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Primary Education Papers

Volume 2

Contents

Foreword

We are delighted to publish Volume Two of the Hibernia College Education Papers. On our programme, students complete a 10,000-word dissertation as part of their research module. They choose a research topic from four different theme areas: (1) Teaching, Learning and Assessment, (2) ICT, (3) Psychological, Sociological, and Historical, (4) Inclusion and Differentiation. This year, our top-performing graduate teachers who began the programme in March 2015 and September 2015 selected a variety of different areas from dance, visual arts, bereavement support, Autism, Gaeilge, visual literacy, standardised testing and many more. The variety of interesting projects are testament to the hard work and dedication of our graduate teachers, who produced excellent research whilst simultaneously completing a demanding course.

The purpose of this publication is to provide a means of research dissemination for our graduate teachers in order to provide a snapshot of their research activity while they were studying in the School of Education in Hibernia College. Our student teachers explored topical issues that permeate the current landscape of Irish education and endeavored to develop their knowledge of a key area within education. During the research journey our student-teachers were guided and supported by their research supervisors. The dedication of these research supervisors has not gone unnoticed and we are grateful to them for the professional way in which they have encouraged and enabled our student-teachers to reach their full potential as they began to see themselves as both teachers and researchers.

The value of research in education cannot be understated. We are proud to disseminate this important and thought-provoking publication on the key issues that our student teachers have explored.

Ms Mary Kelly
Head of the School of Education

Dr Aoife M. Lynam
Director of Research

Dance as a Strategy for Social and Cultural Inclusion, by Diarmaid O'Meara

Biography

Before completing the Professional Master of Education (PME) in Primary Education, Diarmaid gained a BSc in Genetics from University College Cork and a BA in Professional Dance and Performance from Central School of Ballet, London. Diarmaid has worked as a professional dancer with ballet companies in Ireland and the UK, touring extensively and performing in venues including London's Royal Opera House, Sadler's Wells Theatre, Dublin's Gaiety and the Bord Gáis Energy Theatre. Diarmaid continues to teach ballet from pre-school to professional levels. He lives in Buncrana, Co. Donegal and currently teaches Fourth Class in Scoil Íosagáin, Buncrana.

Dance as a Strategy for Social and Cultural Inclusion in the Irish Primary School, by Diarmaid O'Meara

Research supervisor: Ms. Una Forde

Abstract

This research project explored Dance as a strategy for social and cultural inclusion in an Irish context. A mixed-methods research design was employed. Primary school teachers completed questionnaires (n=32) that explored their attitudes towards Dance, their awareness of Dance for social and cultural inclusion, and barriers which prevent their implementation of Dance. Dance-in-education experts were interviewed (n=4) on possible strategies that could support teachers in their efforts in social and cultural inclusion through Dance. Teachers reported a positive predisposition towards Dance and are aware of its potential for social and cultural inclusion. Low levels of readiness to use Dance inclusively along with a lack of resources and knowledge of Dance were cited as barriers. Strategies of support emerged through thematic analysis. A pathway for development was recommended whereby teachers could be supported in using Dance for social and cultural inclusion.

Introduction

Dance represents an alternative literacy (Hong-Joe, 2002) where the individuality and competence of all children can be acknowledged and celebrated (Elin & Boswell, 2004; Cone-Purcell, 2015). The UNCRC (2013) has observed that children with disabilities and children from indigenous, minority and/or poor backgrounds are more likely to be marginalised with regard to participation in the arts. Dance represents a strategy for social and cultural inclusion. There is an extensive body of research that extols this facet of Dance (Bajek et al., 2015; Cone-Purcell, 2015; Mancini-Becker, 2013). Dance is, however, currently sidelined in the Irish Primary school (Council of Europe, 2010). Teachers feel ill-prepared to deliver Dance in the classroom and frequently avoid teaching it (Russell-Bowie, 2013), leaving a missed and valuable opportunity for inclusion. The existing literature surrounding this topic raised the following research questions:

1. What are primary teachers' attitudes towards Dance and are they aware of the potential of Dance for social and cultural inclusion?
2. What barriers prevent teachers from implementing Dance in its socially and culturally inclusive capacity?
3. What strategies might be effective in supporting teachers to implement Dance for social and cultural inclusion?

Literature review

Although, over time, Dance was integrated into Curaclam na Bunscoile (DES, 1971), it was not present as a discrete curricular area until 1999 (DES, 1999a). At present, it is a strand in the Physical Education syllabus (DES, 1999b) and is also included within the Arts education curriculum (DES, 1999c). Dance is poorly resourced as part of Physical Education in comparison to the Games strand, which has been reported as delivered as "often" in 90% of cases whereas the Dance strand is delivered "often" in only 30% of cases (INTO, 2007). Despite such statistics, research reports a positive teacher attitude towards the Arts (NCCA, 2012) and Dance as part of an overall Arts education (Gray, 2007) in primary schools. The implementation of strands and teacher attitudes towards them impact social and cultural inclusion. Within the Irish context, inclusion refers to refugees, members of the Traveller community, those with disabilities, those from low socioeconomic status backgrounds and others who identify themselves as non-Irish (O'Brien and Ó Fathaigh, 2007). These groups align with the view of the UNCRC (2013) which indicates that minority groups are at risk of being sidelined in engaging with the arts.

In light of social and cultural diversity in contemporary Ireland (CSO, 2012), measures must be taken to ensure all children in the diverse population are included in primary schools. There is a body of research that identifies Dance as a curricular area that can potentially facilitate social and cultural inclusion (Anttila, 2007; Cone and Cone, 2011; Dunphy and Scott, 2003; Mancini-Becker, 2013; Sansom, 2009; Smith-Autard, 1994). Children can be encouraged to bring their own concepts of Dance, movement vocabularies, a spectrum of physical abilities, limitations and lived experiences to the Dance lesson (Smith-Autard, 1994). Creative Dance provides inclusive spaces for children of all social and cultural backgrounds to engage with creative dance processes based on lived experiences (Anttila, 2007). Dance also focuses on the sharing of ideas and acknowledges each child's unique contributions (Cone and Cone, 2011). Dance, in this guise, can provide a conduit for school success for children who may not otherwise experience it.

Low implementation of Dance (INTO, 2007) suggests that barriers exist in its practice. Dance in this respect not only refers to sociocultural inclusion but Dance in general. In an international study, which included Ireland, it was reported that teachers lack the confidence, motivation and specific knowledge to deliver Dance and do not have access to adequate resources or lesson ideas to do so (Russell-Bowie, 2013). Newly qualified teachers in the UK felt under-prepared to deliver Dance in the primary school (Rolfe, 1997). Such studies reflect how Dance needs to be prioritised in the training of teachers both at home and abroad. Other reported challenges include the lack of appropriate assessment criteria (INTO, 2007) and curriculum overload (Nunan, 2015). This research aimed to identify specific barriers to Dance for social and cultural inclusion and recommend possible support strategies.

Methodology

Questionnaires were used to identify teachers' levels of awareness, attitudes and barriers to Dance implementation. However, the research also required expert opinions to inform and recommend support strategies. This was best elicited through semi-structured interviews. Thus, an asynchronous convergence model of mixed-methods research (Creswell and Plano Clark, 2007) provided the best opportunity to gain a thick description that would address the research questions.

An initial phase of qualitative data collection (semi-structured interview) and analysis was followed by a phase of quantitative data collection and analysis (questionnaire). The semi-structured interview was employed as it allows all crucial topics to be covered while allowing space for probing and elaboration (Bell, 2014; Merriam, 2014). Purposive sampling (Ritchie and Lewis, 2003) was employed to identify a sample of interview participants. For the inclusion criteria, participants had to be expert in the field of Dance in education. Resulting interviews were conducted, recorded and transcribed and then analysed using thematic analysis (Braun and Clarke, 2006). Fragments of meaningful data (Boyatzis, 1998) known as codes were identified across the data set. These codes were then grouped thematically and refined until there was a set of clear themes relevant to the research questions. This was a recursive process (Braun and Clarke, 2006) where the researcher moved back and forth between phases to clarify emergent themes. Reliability measures included: (1) Accurate recording and transcription of interviews, (2) Thematic analysis is regarded as particularly reliable (Roberts, 2006) and (3) Full range and tone of data represented. Validity measures comprised: (1) Accurate self-reporting by participants (Burns & Grove, 2005), (2) Respondent validation of interviews and (3) Audit trail maintained.

Questionnaires were also used as an appropriate data collection strategy for this research project. A questionnaire was prepared and piloted (by non-cohort primary school teachers) to assess clarity, omissions and time commitment (Bell, 2014). Quota sampling (Cohen et al., 2007) was employed to identify a representative sample for this phase—in this case, mainstream teachers in Irish primary schools. Raw data from the questionnaires was exported to Microsoft Excel 2010. The data was analysed using a framework described by Leahy (2004) wherein data was cleaned, annotated and appropriate graphical representations were prepared. Internal consistency of the data was analysed using Z-scoring, as described by Panik (2012). Reliability measures included: (1) Data analysis in accordance with recognised framework (Leahy, 2004), (2) Internal consistency scrutinised and (3) Appropriate piloting carried out. Validity measures were tested though the scale of the research limits it to being descriptive; however, the data is internally valid as the questions elicited responses appropriate to the particular area being assessed (Eby, 1993).

Prior to commencement of research, an ethics review of the research proposal was carried out and approved by the Research Committee of Hibernia College. This was in line with the British Educational Research Association

Guidelines (2011). Despite measures to improve reliability and validity of data, limitations within the research design must be acknowledged. The scale of the research was small: four Dance-in-Education experts were interviewed and 32 Irish primary school teachers completed the questionnaire. While this poses a limitation on the generalisability of the research, the findings may be 'relatable' (Bassey, 1981) and useful for further studies.

Results

The results of the questionnaire were organised into three broad categories:

(1) Provision of Dance

The levels of implementation of Dance were reported as Always – 9%, Often – 25%, Sometimes – 37.5%, Rarely – 22% and Never – 6.5%. 31.25% of respondents reported that a specialist teacher in their school delivered Dance. 56% of lessons delivered were reportedly based on an integrated scheme of work or based on creative Dance. Descriptive Dance (folk dance and teaching routines) accounted for 39% of lessons taught. 93.75% of respondents expressed an interest in developing their personal skills in Dance.

(2) Social and Cultural Inclusion

This research demonstrated that 72% of teachers regard social and cultural inclusion as essential to their practice. 75% of respondents agree/strongly agree with the statement: "Dance can be used as a medium for social and cultural inclusion in the Primary classroom." The extent to which teachers believed they could use Dance for social and cultural inclusion in the classroom was assessed with a 5-point Likert scale. The mean value was 2.2, aligning with "slightly" equipped.

(3) Perceived Barriers

Data showed that the teacher's own knowledge of Dance and the paucity of resources (e.g. lesson ideas, structured schemes of work) for teaching Dance prove the greatest challenges in using Dance to its greatest capacity for social and cultural inclusion. Given that 94% of respondents indicated that Dance was an area in which they are interested in developing, it is clear that teacher knowledge of Dance appears to be the barrier. However, there was significant interest evident in tackling this issue. Despite teacher awareness of Dance as a strategy for social and cultural inclusion, no additional comments dealt directly with this area. Four themes emerged from the semi-structured interviews in accordance with the framework described by Braun and Clarke (2006).

Theme One: Teacher experiences of Dance

All participants insisted that Dance is a discipline, which must be experienced before it can be effectively taught. This experience affords insight. Conversely, a lack of experience makes Dance, as an inclusive curriculum strand, difficult. This experience is, however, attainable; teachers can further their personal experience of Dance, observe Dance being taught, and participate in Dance as taught by specialist teachers within school. The data suggests that achievable as this may be, it places a lot of commitment on the teacher.

Theme Two: Planning and availability of resources

This theme describes the challenge of providing coherent and meaningful Dance experiences for social and cultural inclusion. Thematic cross-curricular planning that includes Dance emerged as a strategy for providing opportunities for diverse perspectives that could be offered by students from various social and cultural backgrounds. Many of the resources currently available for Dance in the primary school are not sufficiently pre-planned for the teacher to effectively implement in meaningful ways.

Theme Three: Collaboration with a specialist teacher

All participants expressed a positive attitude towards having a specialist teacher of Dance to facilitate social and cultural inclusion through the medium. However, it was clear that any specialist teacher should work in collaboration with the class teacher to further facilitate teacher development.

Theme Four: Role of principal and policy

There was a strong consensus among interviewees that the attitude of the school principal sets the tone with regard to Arts/Dance development and its role for inclusion. Policy is regarded as the driver of change. If teachers are to be given sufficient time, space and resources for the development of Dance for social and cultural inclusion, it first needs to be present in school policy.

Discussion

In addressing the research questions, it is evident that a complex interdependence of factors influences the use of Dance for social and cultural inclusion. Fig. 1 shows a possible pathway for development based on questionnaire feedback, interviews and existing literature. In this framework, educational policy drives teacher engagement with Dance (whether in-service or pre-service) with the support of school implementation. A positive attitude towards Dance was reported, consistent with previous research (Gray, 2007). 72% of teachers indicated that the potential of Dance for social and cultural inclusion was "essential", demonstrating that primary school teachers in the study

consider it an educational priority. 75% of respondents "agree/strongly agree" that Dance can be used as a strategy for social and cultural inclusion. The basis of this statistic must, however, be scrutinised. Given the low implementation rates reported in this study and in the literature (INTO, 2007), we can infer that the awareness of the inclusive capacity of dance is not grounded in experience.

Research found that insufficient knowledge of Dance itself is the primary barrier against using the art form as a platform for inclusive education. This concurs with the findings of an INTO Study (2007) that states current teacher training leaves newly qualified teachers feeling ill-prepared to deliver strands on Dance. Apart from a lack of Dance education in teacher training, other challenges identified included lack of resources/support, insufficient planning time/time for PE and a lack of confidence. This suggests that barriers to using Dance for social and cultural inclusion are Dance specific rather than inclusion specific. For teachers to understand the inclusive capacity of Dance, they need to reach a level of comfort and understanding that will allow them to appreciate the diverse responses that social and cultural inclusion demands (Elin & Bosnell, 2014). Increasing teacher engagement with Dance may circumvent several obstacles and may allow Dance to be used for social and cultural inclusion.
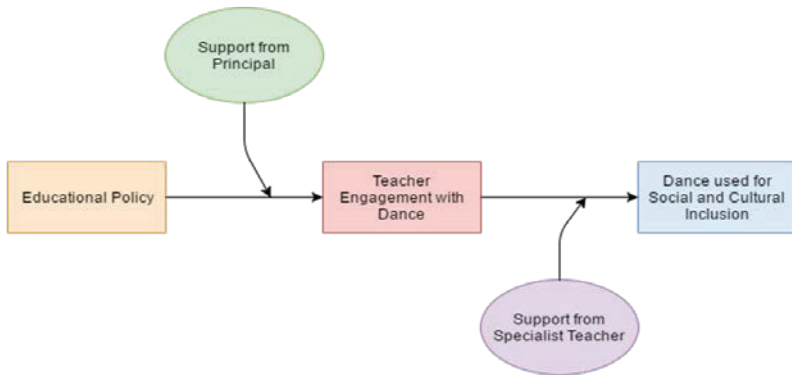
Fig. 1 A pathway for developing Dance for social and cultural inclusion

Three principal support strategies were identified through thematic analysis.

(1) *Teacher experiences of Dance*

Interviewees agreed that teachers must engage with Dance in order to teach it effectively. Elin and Bosnell (2014) state that experience will allow teachers to have a broader understanding of the assessment and contribution of Dance. Pre- and in-service training could address skills but in the face of curriculum overload (NCCA, 2010), the practice of privileging theoretical knowledge (Hopkins, 2014) for practical use is unlikely.

(2) *Planning, resources and policy*

Cross-curricular thematic planning emerged from the interviews as a means for Dance to be used effectively for social and cultural inclusion. Reported lack of resources is a barrier here. While policy is present, interviewees refer to a gap between policy and practice; unless guidelines are enumerated, it will be difficult to effect any real change in schools. Stakeholders from various agencies would need to work together if Dance for social and cultural inclusion is to be explicitly provided for by policy. While the *Arts in Education Charter* (DAHG/DES, 2012) mentions Dance as a component of Arts education in Irish schools, neither it nor the *Education Act* (Government of Ireland, 1998) or *Education for Persons with Special Educational Needs Act* (Government of Ireland, 2004) explicitly name inclusion. In this context, with no explicit policy driving the use of Dance for social and cultural inclusion, effective change is difficult to implement.

(3) *Collaboration with a specialist teacher*

All interviewees recommended collaborations between Dance teachers and the classroom teacher. Both should work together in mutually informative ways. The Dance teacher can use the class teacher's in-depth knowledge of the students to create spaces for an inclusive practice and through their participants and contributions,

thus the class teacher gains more insights on their students and increases their knowledge of the educational potential of Dance. Such professional partnerships could facilitate more spaces that work towards a more inclusive model of good practice.

Conclusion

The principal findings of this research are as follows:

1. Awareness of Dance for social and cultural inclusion and levels of implementation do not align, indicating the presence of barriers.
2. Barriers to Dance implementation for social and cultural inclusion are predominantly related to a lack of teachers' knowledge of Dance.
3. Working alongside a specialist teacher, thematic planning, resources and policy may support Dance for social and cultural inclusion.

This small-scale study (four interviewees and 32 questionnaire participants) cannot claim generalisability although findings and recommendations can still be seen as 'relatable' (Bassey, 1981) and, thus, useful as a guide. A mutually informative relationship between a specialist Dance teacher and the classroom teacher potentially maximises the benefit of using Dance for social and cultural inclusion.

References

Anttila, E. (2007) 'Children as agents in dance: Implications of the notions of child culture for research and practice in dance education', in Bresler, L. (ed.) *International handbook of research in arts education*, Dordrecht: Springer.

Bajek, K.M., Richards, A.R. and Ressler, J. (2015) 'Benefits of Implementing a Dance Unit in Physical Education', *Strategies: A Journal for Physical and Sport Educators*, 28(5), 43-45.

Bell, J. (2006) 'Doing your research project', *British Journal of Educational Technology*, 37(5), 813.

Boyatzis, R.E. (1998) *Transforming qualitative information: thematic analysis and code development*, London: SAGE Publications.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(21), 72-101.

British Educational Research Association (2011) *Ethical Guidelines for Educational Research*, London: British Educational Research Association.

Burns, N. and Grove, S.K. (2005) *The Practice of Nursing Research: Conduct, Critique and Utilization*. 5th edn. Philadelphia, USA: WB Saunders.

Cohen, L., Manion, L. and Morrison, K. (2007) *Research Methods in Education*. 7th edn. London: Routledge.

Cone, T. and Cone, S. (2011) 'Strategies for teaching dancers of all abilities', *Journal of Physical Education*, *Recreation and Dance*, 82(2), pp.24-31.

Council of Europe (2010) *Compendium of cultural policies and trends in Europe*, Strasbourg: Council of Europe. [Online] Available at: www.culturalpolicies.net/web/ireland.php?aid=831 [Accessed: 14 June 2016].

Creswell, J.W. and Plano Clark, V.L. (2007) *Designing and Conducting Mixed Methods Research*, London: SAGE Publications.

Department of Education and Skills (1971) *Curaclam na Bunscoile*. Dublin: Stationery Office.

Department of Education and Skills (1999a) *Primary School Curriculum – Introduction*, Dublin: Stationery Office.

Department of Education and Skills (1999b) *Primary School Curriculum – Physical Education*, Dublin: Stationery Office.

Department of Education and Skills (1999c) *Primary School Curriculum – Visual Arts*, Dublin: Stationery Office.

Department of Education and Skills/Department of Arts, Heritage and the Gaeltacht (2012) *Arts in Education Charter*, Dublin: Department of Education and Skills/Department of Arts, Heritage and the Gaeltacht.

Dunphy, K. and Scott, J. (2003) *Freedom to move: Movement and dance for people with intellectual disabilities*, Sydney: Maclellan and Petty.

Eby, M. (1993) 'Validation: choosing a test to fit the design', *Nurse Researcher*, 1(2), 27-33.

Elin, J. and Boswell, B. (2004) *Re-envisioning dance: Perceiving the aesthetics of disability*, Dubuque, IA: Kendall Hunt.

Government of Ireland (1998). *Education Act 1998,* Dublin: Stationery Office.

Government of Ireland (2004). *Education for Persons with Special Educational Needs Act 2004*, Dublin: Stationery Office.

Hong-Joe, C. (2002) *Developing dance literacy in the postmodern: An approach to curriculum*, Doctoral dissertation, Griffith University.

Irish National Teachers' Organisation (2007) *Physical Education in the Primary School: Proceeding of the Consultative Conference on Education*, Dublin: Irish National Teachers' Organisation.

Leahy, J. (2004) *Using Excel for Analysing Survey Questionnaires*, Wisconsin: Cooperative Exchange Publishing.

Mancini-Becker, K. (2013) 'Dancing through the school day: How dance catapults learning in Elementary Education', *Journal of Physical Education, Recreation and Dance*, 84(3), 6-8.

Merriam, S.B. (2014) *Qualitative Research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Nunan, M. (2015) *The Dance of the Poetic and the Practical (Reflections on Dance-in-Education in Ireland)*, Dublin: Arts-in-Education Portal.

O'Brien, S. and Ó Fathaigh, M. (2007) 'Ideological challenges to the social inclusion agenda in the Republic of Ireland', *International Journal of Inclusive Education*, 11(5-6), 593-606.

Panik, M.J. (2012) *Statistical Inference: A Short Course*, New Jersey, USA: Wiley.

Purcell-Cone, T. (2015) 'Teaching Dance for Access, Inclusion and Equity', *Journal of Dance Education*, 15, 85-86.

Russell-Bowie, D.E. (2013) 'What? Me? Teach dance? Background and confidence of primary preservice teachers in dance education across five countries', *Research in Dance Education*, 14(3), 216-232.

Sansom, A. (2009) 'Mindful pedagogy in dance: honouring the life of the child', *Research in Dance Education*, 10(3), 161-176.

Smith-Autard, J.M. (1994) *The Art of Dance in Education*, London: A&C Black.

United Nations (2013) *United Nations Convention on the Rights of the Child*, General comment No.17 on the right of the child to rest, leisure, play, recreational activities, cultural life and the arts (Article 31) (CRC/C/GC/17) Geneva: United Nations.

Exploring the Benefits and Limitations of Standardised Assessment, by Kara Burbage

Biography

Kara recently completed a Professional Master of Education (PME) with Hibernia College, receiving First Class Honours. Prior to this, she completed a Bachelor of Commerce (Hons) Degree and a Master's in Corporate Strategy and People Management at National University of Ireland, Galway. During the last few years, Kara has gained invaluable experience working within a consultancy capacity with a focus on project and change management projects. Her love for Irish Dancing led her to set up her own dancing academy. Kara's interests lie in teaching and working with children in primary teaching settings.

Exploring the Benefits and Limitations of Mandatory Standardised Assessment in the Irish Primary School Context, by Kara Burbage

Research supervisor: Mr. Jonathan Loftus

Abstract

This research focused on assessment—in particular, standardised assessment in the Irish primary school. Currently, there is limited research that specifically examines Irish teachers' current ideologies of assessment. This research seeks to provide an insight into Irish teachers' perceptions of standardised assessment and its relationship with inclusive education. A mixed-method approach was adopted to address the research questions. Methods included a focus group that allowed for an in-depth view of assessment, particularly from a SEN perspective. Findings indicate that teachers consider standardised assessment to be beneficial but also acknowledge some limitations. Findings further suggest that there should be a transfer of knowledge to parents about standardised assessment.

Introduction

The importance of assessment in Irish education has been a welcome development in its positive impact towards pedagogical improvements and innovation (Mac Ruairc, 2009). New teachers are encouraged to accommodate for all the learning needs in the classroom—to help all children realise their full potential (Evans and Waring, 2011). Differentiation features strongly when quality of learning within schools and the performance of whole schools are examined. There is ample research on assessment, specifically relating to mandatory assessment policies of primary schools. However, there is a dearth of literature on Irish teachers' views of standardised assessment. The aim of this research was to gain an understanding of Irish teachers' perspectives in relation to standardised assessment and their views of the benefits and limitations associated with standardised assessment. This research addressed the research question: What are the benefits and limitations of mandatory standardised assessment from teachers' perspectives?

