Yong & Hoffman, 2015) and other learning materials (e.g., Amos, 2020; An et al., 2016; Pérez Cañado, 2016).

Challenge	Category
Training (general) unavailable or of poor quality (19)	Training and Development
Teacher education inadequate in TL (4)	
Inexperienced teachers (2)	
Inadequate knowledge of language pedagogy (e.g., CLIL) (23)	Teaching and learning
Assessments (12)	
Challenges connecting language and content (12)	
Teacher language proficiency (11)	
Inadequate knowledge of minoritised community practices (10)	
Academic language can be difficult to use and understand (9)	
Unsure of how to <i>use</i> materials (8)	
Some poor student language outcomes (7)	
Immersion pedagogies require additional time (6)	
Insufficient skill (or resourcing) with technology (6)	
Language standardisation/variation (4)	
Need for sociocultural knowledge of multiple communities (3)	
Identifying and differentiating for SEN students (2)	
Inadequate language policy knowledge (2)	
Lack of knowledge of student home languages (1)	
Disentangling language learning from content learning (1)	
Student skills differ across modes (e.g., writing vs. speaking) (1)	

Challenge	Category
Need for high quality materials (20)	Classroom Environment
Discrimination against teachers (4)	
Discrimination against students/community (4)	
Behavioural issues (3)	
Problematic teacher ideologies (7)	Social & affective factors
Lower self-efficacy/self-perception for bilinguals (6)	
Status differences between languages (5)	
Outside pressure to prioritise English (5)	
Challenging to connect with parents (4)	
Political hostility (3)	
Sense of isolation for teachers (3)	
Sense of isolation for students (mainstreaming) (2)	
Difficult to motivate student learning (2)	
Learners of diverse language backgrounds (1)	
Socioeconomic status differences among students (1)	
Problems with principal (1)	
Unrealistic expectations (1)	
Inadequate financial resources (8)	Profession
Challenges with recruitment (6)	
Challenges with retention (students) (2)	
Challenges with retention (teachers) (3)	
Supply of places outpaced by demand (1)	
Need for special qualifications (1)	
Teacher precarity (1)	
Strict language policies (1)	

Table 4: Challenges to immersion education identified in systematic literature review

Problems and challenges associated with assessment practices in immersion education (see Table 4) are well documented in a variety of contexts (e.g., Welsh immersion, bilingual education in China, Spanish-English dual immersion in the US, signed language learning in Botswana,). These concerns appear more likely to emerge from minoritised language teaching contexts, where teachers are already experiencing challenges associated with limited resources (e.g., Gempeso & Mendez, 2021; Mpuang et al., 2015; Thomas & Dunne, 2022). Assessment challenges are also well documented in bilingual education contexts where at least one of the languages of instruction is the dominant language in society such as Spanish-English dual language bilingual education contexts in the US (Palmer et al., 2016) or Mandarin-Nuosu bilingual education in China (Rehamo & Harrell, 2020). Further, assessment challenges may be linked with other practical concerns such as connecting language and content (Tam, 2011). We also note interconnected research in which studies highlighting poor student language outcomes also cite challenges with the teaching and use of academic language (Lo & Macaro, 2012; Spada & Lightbown, 2002).

Inadequate funding is cited as a reason for some of the challenges teachers encounter with inappropriate assessments (de Puy Ciriza, 2023) and low-quality materials (Yong & Hoffman, 2014). Compensating for these curricular shortcomings can be time consuming,

compounding the workload faced by teachers engaged in immersion pedagogies (Durán-Martínez & Beltrán-Llavador, 2020; Hood, 2020; McDougald & Pissarello, 2020).

Challenges associated with numerous social aspects of immersion teaching are described in the studies. Some of these, such as concerns regarding learner identity (e.g., An et al., 2016, Azcharias, 2013) are found only in classrooms where English is one of the mediums of instruction (Mol). However, challenges pertaining to connecting with parents (Aguayo & Dorner, 2017; Purkarthofer & Mossakowski, 2011) and a sense of isolation for teachers and students alike (e.g., Andrew, 2009; Chen, 2009; Hāwera & Taylor, 2014, Varghese, 2008) are also found in teaching contexts where a minoritised language is the Medium of Instruction.

Responses to challenges

Responses to the challenges of immersion teaching were grouped into three categories of i) training ii) teacher practices, and iii) institutional or policy responses (see Table 5). Over ten percent of studies in the review (n=20) pointed to the utility of additional and ongoing pedagogical training that helps teachers navigate the complexity of teaching both language and culture simultaneously in contexts as varied as French immersion in Canada (Cammarata & Haley, 2018), mother-tongue instruction in South Africa (Koloti & Jita, 2021), multilingual classrooms in Finland (Olmedo & Harbon, 2010), and Spanish-English dual language immersion in the US (Poza, 2019). Training that attends specifically to enhancing teacher language skills (e.g., Early & Norton, 2014; Faltis et al., 2010; Uys et al., 2007) along with training to integrate critical perspectives (McClintic, 2022) and ICT (Durán-Martínez et al., 2022) in the classroom were often cited separately, as additions rather than alternatives to training that specifically addresses the instructional demands of immersion education.

Response	Category
Pedagogical training (20)	Training
Linguistic training (7)	
Accreditation opportunities for teachers (3)	
Training on technology or ICT (2)	
Training to integrate critical perspectives (2)	
Retraining bilingual content teachers (2)	
Study abroad with pedagogy focus (1)	
On-site training (1)	
Translanguaging practices in the classroom (21)	Teacher practices
Teachers create materials they don't have (12)	
Assets-based pedagogies (7)	
Involve family and community (6)	
Connect language with culture (6)	
Teachers support one another (5)	
Use of less complex, accessible language in classroom (4)	
Creative use of technology (3)	
Specific activities (e.g., Q and A, worksheets, pictures) (3)	
Independent learning (language or content) (2)	

Response	Category
Task-based teaching (2)	
Small groups or pairs in classroom (2)	
Separation of languages (2)	
Use of specific bilingual pedagogies (e.g., CBI, CLIL) (2)	
Use of multiple assessments (2)	
Focus on meaning and enjoyment (1)	
Teacher positions self as a learner (1)	
Assets-based approach to assessment (1)	
Smaller classes (1)	
Reinforcing with other skills (e.g., writing to aid reading) (1)	
Critical curricular and instructional practices (1)	
Personalised attention to students (1)	
Special attention to disadvantaged pupils (1)	
Promoting language awareness (1)	
Appeal to policymakers (1)	
Partnerships and collaboration (7)	Institutional/Policy responses
Hold more time for teachers' reflection (6)	
Teaching assistants to support (6)	
Professional communities (1)	
Scholarship support for families (1)	
Immersion before dual language introduction (1)	

Table 5: Responses to challenges of immersion teaching as identified in systematic literature review

Given the empirical evidence showing widespread use of training in bilingual pedagogy to address challenges, it is no surprise that translanguaging practices in the classroom (n=21) were by far the most common responses employed by individual practitioners.

Translanguaging practices (i.e., the strategic use of all linguistic resources in a bilingual individual's repertoire) proved useful in contexts as diverse as North America (e.g., Chen, 2009; Tedick & Young, 2018), Africa (e.g., Clegg & Aftiska, 2011; Jones, 2014), Europe (e.g., Martinez, 2019; Purkharthofer & Mossakowski, 2011), the Middle East (Schwarz et al., 2022), and Asia (Phyak et al., 2022; Poon & Lau, 2016) (see Appendix 7). Further to teachers' practices, studies from the review showed that teachers in immersion contexts tend to rely heavily on their own resourcefulness to make materials (Cammarata & Haley, 2018; Grandinetti et al., 2013; Mpuang et al., 2015), connect with students' cultures (Becerra-Lubies & Fones, 2016; Yang et al., 2018), and develop localised practices in response to challenges.

Findings from this review of international research illustrates how immersion teachers also rely on one another, sharing materials and strategies (e.g., An et al., 2016; Hudson, 2009). Notably, cooperation of some kind was shown to be institutionalised in a considerable number of studies, as some schools responded to challenges by building collaborative networks (e.g., Hāwera & Taylor, 2014; Peter & Hirata-Edds, 2006) and providing language assistants to support practicing classroom teachers (e.g., Gerena & Keiler, 2012; Pérez

Cañado, 2016). These institutional responses that aimed to support human resources were found in the US, Canada, Spain, Germany, South Africa, and New Zealand.

Teacher competencies

Research on immersion teacher competencies tends to focus on instructional knowledge within the confines of the curricular objectives and classroom.. However, this review also evidences numerous studies (n=43) from a wide range of contexts which acknowledge the intersecting personal, professional, and cultural knowledge needed by immersion teachers. In Including research from six continents (see Appendix 8) our systematic literature review offers a comprehensive list of immersion teacher competencies (see Table 6).

Competence	Category
Knowledge of immersion pedagogies (24)	Instructional knowledge
Knowledge of target language (19)	
Knowledge of content and curriculum (18)	
Materials design and creation abilities (14)	
Knowledge of affective dimension of language learning (13)	
Ability to integrate social and cultural elements into teaching (9)	
Knowledge of impact of non-linguistic factors on learning (8)	
Knowledge about bilingualism (6)	
Knowledge of academic language (5)	
Knowledge of language policy (4)	
Skill with technology (4)	
Ability to relate to students (4)	
Ability to differentiate instruction (3)	
Translation abilities (2)	
Metalinguistic knowledge (2)	
Ability to notice (2)	
Teaching experience in immersion (2)	
Ability to integrate content and language (2)	
Critical language awareness (1)	
Nonverbal communication (1)	
Knowledge of culture (7)	Cultural knowledge
Understanding of political context (6)	
Connection with parents (4)	
Ability to advocate for learners and schools (10)	Personal/professional skills
Collaborativeness (7)	
Critical consciousness (3)	
Adaptability (3)	
Ability to reflect on practice (2)	
Knowledge of how to challenge purist ideologies (1)	

Table 6: Immersion teacher competencies identified by systematic literature review

Reinforcing the significance of immersion pedagogies and their combined requirements of linguistic, cultural, and subject knowledge, our review shows these areas of expertise to be well represented in the literature. Further, numerous studies noted the importance of teachers understanding fundamental processes and practices associated with bilingualism (e.g., Delany-Barmann, 2009; Thomas & Dunne, 2022), including non-linguistic (e.g., Akcan, 2004; Clark, 1995; Tavares, 2015) and affective dimensions of language learning (Cekaite, 2009; Yong & Hoffman, 2014). The number of studies describing these competencies is noteworthy as these skills are *in addition to* monolingual teacher competencies (also represented in immersion literature) that include differentiation of instruction (e.g., Ewart & Straw, 2001), skill with technology (e.g., Coyle et al., 2010; Zacharias et al., 2022), and an ability to relate to students (e.g., Schwartz & Gorbatt, 2017; Zaidi et al., 2022).

Research shows immersion teachers to be adaptable, reflective, and aware of social inequalities. The advocacy role played by many immersion teachers was highlighted in studies from North America (e.g., Amos, 2020; Faltis et al., 2010) and Africa (e.g., Clegg & Afitska, 2011; Jones, 2014), though Baldwin (2021) sees the ability to advocate for learners and schools as even more widely held. For minoritised language teachers, skills associated with navigating cultural, social, and political complexities are a necessary part of a practitioner's repertoire, as the studies in this review demonstrate. Further, advocacy work can be seen as connecting to many of the resourcing challenges listed in Table 1. Just as a lack of materials requires teachers to be competent materials developers (e.g., Akello & Timmerman, 2018; Pérez Cañado, 2016; Peter & Hirata-Edds, 2006), so might a lack of cultural representation or political support necessitate competence navigating power inequities.

3.3 Summary of key findings for systematic literature review

Key **challenges** to immersion teaching in peer-reviewed research:

- Immersion teaching requires more time than teaching in a shared dominant language,
- Inappropriate assessment practices,
- Lack of quality, relevant training in language and bilingual pedagogies,
- Challenges associated with identifying and using appropriate materials and technology,
- Wide variation in teacher and student abilities with regard to language and academic skills,
- Social pressures, inequity, and discrimination for teachers, students, and communities,
- Inadequate financial resources to fund professional development and educational infrastructure.

Key **responses** to immersion teaching challenges in peer-reviewed research:

- Increased and specialised teacher training to improve linguistic and pedagogical skills,
- Classroom practices that built upon students' linguistic and cultural assets (e.g., translanguaging, assets-based pedagogies, integration of home culture in class),

- Bespoke, teacher-developed additional practices in response to classroom and local conditions,
- Redistribution of labour across more human resources (I.e., cooperation with colleagues, collaborative relationships, addition of teaching assistants)

Key **competencies** held by immersion teachers according to peer-reviewed research:

- Linguistic expertise,
- Familiarity with minoritised cultural knowledge,
- Expertise with plurilingual pedagogies,
- Skill with materials development & technology,
- Ability to integrate diverse subject matter and cultural content into instruction,
- Understanding of political complexities relevant to specific immersion context,
- Ability to liaise with parents and advocate for minoritised language students,
- Reflexivity and awareness of power inequities inside and outside the classroom.

4. Stakeholder interviews

In order to better understand and evidence challenges for practitioners in the IME sector in the specific context of Northern Ireland, semi-structured interviews were conducted with a range of practitioners and stakeholders. To create this multi-perspectival and context sensitive view of IME competencies and challenges in NI, the research team conducted

interviews with student teachers, teacher educators, teachers, and principals. The primary dataset of interviews evidences the experiences and perspectives of IME stakeholders working in the Northern Ireland context in 2023. The analysis of the interviews provides insight into the complexity of challenges for IME practitioners and is discussed in relation to the findings of the systematic review and the extent to which the issues are different from or similar to immersion education elsewhere.

