A Prototype Bilingual Literacy Screening Test for Pupils in Gaelscoileanna and

Gaeltacht Schools: Design Consideration and Teacher Attitudes

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**Abstract** 

The present paper has two main aims. The first is to describe the prototype development of a bilingual literacy screening test for pupils in Gaelscoileanna and Gaeltacht schools. A description of the design process is provided, including the guiding design principles, task selection and task development. A number of challenges to development are identified within the Irish-English context, including the need to minimise cross-linguistic bias in order to facilitate comparisons across scores in each language. The second aim is to examine teachers' (n = 8) perceptions of the prototype screening test. The participating teachers implemented the assessment over a two-week period in their school setting. They then took part in semistructured interviews to examine their perceptions of the feasibility of implementing the assessment as well as its utility in identifying students who may need additional support. The findings indicate that teachers recognised the need for more bilingual screening tests in Irishmedium schools, and that they favoured an assessment of a broad range of skills – including phonemic awareness and listening comprehension – over a narrow assessment of reading and writing skills. Participants from Gaeltacht schools emphasised the need for an oral language assessment, recognising the integrated nature of language and literacy skills. The need for equal provision of screening and diagnostic assessments for children in English- and Irishmedium education is highlighted.

**Keywords:** biliteracy, assessment, immersion education, bilingualism, literacy

Introduction

This paper has a dual aim: the first is to describe the prototype development of a bilingual literacy screening test for pupils in *Gaelscoileanna* and *Gaeltacht* schools, and the second is to examine teachers' perceptions of its usability and practicality. Best practice dictates that bilingual children should be assessed in both languages when evaluating language and literacy development (e.g., Sanchez et al., 2013). At present, however, there are no bilingual literacy screeners available to students in Irish-medium schools, and teachers frequently rely on English language dyslexia screeners or assessment material they have developed themselves (Nic Aindriú et al., 2021). This is problematic as a lack of access to bilingual

literacy assessment – as well as a lack of appropriate assessment policy – can result in the over- or underidentification of children as having additional educational needs (Restrepo & Castilla-Earls, 2021). Indeed, findings from previous research indicates that assessing bilingual children in both of their languages provides a more accurate account of their abilities (Murphy & Travers, 2012).

The need for appropriate assessment materials in Irish has been long been acknowledged, and this need extends beyond the school level to educational psychology services. Recent research indicates that only a very small proportion (10%) of Irish-medium schools have access to educational psychology services in Irish (Nic Aindriú et al., 2021). Due to the lack of normed screening tools, educational psychologists and speech and language therapists that do speak Irish resort to translating English language assessments to Irish, though they are very much aware of the validity issues of such translated tests (O'Toole & Hickey, 2013). The lack of adequate assessment materials raises broader questions in relation to equity of provision for students in Irish-medium education.

The lack of appropriate early literacy assessments for those in Irish-medium education is particularly problematic in light of the importance of early intervention; a meta-analysis of previous studies suggest that early intervention is significantly more effective at remediating literacy difficulties than later intervention (Ehri, 2003). In order to provide early intervention, it is crucial to have an accurate picture of the nature and type of needs a child has.

### **The Irish Context**

Irish is the first official language of Ireland, and is taught in all mainstream schools in Ireland. Education is provided through the medium of Irish in approximately 8% of schools (Gaeloideachas, n.d.). Of these schools, 58% are Irish-medium immersion schools situated in traditionally English-speaking areas (*Gaelscoileanna*), and the other 42% are situated in

Gaeltacht areas which are considered substantially Irish-speaking (Gaeloideachas, n.d.). A large amount of variety exists between various *Gaeltacht* areas in terms of the number of daily speakers and the proportion of residents that speak Irish daily (Central Statistics Office, 2023).