Literature review

Positive impacts arising from structural changes within the Irish educational system has led to pedagogical improvements and innovation (Mac Ruairc, 2009). Looney (2006) affirms that the education system 'has moved from relative silence on assessment to an emerging dialogue, in which teachers are very much included, on purposes, philosophies and practice' (p.352). Although assessment is present in the 1999 Primary School Curriculum, it provides no clarity or clear guidelines as to how children's progress is to be monitored and assessed or what assessment methodologies best suit what specific subject matter (Looney, 2006). In the Irish context, the NCCA (2007) guidelines define assessment as 'the process of gathering, recording, interpreting, using, and reporting information about a child's progress and achievement in developing knowledge, skills and attitudes' (p.70).

Types of assessment

Fig. 1 shows the continuum of assessment methods presented by the NCCA in 2007. The chart can be used for both Assessment of Learning (AfL) and Assessment for Learning (AoL) (NCCA, 2007, p.13).
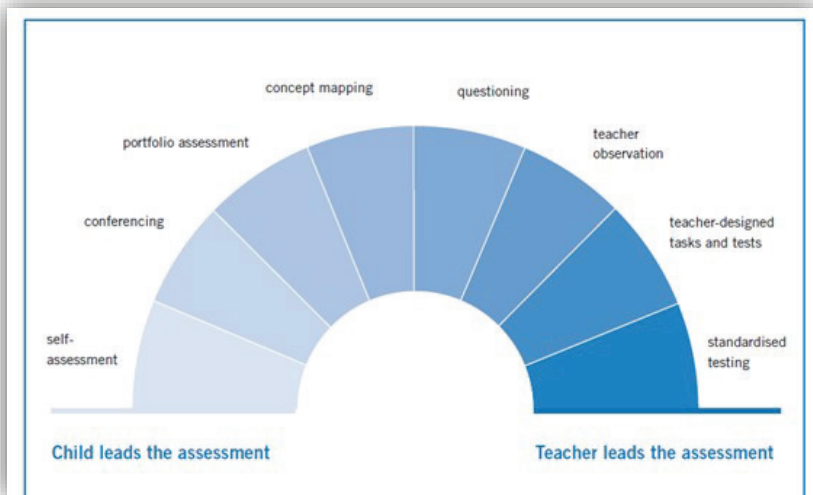
Fig. 1 NCCA (2007) Assessment in the Primary School Curriculum, Guidelines for Schools, p.13

Standardised assessment

According to the NCCA (2007, p.60) 'a standardised test is an assessment instrument that contains standardised procedures for its administration and scoring and for the interpretation of results'.

Standardised assessment is an essential practice in Irish education due to the statutory requirement for all schools to 'regularly evaluate and periodically report the results of evaluation to the students and their parents' (Government of Ireland, 1998, p.23). However, the extent to which standardised assessments articulate models of good practice in comparison to international standards must be addressed. The extent to which educational platforms prioritise high-quality learning that facilitates economic requirements is an open one. Assessment at its core 'serves as a communicative device between the world of education and that of the wider society' (Broadfoot and Black, 2004, p.9). There is ample literature on standardised assessment—in particular, the benefits and limitations that it can pose. Certain arguments have suggested that 'the standardised test is better at representing what the child can do as it is an absolute score and does not need moderation and does not contain bias' (Hall and Kavanagh, 2002, p.271). However, other scholars have noted that 'measuring educational standards does not necessarily need to be paper-based and that there are other alternatives to measuring this' (Deluca and Hughes, 2014).

A teacher's perspective

Learning is a journey with the teacher as a guide (Kimbell, 2007, p.248). The extent to which 'teachers think about curriculum, subject matter, teaching and learning has been shown to influence classroom practices' (Clark and Peterson, 1986; Thompson, 1992, cited in Harris and Brown, 2009, p.365). Given that a teacher is at the forefront of a child's learning, it is therefore of utmost importance that a teacher acknowledges, embraces and promotes effective assessment methods in their teaching. Accordingly, it is important to hear the views of a sample of Irish teachers in relation to standardised assessment.

Inclusive education

National standardised assessment must be considered with regards to ways it caters for children with special educational needs by ensuring that all assessments are 'accessible through suitable accommodation and appropriate through suitable breadth of assessment and range of criteria' (Douglas et al., 2016, p.103). Corbett (1999, cited in Hall et al., 2004, p.814) states that 'inclusive school communities are difficult to create within an individualised model of achievement and standardisation'. According to Douglas et al. (2016, p.103) 'assessments should seek to measure progress and outcomes on the full breadth of the

curriculum that an education system offers'. The current research examined ways teachers assess that capture a child's capability across all subjects.

Methodology

The main premise of this research was to investigate school teachers' perspectives on assessment, in particular, standardised assessment. As teachers are encouraged and trained to differentiate within their practice, the extent to which assessment works towards the provision for inclusive education is explored.

Research design

A mixed-method approach was chosen for this research. This approach was undertaken to improve clarity and conduct an in-depth examination of the aims of the research—in particular, in the area of SEN and assessment. Questionnaires and a focus group were the methods used to address the research question. The main premise of using a questionnaire was to collate generalised data from teachers whilst one focus group collected data on teacher experiences of assessment in the Irish primary school context. Questionnaires were electronically created through the use of Survey Monkey and distributed via email. A link to the questionnaire was provided and data was collated from these questionnaires on a specified date. The mixed questionnaire was designed to contain open questions (qualitative) to analyse attitudes on the topic and both closed and multiple questions (quantitative) in order to collate information relating to background, practices and behaviour. The analysis of this data then informed the creation of questions for the focus group. The focus group allowed the researcher to interpret the group dynamic and collect a more in-depth view of teachers' perspectives on standardised assessment. To ensure a balanced sample, participants in the focus group included SEN teachers who worked within a specific unit.

Prior to the undertaking of this research, ethical approval was granted by Hibernia College. To ensure that the research retained the highest of standards ethically, the Ethical Guidelines for Educational Research (BERA, 2011) was referenced throughout the process of research. Confidentiality was of utmost importance and this was upheld through the use of anonymity in the data collection of both methods. In terms of the focus group, confidentiality was ensured from the offset and was reinforced throughout the focus group process at the face-to-face meeting. Due to the time frame and word-count limitation, a small sample of teachers and SEN teachers were taken into account. Limitations included the size of the sample and the number of schools selected and, therefore, the results cannot claim any transferability or generalisability.

Results

All participants were asked whether there was an assessment policy in their school. The findings noted that only 62.1% (n=18) of the population had an assessment policy in place in their school. 100% of respondents acknowledged that inclusive education is promoted in the school. However, only 48% of respondents identified assessment as featuring in the inclusive education policy. One respondent did not respond to this question. Respondents ranked from 1–10 on their opinions relating to the purpose of assessment; 1 being of 'most importance' and 10 being of 'least importance'. Fig. 1.1 illustrates how each option was ranked.
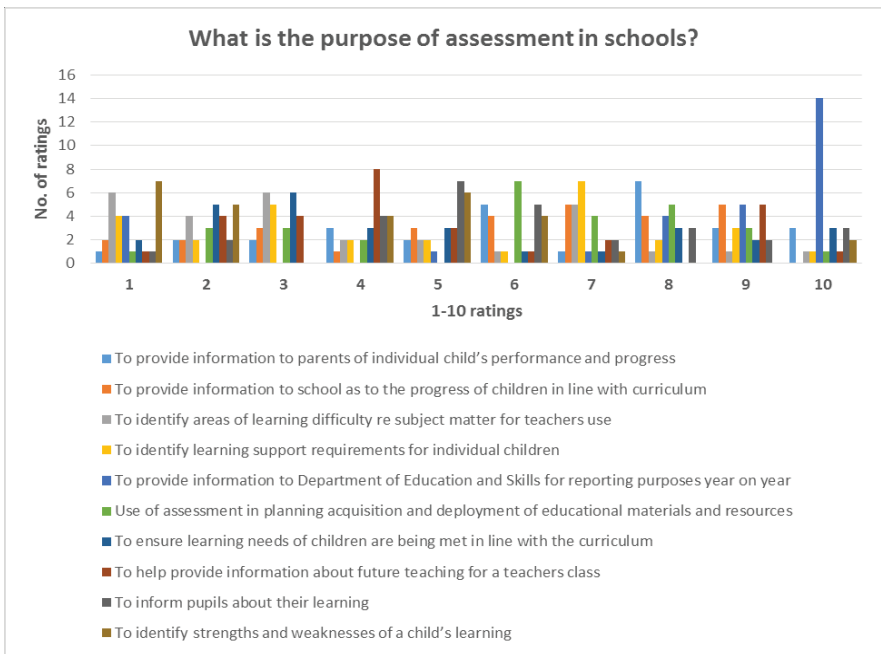
Fig. 1.1 What is the purpose of assessment in schools?

Respondents identified the different types of assessment methods regularly used by primary school teachers. It was noted that 'questioning' and 'teacher observation' are used weekly by 28 out of the 29 respondents whereas 'peer assessment' (n=7) and 'diagnostic testing' (n=5) are amongst the least assessment methods used. Teachers then ranked main reasons why standardised assessment is implemented. It is evident that teachers see huge benefits to assessment in terms of helping to guide future teaching needs and informing pupils about their learning. 65.6% of teachers acknowledged that all children are included in standardised assessment. Probably one of the most interesting

statistics from the findings was that 58.6% of teachers agreed in all children completing standardised assessment. The 12 teachers that did not agree to allow all children to complete the standardised assessment process stated reasons that included children's special needs, learning difficulties and the unsuitability of assessment for children's learning needs. Teachers were then asked whether they believed that standardised assessment is a true reflection of a child's learning ability. 86% of respondents acknowledged it is not a true reflection.

Themes emerged from the focus group—namely, benefits and limitations of standardised assessment. In response to standardised assessment, Participant A acknowledged that "I love it particularly when I started teaching because it kind of gives you, well where are we, where is everybody, it gives you something to take a hold of". The same participant, however, also stated that "standardised testing is great but actually aside from the ones who are way outside the norms who are the very minority in class what do they generally tell you that you didn't already know".

The theme of exploring what constitutes an assessment was also prevalent in the focus group discussion. Participant A noted the "…I think there is a huge issue around teacher professionalism and how valuable the teacher voice is seen in assessment because there is this idea that the standardised test is all of it and it's really not". SEN also emerged very clearly from the onset of the data. One teacher had specific expertise in this area. Participant B outlined how "we try as far as possible to give the standardised test to all children in the school as far as possible, and we nearly know the children who are not going to do very well". In spite of this, it was noted that "what you are really looking for, if they are not able to do anything on a standardised test, you are looking for something that will be diagnostically suitable". Communication between parents about assessment and clear reporting lines also emerged as issues to assessment. Participant A confirmed that "There is a real tension around reporting to parents which is what the latest government initiative is, and there is this sense that everyone knows education because they all have been to school."

Discussion

The questionnaire has provided data relating to teachers' perspectives on assessment and in particular standardised assessment in the Irish primary education system. It was surprising to note that only 62.1% of the teachers were aware of an assessment policy in their school. This supports Hall and Kavanagh (2002), who state that assessment policy and assessment practice are not key strengths of the Irish primary education system. In terms of identifying the main reason for standardised assessment, this was also centred on the child and not any other third party. Teachers recognised and rated the identification of learning

support requirements for individuals as the most important. It is noted in the research collated how other assessment methods such as teacher observation (100% of respondents), questioning (100% of respondents) and teacher-designed tasks (80%) are used considerably on a weekly basis. This is promising due to the fact that 85% of teachers questioned do not have a choice on standardised assessment used in their school.

The findings also demonstrate that 100% of teachers surveyed acknowledged how their schools promote inclusive education in the school. However, only 48% acknowledge that 'assessment' is present in their current inclusive education policy today. Whether assessment is part of the inclusive education policy or not, it was noted that 65.6% of teachers surveyed outlined how all children undertake standardised assessment. Nevertheless on analysing responses, it can be interpreted that this figure may not be an accurate reflection of this research. It is important to be aware that 20.1% of respondents who completed this survey teach in the Junior Infant classroom, and 13.8% of the 20.1% resource teachers also work with this year group. Therefore, this data is potentially unreliable as a result. According to Lin (1992, p.44, cited in Hall et al., 2004, p.807) 'multiple indicators are essential so that those who are disadvantaged on one assessment have an opportunity to offer alternative evidence of their expertise'. It is positive that teachers in this survey are aware that there is a need for change to the current standardised process.

Benefits and limitations of standardised assessment

Data gathered from the focus group acknowledges that there were benefits and limitations to standardised assessment. One participant acknowledged how standardised assessment gives teachers a basis and informs them where the class are at. Yet it seems the disadvantages outweigh the benefits as it was acknowledged by one of the participants that standardised assessment does not cater for differentiation nor take into account other influences that may affect a child's performance in the standardised assessment result.

What constitutes assessment?

The literature emphasises how assessment can be seen as 'any act of interpreting information about student performance, collected through any of a multitude of means or practices' (Brown, 2004, p.304). This was also acknowledged by participants in the focus group regarding the use of numerous methods such as teacher observation. Spelling tests and writing were also reported as ultimately important in assessing a student. Nonetheless, it was noted by one of the participants that standardised assessment outweighs other forms of assessment in terms of importance and reporting to parents.

Assessment from the SEN perspective

Ireland has acknowledged its role in terms of SEN—'that the education of people with such needs shall, wherever possible take place in an inclusive environment' (Government of Ireland, 2004, p.5). It is clear from the focus group that standardisation assessment does not take into account differentiation at both low and high attainment levels. However, teachers did agree that all children undertake standardised testing as far as possible—even if they know the child will not score very well from the onset. Findings highlight that, often, teachers may seek a diagnosis when in fact the child is generally weak and may have a specific learning problem(s). One of the participants importantly noted that the assessment method depends on what the special need is. There is no one-fits-all approach when it comes to assessment and differential learning. Communication between parents about assessment and clear reporting lines also emerged as issues to assessment. As per Section 22 2(b) of the Education Act, it is a statutory requirement for all schools to 'regularly evaluate and periodically report the results of evaluation to the students and their parents' (Government of Ireland, 1998, p.23). Findings stress an importance of informing parents regarding all supports that their children receive. The researcher found that there can be an unease when informing parents about their children due to the sensitive nature of the topic. There needs to be clear and open communication lines with parents at all times.

Conclusion

The findings of this research reveal how current primary school teachers perceive it a benefit to use standardised assessment. However, there is an acknowledgement of the need for change. A renewal is very much rooted around inclusive education and assessing both low and high achievers, thus aligning with the concept of Day and Prunty (2015) that a one-size-fits-all approach does not work. The importance of standardised assessment in the Irish primary school context is highlighted yet may not always be an accurate reflection of a student's performance. The research explored limitations associated with standardised assessment and how a revision of the current system, described as 'archaic' in participant feedback, needs to occur to cater for SEN and EAL and also test for other intelligences. Going forward, it is hoped that this study reinforces the need for change and instils a new perspective on the approach to assessment where the teacher's voice is heard.

References

Broadfoot, P. and Black, P. (2004) 'Redefining assessment? The first ten years of Assessment in Education', *Assessment in Education*, 11(1), 8-27.

Brown, G.T.L. (2004) 'Teachers' conceptions of assessment: implications for policy and professional development', *Assessment in Education: Principles, Policy & Practice*, 11(3), 301-318.

Day, T. and Prunty, A. (2015) 'Responding to the challenges of inclusion in Irish schools', *European Journal of Special Needs Education*, 30(2), 237-252.

DeLuca, C. and Hughes, S. (2014) 'Assessment in the Early Primary Education: An Empirical Study of Five School Contexts', *Journal of Research in Childhood Education*, 28(4), 441-460.

Department of Education and Science (2006) Supporting Assessment in Primary Schools, [online], Available at https://www.education.ie/en/Circulars-and-Forms/Active-Circulars/cl0138_2006.doc [Accessed 06 August 2016].

Department of Education and Skills (2011a) *Initial steps in the implementation of the National Literacy and Numeracy Strategy*, Dublin: DES, [online], Available at: https://www.education.ie/en/Circulars-and-Forms/Active-Circulars/cl0056_2011.pdf [Accessed 06 January 2017].

Department of Education and Skills (2011b) *Literacy and Numeracy for Learning for Life: The National Strategy to improve Literacy and Numeracy among Children and Young People 2011-2020*, [online], Available at: https://www.education.ie/en/Publications/Policy-Reports/lit_num_strategy_full.pdf [Accessed 06 January 2017].

Devine, D. (2000) 'Constructions of childhood in school: Power, policy and practice in Irish education, *International Studies in Sociology of Education*, 10(1), 23-41.

Douglas, G., McLinden, M., Robertson, C., Travers, J. and Smith, E. (2016) 'Including

Pupils with Special Needs and Disability in National Assessment: Comparison of Three Country Case Studies through an Inclusive Assessment Framework', *International Journal of Disability, Development and Education*, 63(1), 98-121.

Education for Persons with Special Educational Needs Act 2004. Dublin, Government Publications.

Evans, C. and Waring, M. (2011) 'How can an understanding of cognitive styles enable trainee teachers to have a better understanding of differentiation in the classroom?', *Educational Research for Policy and Practice,* 10(3), 149-169.

Government of Ireland (1998). *The Education Act 1998*. Dublin: The Stationery Office.

Hall, K. and Kavanagh, V. (2002) 'Primary Assessment in the Republic of Ireland,

Conflict and Consensus', *Educational Management and Administration*, 30(3), 261-274.

Hall, K., Collins, J., Benjamin, S., Nind. M. and Sheehy, K. (2004) 'Saturated models of pupildom: assessment and inclusion/exclusion', *British Educational Research Journal*, 30(6), 801-817.

Harris, L.R. and Brown, G.T.L. (2009) 'The complexity of teachers' conceptions of assessment: tensions between the needs of schools and students', *Assessment in Education: Principles, Policy & Practice,* 16(3), 365-381.

Kimbell, R. (2007) 'Assessment', in de Vries, M., Custer, R., Dakers, J. and Martin, G. (eds.), *Analysing best practice in technology education*, Rotterdam: Sense Publishers, 247-258.

Lin, Q. (2002) 'Beyond standardization: testing and assessment in standards-based reform', *Action in Teacher Education,* 23(4), 43-49.

Looney, A. (2006) 'Assessment in the Republic of Ireland', *Assessment in Education: Principles, Policy and Practice*, 13(3), 345-353.

Mac Ruairc, G. (2009) 'Dip, dip, sky blue, who's it? NOT YOU: children's experiences of standardised testing: a socio-cultural analysis', *Irish Educational Studies*, 28(1), 47-66.

NCCA (1999) *Primary School Curriculum*, Dublin: Department of Education.

National Council for Curriculum and Assessment (NCCA) (2007) *Assessment in the primary school curriculum: Guidelines for school*, Dublin, [online], Available at: http://www.ncca.ie/uploadedfiles/publications/assess%20 %20guide.pdf [Accessed 06 January 2017].

Supporting Children with Autism in the Mainstream Classroom, by Aoife Holmes

Biography

Aoife Holmes completed a Professional Master of Education (PME) in Primary Education. Prior to this, she undertook a Bachelor of Arts Degree in English and Psychology. She spent two years teaching in Dubai and taught English to the Italian army in Rome. While working with the army, Aoife gained invaluable interpersonal skills, which has informed teaching diverse learners. She also has experience of teaching adults English in an English language college in Dublin. Such experiences have helped her develop her pedagogy, which she feels will greatly benefit her on entering the teaching profession in Irish primary schools.

A Mixed-Method Study: Supporting Children with Autism in the Mainstream Classroom, by Aoife Holmes

Research supervisor: Mr. Joe Mc Donald

Abstract

With an increase in the diagnoses of children with autism, schools need to be equipped with the appropriate resources and methodologies to effectively educate diagnosed students. A-mixed method approach was used to enable the researcher to collect data from primary school teachers regarding their practices, the accessibility of teaching support modules, and the suitability of the mainstream class. The results demonstrated that mainstream class teachers, who have students with autism in their care, are not fully satisfied with the practices used in the classroom. Additionally, initial teacher training courses have not sufficiently taught teachers the skills required to effectively educate children with more complex special educational needs. The recommendations from this study found that students with autism with access to an SNA are not being adequately catered for within mainstream classes and would perhaps benefit more academically from specialised education in smaller group settings.

Keywords: Autism, mainstream class, education, teacher

Introduction

The prevalence of autism has increased substantially in recent years. As a result of this increase, schools have had to cope with some unique challenges, ensuring social and academic skills are being met. Humphrey and Lewis (2008) maintain that there is a need for improved resources in mainstream classes with more appropriate SEN training in initial teacher education to better understand challenges in teaching children with autism. Often, depending on their diagnosis, the pupil with autism shares their assigned SNA with at least one other student and may not receive full-time support. The duties of an SNA involve removing barriers to learning related to the "environment in which the child is trying to learn" (Autism Ireland, 2017). It is essential that schools ensure a positive learning experience for all children by making support, facilities and resources readily available. However, there is a huge discrepancy between the number of children who have autism and the level of support currently available. Many teachers may still be in the early stages of working with children with autism in an inclusive environment. More targeted funding is needed to allow for appropriate training and resources. The mainstream class may not always be suitable for all

children with autism. Funding could be provided to allow smaller group settings to enable educational spaces suitable for their academic progression. Within smaller group settings, children with autism who have access to an SNA could still have access to their assigned mainstream class for other curricular activities.

Literature review

There has been a significant increase in the number of children with special educational needs attending mainstream schools (DES, 2007). A study carried out for the National Council for Special Education (2016) found that one in 65 school students have been diagnosed as autistic. The Education for Persons with Special Educational Needs Act (EPSEN) (Government of Ireland, 2004) ensured that the state educates children with SENs in mainstream schools and provides an inclusive provision that does not disadvantage the education of their peers (McGillicuddy and O'Donnell, 2014). It has been argued that best results in special education are based upon a low pupil-teacher ratio (Mesibov and Shea, 1996) along with a high level of one-to-one work (Cameron et al., 2012). Large class sizes and a lack of funding initiatives that support the development of resources are challenges to inclusive education (Moran and Abbott, 2006). The availability of age-appropriate teaching resources and learning materials in the education of students with autism has been identified as an area of neglect. Some schools have developed materials and resources or have successfully adapted ICT programmes for their students.

It is very important to consider issues that may impact on students participating in mainstream schools. The needs of every child with autism differ and should be examined in relation to professional intervention through research and assessment. Each child is unique and it is important to find systems and staff to work with their needs (NSCE, 2013). When a child with autism is placed in the mainstream class, they may have access to an SNA, depending on their diagnosis. The role of the SNA is to support the care needs of the child and prevent barriers to learning, if possible (DES, 2014). However, all children with autism have compromised social communication skills. Sometimes, educational systems of mainstream classes do not effectively facilitate these pupils, which can leave them feeling overwhelmed in this environment, even if an SNA is present (Ferguson, 2014). The SNA cannot control sensory issues within the mainstream class. Therefore, it is extremely important that each child is suitably placed in the classroom where appropriate spaces for learning are encouraged. Without such environments, the student may suffer from the impact of sensory distress (Manikiza, 2015).

Studies have suggested that just over half of children with an ASD attend a mainstream educational setting (Barnard et al., 2000; Keen and Ward, 2004). However, little research exists regarding how best to facilitate the learning of children with special needs in mainstream classrooms (Humphrey and Lewis,

2008). Placing a child with autism into a mainstream class may provide opportunities for peer learning (Crisman, 2008). This inclusion is relatively successful in the child's social skills (Reiter and Vitani, 2007). However, there are many other challenges for the child within the mainstream class that include the physical set-up of the classroom, social expectations from peers, and sensory issues of a classroom that may be demanding for a child (Humphrey and Lewis, 2008). While there is an assumption that students with autism academically succeed within an inclusive educational placement, research has shown that learning outcomes are extremely varied and are much lower than would be expected given the child's level of intellectual functioning (Howlin, 2005; Tsatsanis, 2003).

With regard to the *No Child Left Behind Act* (2001), schools and curricula are becoming more standardised with classrooms becoming more systematised as schools adjust to meet guidelines. The inclusion movement (INTO, 2004) has placed children with wide-ranging abilities and needs in such classrooms, which opens up the question on whether the educational needs of many students are being jeopardised for the social goals of inclusion. An advantage of mainstreaming children with autism is that it allows them to learn in a more natural environment. In the real world, individuals with autism are expected to function in society alongside typically developing peers (Lawrence, 2014). However, there is the issue of the suitability of educating children with autism in the mainstream classroom. The pupil may benefit socially from an inclusive classroom, but their academic skills may be compromised. While mainstreaming is considered a positive practice, students with autism may not always receive the specialised education they need.