4.1 Participants

Participants in this research included: IME teachers, IME principals, IME university student teacher, and IME university teacher educators working/studying in Northern Ireland, including those working in rural and urban areas. A breakdown of participants by region are given below in Table 4. Further details on participant characteristics are not provided in this report to ensure anonymity.

Student Teacher	Teacher Educator	Teacher	Principal
Co. Down	Co. Antrim	Co. Antrim	Co. Derry
	Co. Antrim	Co. Down	Co. Antrim
		Co. Fermanagh	Co. Tyrone

Table 4 Participants by group and region

4.2 Research instruments

A series of semi-structured interview questions were drafted according to the targeted duration of interview time and particular stakeholder group (i.e., IME teacher, teacher educator, student teacher, IME school principals/leaders- see Appendix 5). Across these groups, interview questions were parallel themed under perspectives on IME, perspectives of future career in IME or future directions of IME in NI, as well as professional development opportunities, challenges teaching in IME schools and experiences learning/using Irish. Interview questions were revised within the team to ensure coherence, consistency, and avoid redundancy. A pilot interview was conducted with an IME teacher who helped to validate the questions designed for IME teachers. The overall aim of the interview questions was to elicit evidence of challenges and additional competencies of practitioners in the IME sector.

4.3 Data collection

Prior to any data collection, the research team submitted an Ethics Application for review to the QUB School of Social Sciences, Education and Social Work Ethics Committee. No research was conducted until Ethical Approval to proceed had been granted (REF 043_2223). All members of the research team are members of professional organizations who adhere to recommendations on good practice in Applied Linguistics ([BAAL, 2021](#)) and Ethical Guidelines in Educational Research ([BERA, 2018](#)).

Information about the project and accompanying invitations to participate in a 45-60 minute interview were sent to publicly available school and institution email addresses (Appendix 2-4). Communication about the project was also shared with professional organizations and networks. On receipt of completed consent form, arrangements were made via email to hold an interview with the participant and one of the members of the research team. Interviews either took place in person or via MS Teams. All interviews were recorded with the permission of participants and transcribed.

4.3 Data analysis

Interview data were analysed using a constant comparison method (Lincoln and Guba, 1985), an inductive process whereby data is reduced through iterative coding. Reading and reviewing the interview transcripts, the research team coded and compared incidents of challenges, expectations, and competencies across the different interviews. This open-coding process yielded a number of themes which transcend the particular individual reports of experience to offer a thick description of the additional workloads and challenges for IME practitioners in Northern Ireland. Key themes from the analysis of the stakeholder interviews are discussed below and illustrated with specific quotes from participants.

4.4 Findings from the stakeholder interviews

Key themes from the analysis of the stakeholder interviews are discussed below and illustrated with specific quotes from participants. Specific identifiers are not presented in this report to protect the anonymity of participants, only the following nomenclatures are used: student teacher, teacher, school leader, teacher educator.

Impact of a resource gap

A recurring theme in the interview data was the matter of resources-both human and material. While this may not be an unexpected theme in a societal context which has been subjected to successive periods of economic austerity, the findings focus on the specific experiences of IME practitioners and the impact of this resource gap on teachers and pupils.

“There is an additional layer of work and effort involved in teaching in an Irish medium school because we haven't got the resources yet, but we will. But there is a lack of resources, and there is a lack of support. So then all that falls back to the class teacher to be more imaginative, more inventive, create their own resources. So you know that's a challenge, it's not easy.” (School Leader)

In relation to teaching and classroom learning materials, interviewees noted that they could point to examples of excellent locally produced Irish-medium teaching resources. However, they considered that the breadth and depth of resources and the extent to which these were not widely available across the sector was deeply problematic.

“Materials are not always available or to the extent that you would like them to be available and also [for] children with special learning needs” (Teacher Educator)

“Apps and online resources that are available in English aren't available in Irish.” (School Leader)

“the kids need a level playing field ...there isn't a level playing field when it comes to resources” (School Leader)

Practitioners noted that there is no allowance in time, salary, or formal recognition for the many ways in which classroom teachers find themselves having to fill the gaps for their pupils. The impact of not having a range of suitable teaching resources readily available was felt most significantly by classroom teachers and recognised by interviewees from across the different stakeholder groups

“22 years teaching and I'm still working to 10:00 o'clock every night preparing resources and things that just aren't there ... an English teacher can go online and they have a wealth of resources at their fingertips. Ours is very limited” (Teacher)

I [...] see that within my age group, a big burnout of teachers. Because it's easier to work when all the resources are there (Teacher)

Evident in some interviews were examples of school-based practices which had been developed to counter some of this workload impact of creating Irish medium content specific resources. Participants cited language support teachers or language development officers with specific remits for materials development. However this was not the case in all of the participants' schools. Where this type of support was available, the demand at school level to make up for the lack of range and availability of teaching and learning resources was considered somewhat overwhelming.

“Everybody wants a wants a piece of me.” (School Leader)

As interviewees note, creating teaching, learning and assessment resources in an immersion context is not the transfer of content from one language to another. The workload reality for any teacher in an immersion education context, as highlighted from the literature review earlier in this report, is additional to that of a teacher in a monolingual context. As one leader noted:

“It's more than a translation of an English curriculum” (School Leader)

Classroom materials and teacher-pupil interactions, require explicit language scaffolding strategies to ensure that the language learning triptych (of, for, and through) is comprehensively addressed (Marsh et al., 2010). As one teacher observes:

“You are being a translator, you're teaching content and you're teaching language at the same time” (Teacher)

Teacher participants also discussed the lack of in-class support from Irish-speaking classroom assistants. One teacher noted that where children were assigned classroom assistants, not all classroom assistants spoke Irish. This is clearly an area of concern as directed classroom support has been found to have a more positive impact on a pupil's academic achievement than the provision of more 'general' classroom assistance (Farrell et al., 2010).

Participants gave further examples of how being a practitioner in immersion contexts results in additional workload. These include undertaking translation tasks for teaching and administration materials and the outworking of dual language school policies:

“We have a policy that notes and communications everything goes out in Irish and bilingually. So that's double the work.” (School Leader)

“You have to be a dual teacher” (Teacher)

In terms of environmental resources, participants note that some IME school plants are in need of reconditioning. While there may be examples of some new IME builds in NI, some schools are still on sites which consist of worn-out temporary accommodation, which according to one teacher educator is “not ideal for a child learning”. In some instances, participants noted the struggle to adapt and source basic facilities for meal times and exercise to accommodate growing pupil populations. Practitioners are also cognizant of how pupils are affected by their physical learning environment, and how diverse needs and pupil-centred teaching methods need to be supported by the physical classroom environment (e.g. reading stations, active engagement, group work, quiet spots), therefore additional time is also spent trying to counteract deteriorating physical learning environments. Teachers discussed how increasing enrolments at all levels are straining accommodations, with the need in some post-primary contexts to source new portable classrooms in an attempt to meet demands of enrolments.

With further reference to post-primary contexts, interviewees reported their experiences of a shortage of subject specialists who also have teacher education in Irish-medium education.

*“the difficulty is that in certain areas of the curriculum you don’t have the expertise”
(Teacher Educator)”*

*“A lot of our teachers were all Irish specialists that learned how to teach language.”
(T01, 28 March 2023)*

*“We are doing only do 3 subjects through Irish at the moment and we're trying to increase that. But we're doing it slowly and steadily with the proper expertise”
(Teacher)*

“there is a need for more secondary provision” (Teacher educator)

Currently in NI, there is no Irish-medium specific post-primary PGCE which prepares subject specialists for teaching their subject specialism in Irish. An Irish-medium Enhancement Course for Post-primary PGCE students is offered to students who are taking their post-primary PGCE at QUB or UU, through the medium of English.

As one student teacher noted:

“I was teaching 3D shapes last year through Irish and the language of vertices, corners and edges. All of that was new to me. And the names of the shapes themselves, and so I had to sit down and [...] learn those myself.”

The current provision for Irish-medium teacher education in Northern Ireland could be described *de facto* as dual language teacher education rather than an immersion teachers education; student teachers are trained to teach in both English-medium and Irish-medium schools. As interviewees highlighted, student teachers on a BEd (Hons) degree which can be taken bilingually (Irish and English) undertake their first two years of teaching practice in English medium schools. It is only when the student teachers are in years 3 and 4 that their placements move to Irish medium schools.

“Students [student teachers] spend half their time in EM schools they see that they are not being properly immersed totally immersed in immersion education” (Teacher educator)

To some extent this may have been a reasonable measure in the initial period of IM teacher education in NI, to offset any concern that the sector would not see its growth in popularity in NI. However, in the longer term it can be suggested that this current programme structure actively works against opportunities for student teachers to strengthen their Irish language skills and repertoires and curtails meaningful opportunities to develop their knowledge of teaching and academic discourse in the medium of Irish. Some of our interviewees describe the detail of how these opportunities are missed and the impact of dual weight of teacher education for IME student teachers

“a big problem that I find with... student teachers ... is that they actually don't speak Irish to each other...they'll do it in the classroom as soon as you walk out into the hall...they'll revert back to English”(Student teacher)

“The students who are doing Irish Medium will tell you that they have more work to do and some of them in fact...drop out of it” (Teacher Educator)

“I think it's the marks they get. They don't think its commensurate with the work they think they put into it.” (Teacher Educator)

It seems clear that even at an initial teacher education stage, the reality of additional workloads for future IM practitioners is evident.

In terms of practitioners offering responses to these many challenges, participants in this study were eager to share potential for ways forward. Drawing on their practical experiences of immersion contexts outside Northern Ireland, some participants were keen to offer insights into how teachers' resources could be developed. Two examples given were i) the increased use of educational technology accompanied by school training and ii) the dedicated allocation of time for teachers to engage in materials development work, which is distinct from lesson-planning. Participants pointed to successes where past pupils had returned to teaching and assistant posts in IM schools. Practitioners also considered that paths evidenced in other autochthonous language contexts could be forged to support the recruitment and training of specialist teachers from non-IME sectors.

Incongruity of assessment

There may be an assumption that ground-level support is sufficient to create momentum for a growing sector of education. However, systemic support is also required to ensure an environment is in place which sustains long-term growth of the sector. For participants, one aspect where this is notably absent is in the area of assessment of and for learning in IME. All participants who were interviewed raised concerns about diagnostic, formative, and summative assessments of children and young people in the IME sector in Northern Ireland.

Participants point out the discrepancy between what is available to the English medium sector, in relation to assessment tools or packages, and what is available to the IME sector. Some participants raised concerns regarding assessment tools in relation to core principles of assessment such as validity and appropriacy. Some school leaders and educators considered it to be highly problematic that there is a lack of Irish-medium basic assessment tools. Practitioners often have to adapt, translate, or rely on outdated assessment tools which were not designed for use with an IM population in NI.

Assessment for educational needs and the impact of availability of special educational needs assessment were key concerns of participants. Some considered to what extent formal educational psychological assessments take into account learning in an Irish medium environment. The processes of statementing undertaken by teachers and leaders for children who may have special educational needs is considerable in any school context. For some interviewees this task was considered to be compounded in an IME context because of the already additional workloads. One teacher commented,

“we’ve got statements through for pupils in Year 11 and Year 12 that probably should have had a statement some 10 years ago.” (School Leader)

In terms of high-stakes examinations and qualifications, interviewees noted practices which had the potential to have a negative impact on pupils. For example, one teacher described how tests are experienced by young people who have attended IM schools:

“when they are given their exams, I do know they get a paper in Irish and they get the same paper in English” (Teacher)

Participants were unaware whether or not exam candidates are routinely given additional time to read two papers. Participants also noted that policy in neighbouring immersion contexts made it possible for additional marks to be made available for exam candidates who complete a subject exam in Irish (Mac Aogain et al., 2010). The matter which participants express concern over is not necessarily about awarding bonus marks, but rather the lack of awareness of Irish-medium pupils’ exam experiences. A review of assessment issues pertaining to IME, including listening to pupils experiences thereof, and greater representation on awarding bodies may provide some assurance that Irish medium exam candidates are not experiencing inequitable assessment leading to potential disadvantage.

In addition to these concerns regarding exam-taking, educators assert frustration with a process that involves translating students’ exam scripts from Irish into English before they can be marked. From an educational perspective, it is difficult to see how this process can be considered anything other than the active devaluing of an exam candidate’s performance, even before any actual marking has taken place. Second, this approach raises questions regarding validity of assessment, e.g. to what extent is the marker assessing the student’s or the translator’s work. Indeed, teachers cite concerns with some translations and oversimplifications of lexical items, resulting in missed marks for not using key terminology (e.g., “repay” instead of “reparations”) when the academic language is present in the Irish original.

“If there is a problem with the translations, which there has been -- a poor translation -- maybe translating from what would be maybe a sophisticated verb put into a very simple verb, that really changes it.” (Teacher)

Teachers note that while current assessment processes allow for submissions to be ‘re-marked’, when it comes to Irish-medium candidates, it is only the English translations of their scripts which can be marked a second time. The students’ original submission is not reviewed.

While there may be an assumption that these practices have arisen due to a lack of Irish-speaking exam-markers, one interviewee commented.

“When they recruit for examiners, there is no box that says, you know, ‘can you speak Irish?’ So they don’t have a database of Irish language markers.” (Teacher).

The individual and social impact of these current assessment procedures on pupils, teachers, and parents remain underexamined.

Scaffolding Irish language-rich school environments

In connection with many of the statements surrounding the resource gap in IME in Northern Ireland, there are numerous challenges associated with scaffolding language-rich environments in schools. As with minoritised language immersion environments elsewhere (e.g., Hermes, 2007; Tedick & Lyster, 2019; Wilson et al., 2014), Irish medium schools rely on materials, technology, teacher language, and the community to create an environment that is rich in Irish language and in opportunities to use it.