Irish is a Celtic language; there are three main dialects and no spoken standard, though there is a written standard (An Caighdeán Oifigiúil: Rannóg an Aistriúcháin, 2017). The linguistic structures of Irish differ substantially from those of English. Importantly from a literacy perspective, Irish phonology is very different from that of English (see Ní Chasaide, 1999). In addition, Irish orthography is overall more consistent and regular than that of English though it has a complex set of spelling rules (Stenson & Hickey, 2016).

# **Designing a Bilingual Literacy Screening Test**

The first aim of the present paper is to describe the design of the bilingual literacy screening test. To this end, the main principles of design are described, as well as the method of task selection and task design. Screening tests are typically administered to an entire class (as opposed to individuals) with the purpose of identifying those who may need further assessment or support, or in order to tailor support (e.g., Andresen & Monsrud, 2022).

# **Guiding Design Principles**

The development of the screening test described in the present paper involved the simultaneous development of Irish and English versions in consultation with the International Test Commission Guidelines for Test Translation and Adaptation (Muñiz et al., 2013). It was originally designed for senior infant pupils, however it was implemented with first class<sup>1</sup> in

Senior Infants is the second year of primary/elementary schooling in Ireland, where pupils are typically 6-7

years old. First Class is the third year of primary/elementary schooling, where pupils are typically 7-8 years old.

the present study due to the expectation that it may have been too advanced for senior infants after Covid-19 school closures. The primary goal in development was to maximise the equivalence of the Irish and English versions of the assessment, in order to allow for cross-language comparisons. Bias is the main threat to equivalence, and may arise from differences in the construct across languages, how the test is implemented in each language or the items developed for each language (He & Van de Vijver, 2012).

This screening test was designed with child-centred principles. The first was to minimise test anxiety for the children who take the test. Test anxiety refers to a set of responses – phenomenological, physiological and behavioural – that can be provoked by concerns about low performance on a test (Zeidner & Matthews, 2003). For some children, testing can be threatening and result in upset or in insecurity, manifesting in behaviours such as seeking reassurance from teachers (Connor, 2001). Test anxiety can also lower test validity as it is a source of test bias, due to the fact that anxious students may not perform to the best of their ability (Zeidner & Matthews, 2003).

The screening test discussed in this paper was implemented in a non-traditional way, in short (10 minute) tasks. The motivation for this was: (i) to avoid a traditional testing situation and the accompanying anxiety and (ii) to provide an optimal environment for students with attention or executive function differences to demonstrate their learning. It has been suggested, for example, that tests of shorter duration are optimal for students with ADHD or other attentional differences (Daley & Birchwood, 2010).

## **Selecting Tasks for the Screening Test**

The fact that previous research recommends assessing bilingual children in both languages (e.g., Sanchez et al., 2013; Murphy & Travers, 2012) is not surprising as research indicates that the cognitive and linguistic skills (e.g., phonemic awareness, rapid automatised naming)

which predict literacy attainment differ in each of a bilingual's languages (e.g., Pasquarella et al., 2015; Jared et al., 2011; Lindsey et al., 2003; LaFrance & Gottardo, 2005). This is so, despite there being a common underlying proficiency between both of a bilingual's languages which means that learning experiences in one language benefit development in the other language (e.g., Cummins, 1979).

It is not yet clear whether within-language predictors (e.g., English phonemic awareness predicting English word reading), or cross-language predictors (e.g., English phonemic awareness predicting Irish word reading) are more effective. Some studies have found that within-language predictors are more effective than cross-language predictors (La France & Gottardo, 2005; Jared et al., 2011), while others have had the opposite finding (Lindsey et al., 2003). In the Irish context, it has been found that both within-language and cross-language predictors are necessary to gain an accurate view of a child's attainment (Barnes, 2021). The lack of consensus in this regard strengthens the argument for assessment in both languages, in order to have the most holistic picture of a child's attainment at a given point in time.

The differing levels of predictive efficacy of skills in each language, as well as differing levels of performance in certain skills in each language, suggest that testing in each of a bilingual's languages could be more effective and more accurate than testing in a single language.