Methodology

A mixed-methods approach was used to address the research questions. The researcher chose to obtain data from particular participants who engage with children with autism on a daily basis. A quantitative method was chosen to focus on numerical data and to generalise the data obtained across groups. Specific questions were designed in the questionnaire to invite participants to answer questions on teaching children with autism in their mainstream classes. As variables can be apparent in the data returned in questionnaires (Saris, 2014), the researcher decided that combining questionnaires with semi-structured interviews would be most suitable for this study. All participants in this research study (n=22) were teachers in School A and School B. The participants have the responsibility of teaching children with autism in their class. The researcher acknowledges that there were limitations in the study that must be acknowledged. The study was completed within a relatively short time frame with a restricted word count. Further limitations included a small sample size; therefore, findings

cannot be generalised to a wider population. Additionally, a more detailed analysis was gained through the interviews than with the questionnaire.

Results

The following interconnected themes emerged from both questionnaires and interviews: (a) Physical Learning Environment, (b) Learning Barriers in the Physical Environment, (c) Education and Training, and (d) Suitability of the Mainstream Class. The online questionnaire was sent to two schools. The results were based on returned questionnaires (n=20) and face-to-face interviews (n=2). In order to retrieve accurate information, only teachers with at least three years' experience of teaching children with autism were invited to complete the questionnaire. Results indicate that most teachers are content with the physical learning environment of the classroom. However, data from the interviewees highlighted that the classroom is "distracting" for children with autism. Children with autism can either be overly focused on one aspect of a task or greatly distracted by stimuli irrelevant to the task.

Children with autism often experience learning barriers in the mainstream classroom due to motor, sensory, language and social-emotional delays which may affect their visual processing. Data from both interviews and questionnaires revealed that one of the main barriers to learning involved sensory and visual issues. Results also illustrated that the visuals and sound of an interactive whiteboard could be learning barriers for children with autism. Findings further pointed to a lack of support mainstream teachers receive in class when teaching pupils with autism. One questionnaire respondent commented that they need "access to adequate support" and that their "classes are too big to deal with a child with such specific needs unless an SNA is present". The analysis of data exposed a worry and apprehension regarding adequate training with 90% of respondents stating that adequate training had not been provided. When participants were asked whether they considered students would benefit more from specialised education in a unit/special school, 70% answered "yes" and 30% answered "no". Both interview participants commented on the lack of support they receive whereby someone specialising in the area could benefit the child more.

Discussion

The findings from this study have shown that the participants are aware of how children with autism should be educated in mainstream education. The study indicates that teachers would like more comprehensive initial training programmes that cater for specific learning needs of children with autism. Participants were also cognisant that they should differentiate the physical learning environment to cater for motor, sensory, language and social-emotional delays, which may affect the pupils' visual processing. While the study found that there are learning

barriers for children with autism in the mainstream class, not all participants were in agreement concerning the suitability of the mainstream class for children with autism, and a high number of participants noted that pupils would benefit more from smaller educational settings.

Inadequate education and training

The findings concur with studies by Humphrey and Lewis (2008) and McGregor and Campbell (2001) which reported that teachers do not have adequate specialised knowledge to teach the diverse needs of students with autism. The findings of the current study found that 91% of respondents believed that initial teacher training does not provide teachers with the necessary skills to effectively teach students with autism. A survey carried out with the National Association for Special Educational Needs (2010) concurs with this study in that requirements of QTS should be strengthened to include a section dedicated to SEN with all disabilities a teacher may encounter within the mainstream classroom.

The SESS aims to provide support to schools and individual teachers in a flexible way. They claim that teachers can be "facilitated in availing of professional learning opportunities that enables them to effect a child-centred approach to meeting the needs of pupils with ASDs". This statement is indeed true, but this training opportunity is not available for all teachers in mainstream schools. Findings of this study demonstrated that most teachers do not have access to in-school support and, subsequently, revert to other teachers who have had experience in the ASD unit themselves (assuming there is a unit in the school). The SESS have "supported/funded courses for teachers teaching in classes with students with ASDs". These SESS-funded courses are in conjunction with TEACCH regarding the teaching and learning of children with autism in mainstream schools in Ireland. Such courses contain a "high degree of structure and progressive independence within the classroom and environs"; however, there is a long waiting list to attend these courses and requirements state you must be in a unit before being eligible to attend. Therefore, you must already be teaching a child with autism before you can actually learn the practices involved in catering to their needs. Findings from this study show that most teachers have not attended courses relating to autism. If this course was more readily available to teachers, participants may not be so apprehensive.

The role of the SNA is to look after the care needs of the student and to support their education under the direction of the teacher (DES, 2014)—not to actually teach the child, which may occur. Children with autism who have access to an SNA often share this access with other students. The SNA therefore has to split their time between students. As a result, the child is without full access to their assigned SNA. With more than one in 100 children on the autism spectrum, and over 70 per cent of them going to mainstream schools, every teacher will

more than likely have students with autism in their classes throughout their careers (The National Autistic Society, 2016). Yet most teachers have not had sufficient special educational needs training and are very apprehensive about teaching children with autism because of this.

Availability of resources

The availability of teaching resources and learning materials in the education of students with autism has been identified as an area of neglect (Moran and Abbott, 2006). Findings from this study concur with the DES and show that participants require more funding to aid them in their teaching of children with autism. 40% of teachers responded that they were not content with the resources while 35% were mostly content and 25% were content. These findings are also supported with studies carried out by Lindsay et al. (2013) and Lipsky and Gartner (1997), who assert that students must receive the necessary resources to ensure they are properly supported.

Sensory and visual barriers

As noted by the NCSE (2016), there is a need for primary school teachers to consider the layout and visual aesthetic of a classroom. Findings from this study concur with those of the NCSE with regard to the need for reasonable adjustments to be made to the classroom environment to reduce as many barriers to learning as possible. The learning environment may not be the most suitable for children with autism as they have difficulty functioning in such stimulating environments (Wall, 2004).

The suitability of the mainstream class

Studies carried out by Howlin (2005) and Tsatsanis (2003) state that while there is often an assumption that students with autism who are academically able will succeed in an inclusive educational placement, their learning outcomes are extremely varied and much lower than the child's level of intellectual functioning. Findings from this study illustrate that relevant information may not be processed properly by the child as a result of a busy, overwhelming learning environment. Although 50% of participants (11 from the questionnaire) noted that the mainstream class was suitable for the child with autism, the other 50% did not (9 participants from the questionnaire and 2 interviewees). That being said, 16 out of 22 participants in this study concur with Mesibov and Shea (1996) and Cameron et al. (2012) in stating that children with autism would benefit more from specialised education in a smaller group setting: "even a specialised teacher of autism could push them on more" in order to specifically cater to their needs.

The *EPSEN Act* (2004) provides children with special educational needs the right to be educated, wherever possible, in an inclusive environment with children who do not have special educational needs. Where education within the mainstream classroom is appropriate, it can be hugely beneficial to children, but according to some participants, the child may not always be suitable for a mainstream class. Legislative mandates such as the *No Child Left Behind Act* (2001) and the *Individuals with Disabilities Education Act* (2004) require that students with disabilities not only be exposed to the general education curriculum but demonstrate progress in it as well.

Conclusion

This study aligns with the DES (2006) and Lindsay et al. (2013) research in highlighting the need for improved teaching support modules in mainstream classes and more appropriate SEN training for teachers. The current study found that crucial factors are needed for a child with autism (who are academically able for a mainstream class) to have access to an SNA. These supports include the acquisition of appropriate training, concrete resources, and suitable visual and sensory stimuli. Further development and research are needed in this area for children with autism who are not academically able for the mainstream class. The study concluded that special educational programmes using behavioural and specific individualised teaching methods gain the most successful learning outcomes for the child with autism. That being said, the inclusion movement (INTO, 2004) has placed children with wide-ranging abilities and needs in the same classroom, which questions whether the educational needs of many students are being jeopardised for the social goals of inclusion. There is possibly a need for policy development that recognises that all children have different learning needs within the mainstream class; a policy that both supports the child and the teacher. Working collaboratively with all stakeholders can further improve this area and support effective inclusive practices that prioritise the child to reach their full potential.

References

Autism Ireland (2017) 'What is Autism', [online], Available at: https://autismireland.ie/about-autism/what-is-autism/ [Accessed: 07 September 2016].

Bell, J. (2005) 'Doing your Research Project: A guide for first-time researchers in education, health and social science', 4th edn. Berkshire: Open University Press pp. 27-42, [online], Available at: http://platform-online.net/wp-content/uploads/2013/11/Judith_Bell_Doing_Your_Research_Project_Open_UpBookFi.org-1.pdf [Accessed: 21 September 2016].

Conderman, G. and Katsiyannis, A. (1996) 'State practices in serving individuals with autism', *Focus on Autism and Other Developmental Disabilities*, 11, 29-36.

Department of Education and Science (2001) 'Report of the Task Force on Autism',[online], Available at: http://www.sess.ie/sess/Files/Autism% 20Task%20 Force%20Report.pdf [Accessed: 12 September 2016].

Department of Education and Science (2007) 'Special Education Needs a Continuum of Support', [online], Available at: https://www.education.ie /en/Schools-Colleges/Services/National-Educational-Psychological-Service-NEPS-/neps_special_needs_guidelines.pdf [Accessed: 15 September 2016].

Dybvik, A.C. (2004) 'Autism and the Inclusion Mandate: what happens when children with severe disabilities like autism are taught in regular classrooms? Daniel knows', *Education Next,* 4(1), 43-51, [online] Available at: http://educationnext.org/autismmandtheinclusionmandate/ [Accessed: 16 September 2016].

Howlin, P. (2005) 'Outcomes in Autism Spectrum Disorders', in Volkmar, F., Klin, A., Paul, R. and Cohen, D. (eds.) *Handbook of Autism and Pervasive Developmental Disorders*, 3rd ed., Hoboken NJ: Wiley, 201-222.

Irish Examiner (2013) *Teachers "should get special needs training'.* Available at: http://www.irishexaminer.com/ireland/teachers-should-get-special-needs-training-249155.html [Accessed: 24 March 2017].

Irish National Teachers' Organisation (INTO; 2004) *The Inclusive School.* Available at: https://www.into.ie/ROI/Publications/InclusiveSchool.pdf [Accessed: 15 September 2016].

Koegel, R.L. and Koegel, L.K. (1995) *Teaching children with autism: Strategies for initiating positive interactions and improving learning opportunities*, Baltimore, MD: Paul H. Brookes Publishing.

Lipsky*,* D.K. and Gartner*,* A. (1997*) Inclusion and school reform: Transforming America's classrooms*, Baltimore, MD: Brooks.

Meaney, M., Kiernan, N. and Monahan, K. (2005) *Special Educational Needs and the Law*, Dublin: Thomson Round Hall.

Mesibov, G. and Shea, V. (1996) 'Full inclusion and students with autism', *Journal of Autism and Developmental Disorders*, 26, 337-346.

Moran, A. and Abbott, L. (2006) 'The development of inclusive schools in Northern Ireland: a model of best practice', Northern Ireland Statistics and Research Agency, Research Report 42.

National Council for Curriculum and Assessment (NCCA) (1999) 'Special Educational Needs: Curriculum Issues Discussion Paper', [online], Available at: http://www.ncca.ie/uploadedfiles/nccaeng.pdf [Accessed: 12 September 2016].

National Council for Special Education (NCSE) (2010) *Records from the Special Education Administration System.* Available at: http://ncse.ie/wp-content/uploads/2014/10/AnnualReport2010.pdf [Accessed: 25 March 2017].

Ritvo, E. and Freeman, B. (1977) 'National Society for Autistic Children definition of the syndrome of Autism', *Journal of Pediatric Psychology,* 2, 146-148.

Shevlin, M., Kearns, H., Ranaghan, M., Twomey, M., Smith, R. and Winter, E. (2009) 'Creating Inclusive Learning Environments in Irish Schools: Teacher Perspectives', Trim: National Council for Special Education.

Special Education Support Service (SESS) (2009) 'Supports for the Learning and Teaching of Students with ASDs', [online], Available at: http://www.sess.ie/categories/autismautistic-spectrum-disorders/aspergers/sess-supports-learning-and-teaching-students- [Accessed: 23 February 2017].

Special Education Support Service (SESS) (2004) The EPSEN Act, [online], Available at: http://www.sess.ie/sites/default/files/EPSEN_Act_2004.pdf [Accessed: 20 February 2017].

Tsatsanis, K.D. (2005) 'Neuropsychological characteristics of autism and related conditions', in Volkmar, Klin, A., Paul, R. and Cohen, D. (eds.), *Handbook of autism and pervasive developmental disorders*, 3rd edn. John Wiley & Sons.

Newcomer Pupils in Category A Gaeltacht Classrooms, by Bairbre Ní Fhlatharta

Biography

Bairbre Ní Fhlatharta graduated with a BA in Irish and Legal Studies from NUI Galway in 2007. She spent time working in Australia before returning to her native Galway where she worked as a Language Development Officer for Conradh na Gaeilge. She recently graduated from Hibernia College with a First Class Honours in the Professional Master of Education (PME) in Primary Education. As part of this programme, Bairbre completed her dissertation on 'The Integration of Newcomer Pupils in Category A Gaeltacht Classrooms'. She is currently teaching Second Class.

The Integration of Newcomer Pupils in Category A Gaeltacht Classrooms, by Bairbre Ní Fhlatharta

Research supervisor: Dr Karen Ní Chlochasaigh

Abstract

This research study examines Category A Gaeltacht School teachers' perceptions of the integration of a newcomer child in the classroom. The purpose of this study is to investigate the strategies, practices and resources utilised by the teachers when integrating a newcomer child and the difficulties they face, if any. The study used a mixed-methods approach. Online questionnaires and semi-structured interview methods were employed. Results indicated 91% of participants experienced a newcomer child in their classrooms with 64% of those stating the pupil experienced certain difficulties during the integration period. The researcher found that 90% of participants reported that the newcomer child had an effect on the social language of the classroom. Findings also indicate that there is a paucity of resources available to teachers of newcomer children in a Gaeltacht classroom setting, specifically a programme tailored for the language support of the child. Furthermore, there is a significant lack of guidelines as to how teachers can effectively cater for both language acquisition of the L2 learner and the language enrichment of the L1 learner in the classroom. Despite the limitations of the study, the research indicates a need for more teacher training and resources that cater specifically for the L2 learner in a Gaeltacht setting.

Keywords: Gaeltacht, gaeilge, immersion, newcomer, language learning

Introduction

Gaeltacht areas have experienced significant changes in the last number of decades. One particular transformation relates to the in-migration of non-Irish speaking families during the Celtic Tiger era. One of the consequences of this is the differing abilities in competence of Irish language speakers, thus contributing to the rapid decline of the number of daily Irish speakers within the Gaeltacht (Ó Giollagáin et al., 2007). One must therefore question how teachers address differing language competencies and focus not only on the language acquisition of an L2 pupil but also the language enrichment of an L1 speaker. This study aims to provide insight into the process of integrating a newcomer child within a 'Category A' Gaeltacht School setting. The project examines the initial stages of integration and focuses on resources, programmes and strategies teachers use in this specific community. It will also explore the challenges, if any, experienced by teachers

when facilitating a newcomer child and whether the newcomer child has any impact on the social language of the classroom. The research encompassed the following questions:

1. What are the initial procedures in integrating newcomer children?
2. What language supports are available to the newcomer child?
3. What resources and teaching strategies are utilised in order to cater for the newcomer child?

Literature review

The Irish language in Gaeltacht areas

Gaeltacht areas have encountered significant changes in the last number of decades. A research report published by Ó Giollagáin et al. (2015) and commissioned by *Údarás na Gaeltachta* found that the decline of the daily speakers of the Irish language was occurring at a more rapid pace than predicted in an earlier report published eight years previously (Ó Giollagáin et al*.,* 2007). A statistic found in the 2007 report stated that only 53% of young people questioned were raised through Irish only or mostly Irish yet when asked if they could speak Irish fluently, 91% reported that they were indeed fluent speakers. Given that this is the case, one can assume that the educational institutions of the Gaeltacht hold an important role in the preservation of the language. That being said, one must still question why there is a decline in the use of Irish at home and in various social settings.

Piper (2001) noted that parents of bilingual children are often more actively engaged in the language learning of their children and act as facilitators in creating the environment of using the language. O'Riagáin highlights the role that parents take in the preservation of the Irish language and noted that patterns were found where marriages in which one spouse is an in-migrant to the Gaeltacht will likely produce children with far less proficiency in Irish (Ó'Riagáin, 1997). Given that there were high levels of in-migration to Ireland during the Celtic Tiger era in particular, one can suggest that this has led to communities with children of differing levels of Irish. Mac Donnacha et al. (2005) discuss the erosion of the Gaeltacht areas and note the social change that has occurred in Gaeltacht areas. Similarly, Ó Giollagáin (2005, 2011 & 2007) stated that there are changing pattern across generations of Irish speakers in 'Category A' Gaeltacht areas. The older generations speak Irish predominantly in their social and family networks. This pattern shifts when we look at the middle-aged group, which uses a mix of both Irish and English. A further variation occurs with the younger generation, where a minority of young people use the Irish language.

Nic Cionnaith (2008, p.93) comments on Gaeltacht classrooms as having a mix of linguistic abilities between native speakers, semi-speakers and learners all in one setting. This creates a more bilingual classroom setting rather than a

monolingual one. Ó Duibhir et al. (2015, p.8) state that the combination of L1 and L2 pupils in one classroom setting presents challenges both from a pedagogical and managerial perspective. Ní Shéaghdha (2010) discusses the impacts this setting has on the proficiency of the native speaker and that the opportunity to strengthen vocabulary and 'saibhreas' in the school is somewhat overshadowed by the non-native speaker. Péterváry et al. (2014) concur with these findings and state that an L1 speaker's proficiency in Irish is not developed appropriately. Therefore, there is a specific need for teachers to prioritise the maintenance and enrichment of the language amongst L1 pupils in an equal manner to the way in which L2 learning is prioritised (Hickey, 2001).

Murtagh and Francis (2012) note positive developments of EAL students in an English-speaking educational environment. Support systems include not only guidelines and resources but also in-service training on how to effectively use such facilities. Integrate Ireland Language and Training (IILT) along with language support teachers have prepared various handbooks and resources, which detail different elements of integrating non-English speaking students into the school curriculum. Though there is a language support scheme (Scéim na gCúntóirí Teanga) in place for L2 pupils of Gaeltacht schools, information regarding strategies and practices carried out by the Cúntóir is not readily available through research. The presence of language support is a vital resource when introducing a newcomer into a new language setting. Smyth et al. (2009) assert that although schools have the necessary formal supports in place for the newcomer's linguistic needs via language support teachers, informal supports from the mainstream teacher and the child's peers are of equal importance for the social integration of the child. Also, the manner in which the language support is provided impacts on different factors of the child's learning. The most dominant approach, found in most schools, involves the pupil's withdrawal from the class to a one-to-one or smaller group setting. Although this facilitates the specific linguistic needs of the child, it may hinder their progress in other subject areas.

The assumption that the majority of newcomer children to the Gaeltacht have a good level of English is a major factor that differs when comparing the language acquisition of newcomer non-English speaking pupils in L1 English-speaking schools, to newcomer children into L1 Irish-speaking schools. One may argue that the challenges faced by a non-English pupil are more complex as they are unable to communicate effectively with the teacher in a language understood by both. This in itself poses a threat to the Irish-medium practices of Gaeltacht schools as the pupil's peers have a good level of English. This could also influence the shift from conversing socially through Irish to conversing through English. This is similar to what Hickey (2001) stated when commenting on bilingual education. When the balance of language is weighted too much on a specific language, in this case English, an unofficial immersion in that language will take place. Similarly, this has a domino effect on the language enrichment of L1 students. Baker (2006) further comments that both the classroom teacher and other students influence

the language choice and if they regularly switch to the majority language, it will become the language of the classroom.

Strategies and resources

Gibbons (2002) noted that the use of scaffolding for language learners allows the teacher to temporarily support the pupils as they are constructing the knowledge of the task at hand through the language they are learning. This supports Vygotsky's (1962) theory that "what a child can do with support today, she or he can do alone tomorrow". Diverse methodologies can be employed to enable a teacher to support the pupil effectively. The use of manipulatives is a highly recommended strategy for a teacher to incorporate, that which coincides with the views of Piaget, Froebel and Montessori, all of whom believed that the best learning takes place when children manipulate objects to solve problems. This is evident from the language support book 'Up and Away' compiled by the IILT, which caters for L2 English speakers. The book incorporates the use of numerous visual aids as resources (IILT, 2006). Grouping is found to have significant benefits for the L2 pupil as it enables them to interact with their native peers (Harley, 1984; Day & Shapson, 1987). Ní Shéaghdha (2010) comments on the prospect of grouping children via their language ability (i.e. L1 speakers together and L2 speakers together) and although this may be a suitable option for the teacher to differentiate, it would not be feasible in most L1 Irish Gaeltacht schools due to the fact that most classrooms consist of multiple class levels and grouping by class level takes precedence.

Although much has been written in the area of the newcomer child in English medium schools, there is an evident gap in research concerning the newcomer child entering a Gaeltacht classroom. This research examined procedures, resources, and strategies that are utilised. It is from this idea that the researcher arrived at this research title, 'The Integration of Newcomer Pupils in Category A Gaeltacht Classrooms'.

Methodology

A mixed-method paradigm of using both qualitative and quantitative data collection methods was chosen for this research project. Scott and Morrison (2006, p.158) stated that a mixed-method approach can provide a "fuller overall research picture", allowing quantitative to facilitate qualitative and vice versa. For that reason, the researcher adopted a pragmatic approach of the mixed-method paradigm. The researcher opted to use two methods of data collection—online questionnaires and semi-structured interviews in order to address the research questions. According to Waltz, Strickland and Lenz (2010), there is a growing popularity of online questionnaire software as it facilitates the formatting process and speeds up data analysis. The questionnaire included both open-ended and

closed questions in order to take advantage of the strengths that both quantitative and qualitative have to offer (Blaxter, 2010). Semi-structured interviews were carried out to see the world from the participants' perspectives (Corbin and Strauss, 2008). The researcher designed open-ended questions to encourage participants to freely express their opinions.

There are currently 25 schools listed in the 'Category A' Gaeltacht area of Connemara, County Galway. The researcher distributed details on the online questionnaires to 25 schools. The researcher then called each school to confirm participation and answer any questions they may have with regards to the study. Teachers participated in the questionnaire (n=22) (27% male and 73% female). The sample of teachers had between 3 to 40 years of teaching experience. Purposeful sampling was selected for the qualitative data collection. The participants (n=2) included Interviewee A, a retired principal with 36 years' teaching experience, and Interviewee B, a principal with 30 years' teaching experience. Face-to-face interviews comprised a forty-minute interview with participant A on Wednesday, the 7th of December 2016 and a sixteen-minute interview with participant B on Sunday, the 11th of December 2016.

Ethical consent was sought from the Hibernia College Ethics Committee and granted prior to the commencement of research. The researcher consulted the Revised Ethical Guidelines for Educational Research (BERA, 2011) to ensure that the research upheld the highest ethical standards. The researcher ensured that all participants were issued with all of the necessary information (either via soft or hard copy) before consenting to participate in the study. The online questionnaire outlined the ethical considerations of the questionnaire and anonymity was ensured. All participants were fully aware that they could withdraw from the study at any time.

Results

The researcher conducted a thematic analysis of the findings in order to categorise data, which "helps researchers move their analysis from a broad reading of data towards discovering patterns and developing themes" (Boyatzis, 1998).

Theme 1: Initial integration of the newcomer child

64% of teachers found newcomer pupils experienced some difficulties settling into the new learning environment while 36% stated that there had not been any difficulties. Some of the responses included a lack of understanding due to the language barrier, nervousness in a new setting, and lack of engagement. Participants who commented on no difficulties stated that newcomer pupils receive support at home with the language.

Theme 2: Role of the parents

76% of participants stated that the parents understood the importance of Irish as the language of the school. Interviewee A explained that she expressed the importance of the language to parents and stated that if the pupil was to benefit from her schooling, then the language should be spoken at home: "Mhínigh mé don tuismitheoir, an máthair [sic] is mó a bheinn ag plé le, mhínigh mé di má bhí siad le buntáiste iomlán a bhaint as an scoil. Go gcaithfeadh siad a bheith ag labhairt na Gaeilge ag baile". In addition, when asked whether services were available in the area for parents to learn Irish, 52% of participants stated that there were while 48% stated there were no services available to them. Interviewee B stated that the availability of such classes is important but it is also necessary to provide continual support for learners.