Print literacy is a crucial skill for student success in schooling environments in the UK, though Irish medium print materials are not always easy to come by. In addition to the translated academic texts associated with Key Stages of curriculum, teachers struggle to find complementary texts in a broad range of genres and reading abilities to reinforce literacy skills and further engage learners.

“There’s nowhere that facilitates us with high-low Irish medium books (...) In St Mary’s they have great books, but they’re geared towards primary schools.” (Teacher)

“We desperately need literature that is accessible for children at their level and in their experience.” (Teacher)

Participants noted the reliance on teacher-produced translations of texts and in-house materials, echoing the resource gap identified earlier. Covering such a gap in order to scaffold language and learning in classroom environments across modalities and grade levels is something which requires considerable time and effort.

Technology has proven to be useful for many teachers in circumventing some of the current print-based limitations on an Irish-rich environment. For instance, one post-primary school teacher noted that technology allowed teachers to create their own versions of BBC’s “GCSE bitesize” modules, as there are none available in Irish.

“Technology has been good to us” (Teacher)

Specific apps such as Bamboozle, Flip, and Kahoot were noted alongside homemade PowerPoints and English language videos. Google Classroom was also cited as an important tool for scaffolding language as it allows teachers to quickly upload sound files of their own speech, offering pronunciation help and details of homework assignments. One primary school teacher-in-training noted how technology allows for more responsiveness when children need language help. He noted his own past frustration as a learner of Irish, having to wait until he saw the teacher in person to ask questions about language, and contrasted it with the near-instantaneous nature of some technologies.

“We would have had to wait until you’re going back to the classroom to talk to the teacher again. But with Google Classroom I could upload, you know, a sound file of my voice, pronunciation of words and explaining the topic, explaining homework, just explaining any problems that the kids had” (Student teacher)

This embrace of technology has implications for universal design and the differentiation of instruction (Rose & Meyer, 2002). However, teachers express a desire for more training and time to make better use of the technological innovations available to educators.

“We didn’t really get much with technology at all in university (...) you’re sort of left to your own devices to learn different things in a way, I was introduced to Flipgrid by other teachers in the school.” (Student teacher).

Teachers in the study noted that generalised educational technology modules are not particularly helpful unless they are tailored for the use of technology in language immersion settings. Irish immersion practitioners from a broad range of backgrounds and teaching contexts see the importance of integrating language awareness and immersion pedagogies into any professional development. Matters of language awareness and language fluency arose many times in interviews as a key element to scaffolding an Irish language-rich environment. Vocabulary building is an essential part of academic language in primary and post-primary classrooms. When it comes to using this academic language for teaching in the classroom, teachers are careful to teach through the medium of Irish rather than relying on English translations for vocabulary. This involves creative use of images, dramatic role play, sound files, and building on the linguistic resources that students already have.

“We wouldn’t give any English, so it will be all Irish” (Student teacher)

The nature of immersion education relies on significant scaffolding for and with Irish language first. This is a key aspect of immersion educational models which play a critical role in creating a language-rich community of speakers and it is vital for linguistic sustainability. Stakeholders in the study acknowledged the importance of ‘Irish-first’ in the school and surrounding community as part of that language learning ecology.

For teachers in schools where student populations are outgrowing the accommodation, the increasing enrolments present challenges to sustaining an Irish-language rich school environment:

“we are at a breaking point” (Teacher)

This ‘breaking point’ is not only in regard to pressures on space and its relationship to child safeguarding, but is central to scaffolding an Irish language-rich environment. With greater staff-student ratios than before, staff are less able to support and encourage the use of Irish language outside of the classrooms.

“we feel like, in the corridors we can’t control the amount of students that are there speaking English. We can do it in our classrooms to a certain extent, but it’s just so big (...) our school is not built for this amount of students.” (Teacher)

Research demonstrates the importance of peer-to-peer interaction in language development (Swain & Lapkin, 1998), and teachers are aware of the difficulties associated with bringing immersion practices into the informal conversations that take place in school spaces. In less populated contexts, teachers acknowledge their delight at witnessing pupil

playground interactions in Irish and can encourage and reward accordingly. In more populated schools however, this is more difficult:

“we know the evidence has shown that it impacts the second language. It is very very hard for us to immerse the children properly when numbers are so big.” (Teacher).

This is particularly important as schools can sometimes be the core of the Irish language environment for some pupils. As one teacher educator commented, not all pupils will have access to Irish language materials, games, or Irish-language speaking social environments outside of school.

Professional identities in IME in NI

Being a part of Irish language communities was communicated as central to the identities of IME practitioners in this study. Transversing their varied identities, interviewees discussed being able to communicate in Irish as fundamental to their lives in Northern Ireland. In their roles as educators, participants spoke about the vibrancy of contemporary Irish spoken in Northern Ireland and how it is part of being an IME practitioner to inspire the life of the language and encourage new speakers:

“Children from the Irish medium have been taught, talk, talk, talk, talk, talk, talk, talk, talk as much as you can, as often as you can” (Teacher)

“we we go out of our way to speak to pupils we're tuned in at every opportunity to to practice the language we look at all the pupils in this school as our community...their our kids, the future of our language” (School leader)

“whatever exam result a child at this school gets they'll be able to speak Irish, that'll set them apart from maybe somebody of a similar academic ability in a in another school, and that's something, maybe that will add to their, you know, their self-worth and their place in society.” (School leader)

Leaders and teacher educators noted that a distinctive quality of IME practitioners is a dedication to learning, using, and improving their Irish language. Irish language competence was expected to move beyond the exams-based qualifications and baseline measures of proficiency to an increase in communicative competencies in Irish and the development of Irish language repertoires for specific purposes. These expectations are also evident in teachers views of how they are perceived by their pupils, and indeed, how they see themselves as language role-models.

“They [pupils] are comfortable speaking to adults because the only people they've been able to speak the language to are adults [...]their role model[s] if you like, their main source of knowledge.” (Teacher)

“It puts a lot of pressure on the teacher again to make sure that their Irish they are using is correct and you know, fit for purpose.”(Teacher)

This inseparable focus on practitioners own language development processes and their teaching is also evident in narratives of professional identities in other countries (e.g. Hammine et al., 2020). While it is clear that Irish language use is growing, which offers more diverse opportunities for language practice, the expectation amongst participants was that improving language proficiency is essential rather than a desirable criteria for an IME practitioner in Northern Ireland. By and large, practitioners are expected to enhance their own Irish language proficiencies and repertoires. From the interviews in this study, there was no evidence of systematic support for the ongoing language development or advanced proficiency of teachers (i.e. monitoring progress or attainment levels). There were reports of instances at school level where some language sessions for teachers were made available part-time, but often only on temporary basis or within the means of already overstretched budgets.

In describing IME practitioners, school leaders discussed teachers who:

“go above and beyond”

“look to go the extra mile”

Striving for the best and working towards improvement are clearly educational goals in any school context, however participants also reflected significant concern on the ethical, health, and wellbeing consequences of having to meet these expectations of “going above and beyond” on a daily basis, particularly in the absence of systematic recognition and support.

From the interview data, it emerges that the assumption of “additional workload” is embedded early in the career of an IME practitioner, from initial teacher education onwards, and is added to by the expectations from across the stakeholder groups. The situation was described in detail by one participant:

“I would say we're a crisis point with teacher retention. We're asking people to do an incredibly difficult job ... it is vocational to lot of people who are especially passionate about Irish and have seen how powerful and how transformational this has been in society. [...] however we have a situation here where... It's too expensive to live here. If you're coming out of college and you want to save for a house, rents are through the roof, teaching salaries haven't gone up in line with inflation it's really tough....So what are we doing to actually retain these people to get them to stay and work on our sector.” (School Leader)

Concerns about retaining teachers in the sector and encouraging newly qualified teachers to stay and take up positions in IME in Northern Ireland were discussed by participants alongside the need for due recognition of the ‘additional’ in being an IME teacher. Teaching and career opportunities for IME teachers in neighbouring jurisdictions can be more attractive. Participants cited other immersion contexts outside of NI where teachers could employ their highly professional immersion teaching skills with substantially higher remuneration, additional classroom assistance and resources. Measures of recognition for the additional requirements of immersion teachers are evidenced in our systematic literature review, with examples of language assistants employed in classes in addition to

class teachers, additional pay awards, and schemes which offer 'loan forgiveness' to new graduates who take up employment in immersion schools which have high proportions of underachievement or areas of high socioeconomic deprivation.

4.5 Summary of key findings from stakeholder interviews

The substantial international research base identified in our review points to the additional challenges for bilingual/immersion educators (e.g. Poon and Lau, 2016). These worldwide challenges are echoed in the evidence from interviews conducted with IME stakeholders in a NI context which include:

- Immersion teaching requires more time than teaching in a shared dominant language
- Inappropriate assessment practices
- Lack of relevant training in language and bilingual pedagogies
- Challenges associated with availability of appropriate materials and technology
- Variation in support for development of teacher and student language and academic skills
- Inadequate financial resources to fund professional development and educational infrastructure

However, in some difference to other contexts, there is already an acknowledgement of the additional professional competence for IME teachers in NI teaching council documentation, with reference to the additional professional competence (GTCNI, Professional Competence 3 (ii)) which applies to Irish medium/bilingual teachers only. With additional competencies required to perform as a successful immersion teacher, it might be expected that substantive systematic support and recognition has already been established in NI over the last decades of a growing IME sector. From the interview data in which participants report on the realities of being a teacher in IM in NI, our analysis suggests that there are a number of significant issues which are compounding the weight of the burden of the additional professional competence 3 (ii) which teachers carry.

In summary, while there are a number of important themes arising from the analysis of the interview data, they are encompassed by two overarching themes: i) the resource gap and ii) the disparity/incongruity of systemic assessment. First, in relation to the resources gap, we use this phrase in our analysis in order to reference both material and human resources. Teaching and learning resources include classroom-based materials, subject-specific textbooks, exam preparation materials, language testing materials. Reference to material resources also includes the physicality of school buildings and facilities. With regard to human resources, teachers in an immersion context hold a double role. Not only are they the 'human' resources employed to teach and prepare children and young people for their futures, as all teachers are, immersion teachers are also the most significant 'language resource' through which pupils can develop their Irish language oracy and literacy. What is evidenced in the interview data is a consistent concern that these "human resources" are being overstretched in a number of ways. The notion that IME teachers do additional work is embedded early, at an initial teacher education stage via *a de facto* dual language teacher education programme and is carried through the narratives of professional identities

through a career in IME. The matter of significant additional work to undertake as an immersion teacher in NI is compounded in the context of relatively new and growing sector of education for which IME-specific/tailored statutory support/recognition is, as yet, to be woven into the current education system. This points to a significant risk, rather than a challenge to the IME sector in NI.

Secondly, from the interviews it is evident that stakeholders view assessment in the IME sector as a particularly underdeveloped high-stakes area. The impact of this underdevelopment is that it adds a considerable burden to teachers, not just in having to attempt to create their own assessments, or work with non-standardized tests, but also a challenge to their sense of professional identity where they find themselves having to, in the face of no alternative, use potentially invalid measures of assessment. Threats to their professional identity also emerge as they may undertake tasks for which they have received no specialist bilingual test-construction training or as they present candidates for examination knowing that their pupils performance will be immediately devalued by having to await translation into English before being marked.. The extent to which parity of assessment in general and testing in particular is/has been achieved for IME sector in NI remains, from stakeholders perspectives, uncertain. They report limited availability of suitable diagnostic assessment tools and standardized tests which are (or are evidenced to be) fair, valid, and reliable for use in an IME population in NI. The area of SEN assessment of IME pupils remains a significant area of concern for stakeholders, with teachers impacted by lack of tools for support in this regard. Interviewees report concerns about the relevance and appropriateness of IME students taking content-subject examinations designed for English speakers, disregarding the impact of translation on performance in examinations and failure to reward pupils demonstration of additional cognitive skills therein.

These additional burdens and challenges over time may be said to culminating, to some extent, in a fear for student teachers, teachers, principals and teacher educators that IME pupils may be being disadvantaged; pupils' potential for academic and employment success is not being fulfilled and/or those who require additional educational support are not receiving it, or receiving it too late in compulsory schooling. Not only does this impact on pupils and teachers, but the ripple effects of underachievement will impact on school, parents, local communities and society in NI as a result.

5. Action plan

5.1 Purpose

The purpose of this action plan is to provide a comprehensive and detailed set of strategies to develop competencies through TPLs and help retain and support Irish-medium teachers in Northern Ireland. This plan addresses several key issues evidenced in the systematic review and identified in the stakeholder interviews. By implementing these strategies, we hope to provide a roadmap to create a more supportive and sustaining

environment for Irish-medium teachers, improving their job satisfaction and well-being, and ultimately supporting the continued success and growth of Irish-medium education in Northern Ireland. This evidence-based action plan also recognizes the need to foster greater collaboration and understanding between immersion educators, curriculum developers, and assessment and examination bodies as well as other identified stake holders. We present this template as entry points for more in-depth discussions about how to better support the Irish medium educators in Northern Ireland.

5.2 Additional resources informing the proposed action plan

Our research and preliminary findings evidenced IME teachers' need in respect of immersion teaching strategies and/or instructional materials and resources. In this section, we highlight possible pathways to help or support IME instructors, educators, or teachers to facilitate their practices. Extrapolating from the field of English language medium instruction we suggest additional resources and strategies based on the work of Nutta (2021) and Nutta et al., (2018) which may inform some of the details of an action plan.

This is needed in order to offer practical guidance on adapting instruction to meet the diverse needs of Irish learners and to provide strategies for differentiated instruction, scaffolding techniques, and inclusive practices that address the linguistic and cultural backgrounds of students in an inclusive educational learning environment for all (Paris, 2021).