The screening test developed for the present study examines (i) phonemic awareness (ii) listening comprehension (iii) word reading and (iv) spelling. This is, of course, not a comprehensive or exhaustive assessment of literacy skill as aspects such as morphological awareness in reading (e.g., ability to read and spell words with initial mutations), style and register are not tested. Each of the assessed constructs is discussed in brief below.

- I. Phonemic awareness. Phonemic awareness refers to the awareness of and ability to manipulate the phonemes of a language. It has been found to be a predictor of literacy attainment across languages (e.g., Ziegler et al., 2012). Importantly in the dual-language context, it has been proposed that phonemic awareness is made up of two components; one which is language-specific and one which is language-universal (Saiegh-Haddad, 2019). In this study, the language-specific component which corresponds to awareness of the phonemes of a language was measured using a phoneme discrimination task. The language-universal component is measured using a phoneme deletion task. The latter task was found to be the most effective predictor of literacy skills in Irish-English bilinguals (Barnes, 2021).
- II. Listening comprehension. Listening comprehension was examined due to the dual-language context of the current study. There is substantial variation in terms of the experience that dual-language learners have with each of their languages (Scheffner-Hammer et al., 2014). Given the relationship between oral language proficiency and literacy (e.g., Geva, 2006), it was deemed important in the current context to examine listening comprehension as a measure of language competence.
- III. Word reading. Single word reading was chosen as reading difficulties typically stem from issues in word-level reading skills such as decoding and word identification (Vellutino et al., 2004). Due to the relatively young age of the children, a single word reading task was deemed to have an appropriate level of difficulty. Single words can be read either by decoding matching chunks of a written word (letters/graphemes/syllables) with their corresponding sounds or by identifying the entire word as a sight word (Ehri, 2005).
- IV. Spelling. A spelling task was chosen in order to provide an additional indication of literacy attainment. Previous research has demonstrated that errors in L2 phonemic

awareness can lead to spelling mistakes (Figueredo, 2006); this is an additional source of interest.

#### **Materials and Methods**

This study aims to answer the research question: what are teachers' perceptions of the feasibility, utility and practicality of a bilingual early literacy screener for those in Irishmedium education?

The methods and materials used in the present study – which was approved by the Research Ethics Committee of Dublin City University – are detailed below.

# **Research Paradigm**

We adopt a pragmatist paradigm in the present study. Pragmatism appreciates both the postpositivist view that the world exists independently of our understanding of it, and the
constructivist view that the world is constructed through our interpretations of it (Morgan,
2014). Essentially, it acknowledges that our reality has both subjective and objective
components. This study is qualitative in nature, though it would be remiss to ignore that the
content of the study is a quantitative assessment of skills. This design acknowledges that,
while there is value in the quantitative analysis of skills, the experience of the individuals
who administer and take the assessment is important both for their own wellbeing and for the
validity of the assessment. Pragmatism has also been concerned historically with social action
and with education (Whipps & Lake, 2020), and acknowledges that values play a role in the
research we choose to do (Brown & Lambert, 2012). This study is motivated by the belief
that students in Irish-medium and *Gaeltacht* schools should have access to equivalent
resources to their peers in English-medium schools.

# Sampling

The sampling method involved an initial stratification of schools in order to include a proportional number of *Gaelscoileanna* and *Gaeltacht* schools as well as schools with varying socioeconomic backgrounds. Convenience sampling was used to select schools within the stratified samples. The Board of Management of each school was contacted to request approval to distribute information in their respective schools. Then, information was distributed to students and they were invited to take part in the study. Finally, teachers of participating students were invited to take part.

## **Participants**

Eight teachers – six of whom worked in a *Gaelscoil* and two of whom worked in a *Gaeltacht* school – took part in the semi-structured interviews. Six of the eight teachers were female. The participating teachers all provided informed consent for this study. The pupils in their classes who took part in the screening test also provided informed assent for this study, though no data pertaining to them is reported in the present paper.