Theme 3: The impact of the newcomer child on the social language of the classroom

90% of participants reported that the newcomer child had an effect on the social language of the classroom. Findings also showed that 57% of participants felt this impacted the use of spoken Irish as the social language of the classroom and richness (saibhreas) of the L1 speakers' dialect. One participant further commented that the teachers themselves should not simplify the language. Interviewee A expressed the importance of the Cúntóir Teanga and suggested the use of songs, stories, proverbs and games to encourage language enrichment in the classroom.

Theme 4: Strategies

When questioned on effective strategies, 95% of participants utilised a one-on-one approach while other children worked on tasks. The use of visual aids was identified as another effective strategy (82%). Both interviewees recommended the use of drama as a strategy as it enabled spaces for pupils to develop confidence and provided opportunities for language enrichment: "Bhí sé thar barr ó thaobh saibhreas agus ó thaobh muinín a chothú sna páistí". Fig. 1.1 illustrates levels of difficulty teachers experience in facilitating a newcomer child.

own unit
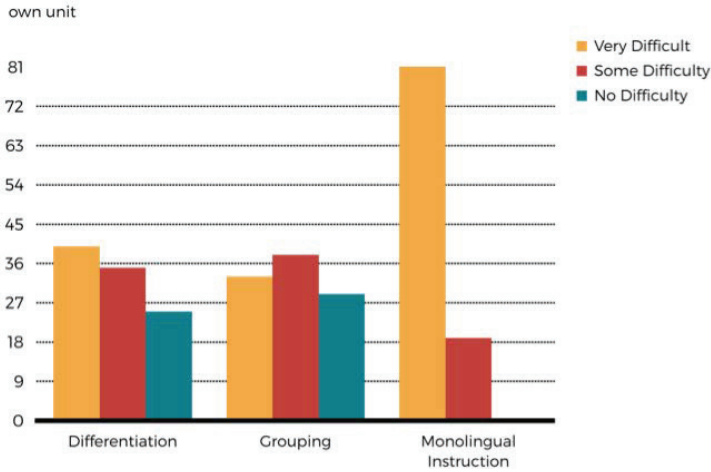
Fig. 1.1 Levels of difficulty

Sub-theme 1: Differentiation

40% of participants expressed significant difficulty with regards to differentiation. Comments included the lack of time needed to focus on that specific pupil. Interviewee B's approach focused on integrating the newcomer child with younger class levels. This allowed them to develop language competency from a basic level. Interviewee A noted the support provided by the new language curriculum that emphasises differentiation. The new curriculum enables a teacher to clearly identify the level in which each pupil is at and plan differentiated tasks accordingly.

Sub-theme 2: Grouping

71% of participants stated that they have experienced some difficulty when using grouping as a strategy. The researcher found that most common methods of grouping used depended on the class. Some classrooms host a number of different class levels and others only had one or two class levels. Interviewee B stated that the inclusion of the newcomer child in a grouping strategy was something to progress towards. Instead, she focused on the individual pupil first and as the child developed in ability, they were then grouped with their peers.

Sub-theme 3: Monolingual instruction

Monolingual instruction was found to be a challenging area when facilitating a newcomer child. 81% of participants stated they experienced significant

difficulties in giving instructions through Irish alone. Furthermore, 52% of participants asserted that they have used English to instruct the newcomer child in a variety of circumstances. Interviewee A believes that instruction should be given in Irish only and the teacher play an important role in effectively implementing this. The idea here is if a teacher creates the necessary learning environment and sets interesting tasks, the child will become engaged in learning and the language of instruction will make no difference to them.

Sub-theme 4: Scaffolding

62% of participants use scaffolding when facilitating the newcomer child. Interviewee A stated that this strategy is needed in all learning but especially with language learning. She noted that in order to successfully scaffold to a newcomer child; emphasis must be on modelling sentence structures and not on correcting pupil mistakes.

Theme 5: Language support, programmes and resources

All participants stated that the newcomer child availed of language support. They also ascertained that a Language Support Assistant via 'Scéim na gCúntóirí Teanga' provided this support. When asked how language support was delivered, 67% of participants stated that it was on a one-to-one basis, 48% stated that it happened in groups of two to three children, and 24% stated the child received language support in groups of three or more. Interviewee A highlighted the importance of integrating the newcomer child with fluent speakers: "níor chreid mise gur chór iad sin a phiocadh amach. Cheap mé gur cheart an chuid eile a bheith in éineacht leo sa gcaoi 's go raibh bior agus go raibh gluaiseacht sa rang".

The researcher found that there is no specific language support programme available for newcomer children in L1 Irish Gaeltacht schools similar to the 'Up and Away' programme designed for EAL students. Some teachers stated that they created their own programme using resources provided by the Language Assistant and Resource Teacher. Another participant remarked that they translated some areas of the 'Up and Away' programme as such a programme was considered a very useful guide. All participants stated that they use *Séideán Sí* as their main language programme in the classroom. Some participants noted they incorporate other programmes such as An Clár Luathléitheoireachta into their lessons. Interviewee A commented on *Séideán Sí* as being very effective for children of a higher ability; however, she also stated that the programme is suitable for other learners so long as the teacher designs differentiated tasks that suit their abilities.

Fig. 1.2 illustrates resources participants deemed as effective. Using concrete materials as a resource is very effective according to 82% of

participants. This concurs with Interviewee A recommendations regarding the need for the pupil to make connections between the word, its sound, and the physical object itself: "Mas úll atá ann, mas gúna atá ann, mas carr, nó traein, nó bréagán de shaghas ar bith, go bhfeiceann an páiste é agus an ábhair [sic] concréiteach nó an fíor rud. Agus freisin nach labhraítear aon theanga eile leis an páiste [sic] agus ansin déanann an páiste ionannú leis an bhfocal, an fhuaim agus an rud".
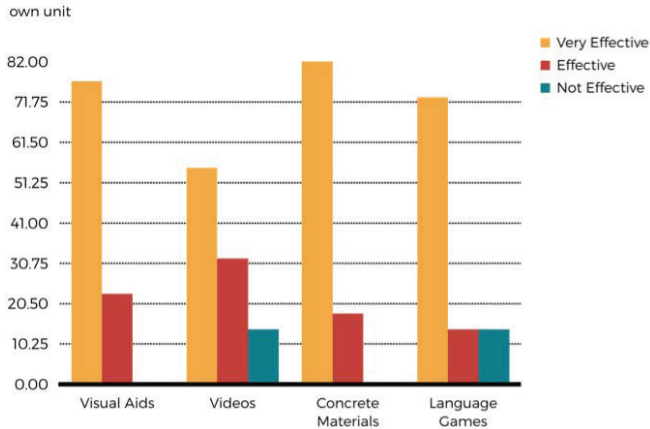

Fig. 1.2 Effectiveness of various resources

77% of participants recommended visual aids as an effective resource, similar to that of concrete materials, which allow the pupil to make connections between words and images. 73% of participants stated that language games are also an effective resource while 55% deemed videos as helpful.

Discussion

Findings indicate that the majority of teachers in the Connemara Gaeltacht area have experienced a newcomer child in their classroom. This coincides with Nic Cionnaith's (2008) comments on Gaeltacht classrooms as having a mixture of linguistic abilities. 90% of participants recognised that the new pupil had some effect on the social language of the classroom. This relates to Ó Giollagáin's (2015) findings in stating that the decline of daily Irish speakers is happening at a more rapid rate. There are a number of challenges that face teachers when integrating a newcomer child. The lack of resources is one of the more common obstacles noted in the study. More predominantly, the lack of sufficient language support programmes, similar to those provided for EAL students in an English-speaking school, is highlighted. Furthermore, the complex nature of the classroom

setting, which hosts a number of different class and linguistic levels may be an obstacle when using strategies that are tailored for a newcomer child. Findings highlight the lack of sufficient guidelines available to teachers on how to create the necessary learning environment in such complex settings.

Findings from the study demonstrate that initial planning and preparation for integrating the newcomer child is a collective effort by the teacher, Language Assistant, colleagues and the Principal. This leads to the understanding that the initial integration process is undertaken with the prime objective of the child's well-being and this is a collective effort that demands the input of various sources. This concurs with Smyth et al. (2009), who detailed the vital role that a positive relationship between all parties must exist for the child to progress.

Findings highlight that the majority of parents show a positive attitude towards the language as the primary one within the classroom, with 76% stating they supported the language. However, some participants stated that in some families, only one parent supported the language and its use at home. This can be related to what Ó Riagáin (1997) underlined on patterns of marriage whereby one spouse is an in-migrant and may not play a role in the newcomer child's language acquisition. Piper (2001) detailed the role of parents when acquiring a second language as one that must be active and consistent in their language use for the child. Only having the support of one parent and an unsuitable learning environment for Irish language acquisition can be challenging. Therefore, there is a need for specific strategies between parents and teachers to create a holistic learning environment for the child. Furthermore, support services that would enable non-Irish-speaking parents to acquire the language themselves was advantageous.

90% of participants reported that the newcomer child had an effect on the social language of the classroom. Other children in the classroom tended to converse with the newcomer child in English. This is consistent with Baker (2006) and Hickey (2001), who both noted the student's influence on the language of choice. If they regularly switch to the majority language, it will become the language of the classroom. What emerges is similar to what Mac Donnacha et al. (2005) and Ó Giollagáin (2005, 2011, & 2007) assert regarding the erosion and changing patterns across generations of Irish speakers where the majority of the younger generation are using spoken English socially. This domino effect is one of the main contributors to the rapid decline of Irish speakers according to Ó Giollagáin (2015).

'Scéim na gCúntóirí Teanga' was found to be the primary source of language support available to the newcomer child. The child is removed from the classroom in order to focus on their work. Interviewee A commented on the importance of ensuring the newcomer child not be taken out of the classroom but supported instead by the Language Assistant within the classroom. This supports the view of Smyth et al. (2009), who state a child's withdrawal from the class

could hinder their progress in other subject areas. However, a lack of funding prohibits Gaeltacht schools from creating opportunities for newcomer children to avail of such language supports in the classroom setting.

Despite the advances undertaken by the Department of Education for L2 pupils in an English-speaking school (Murtagh and Francis, 2012), there is a visible need for equivalent resources and training to cater for the newcomer child within an L1 Gaeltacht classroom. The lack of sufficient support programmes to facilitate newcomer children in an L1 Irish-speaking classroom is evident from this research project. In particular, there is an explicit gap in the availability of sufficient support materials in Irish. This gap could potentially be filled by the provision of suitable resources similar to those available in the 'Up and Away' programme. Concrete materials are the most popular resources for supporting language acquisition of a newcomer child according to 82% of the participants. 77% also recommended the use of visual aids as an effective tool. These recommendations mirror the views of theorists Piaget, Froebel, and Montessori, who believed that best learning takes place when the child can use objects to solve problems.

The majority of participants (81%) stated that they had significant difficulties in teaching using monolingual instruction. Given Nic Cionnaith's (2008) findings that Gaeltacht classrooms now host pupils of differing linguistic abilities, it is understandable that teachers find it challenging to teach through monolingual instruction. However, Interviewee A contradicts these findings and states that it is imperative that teachers develop an environment whereby children are engaged and interested in their learning; the language of instruction makes no difference to them. There is an evident need for concrete guidelines on how best to create the appropriate language dynamic that Interviewee A speaks of. The study found that scaffolding is used by 62% of participants. This complies with the views of Gibbons (2002) in stating scaffolding enables a teacher to temporarily support pupils as they are constructing knowledge of the language they are learning. 50% of participants grouped according to class levels, which coincides with Ní Shéaghdha's (2010) findings. This is a suitable method given Gaeltacht schools host numerous levels in one classroom due to a lower demography. Interviewee A mirrored the views of Harley (1984) and Day and Shapson (1987) when she highlighted the importance of the grouping strategy for language learners through the use of mixed-ability groupings.

Conclusion

The findings identified an evident lack of resources available to the teacher— specifically a language support programme tailored for the newcomer child in an L1 Irish school equivalent to that of 'Up and Away', which caters for EAL children. Given that this programme is deemed essential for the integration of an EAL

student, it is therefore imperative that such resources become available in an Irish-speaking context. The lack of guidelines available to teachers catering for a newcomer child within the complex setting of a Gaeltacht classroom is also evident. There are many factors that distinguish a Gaeltacht classroom. At the forefront is how such schools provide educational spaces for children of multiple levels and language competencies. Sufficient guidelines that cater for this specific setting must be readily available. Furthermore, the guidelines must take into account the dual objective of Gaeltacht schools—the language acquisition of the newcomer child and also the language enrichment of the L1 speakers in the classroom. The role of parents is crucial for successful integration of the newcomer child. Parents should act as facilitators in providing the necessary environment for their children to immerse fully with the Irish language. The provision of support services for parents who do not speak the language is also an important factor. Providing parents with Irish classes, conversation circles, and hosting events that cater for the community of learners to not only acquire the language but also practice it socially in informal settings should be encouraged.

References

Baker, C. (2006) *Foundations of Bilingual Education and Bilingualism*, 6th edn. Clevedon: Multilingual Matters Ltd.

Blaxter, L. (2010) *How to Research, 4th edn*. Berkshire: Open University Press.

Boyatzis, R. (1998) Transforming qualitative information, Thousand Oaks, CA: Sage Publications.

British Education Research Association (BERA) (2011). *Ethical Guidelines for Educational Research*, London: British Educational Research Association, available: https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf

Corbin, J. and Strauss, A. (2008) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 3rd edn. Thousand Oaks, CA: Sage Publications.

Day, E. and Shapson, S. (1987) 'Assessment of oral communicative skills in early French immersion Programmes', *Journal of Multilingual and Multicultural Development*, 8(3), 237-260.

Gibbons, P. (2002) *Scaffolding language, scaffolding learning*, Portsmouth, NH: Heinemann.

Harley, B. (1984) 'How good is their French?', *Language and Society,* 12 (Winter): 55-60.

Hickey, T. (2001) Mixing Beginners and Native Speakers in Minority Language Immersion: Who is Immersing Whom? *The Canadian Modern Language Review*, 57(3), 443-474.

Internet based Information on Learning and Training (IILT) (2006) *Up and Away*,
        1st edn. Integrate Ireland Language and Training, [ebook] Available at:
        http://www.ncca.ie/uploadedfiles/Curriculum/inclusion/Up_and_Away.pdf.

Internet based Information on Learning and Training (IILT) (2005) *Integrating
        non-English speaking pupils into the school and curriculum*, 2ndedn.
        [ebook] Integrate Ireland Language and Training. Available at:
        http://www.ncca.ie/uploadedfiles/Curriculum/inclusion/Handbook_primar
        y.pdf.

Mac Donnacha, S., Ní Chualáin, F., Ní Shéaghdha, A. agus Ní Mhainín, T. (2005)
Staid Reatha na Scoileanna Gaeltachta. BÁC: An Chomhairle um Oideachas
        Gaeltachta agus Gaelscolaíochta, An Chomhairle um Oideachas
        Gaeltachta agus Gaelscolaíochta.

Murtagh, L. and Francis, T. (2012) 'Supporting pupils with EAL and their teachers
        in Ireland: the need for a co-ordinated strategy', *Language and
        Education*, 26(3), 210.

Nic Cionnaith, P. (2008) *Léargas ar Dhearcadh agus Tuairimí i dtaobh an Chórais
        Oideachais Gaeltachta ag Tuismitheoirí Gaeltachta atá ag tógaint a gcuid
        Páistí le Gaeilge*, M.A. Acadamh na hOllscolaíochta Gaeilge, OÉG.

Ní Shéaghdha, A. (2010) 'Taighde ar Dhea-chleachtais Bhunscoile i dtaca le
        Saibhriú/Sealbhú agus Sóisialú Teanga do Dhaltaí arb í an Ghaeilge a
        gCéad Teanga', *Maoinithe ag an gComhairle um Oideachas Gaeltachta
        agus Gaelscolaíochta.*

Ó Duibhir, P., Ní Chuaig, N., Ní Thuairisg, L. and Ó Brolcháin, C. (2015) *Education
        Provision through Minority Languages: Review of International Research*,
        Department of Education and Skills.

Ó Giollagáin, C. (2005) 'Gnéithe d'antraipeolaíocht theageolaíoch Phobal Ros Muc,
        Co na Gaillimhe', in Kirk, J. and Ó Baoill, D. (eds.), *Legislation, Literature
        and Sociolinguistics: Northern Ireland, the Republic of Ireland, and
        Scotland, Belfast Studies in Language, Culture and Politics 13*, Queen's
        University Press, 138-162.

Ó Giollagáin, C. (2011) 'Speaker Diversity in the Majority-Minority Linguistic
        Context' *Annales Series historia et sociologia*, 21. University of
        Primorska, Science and Research Centre of Koper, Slovenia.

Ó Giollagáin, C., Mac Donnacha, S., Ní Chualáin, F., Ní Shéaghdha, A. and O'Brien,
        M. (2007) *Comprehensive Linguistic Study of the use of Irish in the
        Gaeltacht: Principal Findings and Recommendations*. Dublin: The
        Stationery Office.

Ó Giollagáin, C. and Charlton, M. (2015) *Nuashonrú ar an Staidéar Cuimsitheach
        Teangeolaíoch ar Úsáid na Gaeilge sa Ghaeltacht: 2006–2011*. [online]
        Údarás na Gaeltachta. Available at: http://www.udaras.ie/media/pdf/
        002910_Udaras_Nuashonrú_FULL_report_A4_FA.pdf

Ó Riagáin, P. (1997) *Language policy and social reproduction*, Oxford: Clarendon
        Press.

Péterváry, T., Ó Curnáin, B., Ó Giollagáin, C. and Sheahan, J. (2014) *Iniúchadh ar an gCumas Dátheangach - Ag sealbhú teanga i measc ghlúin óg na Gaeltachta,* Baile Átha Cliath: An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta.

Piper, T. (2001) *And Then There Were Two: Children and Second-Language Learning*, 1st edn. Scarborough: Pippin Publishing Corporation.

Scott, D. and Morrison, M. (2006) *Key Ideas in Educational Research*, London: Continuum, eBook Collection.

Smyth, E., Darmody, M., McGinnity, F. and Byrne, D. (2009) *Adapting to Diversity: Irish Schools and Newcomer Students*, Dublin: ESRI Research Series, 8, 15.

Vygotsky, L. (1962) *Thought and language*. Cambridge, M.I.T. Press, Massachusetts Institute of Technology.

Waltz, C., Strickland, O. and Lenz, E. (2010) *Measurement in nursing and health research*, 4th edn. New York: Springer Publications.

A Contextualised Investigation of Looking and Responding, by Michelle S. MacDonagh

Biography

Michelle recently completed her Professional Master of Education (PME) in Primary Education with Hibernia College. Prior to this, she graduated from Trinity College Dublin with a Bachelor of the Arts in the History of Art and Architecture and Classical Civilisation. Michelle has worked in various arts and cultural organisations and has been specifically engaged in programmes designed for children and young people. She has a keen interest in the meaningful application of the arts in education and its potential impact on the broader development of the child. This interest and experience has directly influenced the research topic chosen, which analyses the potential of 'Looking and Responding' within the Visual Arts Curriculum.

Visual Arts Curriculum: A Contextualised Investigation of Looking and Responding, by Michelle Sheila MacDonagh

Research supervisor: Dr Linda Butler Neff

Abstract

This study investigated 'Looking and Responding' (LAR) in Visual Arts (VA) as a curricular area that fosters Visual Literacy (VL) and oral language skills in young children. It focused on urban Delivering Equality of Opportunity in Schools (DEIS) schools highlighting issues around literacy, oral language and access to the arts. It was in the gap between theoretical intention and practice that this research project was located. Using a mixed-methods approach, teachers of Junior Infants to Second Class in DEIS band 1 schools in inner-city Dublin were surveyed. Experts in visual literacy, oral language and arts education were also interviewed. The results demonstrate that LAR is considered important for young learners yet is inadequately practised in classrooms due to inhibiting factors that include curriculum overload, perceived lack of teacher knowledge, and economic barriers. Based on these findings, a re-evaluation of 'literacy' with consideration for its application and increased support for teachers through Continuous Professional Development (CPD) is recommended.

Keywords: Continuous Professional Development (CPD), Delivering Equality of Opportunity in Schools (DEIS), 'Looking and Responding' (LAR), Visual Art (VA), Visual Literacy (VL)

Introduction

Engagement in art viewing is considered a rich domain of learning for young children (Eckhoff, 2008; Williams, 2007). Support for introducing learners to art viewing is central in the Primary School VA Curriculum with equal emphasis on 'LAR' and 'Making Art' across six strands of practice (Ireland, 1999). The literature contends that meaningful LAR can substantially extend children's skills in other areas, such as development of VL and oral language (Cheng and Cress, 2014; Housen, 2001; Yenawine, 1997). The DEIS programme prioritises strategies to improve literacy skills 'as vital tools for life' with emphasis on early intervention at primary level (Cregan, 2008; DES, 2005; DES, 2005a; Smyth, 2015). Additionally, *Arts and Cultural Participation among Children and Young People* and *Arts and Cultural Education at School in Europe* underline the relevance of VA in disadvantaged contexts and promote the capacity of schools to redress inequality of access (EACEA, 2009; Smyth, 2016). The hypothesis at the core of this study is

that LAR is a curricular construct for children to engage with art viewing for the potential to enhance their VL and oral language skills. This is a large field of inquiry with no known studies to date exploring this particular area. This framework was influential in developing the research questions:

1.   What is the potential application of LAR?

2.   What are the current practices in classrooms in LAR?

3.   What are the perspectives of experts in VL as it applies to young children?

Literature review

In Ireland, LAR is the manifestation of art viewing experience within primary education (Ireland, 1999). It comprises two distinct skill sets, visual analysis (looking) and linguistic observation (responding). The practice of using one's eyes to learn is acquired at a young age and creates the foundation for basic concept formation in early childhood (Arnheim, 1969; Piaget, 1999). John Berger (1972) posited that 'seeing comes before words'. Correspondingly, it is mistakenly assumed that children do not need to be taught to read visual images as the skills develop independently from experience (Avgerinou, 1997; Bamford, 2003; Vermeersch, 2015). However, Yenawine (1998) suggested that 'viewers need long-term, graduated support, like that provided to readers'. Johnson (2008) also noted that 'a picture may be worth a thousand words, but these words can remain unsaid or misunderstood when adults do not attend to their development'.

Literacy/visual literacy

The *National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* places 'the achievement of proficiency in literacy' as a priority and endeavours to extend literacy instruction to all curricular subjects (DES, 2011; Kennedy, 2012). Unfortunately, educational policy and practice in Ireland fails to acknowledge a range of literacies (Ní Bhroin, 2013). Much of the literature around literacy evaluates methods of reading/writing to target disadvantaged groups with less focus on the wider concept of literacy and implications of its changing interpretation (DES, 2005).

John Debes (1969) coined the term 'visual literacy' regarding a 'group of vision competencies a human being can develop by seeing', which he hypothesised are 'fundamental to normal human learning' (Fransecky and Debes, 1972). In VA, it concerns interpreting images and recognising how pictorial aspects combine to make meaning in visual information (Hortin, 1994). VL has been described as 'the foundation for other kinds of literacy', which can provide substantial support to children with less-developed text-reading skills to access

literacy that is essential to everyday experience (Sinatra, 1986; Williams, 2007). Correspondingly, it is proposed that children today require a sophisticated set of literacies as contemporary culture is increasingly dependent on a visual means to communicate (Bamford, 2001; Metros, 2009). Notably, the primary school curricula of Canada, USA and Australia have integrated VL into language arts (Lee, 2009).

Oral language

The *National Strategy to Improve Literacy and Numeracy among Children and Young People* acknowledges 'spoken language' for its 'crucial role in developing children's early literacy skills' (Shiel, 2012). However, research suggests that oral language has been relegated to incidental learning in many classrooms (Kirkland and Patterson, 2005). The *Primary Language Curriculum* encourages 'listening and speaking' skills which complements a 'dialogical approach' of LAR, that which is recommended in the VA Curriculum (Ireland, 1999a; NCCA, 2016). This promotes a shared experience and meaningful discussion as the central mechanism for accelerating learning in LAR (Davis and Gardner, 1999; Iorio, 2006; Pantaleo, 2007). Halliday (1993) posited that 'when children learn language…they are learning the foundation of learning itself'. Similarly, Bourdieu suggested that the 'currency' of education is language which reinforces the connection between language and access to the education (Cregan, 2010; DES, 2010; Mawson, 2010). However, it is also understood that young children learn the 'language variety' of those around them which is often closely aligned with social status (Bernstein, 1962; Cregan, 2008; INTO 1994). Therefore, in the school environment, the register of language can be discordant for children in terms of experience which can hinder success given the reliance on spoken language competence (MacRuairc, 2009; Wells, 1987).