Within a culturally responsive and inclusive education framework (Gay, 2010; Ladson-Billings, 1995; Pirbhai-Illich et al., 2017)) teachers use their knowledge of students' cultures to create a learning environment that is relevant and engaging for all students in these ways:

- Building relationships with students. Teachers get to know their students and their families, and they use this knowledge to create a classroom environment where students feel safe, respected, and valued.
- Using culturally relevant materials and resources. Teachers use materials and resources that reflect the cultures of their students. This can include books, articles, music, art, and other artifacts.
- Infusing cultural content into the curriculum. Teachers find ways to incorporate students' cultures into the curriculum, even in subjects that may not seem to have a direct connection to culture. For example, a math teacher might use a problem-solving activity that is based on a traditional story from a student's culture. This makes explicit the fact that the IME curriculum is not/cannot be considered a translation of an English medium curriculum.
- Promoting critical consciousness. Teachers help students to develop a critical consciousness, which is the ability to see the world through a critical lens and to understand how their own culture and experiences shape their perspectives. This is particularly salient in minoritized language/language revitalization-reclamation contexts.

This action plan may be a powerful tool in redressing educational inequalities and underachievement, helping all students to learn and succeed.

5.3 Action plan created in collaboration with stakeholders

The findings of this research point to significant challenges for IME practitioners in Northern Ireland. What is also evident are some of the potential responses to these challenges. Given the evidence to date, it can be suggested that these responses will be necessary in order to offset the likelihood that certain challenges will manifest as risks to the IME sector in NI. Based on our research findings and evidence from systematic literature review, an inclusive action plan was developed and refined with feedback from key stakeholders to create a comprehensive process to enact more critical and sustainable practices that meet the needs of students, community, parents' and other stakeholders' in IME in Northern Ireland.

The following suggested actions may help to address the challenges and potential risks to IME in Northern Ireland. They highlight the means and resources required for successful practices and sector goal fulfilment. We recognize that these actions may also serve to guide future language education policies in Northern Ireland which recognize, value, and provides equitable educational resources for Irish language speakers in Northern Ireland.

1. *Provide professional development opportunities*

Teacher professional development is a constant process of reflection, learning, and action that leads to improved teaching practices that have a beneficial impact on students' learning. In one of our interviews, a teacher educator with more than 30 years of experience, mentioned that it would be advantageous to include more professional development initiatives in the future of Irish Medium Instruction. To this, they say "*actions around teacher professional development ... improve access to support ... providers to be able to deliver [their] (emphasis added) courses*" Similarly, a school leader, responded that professional development initiatives such as those which re-invigorate and improve language learning and support teachers to develop their careers. As such, stakeholders seeking to create an action plan involving professional development, should consider some of the following three aspects:

- Develop a professional development program specifically for Irish-medium teachers, focused on language immersion techniques, content language integrated learning (CLIL), and other approaches to language education such as plurilingualism and translanguaging. This will ensure that the Irish immersion practitioners have up-to-date knowledge and practice on immersion education and language acquisition. It will also offer teacher development for language education skills transferable to new languages and newcomer communities in Northern Ireland.
- Provide ongoing opportunities for professional development, such as workshops, conferences, and webinars, that support the development of language teaching skills and provide opportunities for continued learning during the whole academic year. For example, with a programme of events, in-service and pre-service teachers can learn or update new techniques, methodologies or classroom practices to better support their students' need to practice the Irish language meaningfully. Through teacher training colleges and university across Northern Ireland programs could be offered to teachers alongside professional development opportunities to travel and visit other bilingual education contexts.

- Support relevant agents and bodies to co-develop and advance assessment strategies and assessment practices for immersion contexts with IME practitioners. Partnership and participation of teachers and school leaders need to be facilitated to advance assessment strategies and assessment practices in immersion contexts by teacher release schemes so that this does not become yet another additional burden.
- Facilitate teachers' participation in existing professional development opportunities, such as those offered by national organizations, higher education institutions, and area community schools to foster inclusive networks of support and collaboration. Examples of attempts to set up an Irish-medium Learning Community (IMLC) in conjunction with the Education Authority (EA) to create Irish-medium Leaders Group with 4 Area Learning Communities across the North are evident. For such initiatives to be successful requires dedicated and recognized time and resources for coordination. With similar initiatives funded for the English medium sector in Northern Ireland, redressing this disparity is a key priority for such initiatives to become well-established and sustained for the future, considerable resource commitment is necessary.

2. *Retention and support for career progression*

What happens when a teacher considers shifting roles to further their career is referred to as teacher career progression. This usually entails looking at different roles within their institutions or looking for a new job with different duties and a different remuneration plan. Some of those who were interviewed in this research project were highly concerned that some teachers in training and experienced teachers were leaving Northern Ireland to work in the Republic of Ireland, elsewhere in the UK, or internationally because of the lack of career progression opportunities in IME in NI. Those interviewed considered that the current 35 year old legislation (Education – Northern Ireland – Order 1988, Article 89 which states, "It shall be the duty of the Department to encourage and facilitate the development of Irish-medium education" requires considerable updating to take account of what has and has not been achieved over the last three decades for IME career progression opportunities.

Therefore, an action plan tackling this challenge should consider some of the following:

- Develop a career progression plan for Irish-medium teachers, including leadership roles within schools, opportunities for further education and training, and clear pathways for career advancement. For example, this entails providing teachers with learning opportunities, both inside and outside of the school system; by providing mentoring and leadership training and support to teachers from underrepresented groups and teachers in rural and marginalized areas in Northern Ireland.
- Create a mentorship program for early career teachers to provide support and guidance as they navigate the profession and explore opportunities for career advancement. A recognised mentor would be a skilled and experienced IME teacher who is willing to share their knowledge and expertise with the new teacher. The new teacher would be someone who is eager to learn and who is looking for support and guidance. For example, dedicated opportunities could be provided for the new teacher to observe the mentor's teaching to give them a chance to see how the

experienced teacher approaches the classroom and to learn from their techniques on engaging students in language learning and practice.

- Establish IME advocacy positions at departmental and government level and within qualifications and curriculum agencies which draw on working knowledge of the IME sector in NI to inform the necessary policy changes to ensure that teachers/educators have opportunities for professional progression; to ensure that funding is provided for Irish medium schools and programs to enable routes for career progression in the sector which corresponds to increased demand for Irish medium education, and to ensure that statutory responsibilities on resourcing are provided for quality education.

3. Address resources gap

Teaching workload refers to the amount of teaching and support for teaching that a practitioner is expected to complete within a specific academic year as part of their employment. As demonstrated in the systematic review of international evidence, bilingual educators face additional workloads in comparison to monolingual teaching peers. Some of those who were interviewed responded that because of the lack of resources and support, their additional workload is overwhelming. One principal, with over 15 years experience in IME, mentioned that *“there’s a lack of resources, there’s a lack of... support. So, then all that falls back, then the class teacher [needs to be] maybe be more imaginative, more inventive, create their own resources and stuff like that.”* Therefore, in order to reduce additional workloads or to provide additional support for IME educators some of these key points might be necessary.

- Conduct a detailed needs assessment to identify specific areas and scale of high workload impact. Although the current research highlights the areas of materials development and language assessment as key areas where additional workload is undertaken by teachers, further detailed analysis of work allocations could be undertaken in addition to measuring the impact of measures such as access to classroom language assistants or reduced administrative duties.
- Provide additional resources and support to address workload issues, such as funding for teaching assistants, technology support, and bilingual administrative assistance. It is essential to have a shared awareness and understanding of the roles played by additional support such as assistants, to be as beneficial as possible.
- Consider due recognition of remuneration, time in lieu, other financial incentives such as loan waivers, as is evidenced in other bilingual education contexts.
- Support work-life balance practices, such as flexible schedules and family-friendly policies. To help facilitate the well-being of Irish-medium teachers and sustain teachers’ connections with language and culture, which can be a source of strength and inspiration, funds could be made available for community development initiatives such as such as a community choir, or environmental projects.

4. Foster a sense of community

A sense of community is the belief among group members that their needs will be addressed by their commitment to being together, a sense of belonging, and a sense that they matter to one another and the group. Many communities in Northern Ireland formed

by teachers, principals, families, and language advocates have worked together for stronger education and reclamation of the Irish language. However, this sentiment needs to be facilitated to become action and supported so it becomes central as part of any action plan. To sustain strong sense of leadership and a leaderful community among the Irish speaking peoples and educators some of the following ideas might help accomplish this goal.

- Develop a network of support for Irish-medium teachers which is resourced by a coordinator, including opportunities for collaboration and peer support with other teachers across Northern Ireland. Attention needs to be given to practitioners working in rural areas and/or smaller schools, where there can be less opportunities to attend events, network, and share resources. By developing a network of support for Irish-medium teachers, we can help to ensure that they have the resources and support they need to be successful. This will benefit both the teachers and the students, and it will help to ensure that the Irish language continues to thrive.
- Establish funding resources to create opportunities for more social engagement, such as regular meetings or social events, to foster a sense of community and support among Irish-medium teachers in connection with parents and other community members.
- Encourage participation in existing professional organizations, such as language teacher associations or cultural groups, to build broader networks of support and collaboration during the academic year and beyond and also create more opportunities to discuss what is happening in the communities in relation to the cultural and linguistic aspects of learning Irish in Northern Ireland. A detailed list of organizations is provided at the end of this action plan.
- Encourage participation in professional networks for teachers of minoritized languages in other parts of the world (e.g., Wales, Canada, New Zealand).

5. Recognition and appreciation

Appreciating a teacher's work refers to recognizing and acknowledging the value, dedication, and impact of a teacher's efforts in the field of education and more specifically in their efforts to promote, encourage others to revitalize, and speak Irish. It involves showing gratitude and respect for their role in shaping students' lives and contributing to their academic and personal development. In some of the interview conversations with the participants of the study, it was mentioned how grateful they are to work with communities, parents and students towards engaging in Irish language learning, however there is so much more that can be done, and an action plan centred on prizing, celebrating and highlighting the teachers' and students work can afford due attention to the following key items.

- Develop a recognition program to acknowledge the contributions of Irish-medium teachers to language revitalization efforts in Northern Ireland, such as awards or public recognition ceremonies funded by the government. For example, a national award for Irish immersion teaching. This could be a prestigious award given to a select number of teachers each year, in recognition of their outstanding work in teaching Irish in immersion contexts in Northern Ireland. The award could be accompanied by a cash prize, as well as other benefits, such as a public recognition ceremony or a scholarship for further professional development/study.

- Provide ongoing opportunities for professional development and training to demonstrate recognition and appreciation for the work of Irish-medium teachers through colleges and university across Northern Ireland. This program could offer teachers the chance to attend workshops, conferences, and other events to learn new teaching methods and techniques. It could also provide funding for teachers to travel to elsewhere in Ireland to develop knowledge of Irish language and culture.
- Work with community organizations and cultural groups to identify additional ways to recognize and appreciate the contributions of Irish-medium teachers to language revitalization and reclamation efforts and support language and cultural reclamation by creating a public awareness campaign to highlight the importance of Irish immersion education. This campaign could be used to educate the public about the benefits of learning Irish within Northern Ireland, as well as the challenges faced by Irish immersion teachers. It could also be used to encourage more people to become Irish immersion teachers.

6. *Collaboration with language revitalization and reclamation efforts*

Collaboration in efforts to revitalize the Irish language in Northern Ireland refers to working together with all stakeholders, organizations, and communities to preserve, promote, and revive languages that are at risk of being lost or marginalized. It involves collective action and shared responsibility to ensure the sustainability and revitalization and reclamation of heritage languages. For example, one principal in our study, mentioned the importance of this collaboration especially in rural areas because to date, in the area, there are many native Irish speakers, and their language is embedded in the culture to various practices such as music and dancing. He says that it is important to tap into those funds of knowledges in order to foster more collaboration. Any action plan that seeks to promote more collaboration should be guaranteed to be conducted within school hours as much as possible to avoid a persistent cycle of innovation happening at the expense of and burden on the practitioner. In order for a collaboration to be successful it is necessary to provide resourcing in and out of the school time to make sure teachers are not being burden by 'extra work' and consideration should be given to resourcing community organizations as the drivers for these partnerships. Examples of support for school-community collaboration are:

- Provide support for partnerships with language revitalization and reclamation community organizations who can offer teachers access to resources and such as Irish language classes cultural programmes, family language events
- Provide support for of IME collaborative partnerships between networks of IME language experts and organisers of extra-curricular activities (e.g., sport clubs, music and arts lessons, cookery classes) which can support out of school language learning. As part of these partnerships, it is suggested that public and private organizations create bilingual (English/Irish) sections of their public websites or at least create a section in Irish explaining the nature of their organization.

7. *Recruitment and mentorship*

An IME practitioner with over 20 years of experience learning and teaching Irish since she was in secondary school, expresses a high level of concern as some teacher

candidates who study in Northern Ireland leave the country immediately to the UK or elsewhere. In any action plan, it is important to understand that a teacher education program's methods and efforts for recruiting potential teachers should be paramount when and while choosing the best candidates by offering them advice and assistance on their path to becoming teachers at all times. Below, we have pointed some ideas to keep in mind to achieve this.

- Develop a recruitment program to attract new Irish-medium teachers to the profession, including support for language proficiency and cultural integration to mitigate migrating new teachers to other parts of the UK/Europe. The program could reach out to potential students through a variety of channels, such as social media, email, and word-of-mouth. They could create a social media campaign that highlights the benefits of becoming an Irish immersion teacher and also partner with community organizations and schools to promote the program through their own listservs.
- Create a mentorship program for early career teachers to provide support and guidance as they navigate the profession and become part of the broader community of Irish-medium teachers. Partnering senior and junior teachers, alumni and families might help create a sense of belonging. The program could pair each student with a mentor who is an experienced Irish immersion teacher. This one would provide the student with support and guidance throughout their studies. The mentor could be a current teacher, a retired teacher, or a language instructor who might meet with the student regularly to provide feedback and support in all aspects related to language education, methodology and practices.
- Work with community organizations and cultural groups to identify additional ways to support recruitment and mentorship of new Irish-medium teachers providing not only economic incentives for retention, but also cultural and social incentives to engage teachers in their communities. For example, such a program could require students to complete fieldwork in an Irish immersion school within various communities. This could be done for a semester, or a full year and students would be responsible for teaching Irish to students of all ages and have the opportunity to observe experienced teachers and to learn from them.