### **Teacher training**

Teachers were provided with training in relation to the administration of the screening test.

This involved one of the researchers meeting with participants on an individual basis on an online platform to explain the administration of each task as well as the accompanying documentation, and answering any questions the teachers had.

# **Procedure: Screening Test Implementation**

Participating students were asked to complete five tasks on the screening test in both Irish and English (a total of 10 tasks).

## Listening Comprehension

In this case, both the Irish and English versions contain four target sentences which are assessed for comprehension. Each version examines vocabulary related to (i) colours and clothes (ii) food (iii) household furniture (iv) general items and (v) prepositions and locations. These topics were chosen as they feature strongly in the Primary Language Curriculum (Department of Education and Skills, 2019) and would be familiar to students. The teacher read the whole story through. Then (s)he read each line in isolation and asked the children to choose which of four images best describes the line. In each case, one of the four images was correct, and there were three distractor images.

### Phoneme Deletion

The phoneme deletion task required the participant to delete the initial phoneme from eight monosyllabic words. Both the Irish and English versions of the task contained four words with a single initial consonant (e.g., leg), and four words with an initial consonant cluster (e.g., bring). Each version was matched for the number of phonemes per word; each contains four 3-phoneme words and four 4-phoneme words. In each case, deleting the initial consonant results in a real word (e.g., leg – egg; bring – ring).

As this is a whole-class test, the teacher calls out a stimulus to the class (e.g., "think of the word **LEG**. Now take the /l/ away. What little word is left?"). The class select which of four images corresponds to the target word.

# Phoneme Discrimination

The phoneme discrimination task required the participant to indicate whether two words start with the same sound or with different sounds. For both the Irish and English versions of the

tasks, easily-visualised, very familiar words were chosen. Ten consonant-initial word pairs were chosen in each language (five matching, five mismatching), along with eight vowel-initial word pairs (three matching, five mismatching).

An effort was made to control for the number of syllables across each language version, however this was not always possible. Priority was given to imageability (ability to visualise) the word, due to the picture-based answer format of the task. The Irish version contained phonemic contrasts important for understanding the orthography, including the velarised-palatalised consonants (e.g. the initial sounds in 'tuí' /tvi:/ and 'tí' /tvi:/) and the short-long vowel contrasts (e.g. the vowel sounds in 'sin' /ʃini/ and 'sín' /ʃi:ni/).

The teacher read out each word pair, and the children viewed pictures of each pair of words in front of them. The children were asked to put a tick beside pairs of words which start with the same sound, and an X beside pairs of words which start with different sounds.

### Word Reading

The word reading task required children to match a written word with its corresponding image. There were 20 words in total, with 10 on each page. In order to avoid guessing the word from its initial letter (which has been found to be a strategy used by Irish early readers: Hickey, 2005), two words on each page had the same initial letter.

In both the Irish and English version of the tasks, the words were easily-visualised concrete nouns. Sixteen of the words were consonant-initial words, which four were vowel-initial words. Words were chosen to reflect a wide range of spelling rules.

An effort was made to control for the number of letters in each word, however priority was given to reflecting the challenges of each orthography and to the imageability of words.

# Spelling

The spelling task requires participants to attempt to write down the sounds they hear to spell words. Both the Irish and English version contain 10 words, five of which were two-letter (consonant-vowel or vowel-consonant) words and five of which were three-letter (consonant-vowel-consonant) words.

#### **Semi-structured interviews**

Participant teachers took part in an online semi-structured interview. All participants were provided with a list of questions prior to the interview, and Irish was the medium of communication in all interviews. Interviews were recorded and transcribed.