Methodology

This study was exploratory in nature but also informed by the hypothesis highlighted in the literature— that children have the capacity to learn by looking and speaking. The main objective was to examine LAR as a curricular context to foster VL and oral language development in young learners in disadvantaged settings.   As the researcher was interested in drawing on the practical experiences of teachers, a questionnaire was deemed an effective method to capture experiences, particularly as the population of interest was based on reasonably specific theoretical terms (Cohen, 2013). Additionally, it was perceived that harnessing the knowledge of experts with research interests in VL would significantly supplement the data drawn from teachers. Accordingly, further insights might be gained by a qualitative inquiry to inform the quantitative inquiry as a form of triangulation. Therefore, in addition to a review of literature, a mixed-

methods approach was selected given its capacity to extend the area under investigation and to address the research questions succinctly (Bell and Waters, 2014). This incorporated paper questionnaires distributed to teachers and semi-structured interviews with experts as its central data instruments to gain pedagogical and non-pedagogical perspectives (Blaxter, 2010). The selected data-gathering instruments were piloted prior to data collection to refine and reduce errors and produce useable data (Bell, 2005).

The sample for the quantitative component consisted of Junior Infants to Second Class primary school teachers in English-medium DEIS Band 1 schools in inner-city Dublin. The grounds for selecting this population was developed based on literature that relates to educational disadvantage, which places a consistent emphasis on the importance of early intervention (Cregan, 2008; DES, 2005a). As the sample was clustered geographically, a 'probability sample' was formed based on the return of the questionnaire (Bryman, 2006). A total of twenty-two questionnaires (n=22) were returned, which equated to a response rate of 55%. The population for the qualitative inquiry was identified in relation to their particular fields of expertise and comprised individuals working in, or with a research interest in, VL, oral language, and education. In this instance, purposive sampling was used, which involves 'selecting information rich cases to study…that by their nature and substance illuminate the inquiry question being investigated' (Patton, 2015). All research was carried out in accordance with ethical guidelines and fully informed consent was acquired from participants.

The veracity of results of the self-administered questionnaire relies on the assumption of accurate and complete participant responses (Cohen, 2013). Credibility was enhanced by monitoring the results to measure internal consistency, as a reliable instrument should yield similar data from similar respondents (Cohen, 2013). Additionally, 'respondent validation', which solicited feedback from interview participants, was used to heighten the accuracy of the qualitative data. This was achieved by transcribing the interview recordings ad verbatim and emailing them to participants to confirm that the findings were congruent with their intended views and truthfully represented (Bryman, 2015). The questionnaire responses were pre-coded using nominal and ordinal scales to deliver structured data which assisted the researcher in analysing the results and reaching conclusions (Bell, 2014). Thematic analysis was carried out on the interview transcripts to systematically note patterns and codes within the data and develop themes relating to the research topic (Braun, 2006).

Results

Although the reported perspectives of the respondents proved diverse, three central themes were identified in the data analysis process—namely, Practice, Challenges, and Outcomes.

Practice

While a disparity between respondents' familiarity with the VA Curriculum and Teacher Guidelines and their usefulness in practice was indicated, a comprehensive understanding of LAR was also revealed. Moreover, teachers largely associated positive developmental opportunities with VA and professed a wholly supportive attitude towards VL. A distinct majority (82%) suggested they devote one or more hours each week to VA; however, 100% of respondents also reported that they do not place equal emphasis on 'Making Art' and LAR. This assertion was further substantiated with 18% of respondents indicating they 'almost never' engage in sustained LAR sessions and 27% reported doing LAR 'once a term' (Fig. 1). The range of recommended methodologies were regarded as relevant to LAR activities with 100% of respondents signalling the particular application of 'talk and discussion'. Internet/websites and TV programmes/videos were noted as the most commonly used resources. All respondents stated that VA is displayed in their classroom with 72% of this being the work of students. Moreover, the vast majority of respondents (91%) indicated that they have not facilitated a visit to a gallery/museum. Interviewee A referred to the significance of keeping the experience of the viewer 'closely connected to an experience of an artwork' and emphasised how 'schools are the democratic space' for accessing art.
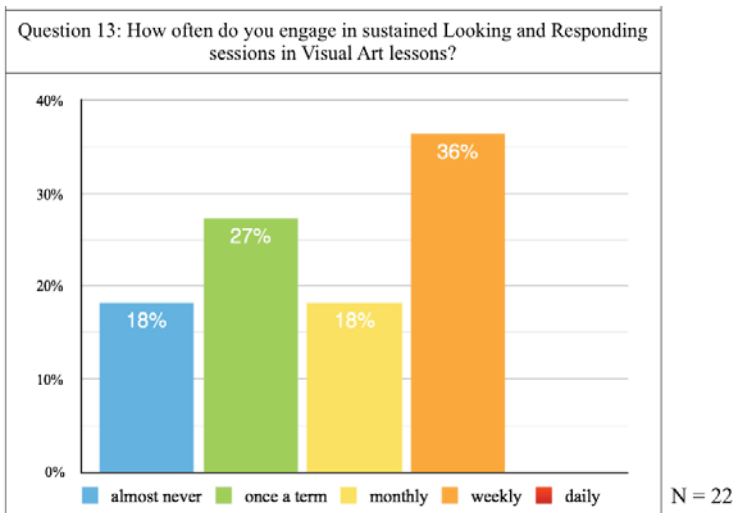

Fig. 1 Engaging in sustained 'Looking and Responding' sessions

Challenges

This study found that a majority of respondent teachers (55%) encounter professional and/or personal challenges in relation to practising LAR and identified 'time', their 'own ability to read images', and 'an already crowded curriculum' as contributing factors. Potential options included 'CPD specific to the LAR strand' and 'guided tours in gallery' to address such challenges. Economic factors such as transport costs to arts centres and accompanying teachers were noted as obstacles to accessing VA. Interviewee A alluded to the lack of 'formal funding for a visits programme'.

Outcomes

Language development was at the centre of reflections on outcomes of LAR. The vast majority of respondents (73%) strongly agreed that 'LAR integrates and extends language learning opportunities'. Consequently, when asked to define LAR, a communicative element was implied with almost all respondents referring to a dialogical exchange, which they noted as important for the particular cohort of students they teach. In consideration of the urban DEIS school context under examination in this study, the struggle of 'the language of school differ[ing] from the language of home' was also noted as significant. Over half (63%) of respondents reported that more than 60% of their class population consist of children who use a different language at home or for whom English is an Additional Language. Additionally, the majority of respondents appraised their classes' language skills as 'fair' or 'poor'. Affirmatively, however, 91% commented that their class is 'good' at showing interest and actively listening.

Discussion

Practice

In contrast to *The Growing up in Ireland Study*, this study found that the recommended curricular time is spent on VA instruction although strand units are dramatically unequally executed (McCoy, 2012). The DES *Evaluation of Curriculum Implementation* (2005) also indicates this disproportionate practice. Balance in VA is essential as students require opportunities to extend their thinking in LAR, which is not present in the 'production focused' classroom (Eckhoff, 2008). Exceptionally low engagement with artists' work in LAR was acknowledged. The DES *Evaluation* (2005) similarly points to this neglect. This fails to provide children with insights into art-making processes and develop 'sensitivity' to artwork that would extend their conceptual framework (Ireland, 1999). *The Arts in Education Charter* (2013), *The National Children's Strategy* (2000), and *The Education Act* (Government of Ireland, 1998) strongly advocate the arts in the lives of children and commit to prioritising children's access supported by VA

Teacher Guidelines (1999b). This study aligns with the INTO *Curriculum Survey* (2006) that notes most art viewing occurs in the classroom rather than in galleries/museums. Notably, *Arts and Cultural Participation among Children and Young People* outlines that children from 'families whose native language is not English' are less likely to attend cultural activities (ESRI, 2009; OECD, 2015). Therefore, as school may be a child's singular point of access to the arts, provision must be 'inclusive in a broad sense' (Chan and Goldthorpe, 2006; EACEA, 2009; Smyth, 2016). Interestingly, in some European countries, cultural visits are formally included in the curriculum (EACEA, 2009).

Challenges

Time and a crowded curriculum were challenges identified in implementing LAR. The NCCA *Curriculum Overload in Primary Schools* (2010) describes the VA Curriculum as 'idealistic'. 'Integrated learning' can ease constraints on instructional time and the Curriculum recommends that VA is 'planned in parallel and interact with other subjects' (Ireland, 1999b). The *DEIS Plan 2017* further outlines that 'the integration of the arts in education…can result in strong positive cognitive, social and collaborative changes in learners'. Therefore, the solution to these challenges resides in teachers regarding VA as a foundational experience for young learners. Additionally, the need for content-specific supports through CPD was noted as teacher confidence is central to successfully implementing and sustaining LAR practice.

Outcomes

VA was acknowledged as encouraging rich interdisciplinary connections. It is also noted for its considerable potential as a way of enriching other areas of learning (Smyth, 2016). However, this study found that, despite teacher validation of 'Talk and Discussion' as a methodology in LAR and their acknowledgement of its integration with oral language development, the practice of LAR remains problematic. This correlates with the *NCCA Curriculum Review* (2005). It is evident that teachers are not exploiting opportunities in LAR for oral language development through dialogical interactions, which are especially significant as demonstrated in the *Evaluation of DEIS* that raises concerns about oral language (Weir, 2011). In line with studies by the NCCA (2016) and Combat Poverty Agency (Cregan, 2008), this study highlighted a language inability of the respondents' classes. Given that research suggests that children in disadvantaged contexts often need intensive oral language instruction, planning for valuable 'talk' in LAR is important if children are to grow confidently as learners and thinkers (Shiel, 2012).

Conclusion

This study revealed that support for LAR is linked to positive developmental opportunities for young children. However, despite teacher advocacy, findings aligned with the DES (2005) and NCCA (2006) on issues surrounding the implementation of LAR, indicating the need for CPD. Additionally, gallery/museum visits were a non-occurrence, which significantly impedes access to VA. It can be concluded that LAR requires substantial re-evaluation and restructuring to benefit teachers and children. This research implies that policy should favour a multi-dimensional approach to literacy in order to develop skills that are applicable to modern life, particularly in disadvantaged contexts where language (both 'literacy skills' and oral language) may mitigate against the achievement of the child. This study contributes to Irish research on LAR as a curricular context that fosters VL and oral language development in disadvantaged contexts. The research aligns with the findings of existing publications on oral language, DEIS education, and access to the arts. The application of these findings is limited as the investigation concentrated on junior classes in DEIS Band 1 schools in inner-city Dublin and is solely representative of this demographic.

References

Arnheim, R. (1969) *Toward a psychology of art*, California: University of California Press.

Avgerinou, M. and Ericson, J. (1997) 'A review of the concept of visual literacy', *British Journal of Educational Technology*, 28(4), 280-291.

Bamford, A. (2003) *The visual literacy white paper,* Sydney: Adobe Systems Pty Ltd.

Bernstein, B. (1962) 'Linguistic codes, hesitation phenomena and intelligence', *Language and Speech*, 5(1), 31-46

Blaxter, L. (2010) *How to research,* 4th edn. Maidenhead: Open University Press.

Bell, J. (2005) *Doing your research project*, 4th edn. Maidenhead: Open University Press.

Bell, J. and Waters, S. (2014) *Doing your research project: A guide for first time researchers*, Maidenhead: McGraw-Hill Education.

Berger, J. (1972) *Ways of seeing*, London: Penguin Books Ltd.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3, 77-101.

Bryman, A. (2015) *Social research methods*, Oxford: Oxford University Press.

Bryman, A. (2006) 'Integrating quantitative and qualitative research: How is it done?', *Qualitative Research*, 6, 97-113.

Cheng, N. and Cress, S. (2014) 'Conversations about visual arts: Facilitating oral language', *Early Childhood Education Journal*, 42(6), 415-22.

Cregan, Á. (2010) *From Policy to Practice the Oral Language Challenge for Teachers,* [online], Available at: https://dspace.mic.ul.ie/bitstream/

handle/10395/1065/Cregan,A.2010%20From%20Policy%20to%20Practic
e%20The%20Oral%20Language%20Challenge%20for%20Teachers%20(
Research%20Report).pdf?sequence=2&isAllowed=y [Accessed: 20
September 2016].

Cregan, Á. (2008) *From difference to disadvantage: "Talking Posh" sociolinguistic
perspectives on the context of schooling in Ireland*, Dublin: Combat
Poverty Agency [online], Available at: http://www.combatpoverty.ie/
publications /workingpapers/200703_WP_TalkingPosh.pdf. [Accessed: 15
March 2017].

Cohen, L., Manion, L. and Morrison, K. (2013) *Research Methods in Education*, 7th
edn. Oxfordshire: Routledge.

Davis, J. and Gardner, H. (1999) 'Open windows, open doors', in Hooper-
Greenhill, E. (ed.) *The Educational Role of the Museum*, Psychology
Press.

Department of Education and Science (2005) *An evaluation of curriculum
implementation in primary schools English, mathematics and visual arts*,
Dublin: Stationery Office, [online] Available at:
https://www.education.ie/en /Publications/Inspection-Reports-
Publications/Evaluation-es/insp_evaluation _curriculum_implementation
_p_pdf.pdf [Accessed: 10 January 2017].

Department of Education and Science (2005a) *DEIS delivering equality of
opportunity in schools: an action plan for educational inclusion*, Dublin:
Department of Education and Science, [online], Available at:
http://www.education.ie/en/Publications/Policy-Reports/deis_action_plan
_on _educational_inclusion.pdf [Accessed: 10 January 2017].

Department of Education and Skills (2017) *DEIS Plan 2017*, Dublin: Department
of Education and Skills, [online], Available at:
https://www.education.ie/en /Publications/Policy-Reports/DEIS-Plan-
2017.pdf [Accessed: 10 March 2017].

Department of Education and Skills (2011) *Literacy and numeracy for learning and
life: the national strategy to improve literacy and numeracy among
children and young people 2011-2020*, Dublin: Department of Education
and Skills, [online], Available at: https://www.education.ie/en/
Publications/Policy-Reports/lit_num_strategy_full.pdf [Accessed: 10
January 2017].

Department of Education and Skills (2010) *Better literacy and numeracy for
children and young people: a draft national plan to improve literacy and
numeracy in schools*, *Dublin: Department of Education and Skills,*
[online], Available at: https://www.education.ie/en/Schools-
Colleges/Information/Literacy-and-Numeracy/Better-Literacy-and-
Numeracy-for-Children-and-Young-People-A-Draft-National-Plan-to-
Improve-Literacy-and-Numeracy-in-Schools-November-2010-.pdf
[Accessed: 10 January 2017].

Department of Education and Skills and the Department of Arts Heritage and the Gaeltacht (2013) *Arts in Education Charter*, Dublin, [online], Available at: http://www.education.ie/en/Publications/Policy-Reports/Arts-In-Education-Charter.pdf [Accessed: 10 March 2017].

Education, Audiovisual and Culture Executive Agency (2009) *Arts and cultural education at school in Europe*, Brussels: EACEA and European Commission, [online], Available at: http://eacea.ec.europa.eu/education /eurydice/ documents/thematic_reports/113EN.pdf [Accessed: 10 December 2016].

Eckhoff, A. (2008) 'The importance of art viewing experiences in early childhood visual arts: The exploration of a master art teacher's strategies for meaningful early arts experiences', *Early Childhood Education Journal*, 35(5), 463–72.

Fransecky, R.B. and Debes, J.L. (1972) *Visual literacy: A way to learn - a way to teach*. Washington DC: Association for Educational Communications and Technology.

Government of Ireland (1998) *The Education Act 1998* Dublin: The Stationary Office.

Halliday, M.A.K. (1993) 'Towards a Language-based Theory of Learning' in Webster, J. (2004) (ed.)   *Collected works of M.A.K. Halliday: The language of early childhood,* Continuum Publishers.

Hortin, J.A. (1994) 'Theoretical foundations of visual learning' in Moore, D.M. and Dwyer, F.M. (eds.) *Visual literacy: a spectrum of visual learning*, Englewood Cliffs, New Jersey: Educational Technology Publications.

Housen, A. (2001) 'Eye of the beholder: Research, theory and practice', paper presented at the conference of '*Aesthetic and Art Education: a Trans-disciplinary Approach*', [online], Available at: http://www.vtshome.org/ research/articles-other-readings [Accessed: 14 September 2017].

Iorio, J.M. (2006) 'Rethinking conversations', *Contemporary Issues in Early Childhood*, 7(3), 281-89.

Ireland (1999) *Primary school curriculum introduction*, Dublin: Stationery Office.

Ireland (1999a) *Visual Art Curriculum*, Dublin: Stationery Office.

Ireland (1999b) *Visual Art Teacher Guidelines*, Dublin: Stationery Office.

Irish National Teachers' Organisation (2006) *INTO survey 2005 and proceedings of the consultative conference on education 2006*, [online], Available at: https://www.into.ie/ROI/Publications/PrimarySchoolCurriculum2008.pdf [Accessed: 20 March 2017].

Irish National Teachers' Organisation (1994) *Poverty and educational disadvantage   breaking the cycle*, [online], Available at: https://www.into.ie/ROI/Publications/PublicationsPre2000/PovertyEdDisa dvBreakingth eCycle1994.pdf [Accessed: 20 March 2017].

Johnson, M.H. (2008) 'Developing Verbal and Visual Literacy through Experiences in the Visual Arts', *YC Young Children,* 63(1), 74-9.

Kennedy, E., Dunphy, E., Dwyer, B., Hayes, G., McPhillips, T., Marsh, J., O'Connor, M. and Shiel, G. (2012) *Literacy in Early Childhood and Primary Education (3-8 years)*, National Council for Curriculum and Assessment, [online], Available at: http://www.ncca.ie/en/Publications/ Reports/Literacy_in_Early_ Childhood_and_Primary _Education_3-8_years.pdf. (Accessed: 10 December 2016).

Kirkland, L.D. and Patterson, J. (2005) 'Developing oral language in primary classrooms', *Early Childhood Education Journal*, 32(6).

Lee, A. (2009) 'A proposed visual education for all Australian students', *Arts Education Policy Review*, 111(1), 25-32.

MacRuaric, G. (2009) 'Language, socio-economic class and educational underachievement', in Drudy, S. (ed.) *Education in Ireland; challenge and change*, Gill and Macmillan Ltd.

Mawson, T.J. (2010) *Bourdieu, Language and Linguistics*, Continuum International Publishing.

McCoy, S., Smyth, E. and Banks, J. (2012) *The primary classroom: Insights from the growing up in Ireland study*. Dublin: ESRI and NCCA, [online], Available at: http://www.ncca.ie/en/The_Primary_Classroom_ESRI_ January _18_2012.pdf [Accessed: 25 March 2017].

Metros, S.E. (2008) 'The Educator's Role in Preparing Visually Literate Learners', *Theory into Practice*, 47 (2), 102-9.

National Council for Curriculum and Assessment (2016) *Primary language curriculum: English language 1 and Irish language 2*, [online], Available at: http://www.curriculumonline.ie/getmedia/524b871d-1e20-461f-a28c-bbca5424112d/Primary-Language-Curriculum_1.pdf [Accessed: 20 March 2017].

National Council for Curriculum and Assessment (2010) *Curriculum overload in primary schools. An overview of national and international experiences*, Dublin: NCCA, [online], Available at: http://ncca.ie/en/Publications/ Reports/Curriculum_overload_in_Primary_Schools_An_overview_of_natio nal_and_international_experiences.pdf [Accessed: 20 March 2017].

National Council for Curriculum and Assessment (2005) *Primary curriculum review phase one*, Dublin: NCCA, [online] Available at: http://ncca.ie/en/ Publications/Reports/Curriculum_overload_in_Primary_Schools_An_overv iew_of_national_and _international_experiences.pdf [Accessed: 20 March 2017].

Ní Bhroin, C. (2013) 'Reading between the lines: Interpreting picture-text interactions in picture books', in *Language, Literacy and Literature: Re-imagining Teaching and Learning Proceedings of the 2013 Annual Conference of The Reading Association of Ireland*, [online], Available at: http://www.reading.ie/sites/default/files/documents/RAI_BK_A5_2014.p df. [Accessed: 20 March 2017].

Pantaleo, S. (2007) 'Interthinking: Young children using language to think collectively during interactive read-alouds', *Early Childhood Education Journal*, 34(6), 439-47.

Patton, M.Q. (2015) *Qualitative Research and Evaluation Methods*, 4th edn. Beverley Hills: Sage Publications.

Piaget, J. (1999) *Play, dreams and imitation in childhood*, Oxfordshire: Routledge.

Shiel, G., Cregan, Á., McGough, A. and Archer, P. (2012) *Oral Language in Early Childhood and Primary Education*, National Council for Curriculum and Assessment, [online], Available at: http://ncca.ie/en/Publications/ Reports/Oral_Language_in_Early_Childhood_and_Primary_Education_3-8_years_.pdf [Accessed: 10 December 2016].

Sinatra, R. and Venezia, J.F. (1986) 'A Visual Approach to Improved Literacy Skills for Special Education Adolescents: An Exploratory Study', *The Exceptional Child*, 33(3), 187-92.

Smyth, E. (2016) *Arts and cultural participation among children and young people: insights from the growing up in Ireland study*, Dublin: ESRI and The Arts Council, [online] Available at: https://www.esri.ie/pubs/BKMNEXT323.pdf [Accessed: 10 January 2016].

Smyth, E., McCoy, S. and Kington, G. (2015) *Learning from the evaluation of DEIS*, Dublin: ESRI, [online], Available at: https://www.esri.ie/pubs/RS39.pdf [Accessed: 20 March 2017].

The National Children's Strategy (2000) *Our children – their lives*, Dublin: Stationery Office [online], Available at: http://www.dcya.gov.ie/docu ments/Aboutus/stratfullenglishversion.pdf [Accessed: 20 March 2017].

Vermeersch, L. and Vandenbroucke, A. (2015) 'Kids, take a look at this! Visual literacy skills in the school curriculum', *Journal of Visual Literacy*, 34(1), 106-30.

Weir, S., Archer, P., O'Flaherty, A. and Gilleece, L. (2011) *A report on the First Phase of the Evaluation of DEIS*, Dublin: Educational Research Centre, [online], Available at: http://www.erc.ie/documents/deis_p1_main.pdf [Accessed: 20 March 2017].

Wells, G. (1987) *The meaning makers: Children learning language and using language to learn*, London: Hodder and Stoughton.

Williams, T.L. (2007) '"Reading" the painting: Exploring visual literacy in the primary grades', *The Reading Teacher*, 60(7), 636-42.

Yenawine, P. (1998) 'Visual art and student-centered discussions', *Theory into Practice*, 37(4), 314-21.

Yenawine, P. (1997) 'Thoughts on Visual Literacy' in Flood, J., Heath, S.B. and Lapp, D. (eds.) *Handbook of Research on Teaching Literacy through the Communicative and Visual Arts*, London: Routledge.

SPHE in DEIS Schools: Supporting Social and Emotional Development, by Anne Crotty

Biography

Anne completed a Professional Master of Education (PME) in Primary Education with Hibernia College from which she received First Class Honours. She has a BA in Social Science and an MA in Women's Studies from UCC. She also trained as a complementary health therapist and worked in this area for a number of years. Anne is inspired by the importance of well-being and values, educational research, and the value of teaching social and emotional skills to children from a young age.

Lessons for Life: Teachers' Perspectives on the Adequacy of SPHE in DEIS Schools to Support the Social and Emotional Development of Irish Primary School Pupils, by Anne Crotty

Research supervisor: Ms. Jacqueline Skelly

Abstract

Well-being incorporates social and emotional skills that enable spaces for children to have positive relationships with others. School plays an important role in the socialisation of children and this is manifested in the Education Act 1998. This research aims to ascertain the types of social and emotional needs identified by teachers amongst their pupils and evaluates the adequacy of the SPHE curriculum and programmes, such as FRIENDS for Life, in DEIS schools. A mixed-methods approach was adopted, involving semi-structured interviews (n=2) and questionnaires (n=22) from rural and urban DEIS and non-DEIS schools. Findings highlight a lack of training, parental involvement, and resources. Findings further identified inconsistencies in implementation that undermine effective delivery of the SPHE curriculum and programmes in DEIS schools. It is recommended that a new programme is developed to teach pupils skills relevant to their lives—one that is adequately resourced, includes relaxation techniques, and provides appropriate teacher training.