8. *Policy engagement strategy*

There may be an assumption that ground-level support is sufficient to create momentum for a growing sector of education. However, systemic support is also required to ensure an environment is in place which sustains long-term growth of the sector. The report highlights several challenges in relation to gaps in resources and current assessment practices, in particular, which without attention will escalate to very significant risks. In addition, evidence of the individual and social impact of these current challenges on pupils and parents remain underexamined. Therefore, the development of a policy engagement strategy would be one measure of ensuring that IME voices are heard and represented in decision-making processes. Such a strategy could:

- Advocate for policy changes at the national level that build on recent successes of grassroots organising with a special attention to implications for Irish medium schools, teachers, teacher education programmes, and bilingual families.

- Advocate for participation in any review processes regarding assessment, marking and awarding of qualifications.
- Coordinate across minoritised language advocacy groups in Northern Ireland to organise for greater awareness of and support for bilingualism in education and society.
- Create an advisory group for engagement with local and national political representatives that gives voice to Irish medium education stakeholders, with equal representation of primary and post-primary interests.

Community links

- An Carn, County Derry <https://ancarn.org/>
- Glór na Móna, Belfast <https://www.glornamona.com/gael-ionad-mhic-goill/>
- Gaelphobal Ard Mhacha Theas, Armagh <https://ardmhachatheas.com/>
- Cultúrlann Uí Chanáin, Derry City <https://www.culturlann.org/>
- Pobal ar a' Iúil, Omagh <http://pobalaraniul.com/>
- Gaeláras Mhic Ardghail, Newry

Local Irish language bodies

- Foras na Gaeilge <https://www.forasnagaeilge.ie/?lang=en>

All island body responsible for the promotion of Irish language north and south.

- Conradh na Gaeilge <https://cnag.ie/en/>

A democratic forum for the Irish language community, advocates for language rights of Irish-speakers and raises awareness about the language.

- Gael Linn <https://www.gael-linn.ie/>

Responsible for the teaching of Irish as a school subject and in adult education, and the creation of opportunities for school pupils to use Irish. (Mostly English-medium schools)

- Glór na nGael <https://www.glornangael.ie/>

Promote Irish language in the community, business and family.



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6. Appendices

Appendix 1: Systematic Review protocol

Review Aims

We will conduct a systematic-type literature review of teacher competencies in IME and related educational settings (e.g., immersion, bilingual) in languages other than English to establish a broad and comprehensive understanding of the role in a local and more global context. The literature review will rely on highest-quality (i.e., blind peer-reviewed) to establish a strong contextual foundation for subsequent interviews.

Review Research Questions

RQ1: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language education settings face?

- RQ1.1: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language education settings face in their daily practice?
- RQ1.2: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language education settings face in their professional development?
- RQ1.3: What (additional) challenges do IME teachers and teachers in other immersive, non-ELT language settings face in their career trajectories?

RQ2: How do IME teachers and other teachers in immersive non-ELT language education settings respond to these additional challenges and with what resources?

Review Search String

Search string has three main strands that aim to cast a wide net. The use of *lemma** allows us to capture all variations/versions of a particular keyword.

("immersion" or "*medium education" or "*medium of instruction" or "bilingual education") AND ("instructor*" or "teacher*" or "practitioner*") AND ("competenc*" or "skill*" or "abilit*" or "method*")

Time parameters (1995 – present)

Search for articles published beginning in 1995 through the present day. Though Bunscoil Phobal Feirste was first 'recognised' in 1984 (started in 1971), the first IME secondary school, Coláiste Feirste (est'd 1991) was not first fully funded by the govt until 1996. This is just one year after the inaugural year of the Irish PGCE programme at St Mary's University College Belfast (1995).

Sources & Hits

Search run 4 March 2023

Database	No. of articles
Scopus	858
ERIC	236

Inclusion/Exclusion criteria

Criterion	Rationale
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Include blind peer-reviewed journal articles	Highest quality research standard
Exclude book chapters, grey literature	Not always blind, peer-reviewed
Exclude English-medium research	The ubiquity and relative power of English differently shapes the dynamics of an EMI educational context when compared with the dynamics of an immersive educational contexts prioritising languages other than English
Exclude articles that do not mention teacher competencies, skills, abilities, practices, working conditions, training, etc.	Aim of the review is on teacher experiences. Articles that focus on student experiences/outcomes, administration, or community involvement are outside the scope of the review.
Include articles about teachers in public or private, compulsory primary or secondary schools	The review is focused on 'qualified'/'licensed' teachers in compulsory education settings (i.e., all-day, Monday-Friday-ish schools)
Exclude articles about Saturday schools, Indigenous and heritage language classes, community outreach efforts, further education	These informal and nonformal contexts are outside the scope of the review
Exclude articles that do not include [language]-immersion or have a [language]-medium focus	Review is focused on teacher competencies in language immersion rather than cultural immersion, VR immersion, etc.

Extraction form

Citation:		
	Extracted text	Location
Context of study (country, community, school type)		
Language(s) being taught/learned or language of instruction		
Research aims		
Methods		
Findings		
Teacher challenges identified/discussed in daily practice		
Teacher challenges identified/discussed in professional dev.		
Teacher challenges identified/discussed re: career trajectory		
Additional challenges (e.g., social, cultural, socioemotional, material support needs)		
Responses to challenges		
Specific teacher competencies identified/discussed		
Materials, technologies, other supportive resources identified		
Notes:		
Possible Codes:		

Appendix 2: Invitation to participate



“Examining expectations and realities for Irish-medium practitioners”

A chara,

We are a group of language education researchers from the [Centre for Language Education Research](#) at Queen's University Belfast. We are carrying out a research project which examines the expectations of and realities for Irish-medium practitioners in Northern Ireland.

We are inviting participants who are either IME teachers, IME principals, IME university student teacher, or IME university teacher educators **to take part in one 45-60 minute audio recorded interview** with us to discuss perceptions and experiences of additional competencies and workloads which result from working in IME context in Northern Ireland.

The purpose of the interview is to gather examples of actual practices and experiences, which can be used to help inform future action plans regarding teacher retention in the Irish Medium Education sector in NI. Data from interviews will be anonymised and analysed by the research team. Interviews can be conducted in-person or by phone/MSTeams/other platforms.

Please be assured that participation is entirely voluntary. You do not have to take part in this study or respond to this notice. Please also be assured that declining this invitation or opting out will have no adverse impact on our current or future relationships with us or our current institutions.

For further information and details on the study, please see information sheet attached. Should you decide to participate in the study, please complete the consent form and return to this email address (a.boyle@qub.ac.uk) with 7 days of datemark.

Thank you for the time you have taken to read this email. If you have any questions, please do not hesitate to contact me/any of research team.

Le dea-mhéin,

Dr. Aisling O'Boyle
Director, Centre for Language Education Research
Senior Lecturer

Contact Details: Dr. Aisling O'Boyle, School of Social Sciences, Education and Social Work | Queen's University Belfast | 20 College Green Belfast, UK | BT7 1NN | Email: a.boyle@qub.ac.uk | Phone: +44 28 9097 5935

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Appendix 3: Participant Information Sheet

Information Sheet for Participants: "Examining expectations and realities for Irish-medium practitioners"

Title of the study: "Examining expectations and realities for Irish-medium practitioners"

Who is carrying out this research?

The research is being carried out by a group of language education researchers from the [Centre for Language Education Research](#) at Queen's University Belfast, which includes, Dr Mel Engman, Dr Aisling O'Boyle (PI), Dr Yecid Ortega, and Dr Sultan Turkan.
Dr Mel Engman m.engman@qub.ac.uk
Dr Aisling O'Boyle a.boyle@qub.ac.uk
Dr Yecid Ortega y.ortega@qub.ac.uk
Dr Sultan Turkan s.turkan@qub.ac.uk

Why is the research being conducted?

The research aims to examine the expectations of and realities for Irish-medium practitioners in Northern Ireland to help inform future action plans regarding teacher retention. It is funded by Comhairle na Gaelscolaíochta.

Why have I been asked to participate?

You have been asked to participate because you are either an IME student teacher, an IME teacher, an IME principal, or an IME university teacher/educator.

Do I have to participate? No. Participation is entirely voluntary. You do not have to take part in this study or respond to the email attached. Please note that declining this invitation or opting out will have no adverse impact on our current or future relationships, or with our current institutions. Should you decide to participate you are entirely free to withdraw from the research and you are free to withdraw your interview data up until a date 7 days after the interview has taken place. If you wish to do so, please send an email to the researcher with the phrase: "I wish to withdraw my data from this research project entitled: Examining expectations and realities for Irish-medium practitioners: REF: 043_2223" within 7 days of the interview having taken place.

What will happen if I take part? You will take part in a 45-60 minute audio recorded interview conducted in-person or by phone/MST Teams/other platform. You will be asked to confirm your participation by completing the consent form. We will contact you by email to arrange a date and time within a 2-week period to hold the interview. We will send you the interview questions by email in advance for your information. Please note, you are entirely free to withdraw from the research and you are free to withdraw your interview data up until a date 7 days after the interview has taken place.

How will the interview data be used?

We will use the interview data from all participants to gather examples of actual practices and experiences, which can be used to help inform future action plans regarding teacher retention in the IME sector in NI. Anonymised written extracts will be included in a research report made available through funder publications for future educational and research purposes.

(Page 1 of 2)

What are the benefits of taking part?

There is no direct benefit to you for participating in this project. However you will be contributing information that can be used in the development of an action plan to support teacher retention.

What are the risks? Will my data be kept confidential and will it be anonymized?

Participating in this study will take up your time in relation to an interview of approx. 45 -60 min. You will be sharing experiences of professional practice and it will not be possible to remove the identifying features of your voice from the audio data. However only the researchers will have access to the audio recordings. The audio data will be transcribed and translated, if required. The audio data will only be used for the purposes specified on this Information Sheet and corresponding Consent Form. Any personal and identifying features in the transcriptions or written extracts will be removed or replaced with pseudonyms. Please note, you are entirely free to withdraw from the research and you are free to withdraw your interview data up until a date 7 days after the interview has taken place.

Privacy Notice: Queen's University Belfast is committed to protecting your personal data. The notice is addressed to research participants. This Privacy Notice tells you why we need to collect personal information about you, what we will do with it, and how we will look after it. It also tells you about your legal rights in relation to your Personal Data. Please note details on the link below:
<https://www.qub.ac.uk/privacynotice/Research/ListofResearchPrivacyNotices/PrivacyNoticeforResearchParticipants.html>

What happens to the information after the research ends? The anonymised data will be kept and securely stored for at least 5 years, in line with QUB data handling and security policy. Electronic data will be stored on password protected and encrypted QUB network sites.

Has this research received ethical approval?

This research was ethically approved by the School of Social Sciences, Education and Social Work Research Ethics Committee (Reference Number: 043_2223)

Who do I contact about this research?

If you have any questions, comments or for further information please contact:
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**Consent Form:
“Examining expectations and realities for Irish-medium practitioners”**

I have read the attached information letter which explains the research about the research project entitled: Examining expectations and realities for Irish-medium practitioners.

I understand that the email is asking me to participate in a 45-60 minute audio recorded interview.

I understand that all the information gathered will be kept strictly confidential and that my name and the name of the school/institution where I work will not be included in any reports.

I understand that my data will be kept and securely stored for at least 5 years, in line with QUB data handling and security policy and that electronic data will be stored on password protected and encrypted QUB network sites.

I understand that participation is voluntary and that I am free to withdraw my consent from the research and my interview data up until a date 7 days after the interview has taken place.

I understand that this research will be published in form of a research report, journal article, and conference presentation.

Please tick one of the following boxes to indicate whether or not you agree to taking part:

- I **AGREE** to taking part in the above research
- I **DO NOT AGREE** to taking part in the above research

Signature: _____ **Date:** _____
(Name)

Please tick the following boxes to indicate whether or not you wish to receive material related to the research

- I wish to receive a copy of the final report
- I do not wish to receive a copy of the final report

If you have any questions, comments, or for further information please contact: Dr. Aisling O'Boyle, School of Social Sciences, Education and Social Work | Queen's University Belfast | 20 College Green Belfast, UK | BT7 1NN | Email: a.oboyle@qub.ac.uk | Phone: +44 28 9097 5935

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Student teacher

Background info and being an Irish speaker

How long have you been learning Irish?/When did you start learning Irish?

In what ways do you use Irish in your personal life or professional life?

Do you think there are advantages and disadvantages to learning/using Irish? Do you think there are to learning/using Irish?

Can you describe a moment in which you were proud of/happy/ challenged to be learning Irish/being an Irish speaker?

Why is learning Irish important for families or communities?/Why do you think IME is important in NI?

Student teacher perspectives of IME

What year of the IME teacher education programme are you in?

Why did you choose to study on an IME teacher programme?/Why do you want to be an IME teacher?/

How do you feel about teaching Irish as a subject and using it to teach other subjects?

How do think that teachers in Irish immersion contexts incorporate Irish in the curriculum/ teach effectively?

Can you talk about any challenges you have faced in learning to teach Irish or learning to teach other subjects through the medium of Irish?

Can you describe any ways that you have experienced which help overcome these challenges, or any innovative or engaging teaching methods for Irish that you have experienced or know about? (Follow-up: the role of technology, or the use of new media for example)

Student teacher perspectives of future career in IME

Can you talk about some of the challenges that you think you will face as an IME teacher?