# **Data Analysis**

A thematic analysis (Clarke et al., 2015) was conducted. The themes were selected prior to analysis based on the main research questions of the study as well as the interview questions. The initial themes included: teachers' motivation for using screening tests; ease of use and administration; benefits of administration procedures; challenges in administration; suitability of the task types; perceptions of difficulty level; student affect and wellbeing; student interest and attention; Data was initially coded using these themes. A second analysis was conducted on the data to identify any additional themes which differed from the initial set of themes. The emergent themes included equality of access to assessments for Irish-medium and Gaeltacht pupils and sociolinguistic considerations for both Irish-medium and Gaeltacht contexts.

### **Findings**

The findings are presented below in relation to (i) the purpose and use of the screening test (ii) implementation of the screening test (iii) constructs assessed within the screening test (iv) difficulty level and (v) pupils' experience of the screening test.

# Purpose and Use of the Screener

In keeping with the literature (Andresen & Monsrud, 2022), teachers acknowledged that the primary role of the screener was to identify students who would benefit from additional support. Participants indicated that the objectivity of the results of a screening test can provide an evidence base for their decision in relation to providing students with additional support, particularly when communicating with parents or other stakeholders:

Buntáiste eile leis seo, is maith liom féin measúnú a bheith ar pháipéar agam, dubh like to have a paper-based assessment, in agus bán...ar a laghad, tá sé amach romham anois agus tá mé in ann seasamh os cionn rud ar bith a deirim le tuismitheoir. (Múinteoir 1)

Another advantage with this, I myself black and white... at least, it's there in front of me and I can stand by anything I say to a parent. (Teacher 1)

Teachers also indicated that they would use the information gleaned from the screening test to direct their teaching both at a whole-class and an individual level:

Thug sé go leor eolais dom faoi na rudaí atá ar eolas ag an rang agus nach raibh a fhios agam go raibh siad ar eolas acu, agus freisin rudaí nach raibh ar eolas acu It gave me plenty of information in relation to the things they know and that I didn't know they knew, and also the things they don't know that I could do in English or Irish. (Teacher 2)

go bhféadfainn a dhéanamh sa Bhéarla nó sa Ghaeilge. (Múinteoir 2)

[Tugann sé eolas mar gheall ar]...cá
bhfuil na gasúir ag dul mícheart agus cén
áit gur féidir liom iad a fheabhsú, mo
chuid múineadh a athrú go mbeinn in an
freastal ar na gasúir. (Múinteoir 1)
...thabharfadh sé b'fhéidir eolas níos
fearr duit féin le haghaidh rud éicint a
mhúineadh sa rang nach ea, nó bealach
éicint eile le dul i mbun do chuid oibre.
(Múinteoir 8)

[it provides information on]...where the children are going wrong, and where I can help them and change my teaching to cater to the children. (Teacher 1)

...it would give you a better idea of how to teach something, wouldn't it, or another way to go about your work.

(Teacher 8)

In this regard, participants' perspectives align with a neurodiversity-style philosophy. This moves away from the deficit-model of learning difficulties, in which the child is seen as possessing barriers to learning towards a perspective in which barriers to learning are seen as an interaction between the learner and the learning experience (Rappolt-Schlichtmann et al., 2018).

One teacher who works in a *Gaeltacht* school highlighted the need for standardised assessments which are suited to children in Irish-medium schools, and the inadequacies of assessments which are currently available:

Fáiltíonn muid go bhfuil a leithéid ag teacht... ba cheart go mbeadh [a leithéid ann] má táimid dáiríre faoin tumoideachas agus faoin bPolasaí Oideachas Gaeltachta. (Múinteoir 8).

We welcome that such [an assessment] is coming...[such assessments] should be available if we are serious about immersion education and about the Policy on *Gaeltacht* Education. (Teacher 8)

This view echoes findings from previous research on the provision of assessments for those in Irish-medium education (Nic Aindriú et al., 2021).