Keywords: Social and emotional development, SPHE, well-being

Introduction

Well-being dictates the ability of a person to participate fully in society. In relation to children, well-being facilitates spaces that develop coping strategies when forming relationships with others and possessing a positive self-concept, thus enabling them to develop fully as people (WHO, 2013). Both the Education Act (1998) and the Primary School Curriculum (1999) outline the responsibility of schools to pupil well-being. Better Outcomes, Brighter Futures (2014) amalgamated the targets of ten years' worth of policies relating to mental health, for better services and resources for 0–24 year olds. It emphasises the need to develop a sense of self-worth, self-esteem, and resilience in children. Research states that half of mental health problems in adults start before the age of 14 years (WHO, 2013). Since eight of these fourteen years are spent in primary school, the adequacy of the SPHE curriculum and programmes that address the Social and Emotional Development (SED) needs of pupils is examined from teachers' perspectives. Three research questions are addressed in this project:

1. What social and emotional difficulties do teachers most frequently see in their classrooms?
2. Do SPHE curricula and programmes in DEIS schools adequately address the needs of pupils?
3. What do the teachers perceive their role to be in relation to pupil well-being and what improvements would they suggest to further SED in primary school?

Literature review

This research examined the provisions and policies regarding well-being in schools. Over the last ten years, numerous policies were published which advocated for health promotion in schools. As centres of socialisation for children, schools are at the forefront of developing coping skills to deal with anxiety and depression in later life (Vision for Change, 2006; Health Promoting Schools Initiative, 2013). As a whole-school approach, solid well-being provisions help children develop to their full potential, promoting positive relationships with others and peers (Mental Health Guidelines, 2015; Guidelines on Behavioural, Social and Emotional Difficulties, 2007). Rees et al. (2013) emphasise the importance of the pupil-teacher relationship in contributing to pupil well-being.

The Social, Personal and Health Education (SPHE) Curriculum (1999) teaches social and emotional skills such as communication, conflict resolution, and managing emotions. Three of the programmes that provide support to this curriculum in Delivering Equality of Opportunity in Schools (DEIS) schools, where children are from disadvantaged backgrounds were investigated. Programmes such as 'Zippy's Friends', which teaches coping skills to children aged five to eight years, were examined. An evaluation of its pilot programme revealed that 90% of teachers stated that children increased their communication capacity, enhanced regulation of their emotions, and were better able to form relationships (Clarke and Barry, 2010). The Friends for Life programme was also explored in the ways it promotes problem-solving skills, self-expression, and resilience through teaching children to cope with emotions such as fear, sadness, and worry through Cognitive Behavioural Therapy (CBT) techniques. Rutledge (2014) evaluated the programme and found that children showed increased coping mechanisms, self-esteem, and decreased levels of anxiety. Finally, the Incredible Years Classroom Management Training for Teachers highlights the benefit of behavioural management strategies such as praise, encouragement, and incentives and the teaching of empathy, problem solving, and social skills in teaching children aged four to eight years (The Incredible Years, 2016). Research highlights that the use of these methods strengthens pupil-teacher relationships and creates a positive classroom environment (McGilloway et al., 2012).

These programmes and the curriculum teach pupils valuable life skills which aim to increase their sense of self-efficacy. This impacts well-being and success, as high self-efficacy encourages people to work at a task until it is achieved, despite obstacles that may arise. A person's actions, thoughts, emotions, and motivation are influenced by this belief. Achievement in tasks increases self-efficacy and so the cycle continues (Bandura, 1994). Developing self-efficacy is thus important in schools, so pupils can develop to their full potential.

Research into well-being in the UK, the USA, and Australia was undertaken in comparing a one-size-fits-all model against a needs-based programme. In the UK, the Social and Emotional Learning Programme (SEAL) teaches management of emotions, self-awareness, social skills, motivation, and empathy. Research by Hallam (2009) asserts an 87% increase in well-being and better behaviour, control of emotions, and conflict resolution skills among pupils and an increased teacher confidence in dealing with issues. However, SEAL has been criticised as having unrealistic expectations, leading to disillusionment about its benefits, inadequate training, and evaluations not subsequently used to improve the programme (Humphrey et al., 2013). In the USA, the Collaborative for Academic, Social and Emotional Learning (CASEL) guide 2013 has provided evaluations of SED programmes, based on their impact on social and emotional skills, prosocial behaviour, conduct, and emotional distress. Similarly in Australia, KidsMatter, a mental health promotion initiative, has a range of programmes to support SED. These vary from universal classroom initiatives, addressing specific issues in schools, targeting a particular group of students or generally creating a positive school environment (KidsMatter, 2016). In these contexts, schools choose programmes that best suit their needs.

Methodology

A pragmatic approach was adopted, which endorses both objective and subjective methods to research. This allows for triangulation where two different methods of data collection are used, enabling results to be compared and increasing the credibility of the research to offer a richer, more complete examination of the issue (Cohen et al., 2013: Scott and Morrison, 2006; Patton and Cochran, 2002). A mixed-methods approach involving both qualitative and quantitative methods was employed (Muijs, 2004), namely questionnaires (n=22) and interviews (n=2). Questionnaires were distributed to teachers in different schools to gauge their experiences and compare and contrast various traits to provide answers (Bell, 2014). Likert scales and ranking scales were used to assess teachers' opinions on a range of issues including the SED issues in the classrooms, the effectiveness of well-being programmes in DEIS schools, and the SPHE curriculum in relation to the SED of pupils (Cohen et al., 2013). The questionnaires and interviews were

piloted to test their effectiveness and adapted as necessary based on the responses received (Blaxter, 2010; Bell, 2014).

Semi-structured interviews were used to explore these responses in more detail (Blaxter et al., 2010).

Questionnaires used convenience sampling in rural and urban DEIS and non-DEIS schools. Voluntary sampling was also used whereby teachers chose whether or not to complete the questionnaire. Hence, these teachers were representative of the population of teachers being studied (Cohen et al., 2013; Blaxter et al., 2010). A purposive sample was chosen for the interviews, where "participants are selected because they are likely to generate useful data" (Patton and Cochran, 2002, p.9). In this case, interviews were conducted with two teachers—one from a non-DEIS school and one from a DEIS school. Unfortunately, the small scale of this research makes it difficult to generalise (Scott and Morrison, 2006). The research can only generate a potential theory regarding the adequacy of the SPHE curriculum and programmes, such as Friends for Life, in addressing the SED needs of pupils from teachers' perspectives, also known as an inductive approach to research (Bryman, 2008). Questionnaires were analysed by coding the questions and responses and inputting this data into an Excel spreadsheet for analysis. Percentages and other numerical data were then presented. The interviews were transcribed and analysed thematically (Braun and Clarke, 2006).

Ethical approval was granted by the Hibernia College Ethics Board. Due consideration was given to obtaining voluntary, informed consent and protecting participant/respondent identities (BERA, 2011; Data Protection Commission, 2003; Patton and Cochran, 2002).

Results

Twenty-two questionnaires were returned from ten schools across Cork, Wexford, and Monaghan.

77% of responses were from urban areas and 23% were from rural areas. 82% of respondents were female teachers. All class levels were represented in the returned questionnaires. Fig. 1 illustrates the breakdown of schools involved.

Breakdown of schools involved in the research by type

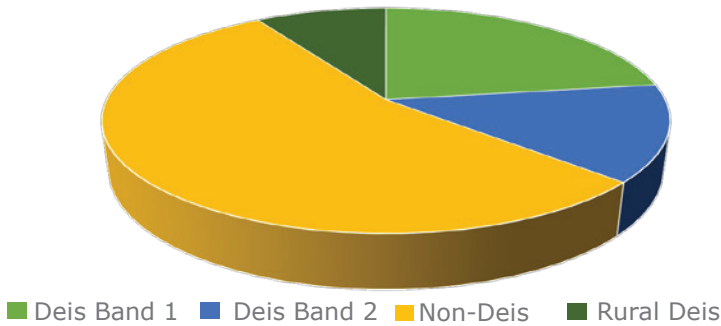■ Deis Band 1   ■ Deis Band 2   ■ Non-Deis   ■ Rural Deis

Fig. 1 Breakdown of participating schools

Interviews were conducted with two teachers in schools. Interviewee A teaches Junior Infants to 3rd class in an urban, mixed, DEIS Band 2 school with 220 pupils, with 14 years teaching in the school. Interviewee B is a resource teacher for Junior Infants, Senior Infants and 4th class in an urban, all-boys, non-DEIS school with 827 pupils, with 18 years teaching in the school. Data from both interviews and questionnaires were collated under four headings and the main results are outlined below.

SPHE Curriculum

Teachers in the study varied in their responses on the area of the curriculum that best supports SED.

Challenging areas included self-esteem development and ability to recognise and manage emotions or form relationships with others. A lack of an effective programme that complements the teaching of SPHE was reported. One school developed their own programme, drawing from four programmes already in existence. Participants remarked that the provision of 30 minutes to SPHE is insufficient. However, integrating SPHE with other subjects such as Drama was stated as useful but not entirely sufficient.

Pupil needs

Findings from the questionnaires demonstrated low self-esteem, poor communication skills, and poor conflict resolution skills as the most frequent difficulties teachers identify (Fig. 2). Depression was the least common finding.

Urban DEIS schools have a higher frequency of SED issues among their pupils. Rural schools appear to have the least number of SED needs. However, only three schools (5 respondents) were from rural areas, which could account for the low numbers. Interviewee A noted that anxiety is a common issue while Interviewee B stated that younger pupils find it difficult to form and maintain friendships. Pupils can also become overwhelmed with difficult tasks or being away from parents. Issues of exclusion, self-consciousness, and bullying were problems encountered in the older classes. A common concern related to how SED can impact learning: "if [the pupils] are in a constant state of heightened anxiety, they are not going to be able to access the curriculum" (Interviewee A).
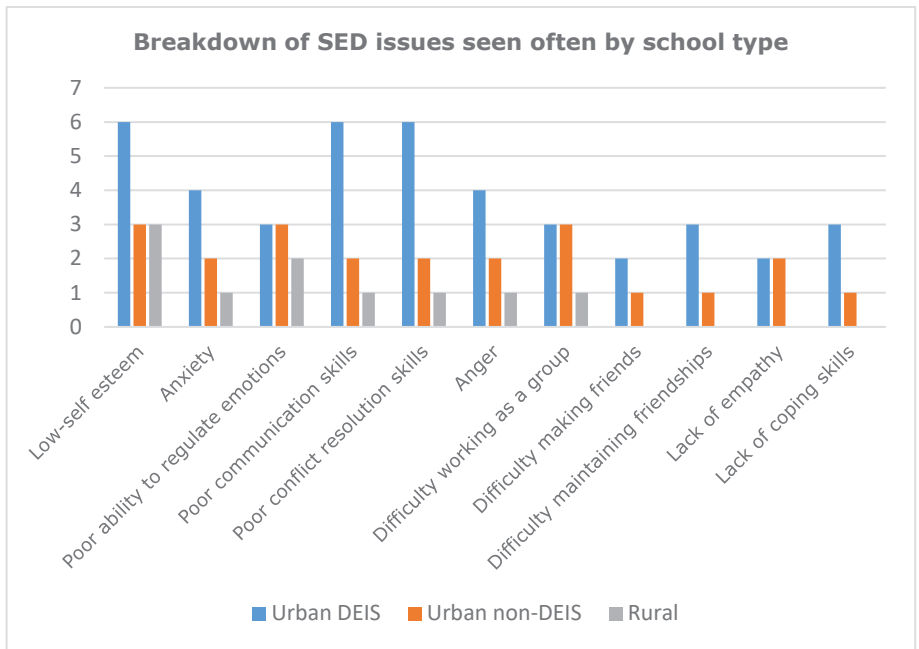
Fig. 2 Breakdown of SED issues

Role of the teacher and school

Results from the questionnaires highlighted that developing well-being is important in schools via a whole-school approach. Interviewee A referred to the teacher's responsibility for the SED of their pupils and emphasised that a good pupil-teacher relationship is essential: "if [the children] feel they can talk to you and you have a positive relationship with them then that's going to impact on their positive mental health". While most teachers agreed that they feel equipped

in dealing with issues that arise, eight respondents 'disagreed' or were 'unsure'. Data that emerged from the two interviews included consistency, good routines, and classroom management as important for providing security for children. Parental involvement and co-operation were perceived as necessary.

Programmes in DEIS schools

Sixteen out of the twenty-two questionnaires commented on programmes being run in schools. However, there was a discrepancy between teachers from one school on whether or not a programme was operating in that school, which could indicate inconsistent implementation of programmes or, at the very least, a lack of training regarding extra programmes available for teachers. Only seven out of thirteen questionnaire respondents who elaborated on The Incredible Years and the *FRIENDS for Life* programme questions received training. Six out of eight respondents agreed that *FRIENDS for Life* is adequate in supporting SED. One out of six respondents stated that The Incredible Years programme is adequate in meeting the SED needs of pupils. *Zippy's Friends* was identified as not implemented in any of the participating schools. The use of social stories such as those in the *Walk Tall* programme was mentioned in the interviews as a resource that helps pupils identify and relate to emotions. The programme was also identified as useful in learning social skills, which could be transferable to real-life contexts. Data drew attention to how teachers often have to rely on their own initiative to find resources to help the SED of pupils. Techniques, such as colours and emotional thermometers, traditionally used in learning support and resource settings can teach children to recognise and manage emotions before they develop unhelpful coping mechanisms. This also provides teachers with the opportunity to support pupils and help identify factors that contribute to these emotions.

Discussion

Based on the findings of the current research project, a number of recommendations have been develop and are outlined in Figure 3.

Increased focus on SED

Over half of respondents recommended that an Irish-based programme could be developed, which is relevant to the lives of pupils and focuses on communication skills, LGBT awareness, social media education, and dealing with failure as "children need to learn that sometimes, you can't win or that losing actually helps you more because you'll try harder" (Respondent 22). This programme should be implemented by the whole school to ensure consistency. Interviewee A supported this idea, stating that "[I]f you're putting time into developing [the pupils'] social

skills and then the next year, there's nothing…kids would be used to saying…'you said if I have a problem, this is what I should do' and then the next teacher… [has] a different method, then it can be confusing and frustrating I think, so…it needs to be continuous and consistent". Mindfulness and meditation are both identified as necessary in the schools. Respondent 17 asserted that "[T]he pace of school life needs to be slowed—children need to learn how to 'do nothing', to be able to sit with their own thoughts and be content in quiet and stillness for short periods of time". Research in the UK suggests that practising mindfulness can enable children to manage their emotions, improve their resilience, and enhance problem-solving skills (Vickory and Dorjee, 2016).

The focus of future SED in Irish schools

A new Irish-based programme including issues that impact children, e.g. self-esteem, social media, and LGBT issues, as well as mindfulness and meditation

Increased awareness and education through mental health week and increased time and resources dedicated to SED in schools

More social stories, acting out social themes, teachers leading by example, and an inclusive school environment

More training for teachers

Co-operation between schools, parents, community and mental health services

Fig. 3 Future SED in Irish schools

Increased resources

Data findings illustrate that teachers are adopting multiple initiatives to substitute the lack of resources available to them. This is leading to SED being "approached in an ad hoc manner" (Respondent 18). More consistency and resources could be provided and schools could choose programmes to suit their needs from a suite provided by one overall initiative, such as with the KidsMatter programme in Australia. Since urban schools, particularly DEIS schools, have more frequent occurrence of SED issues than rural schools, one programme would not suit all

schools. A review of the Australian programme found that 63% of parents and teachers felt a sense of belonging in the school had increased (Slee et al., 2009). More time also needs to be devoted to SPHE. Interviewee B remarked that "SPHE should…be a high priority as equal to English, Irish, or Maths and I think it should be devoted the same amount of time…It develops the social, the emotional, and personal well-being of every person and this is a subject that pupils are going to take with them for the rest of their lives".

Team effort

Increased involvement of parents and outside agencies "such as the Children and Adolescent Mental Health Service (CAMHS) and community psychology services" (Respondent 4) would ensure a consistent approach to SED, with resources made available when necessary. Involving parents was considered as important in both interviews. Many SED issues in the schools pertained to the home. Interviewee B highlighted the importance of SPHE homework so that parents could reinforce what was taught in school. Interviewee A emphasised the need for parenting skills classes in schools to provide parents with appropriate support. She also remarked that resources, such as counselling or therapy, could be provided in schools for pupils to access and reduce placing financial pressure on parents to seek external help.

Training

Adequate training is necessary in programme implementation. Issues of anxiety, bereavement, and separation of parents were highlighted: "Sometimes teachers do not feel fully qualified to cope with problems posed in more recent years, e.g. depression, anxiety, bereavement, parents fighting, and divorce and difficult court sessions to sort access, unemployment, etc." (Respondent 15). Humphrey et al. (2013) emphasised that to ensure consistency, teachers need to be given guidelines on how to implement any programme—how it is to be taught, which aspects are essential to meet the intended outcomes, which elements must be executed as prescribed, and which ones can be changed according to the teacher's requirements.

Conclusion

While not without its limitations, this research set out to explore if the SPHE curriculum and other programmes in DEIS schools were effective in supporting the SED of pupils. Since well-being is influenced by experiences that occur in childhood, life skills, such as coping mechanisms, communication skills, and self-esteem should be taught in schools. Currently, the provision for SED in the education system is not consistent or adequate in addressing these needs, leaving

teachers to rely on their own intuition about what works best. An adequately resourced programme that forefronts the teaching of life skills and provides the training for teachers would facilitate SED. Such a programme could also possibly incorporate some element of relaxation to help the SED of pupils. Ultimately, the aim of such programmes is to protect the future well-being of pupils and facilitate them to develop a high sense of self-efficacy.

References

Bandura, A. (1994) Self-Efficacy in Ramachaudran, V.S. (ed.), *Encyclopedia of human behavior*, 4, 71-81, [online], Available at: https://www.uky.edu /~eushe2/Bandura/BanEncy.html [Accessed: 07 September 2016].

Bell, J. (2014) *Doing your research project: a guide for first time researchers in education, health and social science*, 5th edn. Maidenhead: Open University Press.

Blaxter, L. (2010) *How to research*, 4th edn. Maidenhead: Open University Press.

Braun, V. and Clarke, V. (2006) 'Using Thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), 77-101.

British Educational Research Association (BERA) (2011) *Ethical guidelines for educational research*, [online], Available at: http://www.bera.ac.uk/ researchers-resources/publications/ethical-guidelines-for-educational-research-2011 [Accessed: 22 September 2016].

Bryman, A. (2008) *Social Research Methods*, Oxford: Oxford University Press.

Clarke, A.M. and Barry M.M. (2010) *An evaluation of the Zippy's Friends emotional wellbeing programme for primary schools in Ireland: Summary Report*, [online], Available at: http://www.academia.edu/3261484/An_evaluation _of_the_Zippy_s_Friends_emotional_wellbeing_programme_for_primary _schools_in_Ireland_SUMMARY_REPORT [Accessed: 29 August 2016].

Cohen, L., Manion, L., and Morrison, K. (2013) *Research Methods in Education*, 7th edn. Florence: Routledge.

Collaborative for Academic, Social, and Emotional Learning (CASEL) (2013) *2013 CASEL Guide: Effective Social and Emotional Learning Programs, Preschool and Elementary School Edition,* [online], Available at: http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/526 a220de4b00a92c90436ba/1382687245993/2013-casel-guide.pdf [Accessed: 07 September 2016].

Data Protection Commission (2003) *Data Protection (Amendment) Act 2003*, [online], Available at: https://dataprotection.ie/viewdoc.asp?DocID=1467&ad=1 [Accessed: 23 September 2016].

Department of Children and Youth Affairs (2014) *Better Outcomes Brighter Futures: The National Policy Framework for Children and Young People*, [online], Available at: http://www.dcya.gov.ie/documents/cypp_

framework/BetterOutcomesBetterFutureReport.pdf [Accessed: 05 September 2016].

Department of Education and Skills (2007) *Behavioural, Emotional and Social Difficulties – A Continuum of Support: Guidelines for Teachers*, [online], Available at: https://www.education.ie/en/Schools-Colleges/Services /National-Educational-Psychological-Service-NEPS- /neps_besd_continuum _teacher_guide.pdf [Accessed: 06 September 2016].

Department of Education and Skills (2015) *Guidelines for Mental Health Promotion: Well-Being in Primary Schools*, [online], Available at: https://www.education.ie/en/Publications/Education-Reports/Well-Being-in-Primary-Schools-Guidelines-for-Mental-Health-Promotion.pdf [Accessed: 06 September 2016].

Department of Education and Science (1999) *Primary School Curriculum: Social, personal and Health Education*, [online], Available at: http://www.ncca.ie /uploadedfiles/Curriculum/SPHE_Curr.pdf [Accessed: 04 September 2016].

Department of Education and Science (1999) *Primary School Curriculum: Introduction*, [online], Available at: https://www.curriculumonline.ie/get media /c4a88a62-7818-4bb2-bb18-4c4ad37bc255/PSEC_Introduction-to-Primary-Curriculum_Eng.pdf [Accessed: 09 September 2016].

Department of Health and Children (2006) *A Vision for Change: Report of the Expert Group on Mental Health Policy*, [online], Available at: http://health.gov.ie/wp-content/uploads/2014/03/vision_for_change.pdf [Accessed: 31 August 2016].

Hallam, S. (2009) 'An evaluation of the Social and Emotional Aspects of Learning (SEAL) programme: promoting positive behaviour, effective learning and well-being in primary school children', *Oxford Review of Education,* 35(3), 313-330.

Health Service Executive (2013) *Schools for Health in Ireland: Framework for Developing a Health Promoting School*, [online], Available at: http://www.healthpromotion.ie/hp-files/docs/HPM00840.pdf [Accessed: 04 September 2016].

Humphrey, N., Lendrum, A., and Wigelsworth, M. (2013) 'Making the most out of school-based prevention: lessons from the social and emotional aspects of learning (SEAL) programme', *Emotional and Behavioural Difficulties*, 18(3), 248-260.

KidsMatter (2016) *Programs Guide*, [online], Available at: http://www.kidsmatter.edu.au/primary/resources-for-schools/other-resources/programs-guide [Accessed: 07 September 2016].

Leahy, J. (2004) *Using Excel for Analysing Survey Questionnaires*, [online], Available at: https://learningstore.uwex.edu/Assets/pdfs/G3658-14.pdf [Accessed: 23 September 2016].

McGilloway, S., Ní Mháille, G., Furlong, M., Hyland, L., Leckey, Y., Kelly, P., Bywater, T., Comiskey, C., Lodge, A., O'Neill, D., and Donnelly, M. (2012) *The Incredible Years Ireland Study: Parents, Teachers, and Early Childhood Intervention: Long-term outcomes of the Incredible Years Parent and Teacher Classroom Management training programmes*, [online]. Available at: http://www.archways.ie/fileadmin/user_upload/Incredible_Years_Ireland _Study_-_Combined_12_Month_Follow_On_Report.pdf [Accessed: 29 August 2016].

Muijs, D. (2004) *Doing Quantitative Research in Education*, [online], Available at: http://www.modares.ac.ir/uploads/Agr.Oth.Lib.23.pdf [Accessed: 20 September 2016].

Patton, M.Q. and Cochran, M. (2002) *A Guide to Using Qualitative Research Methodology*, [online], Available at: www.alnap.org/pool/files/qualitative-research-methodology.pdf [Accessed: 20 September 2016].

Rees, G., Goswami, H., and Pople, L. (2013) *The good childhood report 2013*, [online], Available at: https://www.childrenssociety.org.uk/sites/default /files/tcs/good_childhood_report_2013_final.pdf [Accessed: 04 September 2016].

Rutledge, R. (2014) *An Evaluation of the Friend for Life Programme Delivered by Teachers in Irish Primary Schools: NCSE Research Conference*, [online], Available at: http://ncse.ie/wp-content/uploads/2014/11/NEPS-Presentation-on-FRIENDS-for-Life-for-NCSE-Conference.ppt [Accessed: 29 August 2016].

Scott, D. and Morrison, M. (2006) *Key ideas in educational research*, London: Continuum International Publishing Group.

Sharp, J.A., Peters, J., and Howard, K. (2012) *Management of a Student Research Project*, 3rd edn. Abingdon: Gower.

Slee, P.T., Lawson, M.J., Russell, A., Askell-Williams, H., Dix, K.L., Owens, L., Skrzypiec, G., and Spears, B. (2009) Kids Matter: Evaluation Final Report, [online], Available at: https://www.kidsmatter.edu.au/sites/default/files/ public/kidsmatter-full-report-web.pdf [Accessed: 08 September 2016].