How easy/difficult do you think it will be to get a teaching job in the future?

In terms of your future, what kind of career do you think IME offers student teachers?

Teacher

Background info and being an Irish speaker

How long have you been learning Irish?/When did you start learning Irish?

In what ways do you use Irish in your personal/professional life?

Do you think there are advantages/disadvantages to learning/using Irish? Do you think there are to learning/using Irish?

Can you describe a moment in which you were proud of/happy/ challenged to be learning Irish/being an Irish speaker?

Why is learning Irish important for families or communities?/Why do you think IME is important in NI?

Being an Irish teacher in NI

How long have you been teaching at your current school? Can you say a little bit about what your school is like? (e.g. area, number of pupils/teachers, parental involvement)

Have you taught at any other schools/institutions in NI?

Where did you study to become an Irish teacher?

Why did you want to be an IME teacher?

What are the good things about being an IME teacher? What are the not so good things about being an IME teacher?

Teacher perspectives of IME

Thinking about **teaching Irish and teaching other subjects through Irish...**

What does your teaching day look like? If you could describe your teaching methodology, what would it be? How do you teach?

What are some of the challenges you face in your everyday classrooms?

Can you describe any experiences or practices which have helped you to overcome these challenges, or any innovative or engaging teaching methods for Irish that you have experienced or know about? (Follow-up: the role of technology, or the use of new media for example)

What materials do you use in your classes?

Thinking about **your pupils...**

What do you think are some of the challenges that your pupils face?

What support is there for learners in your class/school to develop their Irish/ use it as a medium of instruction in other subjects? Support for Special Educational Needs, learners from diverse backgrounds?

What support is there for IME in the current assessment system and/or examination systems in NI?

Can you talk about the ways in which you assess pupils/learners' proficiency in Irish and their curriculum subjects.

Career and professional development in IME

Thinking about **your career** to date...

Could you tell me about a moment /event that you are particularly proud.

Can you describe a time when you have faced a particularly big challenge in your teaching career as an IM teacher?

Thinking about **your professional development...**

What kind of support is available to you?

Prompt: e.g. knowledge of technology/new media, special educational needs, development of your own lang proficiency/ training courses

From your colleagues, school leaders, communities

From local organizations, statutory bodies?

Has this support changed over time? (i.e. did you have more/less support early in your career)

What kind of support/direction do you have from policy or government?

Thinking about **any other support**

In what other ways are you supported in doing your job? (e.g. communities, parents)

Future

How do you see the future of Irish Medium in Northern Ireland?

What actions would you suggest to policy-makers/ see as necessary for the future of IME in NI?

Principals/School leaders

Background info-principals

How long have you been involved in IME?

Have you worked in any other school contexts?

Where did you study to become an Irish teacher?
 How did you come to this leadership position?
 Why is learning Irish important for families or communities?/Why do you think IME is important in NI?

Principal's perspectives on IME

In your leadership role, can you describe what it is like being an IME school principal in Northern Ireland? What are your main areas of work?

Has the role of the IME school principal evolved/changed over the years? How?

What does success mean for your school? (Prompt: What is your approach to leadership and decision making in the school? How do you approach school improvement, ensuring student success, measure the success of your school?)

In your opinion, what are some of the biggest challenges facing IME schools in Northern Ireland today?

To what extent do you think this is similar/dissimilar to principals in other school contexts?

Can you discuss any challenges you have faced in promoting and sustaining Irish in your school and how you have addressed them?

Can you talk about any successful initiatives or practices you have seen implemented in your school/or elsewhere that helps with these challenges? (Follow-up: the role of technology, or the use of new media for example)

What support is there for your staff in relation to their professional development and growth?

What support is there for you and other school leaders to stay current with educational trends and developments? How relevant is this for IME?

Can you tell me about how you/the school engages with parents, community members, statutory organizations and the importance/relevance of those relationships.

Are there any collaborations with other schools/educational organizations on sharing best practices?

Future

Thinking about the future, thinking about the next generation of IME learners, teachers, principals, schools, sector, what do you see as relevant/important/significant?

What actions would you suggest to policy-makers/ see as necessary for the future of IME in NI?

What advice would you give to someone who is considering becoming a school principal in in an Irish medium school in Northern Ireland?

Teacher educators

Background info- teacher educators

How long have you been involved in IME?

Have you worked in any other university/school contexts?

Where did you study to become an Irish teacher?

Why did you want to be an IME teacher/involved in IME?

Has this motivation changed/ these matters changed over time?

Why is learning Irish important for families or communities?/Why do you think IM Teacher Education is important in NI? Is it the same/different to IM Teacher education you know about elsewhere?

Teacher Educator's perspectives on IME

Can you describe your experience as an IME teacher educator in Northern Ireland?

How have you seen the field of IM teacher education evolve over the years?

How do you approach preparing future IME teachers to navigate the complexities of Irish-medium education in Northern Ireland? What do student teachers need to know about working in IME?

In your opinion, what are some of the biggest challenges facing Irish-medium teachers today?

To what extent do you think this is similar/dissimilar to student teachers preparing to teach in other school contexts?

Can you talk about a particularly successful project or program you have been involved in as a teacher educator in IM?

Can you share any examples of innovative teaching methods or approaches that you have seen be effective in the Irish medium classroom or teacher education classroom?

Can you talk about a time when you had to deal with a challenging situation as an IM teacher educator and how you approached it?

How do you stay current with new developments and research in teacher education?/What are key areas for you at the moment in contemporary IM teacher education?(Prompts: language proficiency, Special Educational Needs, integration of technology, learners from diverse backgrounds)

How do student teachers engage with these topics on their course?

To what extent -do you think-does initial teacher education prepare new teachers to have a career in IME school contexts?

What opportunities are provided for trainee teachers or (teachers you work with) to receive reflections on their practice? What would you like to see more of in terms of professional development of teachers/principals?

Future

What do you see as the future of teacher education and IME in Northern Ireland?

What actions would you suggest to policy-makers/ see as necessary for the future of IME and IME Teacher Education in NI?

Appendix 6: Results of systematic literature review (Challenges to immersion)

Teacher language proficiency (11)	
Context	Citations
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Māori immersion	Hill (2022)
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Language learning in SPAIN	Manzano Vázquez (2015)
Signed language (Botswana)	Mpuang et al. (2015)
EMI (China)	Yip, Coyle, & Tsang (2007)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
EMI (Kenya)	Jones (2014)
EMI (Italy)	Grandinetti et al. (2013)
English-Chinese bilingual schools (China)	Jiang & Ye (2019)
Spanish-English bilingual school (Spain)	Llinares & Evnitskaya (2021)

Teacher education inadequate in TL (4)	
Context	Citations
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
English Mol (Uganda)	Akello & Timmerman (2018)
Spanish-English (DLI) USA	Guerrero (2023)

Training (general) unavailable or poor quality (19)	
Context	Citations
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Spanish-English (DLI)	An et al., 2016
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Basque immersion (Spain)	Ozfidan (2014)
English-Spanish (CLIL) SPAIN	Méndez García & Pavón Vázquez (2012)
Bilingual schools (Bolivia)	Delany-Barmann (2009)

English immersion (China)	Cheng (2012)
EMI (China)	Yip, Coyle, & Tsang (2007)
EMI (Hong Kong)	Lo & Macaro (2012)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)
Gaeltacht Irish-medium schools (RoI)	Murtagh & Seoighe (2022)
Spanish-English DLBE (USA)	Palmer et al. (2016)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
English-Chinese bilingual schools (China)	Jiang & Ye (2019)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)
Spanish-English bilingual school (Spain)	Llinares & Evnitskaya (2021)
Gaelic-medium preschool (Scotland)	McPake & Stephen (2016)
EMI (South Africa)	Uys et al. (2007)

Need for sociocultural knowledge of multiple communities (3)	
Context	Citations
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Multilingual classroom ESL (USA)	López (2012)
Flemish immersion (Belgium)	Andrew (2009)

Inadequate knowledge of minoritised community practices (10)	
Context	Citations
Mapudungun-Spanish CHILE	Becerra-Lubies & Fones (2016)
Spanish-English (DLI) USA	Martínez et al. (2015)
Basque immersion (Spain)	Ozfidan (2014)
Multilingual classrooms (Guinea-Bissau)	Benson (2010)
Multilingual classrooms (Mozambique)	Benson (2010)
Multilingual classrooms (Ethiopia)	Benson (2010)
Multilingual classrooms (Finland)	Olmedo & Harbon (2010)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
Multilingual classroom ESL (USA)	López (2012)

French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)
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Need for high quality materials (20)	
Context	Citations
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Multilingual classrooms (Guinea-Bissau)	Benson (2010)
Multilingual classrooms (Mozambique)	Benson (2010)
Multilingual classrooms (Ethiopia)	Benson (2010)
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
Signed language (Botswana)	Mpuang et al. (2015)
English Mol (Uganda)	Early & Norton (2014)
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
English Mol (Uganda)	Akello & Timmerman (2018)
Spanish-English bilingual teachers (USA)	del Puy Ciriza (2023)
Spanish-English bilingual ed (Spain)	Durán-Martínez & Beltrán-Llavador (2020)
Spanish-English bilingual education (Spain)	Durán-Martínez et al. (2022)
Spanish-English bilingual education (USA)	Hurdus & Lasagabaster (2018)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)
Spanish-English CLIL (Spain)	McClintic (2022)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
Chinese immersion (USA)	Chen et al. (2017)

Unsure of how to USE materials (8)	
Context	Citations
Spanish-English (DLI)	An et al., 2016
Multilingual (Biling Ed) EU	Pérez Cañado (2016)

Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Spanish-English teacher education (USA)	Amos (2020)
Immersion for US Spanish teachers (Mexico)	Schmidt-Rinehart (1997)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)
Spanish-English CLIL (Spain)	McClintic (2022)

Challenges connecting language and content (12)	
Context	Citations
Spanish-English (DLI)	An et al., 2016
Māori immersion (maths)	Hāwera & Taylor (2014)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
EMI (China)	Yip, Coyle, & Tsang (2007)
EMI (Hong Kong)	Lo & Macaro (2012)
Trilingual education (Hong Kong)	Wang & Kirkpatrick (2013)
Putonghua-medium instruction (China)	Tam (2011)
French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
Chinese immersion (USA)	Chen et al. (2017)

Lower self-efficacy/self-perception for bilinguals (6)	
Context	Citations
Spanish-English (DLI)	An et al., 2016
Multilingual ELL class (USA)	Gerena & Keiler (2012)
Multilingual classroom ESL (USA)	López (2012)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)

Spanish-English bilingual teachers (USA)	del Puy Ciriza (2023)
Spanish-English bilingual education (USA)	Szwed & González-Carriedo (2019)

Inadequate understanding of language pedagogy (e.g., CLIL, translanguaging) (23)

Context	Citations
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Language learning in SPAIN	Manzano Vázquez (2015)
Māori immersion	Hill (2022)
Spanish-English (DLI) USA	Martínez et al. (2015)
English-Spanish (CLIL) SPAIN	Méndez García & Pavón Vázquez (2012)
Multilingual classrooms (Guinea-Bissau)	Benson (2010)
Multilingual classrooms (Mozambique)	Benson (2010)
Multilingual classrooms (Ethiopia)	Benson (2010)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
Bilingualism in ESL (USA)	Tedick & Wesely (2015)
English immersion (China)	Cheng (2012)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
French immersion (USA)	Akcan (2004)
immersion contexts (generally)	Baldwin (2021)
EMI at British school (Spain)	Coyle et al. (2010)
Irish-medium schools (RoI)	Ní Dhiorbháin & Ó Duibhir (2017)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)
Spanish-English CLIL (Spain)	McClintic (2022)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
Spanish-English bilingual school (Spain)	Llinares & Evnitskaya (2021)
Chinese immersion (USA)	Chen et al. (2017)

**Inadequate language policy knowledge
(2)**

Context

ESL (L1s unspecified) USA

Mother tongue instr. (MTI) South Africa

Citations

Martínez & Baker (2010)

Koloti & Jita (2021)

Discrimination against teachers (4)

Context

Mapudungun-Spanish CHILE

Latinx bilinguals USA

Spanish-English teacher education (USA)

Spanish-English bilingual teachers (USA)

Citations

Becerra-Lubies & Fones (2016)

Varghese (2008)

Amos (2020)

del Puy Ciriza (2023)

**Discrimination against
students/community (4)**

Context

Mapudungun-Spanish CHILE

Chinese bilinguals in ESL

Latinx bilinguals USA

Spanish-English teacher education (USA)

Citations

Becerra-Lubies & Fones (2016)

Chen (2009)

Varghese (2008)

Amos (2020)

Assessments (12)

Context

Irish immersion

Welsh immersion

Spanish-English (USA)

Signed language (Botswana)

Flemish immersion (Belgium)

Spanish-English bilingual teachers (USA)

Putonghua-medium instruction (China)

Mother-tongue-based (MTB) multilingual
ed (Philippines)

Citations

Thomas & Dunne (2022)

Thomas & Dunne (2022)

Musanti (2017)

Mpuang et al. (2015)

Andrew (2009)

del Puy Ciriza (2023)

Tam (2011)

Gempeso & Mendez (2021)

Gaeltacht Irish-medium schools (RoI)	Murtagh & Seoighe (2022)
Spanish-English DLBE (USA)	Palmer et al. (2016)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Mandarin-Nuosu bilingual education (China)	Rehamo & Harrell (2020)

Challenges with recruitment (6)	
Context	Citations
Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
Basque immersion (Spain)	Ozfidan (2014)
Kurdish-Turkish bilingualism (Turkey)	Ozfidan (2014)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Chinese immersion (USA)	Chen et al. (2017)