# Implementation of the Screener

This screener was implemented in a non-traditional manner, in which short tasks were implemented each day over a two-week period. Participants had differing opinions in relation to this aspect of the screener, though the majority would prefer to implement the screener over a shorter time frame. The most notable challenge was that multiple students were absent over the course of a fortnight, which meant that many students had not completed one or more of the tasks on the screener:

Thar coicíse bhí go leor asláithreachtaí.
B'fhearr liom féin b'fhéidir fiche
nóiméad sa lá a dhéanamh thar
seachtaine, dhá thriail in aghaidh an lae.

Over a fortnight there were a lot of absences. I'd prefer to do maybe twenty minutes per day over a week. (Teacher 3)

(Múinteoir 3)

Two of the participants were in favour of the extended timeframe for implementation, with one participant indicating that students were able to focus on the tasks because of their short length:

An rud le deich nóiméad gach lá...bhí
aird na bpáistí agat whereas tá a fhios
agam ... páistí i mo rang ... tar éis
b'fhéidir uair a chloig den Bhéarla ní
bheadh páistí ag díriú air. (Múinteoir 2)

The thing with ten minutes per day...you have the children's attention whereas I know...children in my class...after maybe an hour of English the children wouldn't be focussed on it. (Teacher 2)

This experience is in keeping with the literature on attentional differences and ADHD, which recommends assessments of limited duration (Daley & Birchwood, 2010). The present findings indicate that there is a careful balance to be sought between the inter-connected values of (i) student enjoyment (ii) test reliability and validity and (iii) implementation feasibility for the teacher.

#### **Constructs Assessed and Tasks Used in the Screener**

This screener contained five tasks in each language. We considered that teachers may view some of the tasks as unnecessary, however this was not the case; all participants felt that each of the tasks were necessary:

Níor mhaith liom ceann ar bith a fhágáil ar lár, tá siad uilig ag teastáil, is páirt den teanga iad, bheifeá ag déanamh faillí ar rud amháin dá bhfágfá amach é.

(Múinteoir 1)

I wouldn't like to leave any of the out, they're all necessary, they're all part of the language, you'd be neglecting an aspect of it if you left it out. (Teacher 1)

Two of the five tasks in each language assessed different aspects of phonemic awareness, in keeping with Saiegh-Haddad's (2019) conceptualisation of the construct. Participants' responses indicate an appreciation for this conceptualisation of phonemic awareness and of the difference between the phoneme identification and phoneme deletion tasks.

Tá a fhios agam go raibh dhá cheann phonemic ann ach bhí siad an-difriúil óna chéile...ní dóigh liom gur cheart aon cheann a fhágáil ar lár. (Múinteoir 2) I know there were two phonemic ones, but they were very different from each other...I don't think either of them should be omitted. (Teacher 2)

Three participants recommended including additional tasks. Two teachers, who both taught in a *Gaeltacht* context, highlighted the importance of examining oral language skills.

An t-aon rud atá fágtha amach – agus níl aon fhreagra agamsa – ná saghas scrúdú cainte. Cén chaoi a ndéanfá é... níl mé cinnte. Tá nós sa nGaeltacht, bhuel tá i [nGaeltacht X] ar aon nós, go mbíonn muid ag ceapadh go bhfuil níos mó ar eolas ag na gasúir ná mar atá. (Múinteoir

The only thing that is left out – and I don't have the answer myself – is some sort of oral exam. How you'd do it...I am not sure. In the *Gaeltacht*, well in [*Gaeltacht* X] anyway, we tend to think the pupils know more than they do. (Teacher 1)

... muna bhfuil cumas labhartha agat, ní thiocfaidh an léitheoireacht ná an scríbhneoireacht. (Múinteoir 8)

1)

...if you don't have oral proficiency, there's no basis for reading and writing skills. (Teacher 8)

The responses of these two participants highlight (i) the important of oral language skills in a minority language context and (ii) their significance as a basis for literacy development. The former perhaps reflects an awareness of the increasing influence of English on the oral Irish language skills of *Gaeltacht* children. Previous research found that though children were more fluent in Irish than in English, their vocabulary and phonetic accuracy was higher in English (Péterváry et al., 2014).