The Incredible Years (2016) *The Incredible Years Parent, Teacher and Child Programme Fact Sheet*, [online], Available at: http://incredibleyears.com/about/ [Accessed: 29 August 2016].

Vickery, C.E. and Dorjee, D. (2016) 'Mindfulness Training in Primary Schools Decreases Negative Affect and Increases Meta-Cognition in Children', *Frontiers in Psychology*, 6, 1-14.

World Health Organisation (WHO) (2013) *Mental Health Action Plan 2013-2020*, [online], Available at: http://apps.who.int/iris/bitstream/10665/89966 /1/9789241506021_eng.pdf [Accessed: 30 August 2016].

Strategies for Motivation in the Primary School Classroom, by Emer O'Connor

Biography

Emer O'Connor is a newly qualified primary school teacher. She completed a Professional Master of Education (PME) in Primary Education with Hibernia College and was awarded first class honours. She has a Bachelor of Arts and a Master's in Human Resource Management from National University of Ireland, Galway. She has worked in supervisory roles and in HR administration. Training staff members in effective work practices motivated her to undertake the PME in Primary Education in 2015. Her interests lie in motivational strategies that may be used to encourage children to reach their full potential in school.

An Exploratory Analysis into Strategies for Motivation in the Primary School Classroom, by Emer O'Connor

Research supervisor: Mr. Eddie Rocks

Abstract

Motivation influences a child's desire to learn and impacts academic performance, making it a teacher priority (Kennedy, 2009). This current study provides an analysis of teacher strategies that work towards motivating pupils in their learning within the primary school classroom. A qualitative methodology was chosen. Five semi-structured interviews were used to collect data (n=5). Findings highlight four prevalent themes, which are: Intrinsic motivators, Positive teacher-pupil relationships, Extrinsic Motivators, and Teacher Challenges. Findings found that interviewees favoured intrinsic motivation and promoted detailed strategies to accommodate this. Further findings assert that extrinsic motivators can benefit if used in moderation. Finally, findings indicate that Newly Qualified Teachers (NQTs) find motivating pupils to learn a challenge.

Keywords: Motivation, strategies, challenges, intrinsic and extrinsic motivation

Introduction

Motivation is defined as the driving force that influences a child towards action (Covington, 2000, p.173). The Irish National Teachers' Organisation (INTO) (2007, p.27) states that this driving force is ignited by an active, responsive, and inclusive style of teaching—characterising them as a motivator to learn. The research examines various strategies teachers use to essentially motivate. Specifically, the project focused on teachers' perspectives on intrinsic and extrinsic motivation. It is hoped that findings may inform future practice and practitioners, especially teacher-training colleges and education centres that provide Continuing Professional Development (CPD) courses. It is evident from the literature reviewed that motivation is central to learning and teachers play a fundamental role in motivating children to learn. Therefore, in order to gain a holistic insight into the strategies used by teachers to motivate children to learn in the primary school classroom, the researcher set out to explore the following research questions:

1. Are extrinsic motivators used by Irish primary school teachers to motivate children to learn and if so, what does this involve?
2. Are intrinsic motivators used by Irish Primary School teachers to motivate children to learn and if so, what does this involve?
3. Which do Irish Primary School teachers favour for their pupils—intrinsic or extrinsic motivation?

    4.   Do teachers find it a challenging task to motivate children to learn?

Literature review

Motivation has played a fundamental role in the practice of education and influences academic development (Kennedy, 2009, p.2; Maehr and Meyer, 1997, p.372). It can be defined as the initiation, direction, intensity, and quality of behaviour (Huang, 2012, p.1755; Maehr and Meyer, 1997, p.373). Pupils may not perform to the best of their ability if they are not motivated to learn. Froiland et al. (2012, p.91) cite Ryan and Deci (2000) in stating there is a continuum for motivation that exists, which features both extrinsic and intrinsic motivation. According to Gherasim et al. (2011, p.354), pupils with extrinsic motivation gain pleasure from the outcome of completing tasks such as a desirable grade, praise, or a tangible reward. Covington and Muller (2001, p.158) criticise the use of extrinsic incentives as an emphasis is placed on rewards as opposed to the benefits that can be derived from learning, which may deter a pupil's progression. In contrast, intrinsic motivation is considerably more conducive to learning and sustainable in the long term. This type of inherent motivation is derived from one's desire to carry out a task purely due to the pleasure gained from the task itself (Moldovan, 2014, p.204; Covington, 2000, p.23; Deci and Ryan, 2000, p.233).

       Theories of motivation may influence teachers when engaging with their pupils. B.F Skinner's Operant Conditioning Theory is based on the premise that humans tend to participate in activities that have a positive result and avoid those with a negative result (Parish and Parish, 1991). It may be interpreted that children can be motivated by tasks resulting in a desirable outcome, and engagement with learning can be increased in this manner. However, some may criticise this strategy and argue children should be motivated by the learning itself (Vansteenkiste et al., 2009, cited in Froiland et al., 2012, p.97). Nevertheless, the use of rewards such as praise and positive feedback can help in the development of a child's self-efficacy. Tollefson (2000, p.67) defines an individual's belief in their abilities and states those with a high level of self-efficacy engage with a task and show persistence. Extrinsic rewards that are intangible can therefore help foster an intrinsic desire to learn (Williams and Stockdale, 2004, p.226; Froiland et al.*,* 2012, p.98).

       It is clearly evident that teachers play an integral role in motivating children to learn. One of the fundamental roles a teacher has is to effectively make use of the methodologies outlined in the curriculum, which include talk and discussion, collaborative/cooperative learning, and use of the environment. A transfer of responsibility that is given over to the pupil to construct their own learning is a common thread across these methodologies. The curriculum is based on the constructivist theory, which, according to Flynn (2004, p.113), encourages the pupil to go beyond simply recalling information towards understanding and applying it. Powell and Kalina (2009, p.248) state that the constructivist

classroom promotes learning through meaningful and relatable pupil experiences. The use of the environment is an effective methodology in achieving this.

While an appropriate choice of methodology and strategy plays a pivotal role in catering for specific learning styles/needs, teachers are also required to differentiate teaching by which pupils learn, the products of their learning, the environment in which the learning takes place, or the content being taught (Tomlinson, 2001, cited in Watts-Taaffe et al., 2012, p.304). In the absence of these measures, students can struggle to engage, which may lead to a lack of motivation. Many teachers may also use tangible rewards, which appeal to the extrinsic motivation of a child. However, Mader (2009, p.153) states that the more teacher education programmes promote good teaching, the less teachers may then find themselves relying on pizza parties, stickers, points, and so on. In this way, what fosters motivation is based on what pupils find effective and meaningful to them as opposed to extrinsic rewards.

Methodology

To gain a fundamental insight into the motivational learning strategies, the researcher chose to gather empirical data on explicit areas of this topic. More specifically, the researcher sought to address teachers' perspectives on intrinsic and extrinsic motivation. A quantitative research measure was used for this project as it was considered useful for topics explored in terms of quantity (Kothari, 2004, p.3). This form of research adopts a deductive approach whereby the researcher makes a statement or prediction and then collects data to seek whether it can be proven true or false (Lodico, Spaulding, and Voegtle, 2010). Nevertheless, this research project did not set out to make and test predictions. In contrast, qualitative research immerses the researcher in the world in which they are studying, allowing for interpretations through the meaning shared by the research participants (Merriam, 2009, p.13). This process involves in-depth interviews and can result in a rich and comprehensive narrative (Ary et al., 2009, p.25). This form of research also allows the researcher to gain an understanding of the world of participants and the approach used to achieve this is inductive. Leavy (2014, p.535) states that researchers using this method listen carefully to what they are hearing and observe and investigate the data to develop an understanding of the phenomena being studied. This approach was closely aligned with the nature of this project, which aimed to gain an insight into teacher strategies on motivating pupils to learn.

Semi-structured interviews were chosen as the data instrument, which allowed for the emergence of quality and focused data since it incorporates both the flexibility of an unstructured interview along with the directionality and purpose of a survey (Schensul, 1999, p.149). This method meant participants had the freedom to fully discuss the topic of motivation to its full potential. Five participants were chosen in a purposive manner (n=5), which involved the researcher choosing the participants based on their ability to fulfil the objective of

the research (Adler and Clark, 2007, p. 121). Among the interviewees, two were newly qualified teachers, each having two years of teaching experience. The additional three teachers have varying years of experience.

Prior to carrying out the research, ethical approval was granted from the Hibernia College Ethics Committee. Interviewees were informed of the purpose of the research and how data would be used, guaranteeing confidentiality and anonymity. Data gathered was transcribed ad verbatim and subsequent thematic analysis was used. This is inductive as themes naturally emerge from the data as opposed to being imposed by the researcher (Dawson, 2002, p.115). The process consisted of familiarisation with the data; coding; searching for and reviewing themes; analysing and naming themes; and writing up an analytic narrative that tells the reader a persuasive story about the data while situating it within the literature reviewed (Braun and Clarke, 2006, p.87).

Results

Four predominant themes emerged from thematic analysis. Firstly, most teachers expressed the necessity for children to be intrinsically motivated to learn. Teacher A stated, 'stickers only go so far, possibly only up to second class. Whereas if they are motivated intrinsically, it will benefit them more in the long run'. Children therefore need to realise that intrinsic benefits gained from learning are far more valuable than tangible rewards. DEIS Band 1 teacher, Teacher E was particularly passionate about helping pupils become intrinsically motivated to learn—to ensure they reach their full potential. He stated, 'if I know a child is coming from a drugs background and I've seen their brothers and sisters struggle, straight away, my desire for them to do well has increased'. Teachers of children from less-privileged backgrounds are very aware of the need for intrinsic motivation and are determined to achieve this so as to increase the likelihood of engagement and learning opportunities.

Secondly, there was agreement across interviews that teachers have a significant influence on a pupil's motivation to learn. Teacher D stated, 'a teacher can put you off learning something. They can really be the reason you don't want to learn'. Undoubtedly, for a child to be motivated to learn, the classroom must be conducive to learning, which is achieved through the presence of an approachable teacher. Additionally, teachers 'need to have an insight into what the child's needs are and they need to be very tuned into the child once they come in' (Teacher D), something which is achieved through positive relationships. Numerous teachers regard this awareness of each child as one of their key strategies in intrinsically motivating them to learn. On discussing additional strategies to intrinsically motivate children, Teacher B shared, 'I try to relate it (learning) to their own lives as much as possible'. Most teachers agreed this to be effective in motivating children. However, it was stressed that 'you have to know the child before you can make it relatable to them'. Therefore, to capitalise on intrinsic motivation achieved

from this strategy, teachers must take the time to build solid relationships with pupils.

Thirdly, while it has been established that intrinsic motivators are preferable, those of an extrinsic nature also have a place in the classroom and all interviewed teachers use them. Extrinsic motivators are at the central source of motivation in junior classrooms as younger children are not easily intrinsically motivated since 'they don't really care what they learn. They aren't that interested in saying "I want to move on and I want to learn more information"' (Teacher D). As intrinsic motivation is not yet predominant at a young age, it is understandable that Junior Infant teachers may use tangible rewards to entice children to listen and stay focused. All teachers agreed that extrinsic motivators are not just limited in the junior classes. Teacher B expressed that all 'children like to see that they are doing well and they like to see that physically'. However, it was reiterated that as children progress up through school, 'the star chart and all that, that's not enough. They will top up the motivation but the motivation first of all needs to come from within' (Teacher E). Therefore, except for younger children, extrinsic motivators are not being used as the main source of motivation but complement intrinsic motivation. All teachers identified praise to be effective in boosting motivation, commenting that, 'they are thrilled because their work has been acknowledged and that somebody has said you know "well done, that's a nice job"' (Teacher D). This is a prime example of an extrinsic motivator that suitably aligns with intrinsic motivation. With regards to how motivated a pupil is by learning itself, words of encouragement can help to reinforce their desire to learn.

Lastly, there were conflicting opinions on whether motivating children to learn is challenging. Teacher E expressed the view that, 'I get great satisfaction out of creating a desire for a child to learn' and this attitude was shared by three teachers. It was also noted that it is 'very much knitted into the role of the teacher. If you are going to teach, you need to be able to motivate' (Teacher D). However, teachers sharing this view are very experienced and, consequently, confident in their abilities. Nevertheless, one of these teachers admitted that, 'if you had asked me that question ten years ago, it would have been a different story. Yeh, so it's something I've worked on myself over time' (Teacher E). Therefore, motivating children to learn can be difficult for those beginning their teaching career. This difficultly was confirmed by two newly qualified teachers who both stressed, 'there should be courses provided for us. Definitely, I think there isn't enough about how we should or could motivate our children' (Teacher A). It was also stated, 'I've seen teachers having no rewards systems. Now, that would definitely be a goal to work towards.' (Teacher B). Challenges may arise here from an over-reliance on extrinsic rewards which 'takes a lot of time, like if you are stopping the class to hand out ten stickers, it takes from the teaching' (Teacher A). A dependency on extrinsic rewards by newly qualified teachers can therefore place unnecessary pressure upon them.

Discussion

Through the research process, the researcher aimed to gain an insight into teacher strategies that motivate children to learn. Four research questions were addressed and aligned with the literature review. In relation to whether teachers favour intrinsic or extrinsic motivation, it became apparent that they favoured pupils to be motivated intrinsically. Prior research has also favoured intrinsic motivation by suggesting extrinsic motivation is detrimental to learning as it distracts from tasks (Vansteenkiste et al., 2009, cited in Froiland et al., 2012, p.97). Showing a preference for intrinsic motivation, several participants expressed similar concerns. Teacher D stated that extrinsic motivators portray the wrong message by placing a value on the reward rather than on learning.

Findings revealed that positive teacher-pupil relationships are crucial. Such relationships are the main means of intrinsically motivating children to learn, therefore addressing whether teachers motivate intrinsically and what it involves. Teacher D specifically stated that, based on her own experience, a teacher can hinder a desire to engage in learning and it is consequently vital to build a rapport with pupils. More specifically, children need their teacher to express an interest in them and to provide quality learning experiences in order to be motivated to learn (Daniels and Perry, 2003, p.107). These relationships are the foundation on which many effective motivational strategies are built. One participant uses insight into her pupils' backgrounds to tailor lessons accordingly and, consequently, this can boost intrinsic motivation to learn (Teacher D). Notably, teaching of this nature differentiates for individual needs and can increase a child's level of success in each task (Bembenutty, 2012, p.186).

Previous studies present substantial criticisms of extrinsic motivators and the researcher aimed to address whether teachers used this form of motivation in the classroom. Findings mirror much of this disapproval; however, they also revealed that participants do not entirely omit the use of extrinsic motivators in their practice. Participants' reasons align with Williams and Stockdale (2004, p.226) and Froiland et al. (2012, p.98) who state that intangible extrinsic rewards such as praise can help foster an intrinsic desire to learn. Similarly, Teacher D confirmed that children gain great satisfaction from having their efforts acknowledged and this can boost confidence in their abilities. Therefore, while rewards such as star charts alone are not believed to be sufficient to motivate a pupil to learn, they can keep intrinsic motivation at a 'top level' (Teacher E). Both the current data and that of previous studies may lead one to interpret that occasional extrinsic rewards can enhance intrinsic motivation.

Teacher A acknowledged that she solely relies on extrinsic motivators as a means to encourage younger age groups to engage in learning. Additionally, Teacher D believed that it is not possible to intrinsically motivate very young children as gaining knowledge is not yet a priority for them. Unfortunately, previous studies have not considered age as a determinant for intrinsic motivation. Instead, Mader (2009, p.153) disapproves of any reliance on 'pizza

parties, stickers, points and so on' and asserts that the focus in teacher education needs to promote more good teaching. However, as evident from the findings, each participant engages in 'good teaching' yet extrinsic motivators are still used. Perhaps the reason for adopting extrinsic motivators is to complement intrinsic ones that will encourage younger children to listen and learn.

It has been established that teachers have a huge responsibility for motivating children to learn but whether this is a challenging task, is a debatable one. Previous research has not considered this and one might argue that teachers are innately suited to their role and do not experience difficulties in fulfilling it. While this may be a utopian viewpoint, several participants shared an idealistic insight by stating that the task of motivating children to learn is not at all challenging and is in fact one they particularly enjoy. However, it is important to note that such participants have been in the profession for numerous years, resulting in a heightened level of confidence. In contrast, the two newly qualified participants displayed less confidence in their motivational strategies and acknowledged feeling challenged by this responsibility. Interestingly, both were quite reliant upon extrinsic motivators. One specifically voiced her concerns on how time-consuming it can be to manage tangible rewards without interfering with the flow of teaching. Therefore, based on the current findings, it can be interpreted that newly qualified teachers may initially find it a challenge to motivate children to learn, possibly due to a lack of experience.

Conclusion

In this study, the researcher set out to analyse teaching strategies that motivate pupils to learn in the primary school classroom. Findings noted teachers' preference for intrinsic motivators and, therefore, align with the literature. Needless to say, intrinsic motivation is more conducive to lifelong learning in comparison to that of an extrinsic nature. Findings also emphasised the importance of differentiation as well as making learning relatable as a means for creating intrinsic motivation. Interestingly, it became apparent that positive teacher-pupil relationships are integral to these strategies and ensure effectiveness. Additionally, extrinsic motivators such as praise can make a pupil feel competent and may consequently increase an inherent desire to engage in future learning. Therefore, while rewards should not be the prime motivator, they may be used along with intrinsic motivation. Nevertheless, motivating children to learn is a topic that has been rarely addressed in Irish literature, leading one to believe that the complexity of this duty has not yet been realised within this country. Findings revealed that Newly Qualified Teachers (NQTs) feel challenged by this task, possibly resulting from a lack of experience, and subsequently, feel they need additional support regarding how best to motivate. It is therefore recommended that further research be conducted in this area, specifically with NQTs to address this issue. Finally, findings may also contribute to teacher training colleges and education centres to inform future practice.

References

Adler, E. and Clark, R. (2007) *How It's Done: An Invitation to Social Research*, 3rdedn. California: Cengage Learning.

Ary, D., Cheser Jacobs, L., Razavieh, A., and Sorensen, C.K. (2009) *Introduction to Research in Education*, 8th edn. California: Cengage Learning.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3 (2), 77-101 EBSCO, [online], Available at: https://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=3&sid=08725a42-a729-4a3c-a7f8-4e824ef5ba52%40sessionmgr101&hid=102 [Accessed: 21 September 2016].

Covington, M. and Müeller, K. (2001) 'Intrinsic Versus Extrinsic Motivation: An Approach/Avoidance Reformulation', *Educational Psychology Review*, 13(2), pp.157-176 EBSCO [online], Available at: https://web.a.ebscohost.com /ehost/pdfviewer/pdfviewer?vid=11&sid=2cc430b7-2c59-41c3-b9e0-6e878ddab4a7%40sessionmgr4010&hid=4204 [Accessed: 06 September 2016].

Covington, M.V. (2000) 'Intrinsic versus Extrinsic Motivation in Schools: A reconciliation', *Current Directions in Psychological Science*, 9(1), 22-25 EBSCO [online], Available at: https://web.a.ebscohost.com/ehost /pdfviewer/pdfviewer?vid=7&sid=0fb6a62d-9927-4dc7-83fb-2d4bdd90d110%40sessionmgr4009&hid=4201 [Accessed: 02 September 2016].

Covington, M.V. (2000) 'Goal theory, motivation, and school achievement: An integrative review', *Annual Review of Psychology*, 51 (1), 171-200 EBSCO [online], Available at: https://web.a.ebscohost.com/ehost /pdfviewer/ pdfviewer?vid=13&sid=029fb181-16fd- 475f-80be-3beca8fc21db%40 sessionmgr4008&hid=4201 [Accessed: 04 September 2016].

Dawson, C. (2002) *Practical Research Methods: A User-friendly Guide to Mastering Research Techniques and Projects*, Oxford: How to Books Ltd.

Deci, E.L. and Ryan, R.M. (2000) 'The "what" and "why" of goal pursuits: Human needs and the self-determination of behaviour', *Psychological Inquiry*, 11(4), 227-268, EBSCO [online], Available at: https://web.a.ebscohost.com /ehost/pdfviewer/pdfviewer?vid=15&sid =0fb6a62d-9927-4dc7-83fb-2d4bdd 90d110%40sessionmgr4009& hid=4201 [Accessed: 02 September 2016].

Flynn, P. (2004) *Applying Standards-based Constructivism: A Two-step Guide for Motivating Middle and High School Students*, New York: Eye on Education

Froiland, J., Oros, E., Smith, L., and Hirchert, T. (2012) 'Intrinsic Motivation to Learn: The Nexus between Psychological Health and Academic Success', *Contemporary School Psychology (California Association of School Psychologists),* 16(1), 91-100 EBSCO, [online], Available at:

https://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=9&sid=2cc
430b7-2c59-41c3-b9e0-6e878ddab4a7%40sessionmgr4010&hid=4204
[Accessed: 06 September 2016].

Gherasim, L., Butnaru, S., and Iacob, L. (2011) 'The Motivation, Learning
Environment and School Achievement', *International Journal of Learning*,
17(12), 353-364 EBSCO, [online], Available at: https://web.a.ebscohost.
com/ehost/pdfviewer/pdfviewer?vid=6&sid=2cc430b7-2c59-41c3-b9e0-
6e878ddab4a7%40sessionmgr4010&hid=4204 [Accessed: 06 September
2016].

Huang, Q. (2012) 'Action Research on Motivation in English Reading', *Theory &
Practice in Language Studies*, 2(8), 1755-1761 EBSCO, [online],
Available at: https://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?
vid =15&sid= 029fb181-16fd-475f-80be-3beca8fc21db%40sessionmgr
4008&hid=4201 [Accessed: 04 September 2016].

Irish National Teachers' Organisation (2007) *Approaches to Teaching and
Learning: INTO Consultative Conference on Education*, Dublin: INTO.

Kennedy, E. (2010) 'Narrowing the Achievement Gap: Motivation, Engagement,
and Self-Efficacy Matter', *Journal of Education*, 190(3), 1-11 EBSCO,
[online], Available at: https://web.a.ebscohost.com/ehost/pdfviewer
/pdfviewer?sid=029fb181-16fd-475f- 80be-3beca8fc21db%40sessionmg
r4008&vid=8&hid=4201 [Accessed: 04 September 2016].

Kothari, C.R. (2004) *Research Methodology: Methods and Techniques*, New Delhi:
New Age International.

Leavy, P. (2014) *The Oxford Handbook of Qualitative Research*, New York: Oxford
University Press.

Lodico, M.G., Spaulding, D.T., and Voegtle, K.H. (2010) *Methods in Educational
Research:From Theory to Practice*, 2nd edn. San Francisco: Jossey-Bass.

Mader, C.E. (2009) '"I Will Never Teach the Old Way Again": Classroom
Management and External Incentives', *Theory into Practice*, 48(2), 147-
155 EBSCO, [online], Available at:

https://web.b.ebscohost.com/ehost/detail/detail?vid=11&sid=22fdae64- f637-
488c-8db7cdfe8ae75a7f%40sessionmgr104&hid=115&bdata=JkF1Dg
hUeXBlPXVybCx1aWQmc2l0ZT1laG9zdC1saXZl#AN=37319592&db=a9h
[Accessed: 09 September 2016].

Maehr, M. and Meyer, H. (1997) 'Understanding Motivation and Schooling: Where
We've Been, Where We Are, and Where We Need to Go', *Educational
Psychology Review*, 9(4), 371-409 EBSCO, [online], Available at:
https://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=029fb181-
16fd-475f-80be-3beca8fc21db%40sessionmgr4008&vid=5&hid=4201
[Accessed: 04 September 2016].

Merriam, S.B. (2009) *Qualitative research: a guide to design and implementation,*
San Francisco: Jossey-Bass.

Moldovan, O.D. (2014) 'Intrinsic and Extrinsic Motivation to Primary School Children', *Journal Plus Education*, 10(1), 203-211 EBSCO, [online], Available at: https://web.a.ebscohost.com/ehost/pdfviewer/pdfviewer? vid=5& sid=0fb6a62d-9927-4dc7-83fb-2d4bdd90d110%40sessionmgr 4009&hid=4201 [Accessed: 02 September 2016].

Parish, J. and Parish, T. (1991) 'Rethinking conditioning strategies: some tips on how educators can avoid "painting themselves into a corner"', *Journal of Instructional Psychology*, 18, 159-166 EBSCO, [online], Available at: https://web.a.ebscohost.com/ehost/detail/detail?vid=12&sid=ffa7c9b1-360f-44e5-baf218c42a356771%40sessionmgr4007&hid=4201& bdata=JkF1 dGhUeXBlPXVybCx1aWQmc2l0ZT1laG9zdC1saXZl#AN=508 373792&db=eue [Accessed: 07 September 2016].