Challenges with retention (teachers) (2)	
Context	Citations
Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)

Challenges with retention (students) (3)	
Context	Citations
English immersion (China)	Cheng (2012)
ESL (USA)	Courtney (2005)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)

Outside pressure to prioritise English (e.g., from parents, education authority, society) (5)	
Context	Citations
Māori immersion	Hill (2022)
English Mol (Uganda)	Early & Norton (2014)
Latinx bilingual teachers USA	Varghese (2006)

Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Spanish-English CLIL (Spain)	McClintic (2022)

Insufficient skill (or resourcing) with technology (6)	
Context	Citations
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Bilingualism in ESL (USA)	Tedick & Wesely (2015)
Spanish-English bilingual education (Spain)	Durán-Martínez et al. (2022)
EMI at British school (Spain)	Coyle et al. (2010)
Spanish-English CLIL (Spain)	McClintic (2022)

Behavioural issues (3)	
Context	Citations
Language learning in SPAIN	Manzano Vázquez (2015)
Chinese bilinguals in ESL	Chen (2009)
French immersion (USA)	Hansen et al. (2017)

Problematic teacher ideologies (7)	
Context	Citations
Spanish-English (DLI) USA	Martínez et al. (2015)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
ESL (L1s unspecified) USA	Milner (2005)
Putonghua-medium instruction (China)	Tam (2011)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
French immersion (Canada)	Keating Marshall & Bokhorst (2018)
Plurilingual higher education (Spain)	Portóles & Martí (2020)

Sense of isolation for teachers (3)	
Context	Citations

Māori immersion (maths)	Hāwera & Taylor (2014)
Latinx bilinguals USA	Varghese (2008)
Spanish-English CLIL (Spain)	McClintic (2022)

Sense of isolation for students (mainstreaming) (2)	
Context	Citations
Chinese bilinguals in ESL	Chen (2009)
Flemish immersion (Belgium)	Andrew (2009)

Inadequate financial resources (8)	
Context	Citations
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
English Mol (Uganda)	Early & Norton (2014)
Latinx bilingual teachers USA	Varghese (2006)
English Mol (Uganda)	Akello & Timmerman (2018)
Spanish-English bilingual teachers (USA)	del Puy Ciriza (2023)
Spanish-English DLI (USA)	Clark (1995)
Chinese immersion (USA)	Chen et al. (2017)

Language standardisation/variation (4)	
Context	Citations
Basque immersion (Spain)	Ozfidan (2014)
Kurdish-Turkish bilingualism (Turkey)	Ozfidan (2014)
Signed language (Botswana)	Mpuang et al. (2015)
Gaeltacht Irish-medium schools (RoI)	Murtagh & Seoighe (2022)

Political hostility (3)	
Context	Citations
Basque immersion (Spain)	Ozfidan (2014)
Kurdish-Turkish bilingualism (Turkey)	Ozfidan (2014)
ESL (L1s unspecified) USA	Martínez & Baker (2010)

Challenging to connect with parents (4)

Context	Citations
Slovene-German schools (Germany)	Purkarthofer & Mossakowski (2011)
English Mol (Uganda)	Akello & Timmerman (2018)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)
Spanish immersion school (USA)	Aguayo & Dorner (2017)

Supply of places outpaced by demand (1)

Context	Citations
Spanish-English Learning Centres (USA)	Lukes (2011)

Status differences between languages (5)

Context	Citations
Bilingual schools (Bolivia)	Delany-Barmann (2009)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
Latinx bilingual teachers USA	Varghese (2006)
Trilingual education (Hong Kong)	Wang & Kirkpatrick (2013)
Spanish-English bilingual education (USA)	Szwed & González-Carriedo (2019)

Socioeconomic status differences among students (1)

Context	Citations
Two-way Bilingual Ed (TWBE) USA	Heiman (2021)

Academic language can be difficult to use and understand (9)

Context	Citations
Multilingual classroom ESL (USA)	López (2012)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
EMI (Malaysia)	Hudson (2009)

EMI (Hong Kong)	Lo & Macaro (2012)
Latinx bilingual teachers USA	Varghese (2006)
Trilingual education (Hong Kong)	Wang & Kirkpatrick (2013)
French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
French immersion (Canada)	Cammarata & Haley (2018)

Inexperienced teachers (2)	
Context	Citations
English immersion (China)	Cheng (2012)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)

Need for special qualifications (1)	
Context	Citations
Latinx bilingual teachers USA	Varghese (2006)

Problems with principal (1)	
Context	Citations
immersion contexts (generally)	Baldwin (2021)

Immersion pedagogies require additional time (6)	
Context	Citations
Spanish-English bilingual ed (Spain)	Durán-Martínez & Beltrán-Llavador (2020)
Trilingual education (Hong Kong)	Wang & Kirkpatrick (2013)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)
Spanish-English CLIL (Spain)	McClintic (2022)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)

Identifying and differentiating for SEN students (2)

Context	Citations
Plurilingual education (Valencia SPAIN)	Garcia-Bellido & Cerezo Herrero (2021)
Gaeltacht Irish-medium schools (RoI)	Murtagh & Seoighe (2022)

Teacher precarity (1)

Context	Citations
EMI (Italy)	Grandinetti et al. (2013)

Difficult to motivate student learning (2)

Context	Citations
CLIL (generally)	Zarobe (2013)
Putonghua-medium instruction (China)	Tam (2011)

Some poor student language outcomes (7)

Context	Citations
Putonghua-medium instruction (China)	Tam (2011)
French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)
Spanish-English DLI (USA)	Clark (1995)
Mandarin-Nuosu bilingual education (China)	Rehamo & Harrell (2020)
Spanish-English bilingual school (Spain)	Llinares & Evnitskaya (2021)
Chinese immersion (USA)	Chen et al. (2017)
EMI (Hong Kong)	Lo & Macaro (2015)

Lack of knowledge of student home languages (1)

Context	Citations
French immersion (Canada)	Zaidi et al. (2022)

Student skills differ across modes (e.g., writing vs. speaking) (1)

Context	Citations
Gaeltacht Irish-medium schools (RoI)	Murtagh & Seoighe (2022)

Strict language policies (1)	
Context	Citations
Plurilingual Dutch classrooms (The Netherlands)	Jaspers & Rosiers (2022)

Learners of diverse language backgrounds (1)	
Context	Citations
Spanish-English CLIL (Spain)	McClintic (2022)

Challenging to disentangle language learning from content learning (1)	
Context	Citations
EMI (Hong Kong)	Poon & Lau (2016)

Unrealistic expectations (1)	
Context	Citations
Gaelic-medium preschool (Scotland)	McPake & Stephen (2016)

Appendix 7: Results of systematic literature review (Responses to immersion challenges)

Teachers create materials that they don't have (12)	
Context	Citation
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Signed language (Botswana)	Mpuang et al. (2015)
English Mol (Uganda)	Early & Norton (2014)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)
Spanish-English bilingual education (Spain)	Durán-Martínez et al. (2022)
EMI (Italy)	Grandinetti et al. (2013)
Gaeltacht Irish-medium schools (Irl)	Murtagh & Seoighe (2022)
Spanish-English bilingual education (USA)	Hurdus & Lasagabaster (2018)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
French immersion (Canada)	Cammarata & Haley (2018)

Teachers support one another (5)	
Context	Citations
Spanish-English (DLI)	An et al., 2016
EMI (Malaysia)	Hudson (2009)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)
Cantonese immersion (USA)	Yang et al. (2018)
French immersion (Canada)	Cammarata & Haley (2018)

Teaching assistants to support (6)	
Context	Citations
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Multilingual ELL class (USA)	Gerena & Keiler (2012)
ESL (L1s unspecified) USA	Milner (2005)
Spanish-English bilingual ed (Spain)	Durán-Martínez & Beltrán-Llavador (2020)

Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)
Spanish-English CLIL (Spain)	McClintic (2022)

Connect language with culture (6)

Context	Citations
Mapudungun-Spanish CHILE	Becerra-Lubies & Fones (2016)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Multilingual ELL class (USA)	Gerena & Keiler (2012)
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
English Mol (Uganda)	Early & Norton (2014)
Cantonese immersion (USA)	Yang et al. (2018)

Linguistic Training (7)

Context	Citations
Language learning in SPAIN	Manzano Vázquez (2015)
Multilingual classrooms (USA)	Faltis et al. (2010)
Multilingual classroom ESL (USA)	López (2012)
English Mol (Uganda)	Early & Norton (2014)
EMI (Malaysia)	Hudson (2009)
Spanish-English bilingual education (Spain)	Durán-Martínez et al. (2022)
EMI (South Africa)	Uys et al. (2007)

Pedagogical training (20)

Context	Citations
Language learning in SPAIN	Manzano Vázquez (2015)
Multilingual classrooms (Finland)	Olmedo & Harbon (2010)
Flemish immersion (Belgium)	Andrew (2009)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
English Mol (Uganda)	Early & Norton (2014)
ESL (L1s unspecified) USA	Martínez & Baker (2010)

Spanish-English bilingual ed (Spain)	Durán-Martínez & Beltrán-Llavador (2020)
EMI (Italy)	Grandinetti et al. (2013)
Spanish-English (DLI) USA	Poza (2019)
EMI (CLIL) Spain	Custodio-Espinar (2019)
Spanish-English DLBE (USA)	Palmer et al. (2016)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
Spanish-English bilingual education (USA)	Szwed & González-Carriedo (2019)
Cantonese immersion (USA)	Yang et al. (2018)
English CLIL (Spain)	Icaraz-Mármol (2018)
French immersion (Canada)	Cammarata & Haley (2018)
EMI (South Africa)	Uys et al. (2007)

Translanguaging practices in the classroom (21)	
Context	Citations
Spanish-English (DLI) USA	Martínez et al. (2015)
Slovene-German schools (Germany)	Purkarthofer & Mossakowski (2011)
Multilingual classrooms (USA)	Faltis et al. (2010)
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
Chinese bilinguals in ESL	Chen (2009)
EMI secondary students (Hong Kong)	Tavares (2015)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
EMI (Kenya)	Jones (2014)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)
English- & French-medium schools (Nigeria)	Amadi (2012)
Sign (BSL) and English (UK)	Swanwick (2001)
English language learning (USA)	Dougherty (2021)

Spanish-English (DLI) USA	Poza (2019)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)
Spanish-English CLIL (Spain)	McClintic (2022)
EMI (Nepal)	Phyak et al (2022)
Arabic-Hebrew bilingual education (Israel)	Schwarz et al. (2022)
EMI (Hong Kong)	Poon & Lau (2016)
English-Spanish TWI (USA)	Tedick & Young (2018)
English-Spanish TWI (USA)	Durn & Palmer (2014)

Partnerships and collaboration (7)	
Context	Citations
Māori immersion (maths)	Hāwera & Taylor (2014)
Slovene-German schools (Germany)	Purkarthofer & Mossakowski (2011)
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
ESL (L1s unspecified) USA	Milner (2005)
Mother tongue instr. (MTI) South Africa	Koloti & Jita (2021)
French immersion (Canada)	Cammarata & Haley (2018)

Hold more time for teachers' reflection (6)	
Context	Citations
Māori immersion (maths)	Hāwera & Taylor (2014)
Multilingual classrooms (Finland)	Olmedo & Harbon (2010)
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)

Involve family & community (6)

Context	Citations
Spanish-English (DLI) USA	Rodríguez-Valls (2011)
Multilingual classrooms (USA)	Faltis et al. (2010)
Signed language (Botswana)	Mpuang et al. (2015)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
French immersion (Canada)	Zaidi et al. (2022)
Gaelic-medium instruction (Scotland)	Birnie (2022)

Use multiple assessments (2)

Context	Citations
Multilingual classrooms (USA)	Faltis et al. (2010)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)

Asset-based pedagogies (7)

Context	Citations
Multilingual classrooms (Guinea-Bissau)	Benson (2010)
Multilingual classrooms (Mozambique)	Benson (2010)
Multilingual classrooms (Ethiopia)	Benson (2010)
English Mol (Uganda)	Akello & Timmerman (2018)
Spanish-English teacher education (USA)	Ference & Bell (2004)
French immersion (Canada)	Zaidi et al. (2022)
English-Spanish TWI (USA)	Durn & Palmer (2014)

Use of specific bilingual pedagogies (e.g., CBI, CLIL) (2)

Context	Citations
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
French immersion (Canada)	Bourgoin & Bouthillier (2021)

Focus on meaning and enjoyment (1)

Context	Citations
EMI vocational learning (Sweden)	Kontio & Sylvén (2015)

Separation of languages (2)

Context	Citations
Spanish-English (DLI) USA	Reyes (2007)
Trilingual education (Hong Kong)	Wang & Kirkpatrick (2013)

On-site training (1)

Context	Citations
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)

Use of less complex, accessible language in classroom (4)

Context	Citations
EMI (China)	Yip, Coyle, & Tsang (2007)
Chinese immersion (USA)	Chen et al. (2017)
EMI (Hong Kong)	Poon & Lau (2016)
English-Spanish TWI (USA)	Tedick & Young (2018)

Independent learning (language or content) (2)

Context	Citations
EMI (Malaysia)	Hudson (2009)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)

Appeal to policy makers (1)

Context	Citations
EMI (Hong Kong)	Lo & Macaro (2012)

Professional Communities (1)

Context	Citations
Spanish-English teacher education (USA)	Amos (2020)

Creative use of technology (3)

Context	Citations
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)
EMI (Hong Kong)	Poon & Lau (2016)

Teacher positions self as a learner (1)

Context	Citations
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)

Assets-based approach to assessment (1)

Context	Citations
Spanish-English bilingual teachers (USA)	del Puy Ciriza (2023)

Smaller classes (1)

Context	Citations
Spanish-English bilingual ed (Spain)	Durán-Martínez & Beltrán-Llavador (2020)