One participant enquired about the possibility of including a sight word task, which would require participants to read high frequency function words:

Céard faoi na hamharcfhocail – tá, níl ar, What about the sight words – tá, níl, ar, agus – an bhfuil aon bhealach iad sin a agus – is there any way to test those? thástáil? (Múinteoir 3) (Teacher 3)

This is another suggestion which is supported in the literature on reading acquisition.

Developing automaticity in reading – which involves recognising words by sight as opposed to decoding them – is a hallmark of skilled readers (Ehri, 2005).

# **Difficulty Level of the Screener**

This screener was developed for senior infant pupils but implemented with first class pupils due to Covid-19 school closures, as the progress made in reading was predicted to be just 63-68% of that of a typical school year (Kuhfeld et al., 2020). Two participants indicated that the screener was too easy, or that aspects of it were too easy for their class:

I mo thuairimse bhí sé i bhfad ró-éasca In my opinion, it was far too easy for don chuid is mó den rang. (Múinteoir 4) most of the class. (Teacher 4)

Other participants indicated that the screener was at a suitable level for their class, or that some aspects were challenging for the class:

Na páistí is laige i mo rang bhí sé anmhaith dóibh agus na páistí is láidre rinneadar é agus bhí siad sásta é a dhéanamh. (Múinteoir 5) It was very good for the weakest students in the class, and the strongest students did it and were happy to do it. (Teacher 5) Bhí an leibhéal foirfe dóibh, ach dá mba rud é go raibh gnáthrang a hAon, nach raibh tar éis dhá bhliain a chailliúint mar gheall ar an bpaindéim, bheadh sé róéasca dóibh. (Múinteoir 2) The level was perfect for them, but if it was a normal first class, that hadn't lost two years to the pandemic, it would be too easy for them. (Teacher 2)

On balance, it would seem that the screener would be more appropriate in the latter half of senior infants.

# Teachers' Perceptions of How Students Experienced the Screener

The student experience was a very important consideration in the design of the screener, and teachers reported that their classes were happy to take the screener for the most part.

Ní raibh aon moans and groans nuair a dúirt mé go raibh an leabhrán ag teacht amach. Cuid dóibh bhí siad sásta agus sceitimíneach agus páistí eile, ba chuma leo ach ní raibh aon duine ag tabhairt

amach faoi. (Múinteoir 2)

There were no moans and groans when I said the booklet was coming out. Some of them were happy and excited, some didn't care but nobody gave out about it.

(Teacher 2)

Bhí na páistí chomh sásta leis, bhain siad an-taitneamh as. (Múinteoir 7)

The children were very happy with it, they really enjoyed it. (Teacher 7)

This is not only important for student wellbeing, but also for assessment reliability as scores are likely to be a more accurate representation of attainment when the student is not anxious (Zeidner & Matthews, 2003). One teacher indicated that though the children were excited at

the start of the fortnight, they appeared to be becoming tired of it towards the end of the period:

An chéad cúpla lá, bhí sceitimíní ar chuile dhuine ...ach ag teacht chuig an deireadh now bhí siad "ughh aríst? aríst?" (Múinteoir 3)

The first couple of days, everybody was excited...but coming up the end now they were saying 'uggh again? again? (Teacher 3)

Apart from this incidence of boredom, none of the teachers reported any negative behavioural reactions from students to the assessment.

### **Discussion and Conclusion**

Originally, this screening test was designed to be used with senior infants, however it was implemented with first class in the present study due to school closures. Teachers' responses indicated that the difficulty level was too low for some of the participating classes, though it was deemed appropriate for others. Given that gains in reading attainment of students affected by school closures were predicted to be just 63-68% of those which would be achieved during a typical school year (Kuhfeld et al., 2020), it is perhaps encouraging that the test was deemed too easy for some of the classes. Indeed, findings from our nearest duallanguage neighbours in Wales indicate that loss of progress in language skills was temporary in nature and that many students regained these skills with support from teachers (Thomas et al., 2021). Going forward, this screening test would be more appropriate to use with senior infant pupils.

Teachers welcomed the access to a bilingual screening test, and indicated that it was a resource needed in *Gaelscoileanna* and *Gaeltacht* schools, echoing previous research on this matter (Nic Aindriú et al., 2021). In addition to recognising its purpose in identifying students who may need additional support, teachers indicated that the results of a screening test

provide them with objective evidence which is useful when speaking to parents or other stakeholders in a child's education. It is interesting to note that teachers indicated that one of the key purposes of screening tests was to guide their own teaching. This is interpreted to reflect the growing engagement with the neurodiversity perspective of learning differences, which view barriers to learning as an interaction between the student and learning environment (Rappolt-Schlichtmann et al., 2018)

There are challenges accompanying bilingual test development, particularly in the case of minority languages such as Irish. These include minimising sources of bias and maximising equivalence between each language version of a test in order to allow for comparisons across languages (He & Van de Vijver, 2012). This is important in order to identify to what extent an issue may be language-specific, as opposed to one which occurs in both languages. At the same time, tests need to reflect the particular challenges of a given language, which arise from differing linguistic structures (particularly phonology, orthography, and morphology in early literacy) in a language. Another obstacle to development is that the population of speakers is small and very varied. This means that the difficulty involved in providing standardised scores for a test is increased, and that scores need to be carefully interpreted based on a child's language background. In addition, the development of items on a test needs careful consideration due to dialectal differences in different *Gaeltacht* regions.

More practical challenges include avoiding participant fatigue, and ensuring that all pupils can reach their potential in the test by minimising test duration (Daley & Birchwood, 2010) and test anxiety (Zeidner & Matthews, 2003). The solution we trialled with the present screening test was to provide a series of short tasks to be implemented over a longer time frame. However, this gave rise to logistical issues. There were of course more absences over a longer period than there would be with a single-day assessment, resulting in missing scores

for certain tasks. Just two of the teachers were in favour of shorter tasks over a longer time frame as it was easier to keep the attention of the children over this time frame. The majority, however, favoured a shorter timeframe.

We considered that completing five different tasks may be onerous for teachers and for pupils. However, teachers showed an appreciation for the variety of tasks included on the screening test. Of particular interest is that teachers in *Gaeltacht* schools suggested than a test of oral language would be useful. In recent years, the oral language competence of children in *Gaeltacht* areas has been under scrutiny (Péterváry et al., 2014) given the prevalence and dominance of English. Given the strong links between written and oral language both in models of language development and in the current Primary Language Curriculum (Department of Education and Skills, 2019), this would be a useful addition though the development of such a test would need considerable thought and its implementation would need a substantial amount of resources as it is likely to require individual assessments.

The findings of the present study should be interpreted in the context of their limitations. This study has a small sample size, and particularly few participating teachers from *Gaeltacht* schools. The findings are derived from self-reported accounts of implementation and no classroom observation was conducted by the researcher. In addition, given that the participants were aware that the interviewers/researchers designed the screening test, they may have felt pressure to portray their experience and the experience of their students in a positive light.

Certain resources are essential to an equitable education system in a society that values inclusive education. Such resources include screening tests and diagnostic assessments which identify potential issues in areas including literacy, executive function and numeracy as early as possible, as early intervention is more effective than later intervention.

Accompanying this, intervention and support materials are needed in order to facilitate

students in reaching their potential in these areas. In Ireland, education is provided in our two national languages – English and Irish. In order to provide both linguistic and educational equity within our education system, it is paramount that children in *Gaelscoileanna* and *Gaeltacht* schools have access to the same basic resources as their peers in English-medium education.

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