Training on technology or ICT (2)

Context	Citations
Spanish-English bilingual education (Spain)	Durán-Martínez et al. (2022)
Spanish-English CLIL (Spain)	McClintic (2022)

Task-based teaching (2)

Context	Citations
EMI (Italy)	Grandinetti et al. (2013)
French immersion (Canada)	Bourgoin & Bouthillier (2021)

Reinforcing with other skills (e.g., writing to aid reading) (1)

Context	Citations
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Putonghua-medium instruction (China)	Tam (2011)
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Small-groups or pairs in classroom (2)

Context	Citations
French immersion (Canada)	Bourgoin & Bouthillier (2021)
Spanish-English CLIL (Spain)	McClintic (2022)

Critical curricular and instructional practices (1)

Context	Citations
Two-way Bilingual Ed (TWBE) USA	Heiman (2021)

Accreditation opportunities for teachers (3)

Context	Citations
EMI (CLIL) Spain	Custodio-Espinar (2019)
CLIL in Europe	Perez Canado (2018)
EMI (South Africa)	Uys et al. (2007)

Study abroad with pedagogy focus (1)

Context	Citations
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)

Training to integrate critical perspectives (2)

Context	Citations
French immersion (Canada)	Keating Marshall & Bokhorst (2018)
Spanish-English CLIL (Spain)	McClintic (2022)

Personalised attention to students (1)

Context	Citations
Spanish-English CLIL (Spain)	McClintic (2022)

Scholarship support for families (1)

Context	Citations
English-Arabic bilingual education (UAE)	Azzam (2019)

Retraining bilingual content teachers (2)

Context	Citations
English-Arabic bilingual education (UAE)	Azzam (2019)
EMI (South Africa)	Uys et al. (2007)

Specific activities (e.g., Q and A, worksheets, pictures as teaching aids) (3)

Context	Citations
EMI (Hong Kong)	Poon & Lau (2016)
EMI (Hong Kong)	Lo & Macaro (2015)
Arabic-Hebrew bilingual education (Israel)	Schwarz et al. (2022)

Special attention to disadvantaged pupils (1)

Context	Citations
English-Spanish TWBI (USA)	Brooke-Garza (2015)

Promoting language awareness (1)

Context	Citations
English-Spanish TWI (USA)	Tedick & Young (2018)

Immersion before dual-language introduction (1)

Context	Citation
Māori immersion	Hill (2022)

Appendix 8: Results of systematic literature review (Documented immersion teacher competencies)

Knowledge of immersion pedagogies (24)	
Context	Citations
Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
Māori immersion	Hill (2022)
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Language learning in SPAIN	Manzano Vázquez (2015)
Spanish-English (DLI) USA	Martínez et al. (2015)
Slovene-German schools (Germany)	Purkarthofer & Mossakowski (2011)
Multilingual classrooms (USA)	Faltis et al. (2010)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
Bilingualism in ESL (USA)	Tedick & Wesely (2015)
EMI secondary students (Hong Kong)	Tavares (2015)
French immersion (USA)	Akcan (2004)
EMI (Hong Kong)	Lo & Macaro (2012)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Spanish-English CLIL (Spain)	Cortina-Pérez & Pino Rodríguez (2022)
EMI (Italy)	Grandinetti et al. (2013)
French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)
Sign (BSL) and English (UK)	Swanwick (2001)
French immersion (Canada)	Bourgoin & Bouthillier (2021)
EMI (CLIL) Spain	Custodio-Espinar (2019)
Spanish-English bilingual education (Spain)	Martinez et al. (2019)
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
CLIL in Europe	Perez Canado (2018)

Knowledge about bilingualism (6)	
Context	Citations

Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
Multilingual classrooms (USA)	Faltis et al. (2010)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
ESL (L1s unspecified) USA	Martínez & Baker (2010)

Knowledge of target language (19)	
Context	Citations
Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Māori immersion	Hill (2022)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
English Mol (Uganda)	Early & Norton (2014)
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)
EMI (China)	Yip, Coyle, & Tsang (2007)
EMI (Malaysia)	Hudson (2009)
EMI (Hong Kong)	Lo & Macaro (2012)
Spanish-English teacher education (USA)	Amos (2020)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)
Spanish-English CLIL (Spain)	Cortina-Pérez & Pino Rodríguez (2022)
English immersion (Malaysia)	Feryok (2013)
Immersion for US Spanish teachers (Mexico)	Schmidt-Rinehart (1997)
EMI (CLIL) Spain	Custodio-Espinar (2019)
English-Chinese bilingual schools (China)	Jiang & Ye (2019)
CLIL in Europe	Perez Canado (2018)
English-Spanish CLIL (Spain)	Pérez Gracia et al. (2020)

Knowledge of content & curriculum (18)	
Context	Citations

Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
Spanish-English (DLI)	An et al., 2016
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Māori immersion (maths)	Hāwera & Taylor (2014)
Spanish-English (DLI) USA	Hayes, Rueda, & Chilton (2009)
Spanish-English (DLI) USA	Reyes (2007)
EMI (China)	Yip, Coyle, & Tsang (2007)
EMI (Malaysia)	Hudson (2009)
EMI (Hong Kong)	Lo & Macaro (2012)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
immersion contexts (generally)	Baldwin (2021)
Spanish-English CLIL (Spain)	Cortina-Pérez & Pino Rodríguez (2022)
EMI (Italy)	Grandinetti et al. (2013)
English maths ESL (USA)	Gómez (2010)
EMI (CLIL) Spain	Custodio-Espinar (2019)
English-Chinese bilingual schools (China)	Jiang & Ye (2019)
CLIL in Europe	Perez Canado (2018)

Ability to integrate content & language (2)	
Context	Citation
Spanish-English CLIL (Colombia)	McDougald & Pissarello (2020)
French immersion (Canada)	Cammarata & Haley (2018)

Knowledge of impact of nonlinguistic factors on learning (8)	
Context	Citations
Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Spanish-English (DLI) USA	Rodríguez-Valls (2011)
Russian-Estonian immersion (Estonia)	Talts et al. (2010)

Chinese bilinguals in ESL	Chen (2009)
Swedish immersion	Cekaite (2009)
French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)

Knowledge of affective dimension of language learning (13)	
Context	Citations
Irish immersion	Thomas & Dunne (2022)
Welsh immersion	Thomas & Dunne (2022)
French immersion (USA)	Akcan (2004)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Multilingual ELL class (USA)	Gerena & Keiler (2012)
Spanish-English Learning Centres (USA)	Lukes (2011)
Chinese bilinguals in ESL	Chen (2009)
Bilingualism in ESL (USA)	Tedick & Wesely (2015)
EMI secondary students (Hong Kong)	Tavares (2015)
Multilingual classroom ESL (USA)	López (2012)
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)
Spanish-English DLI (USA)	Clark (1995)
CLIL in Europe	Perez Canado (2018)

Adaptability (3)	
Context	Citations
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Māori immersion (maths)	Hāwera & Taylor (2014)
English Mol (Uganda)	Early & Norton (2014)

Collaborativeness (7)	
Context	Citations
Spanish-English (DLI)	An et al., 2016
Spanish-English (DLI)	Rodríguez-Valls et al. (2017)
Māori immersion (maths)	Hāwera & Taylor (2014)

English-Spanish (CLIL) SPAIN	Méndez García & Pavón Vázquez (2012)
Slovene-German schools (Germany)	Purkarthofer & Mossakowski (2011)
Signed language (Botswana)	Mpuang et al. (2015)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)

Materials design & creation abilities (14)	
Context	Citations
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
Bilingual schools (Bolivia)	Delany-Barmann (2009)
Signed language (Botswana)	Mpuang et al. (2015)
EMI secondary students (Hong Kong)	Tavares (2015)
Spanish-English (DLI) USA	Reyes (2007)
English Mol (Uganda)	Early & Norton (2014)
Cherokee immersion (USA)	Peter & Hirata-Edds (2006)
English Mol (Uganda)	Akello & Timmerman (2018)
EMI in Int'l Standard Schools (ISS) Indonesia	Zacharias (2013)
Gaeltacht Irish-medium schools (Irl)	Murtagh & Seoighe (2022)
English-Chinese bilingual schools (China)	Jiang & Ye (2019)
Spanish-English bilingual education (Spain)	Lorenzo & Granados (2020)
French immersion (Canada)	Cammarata & Haley (2018)

Knowledge of language policy (4)	
Context	Citations
Multilingual (Biling Ed) EU	Pérez Cañado (2016)
EMI (Hong Kong)	Lo & Macaro (2012)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Latinx bilinguals USA	Varghese (2008)

Understanding of political context (6)	
Context	Citations

Mapudungun-Spanish CHILE	Becerra-Lubies & Fones (2016)
Hawaiian language immersion (USA)	Yong & Hoffman (2014)
EMI (Hong Kong)	Lo & Macaro (2012)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Latinx bilingual teachers USA	Varghese (2006)
English-Spanish CLIL (Spain)	Pérez Gracia et al. (2020)

Knowledge of how to challenge purist ideologies (1)	
Context	Citations
Spanish-English (DLI) USA	Martínez et al. (2015)

Ability to advocate for learners and schools (10)	
Context	Citations
Multilingual classrooms (USA)	Faltis et al. (2010)
European language Mol (Sub-Saharan Africa)	Clegg & Afitska (2011)
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Latinx bilinguals USA	Varghese (2008)
Spanish-English teacher education (USA)	Amos (2020)
EMI (Kenya)	Jones (2014)
Spanish-English teacher education (USA)	Amos (2020)
immersion contexts (generally)	Baldwin (2021)
ESL (USA)	Courtney (2005)
Spanish-English two-way immersion (TWI) (USA)	Hood (2020)

Ability to integrate social and cultural elements into teaching (9)	
Context	Citations
Bilingualism in ESL (USA)	Tedick & Wesely (2015)
Multilingual classroom ESL (USA)	López (2012)
English Mol (Uganda)	Early & Norton (2014)
French or English immersion in Nunavik (Canada)	Spada & Lightbown (2002)
English maths ESL (USA)	Gómez (2010)

Spanish-English DLI (USA)	Clark (1995)
Mother-tongue-based (MTB) multilingual ed (Philippines)	Gempeso & Mendez (2021)
Spanish-English bilingual education (USA)	Hurdus & Lasagabaster (2018)
English-Spanish TWI (USA)	Durn & Palmer (2014)

Nonverbal communication (1)	
Context	Citations
Swedish immersion	Cekaite (2009)

Teaching experience in immersion/bilingual ed (2)	
Context	Citations
English immersion (China)	Cheng (2012)

Knowledge of academic language (5)	
Context	Citations
ESL (L1s unspecified) USA	Martínez & Baker (2010)
Latinx bilingual teachers USA	Varghese (2006)
English maths ESL (USA)	Gómez (2010)
French immersion (Canada)	Cammarata & Haley (2018)
English-Spanish TWI (USA)	Tedick & Young (2018)

Knowledge of culture (7)	
Context	Citations
Spanish-English teacher education (USA)	Amos (2020)
Spanish-English teacher education (USA)	Ference & Bell (2004)
Immersion for US Spanish teachers (Mexico)	Schmidt-Rinehart (1997)
CLIL in Europe	Perez Canado (2018)
English-Spanish CLIL (Spain)	Pérez Gracia et al. (2020)
Plurilingual ELL classroom teachers (USA)	Oh & Nussli (2021)
Aboriginal & Torres Strait Islander Ed. (Australia)	Lavery et al. (2014)

Skill with technology (4)

Context

EMI in Int'l Standard Schools (ISS) Indonesia

EMI at British school (Spain)

French immersion (Canada)

English-Spanish CLIL (Spain)

Citations

Zacharias (2013)

Coyle et al. (2010)

Zaidi et al. (2022)

Pérez Gracia et al. (2020)

Connection with parents (4)

Context

immersion contexts (generally)

English- & French-medium schools (Nigeria)

Spanish-English CLIL (Spain)

Plurilingual ELL classroom teachers (USA)

Citations

Baldwin (2021)

Amadi (2012)

McClintic (2022)

Oh & Nussli (2021)

Critical language awareness (1)

Context

English- & French-medium schools (Nigeria)

Citations

Amadi (2012)

Ability to differentiate instruction (3)

Context

French immersion (Canada)

Spanish-English CLIL (Spain)

EMI (Nepal)

Citations

Ewart & Straw (2001)

McClintic (2022)

Phyak et al (2022)

Ability to relate to students (4)

Context

French immersion (Canada)

Arabic-Hebrew bilingual education (Israel)

Plurilingual ELL classroom teachers (USA)

Citations

Zaidi et al. (2022)

Schwartz & Gorbatt (2017)

Oh & Nussli (2021)

English-Spanish TWI (USA)

Durn & Palmer (2014)

Translation abilities (2)

Context

Gaeltacht Irish-medium schools (RoI)

Spanish-English bilingual education (USA)

Citations

Murtagh & Seoighe (2022)

Hurdus & Lasagabaster (2018)

Metalinguistic knowledge (2)

Context

Irish-medium schools (RoI)

English-Spanish TWI (USA)

Citations

Ní Dhiorbháin & Ó Duibhir (2017)

Tedick & Young (2018)

Ability to notice (2)

Context

Spanish-English bilingual ed (USA)

Plurilingual ELL classroom teachers (USA)

Citations

Musanti (2017)

Oh & Nussli (2021)

Ability to reflect on practice (3)

Context

Chinese immersion (USA)

CLIL in Europe

Citations

Kong & Shang (2020)

Perez Canado (2018)

Critical consciousness (3)

Context

Spanish-English two-way immersion (TWI) (USA)

EMI (Nepal)

English-Spanish TWI

Citations

Hood (2020)

Phyak et al (2022)

Heiman & Yanes (2018)

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