Powell, K. and Kalina, C. (2009) 'Cognitive and Social Constructivism: Developing Tools for an Effective Classroom', *Education*, 130(2), 241-250 EBSCO, [online], Available at: https://web.a.ebscohost.com/ehost/detail/detail? vid=5&sid=d2e5c029-6648-4d06- b3cf-b893b187672a%40sessionmgr 4010 &hid=4112&bdata=JkF1dGhUeXBlPXVybCx1aWQmc2l0ZT1laG9zdC 1saXZl#AN=508119543&db=eue [Accessed: 09 September 2016].

Schensul, S.L., Schensul, J.J., and LeCompte, M.D. (1999) *Essential ethnographic methods: Observations, Interviews and Questionnaires*, Maryland: AltaMira Press.

Tollefson, N. (2000) 'Classroom Applications of Cognitive Theories of Motivation', *Educational Psychology Review*, 12(1), 63-83 EBSCO, [online], Available at: https://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=29&sid =eb4a5bf5-a0f7- 4023-aa20-4bc9405c62e8%40sessionmgr106&hid=123 [Accessed: 07 September 2016].

Watts-Taffe, S., Laster, B.P., Broach, L., Marinak, B., McDonald Connor, C., and Walker-Dalhouse, D. (2012) 'Differentiated Instruction: Making Informed Teacher Decisions', *Reading Teacher*, 66(4), 303-314 EBSCO, [online], Available at: https://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer? vid=37&sid=03922816- 7d3-4c79-abf3-b25324f0baa4%40sessionmgr 105&hid=115 [Accessed: 09 September 2016].

Williams, R. and Stockdale, S. (2004) 'Classroom Motivation Strategies for Prospective Teachers', *Teacher Educator*, 39(3), 212-230 EBSCO, [online], Available at: https://web.b.ebscohost.com/ehost/pdfviewer/ pdfviewer? vid=41&sid =eb4a5bf5-a0f7-4023-aa20-4bc9405c62e8% 40sessionmgr106& hid=123 [Accessed: 07 September 2016].

Visual Literacy in Teaching: Awareness, Attitudes, and Training, by Katy Judge

Biography

Katy Judge graduated from Dublin Institute of Technology in 2007 with a BA in Design (Visual Communication) and subsequently worked as a graphic designer for 10 years. In 2017, she graduated from Hibernia College with a Professional Master of Education (PME) in Primary Education. Katy's research interests lie in transferable skills from graphic design to teaching and how useful visual communication can be. This observation led her to investigate ways teachers can engage with visual resources and the task of sourcing and creating visual resources for all learning needs.

Visual Literacy in Teaching: Awareness, Attitudes, and Training, by Katy Judge

Research supervisor: Dr Bernadette O'Donovan

Abstract

Visual Literacy is the broad term used to describe how people communicate and perceive messages through visuals. Teachers use visuals to aid their teaching and communicate new information. This research set out to investigate Visual Literacy awareness, attitudes, and training amongst primary school teachers. In a mixed-methods study, teachers completed an online survey (n=23) and semi-structured interviews (n=2). Teachers were questioned about their awareness of Visual Literacy; how they create and use visuals in the classroom; and if they feel that they have the appropriate skills needed to produce effective visuals. Findings indicate that while there is some awareness of the term Visual Literacy, there is a lack of understanding about its meaning. Visual resources are recognised as valuable teaching tools but challenges in using visuals include a lack of knowledge of design principles, technology skills, and most importantly, time. These findings add to a growing body of international research about Visual Literacy in the teaching profession.

Keywords: Visual Literacy, visual aids, visual resources, semiotics, graphic design, pre-service teachers

Introduction

This research project investigated teacher opinions on Visual Literacy. In brief, Visual Literacy can be described as "The learned ability to interpret the communication of visual symbols (images) and to create messages using visual symbols" (Pettersson, 1993, p.140). Clarke and Lyons (2010) explain that fundamentally, a teacher has two basic teaching tools: words and graphics. Most of us have a greater proficiency when it comes to words as we are trained to read and write from an early age. The manipulation and interpretation of graphics is a skill that is often overlooked (ibid).

Visual Literacy is an emerging field that focuses on how people communicate and perceive messages through visuals. When teachers create visual resources, they are making choices about colour, typography, form, and imagery. The extent to which they make informed choices, grounded in established design principles and best practice is an open one. The purpose of this research is to contribute to the dialogue about Visual Literacy and visual

communication in Irish classrooms, with particular emphasis on teacher attitudes, perspectives, and knowledge. The research will examine how teachers use graphics and visuals to complement their teaching and investigate if there is a need for visual communication training as a component of student teacher preparation. Taking the pertinent literature and research into account, this researcher investigated the following research questions:

1. Are Irish teachers aware of the field of Visual Literacy?
2. Do they consider themselves to be visually literate?
3. Do teachers feel confident in their knowledge of design principles?
4. Do teachers feel adequately equipped with the technological knowledge to create effective visual resources and presentations?
5. Do teachers want/need to receive training in Visual Literacy and visual communication?

Literature review

History and definition of visual literacy

While the term Visual Literacy is relatively modern, the idea is not. Before the alphabet as we know it was created, human beings were using pictures, signs, and symbols to communicate (Dyrud and Worley, 2006). In the early 1900s, a new field called semiotics emerged, with a further field of study emerging from this in the 1960s called Visual Literacy. Researchers credit John Debes as identifying the Visual Literacy concept in the 1960s (Avgerinou and Ericson, 1997; Felten, 2008; Yeh and Lohr, 2010). However many researchers (Vermeersch and Vandenbroucke, 2015; Pettersson, 2012; Avgerinou and Pettersson, 2011) point out that today, there are disparate definitions and theoretical frameworks of Visual Literacy. Avgerinou and Pettersson (2011) describe the current knowledge of Visual Literacy as a complicated jigsaw of information. Individually, each segment of knowledge makes sense, but the jigsaw is so vast it is difficult to piece it all together into one coherent theory.

Visual literacy models

Seels in Moriarty (1997) outlines a model of Visual Literacy that consists of three major domains: Visual Thinking, Visual Learning, and Visual Communication (Fig. 1).
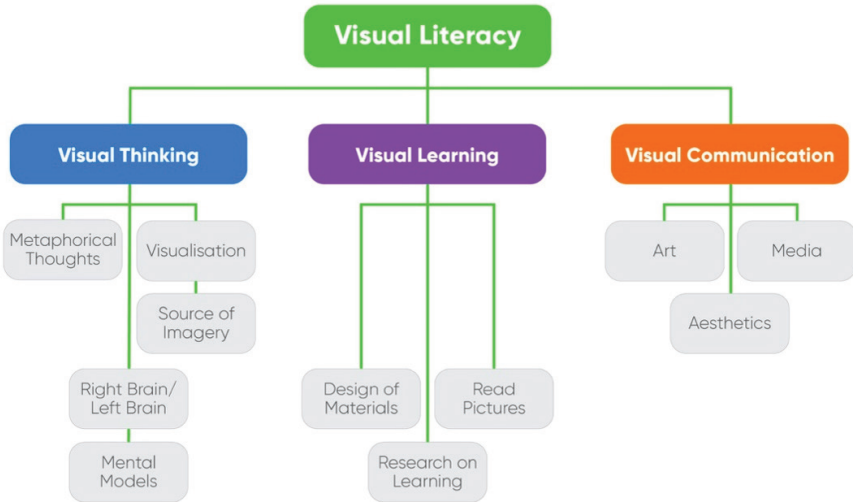
Fig. 1 Barbara Seels' 'Relationships of Areas of Study in Visual Literacy' in Moriarty (1997)

Avgerinou and Pettersson (2011) proposed five components of Visual Literacy, which further adds categories of Visual Perception and Visual Language to the three proposed by Seels (Fig. 2).
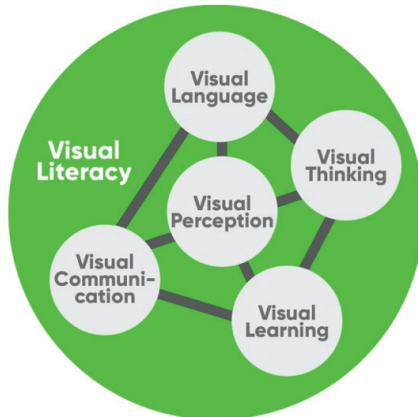
Fig. 2 The Components of the Visual Literacy (VL) Theory (Avgerinou and Pettersson, 2011)

Operational definition of visual literacy

This researcher favours a blend of both models discussed above. Visual Literacy is regarded as an interconnected, inter-reliant network of concepts and 'Design of Materials' that requires all five components to be effective (Fig. 3).

Fig. 3 Operational model of Visual Literacy

This researcher created an operational model of Visual Literacy by adapting Avgerinou and Pettersson's Components of the Visual Liter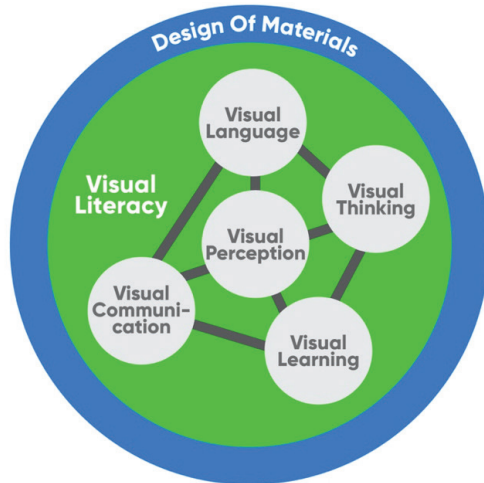acy (2011). 'Design of Materials' was added around the diagram to illustrate that it requires all five skills of visual language, thinking, learning, perception, and communication. Avgerinou and Pettersson (2011) recognise that there are many Visual Literacy definitions, but the common thread that connects all theories situates Visual Literacy as a skill, a competence, or an ability. Avgerinou and Pettersson (2011, p.6) propose a definition, first put forward by Heinich, Molenda, and Russell in 1982, that which the researcher draws on in this project: "*Visual literacy is the learned ability to interpret visual messages accurately and to create such messages. Thus interpretation and creation in Visual Literacy can be said to parallel reading and writing in print literacy.*"

Effectiveness of presentation visuals

Bradshaw (2003) defined the term 'presentation interference' as anything that distracts the learner from the content, including inappropriate colours, typography choice, graphic choice, or placement and alignment of elements. Her study of 118

undergraduate students in America examined the 'Effects of Presentation Interference in Learning with Visuals'. This was undertaken by testing three different presentations and found that participants learned significantly more from the interference-free presentation. Patricia Tarr (2004) considers the impact of the visual environment on children and questions teachers' use of visual resources. She challenges teachers to think beyond wall displays that simply 'decorate' and, instead, consider the educational impact every item on the wall contains. In a study of seventy children from East Anglia, Kershner, and Pointon (2000) investigated children's views on a variety of topics relating to the classroom as an environment for working and learning. They found that 77% of children felt that displays were good for providing inspiration while 50% of them felt that colourful displays distract them from their work. It must be acknowledged that the effectiveness of visuals is hard to definitively measure as it can depend on the medium, type of information, and the amount of time learners are permitted to interact with the material (Pettersson, 2012). In addition, ideas of 'good design principles' vary in every research project reviewed, which serves to highlight the subjective nature of visual design and lack of consensus on what constitutes 'good'.

Visual literacy in teaching and learning

Ajayi (2010) conducted a mixed-methods study whereby 48 pre-service teachers (PSTs) in the USA were assessed on their knowledge of multi-literacies and perceptions of their own preparedness to teach them. Ajayi found that while participants were aware of new literacies, they also identified challenges in teaching them—two of particular note being the lack of training in pedagogical methods and lack of technology available to teach them. He suggests that there is a need to expand the scope of pre-service training to include content such as the interpretation of colours, reading visual images, and interpreting graphics. Fattal's 2016 study, 'Visual Culture in the Elementary-School Classroom: Moving from Box-Store Commodities to Out-of-the-Box Thinking', details an action research project with six PSTs also in the USA. Student experiences and observations during teaching practice were recorded. Participants evaluated commercial and hand-made wall displays, lesson resources, and teacher-made hand-outs and discussed their thoughts and analysis of the effectiveness of such materials. Findings indicate that students had a propensity towards commercial resources as 'fillers' when there was no student work to display and had not previously thought about what kind of visual culture they were creating. It also reports that student teachers frequently made their own worksheets, modelling them on commercial ones they had previously seen. They reported no difficulties in relation to the making of these resources. The researcher highlights the student's knowledge of graphic programmes and the ease with which they could create them.

Yeh and Cheng (2010) conducted a study which (amongst other things) attempted to assess if lessons in visual design principles affected PSTs' perceptions of visual materials. Their findings suggest that lessons in design principles could have a positive impact on Visual Literacy but do not appear to be conclusive. Farrell (2015) carried out a study, which measured the VL ability in graduate level PSTs in the United States. She used a VL index, first established by Avgerinou in 2007. Avgerinou identified eleven VL abilities (visualisation, critical viewing, visual reasoning, visual discrimination, visual thinking, visual association, visual reconstruction, constructing meaning, re-constructing meaning, knowledge of visual vocabulary and definitions, and knowledge of visual conventions) (Farrell, 2015, p.92) and created tests to measure each skill. Farrell found that amongst the participants, some of the weakest areas involved their knowledge of design principles and their use; knowledge and understanding of the meanings of signs and symbols; observation; visual reasoning and visual memory. According to Avgerinou, these are amongst the most important indicators of visual ability. Therefore, Farrell concludes that serious consideration must be given to how PSTs are prepared for VL in teacher training programmes. Researchers agree (Avgerinou, 2009; Tarr, 2004; Dyrud and Worley, 2006) that teachers need guidelines to help them consider the purpose of displays; evaluate commercial materials; and think about classroom aesthetics. College students should be given basic training in the fundamentals of visual communications—to understand the role of signs, symbols, illustrations, diagrams, and graphics in communication (Matuistz in Yeh & Lohr, 2010).

Visual literacy in Ireland

Based on the limited literature review carried out, there appears to be a dearth of research conducted on Visual Literacy in Ireland. Indeed, in a general search, the researcher found few references to Visual Literacy in any context in Ireland. In summary, it is evident that while there has been much debate in the area of Visual Literacy in recent years, it has proven difficult to define and to research. The literature suggests that Visual Literacy is still an emerging field and that much research is needed to develop thinking in the area.

Methodology

This research sought to engage practising teachers and explore their daily use of visuals and graphics in the classroom. It aimed to identify teacher knowledge *of* and confidence *in* Visual Literacy and identify if teachers are adequately informed and trained in skills of Visual Literacy. This research used a mixed-methods approach—quantitative research in the form of an online survey and qualitative in the form of two semi-structured interviews. Quantitative research has roots in the natural sciences and is concerned with observable phenomena that are empirical

and measurable (Scott and Morrison, 2006). In contrast, qualitative research attempts to provide a comprehensive and thorough understanding of actions, meanings, attitudes, and behaviours (Cohen et al.*,* 2013). The researcher deemed there were merits in both methodologies, and thus, an explanatory sequential mixed-methods approach was considered the appropriate research design to address the questions at hand (Creswell, 2014).

Sampling method, participants, and data collection

Participants in this study were all practising primary school teachers who trained in Ireland, England, or Scotland. A non-probability convenience sampling was used to select survey participants (Blaxter et al., 2010) and interview participants were selected via purposive sampling.

Survey

Surveys were deemed to be the most suitable form of inquiry due to the researcher's intent not to make judgements about teachers' Visual Literacy. Instead, their self-perceived knowledge, attitudes, and confidence in Visual Literacy skills were forefronted.

Interview

After the surveys were completed, two twenty-minute, semi-structured interviews were carried out. The researcher reviewed responses from the surveys and generated informed questions that would probe some of the issues raised in the interviews.

Data analysis

Survey data were analysed and interpreted using SurveyMonkey, Keynote, and Excel. Descriptive statistics were used to convey results, utilising graphs and charts to visually represent data. Interview data were analysed using Braun and Clarke's (2006) model of thematic analysis. Transcripts were analysed and key themes identified. The data was then triangulated with the survey data results to provide a complete picture of Visual Literacy opinions in today's teachers.

Generalisability/transferability; reliability and dependability

Due to the small-scale nature of this research, the researcher acknowledges the inability to claim that it is generalisable (and transferable) across all primary teachers in Ireland, England, and Scotland. However, the researcher regards the survey to be a reliable research instrument that is likely to produce similar results

under comparable conditions (Bell, 2005). To ensure maximum dependability in the interviews, the researcher took care to avoid reflexivity and to maintain an objective stance at all points during the interview (Bell, 2005).

Limitations

Using a non-probability convenience sampling method has disadvantages in that it could limit the reach of the study and increase the likelihood that respondents are from similar backgrounds. The researcher was aware of her own interactional position and the ways in which her perceptions and paradigms shaped the research (Cohen et al., 2013). The researcher made every effort to avoid reflexivity by encouraging participants to be honest and open in answering questions.

Ethical issues

Ethical approval was granted by the Hibernia College Ethics Committee and the research was carried out following guidelines outlined by the British Educational Research Association (BERA) (2011) and the Data Protection Acts (Government of Ireland, 1988, 2003). Voluntary informed consent was sought from all participants. Participants were informed of the process in which they were engaging with, why their participation was required, and how the data would be used. It was also imparted to participants their right to withdraw at any stage of the process. Participants were assured of issues relating to privacy and security of the data.

Results

Survey results

Of the 23 respondents who completed the online survey, 16 were female, 6 were male, and one participant declined to specify. The majority of respondents completed their teacher training in Ireland with 20 reporting having studied in Ireland, 2 in Scotland, and one in England (Fig. 4).
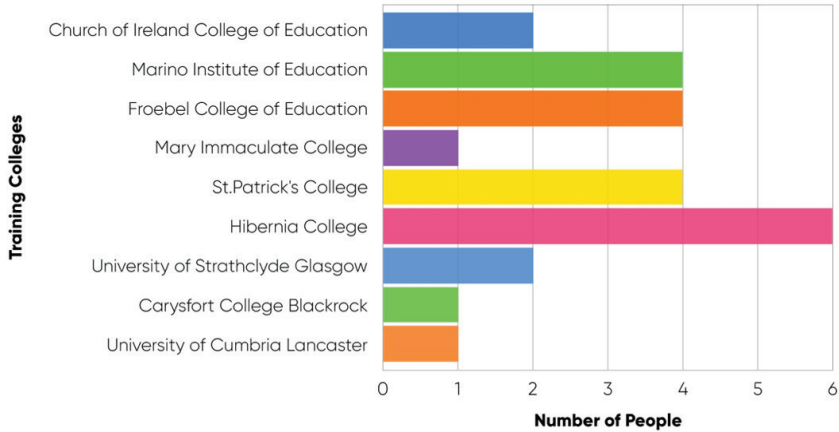
Fig. 4 Teacher training colleges attended by respondents

Awareness and attitude towards Visual Literacy

When asked if they had heard of the term 'Visual Literacy' before, 65% of respondents stated they had. As responses were analysed across a range of teaching experiences, respondents who have been teaching between 6-30 years appear to have had an almost 50% chance of hearing about Visual Literacy. When the 3-5 years' experience group was examined, 82% of that group had previously heard of Visual Literacy (Fig. 5).
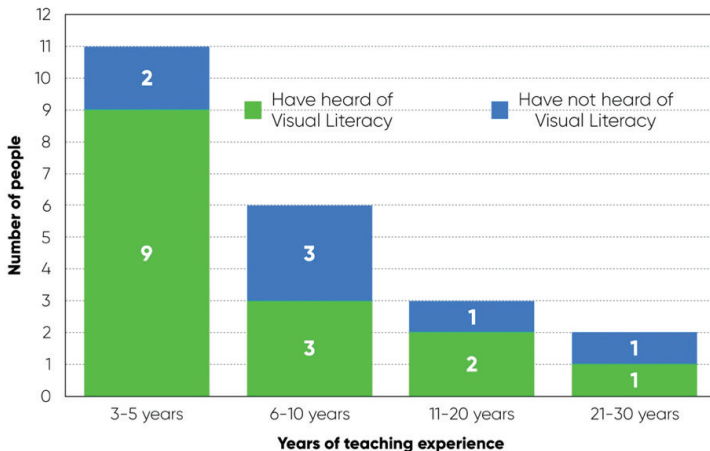
Fig. 5 Awareness of Visual Literacy across the ranges of teaching experience

Of the 15 respondents who answered 'yes' to having heard of VL before, only 11 expressed an understanding of what the term means. This suggests that 48% of respondents were both aware of the term 'Visual Literacy' and had prior understanding of its meaning. When asked to rate their own Visual Literacy skills, most respondents were optimistic about their own abilities (Table 1).

Table 1 Teachers rating their ability to interpret visual messages

| Very Good	Good	Reasonable	Poor	Very Weak
12	8	3	0	0
52%	35%	13%	0%	0%

Results were less optimistic for teachers' ability to *create* visual messages (i.e. using layout, color, font choice, and size and manipulation of images (Table 2).

Table 2 Teachers rating their ability to create visual messages

Very Good	Good	Reasonable	Poor	Very Weak
8	7	5	2	1
35%	30%	22%	9%	4%

Most respondents consider they know how to create resources for visual learners (Fig. 6). However, when it comes to creating resources that cater for special needs such as sight impairment, dyslexia, and autistic spectrum disorder, teachers are less confident with less than half of respondents expressing knowledge in this area (Fig. 7).
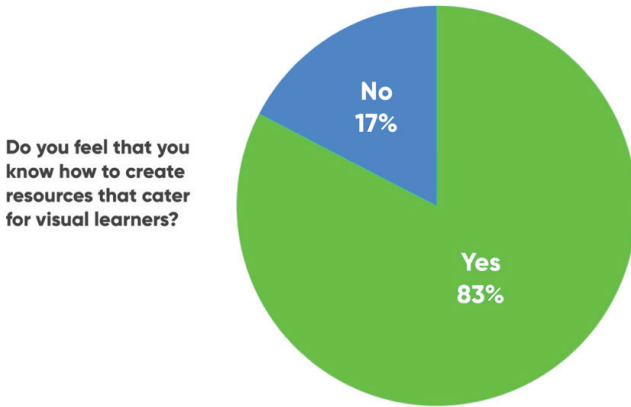
Fig. 6 Teacher confidence in their ability to create resources for visual learners
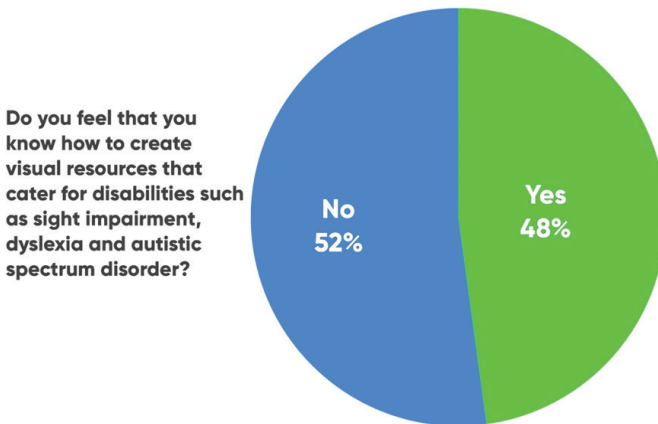
Fig. 7 Teacher confidence in their ability to create resources for children with visual impairment, dyslexia, and autistic spectrum disorder

When questioned on what the biggest barrier to creating visual resources is, lack of time was identified as the most significant impediment for teachers. A lack of confidence followed as well as the opinion that there are ample resources available online, which negate the need to create their own resources.

Table 3 Barriers to creating visual resources

Answer Choices	Number of people
I do not have the time	18
I do not feel confident in my ability	4
I do not think that visual resources are helpful in my teaching	0
Other: There are so many resources available on the internet. It saves time and much of what is available is far better than anything I could create myself.	1

Visual aids - resources and tools

The survey found that teachers use a wide variety of presentation software to create visual resources— Microsoft PowerPoint and hand-made resources being the most popular method for creation of visual aids (Fig. 8).

Fig. 8 Presentation tools and software used by teachers

Guidelines and training

Of the teachers surveyed, 19 specified that there are no guidelines for the creation and presentation of graphics in their school while 4 of them commented that there are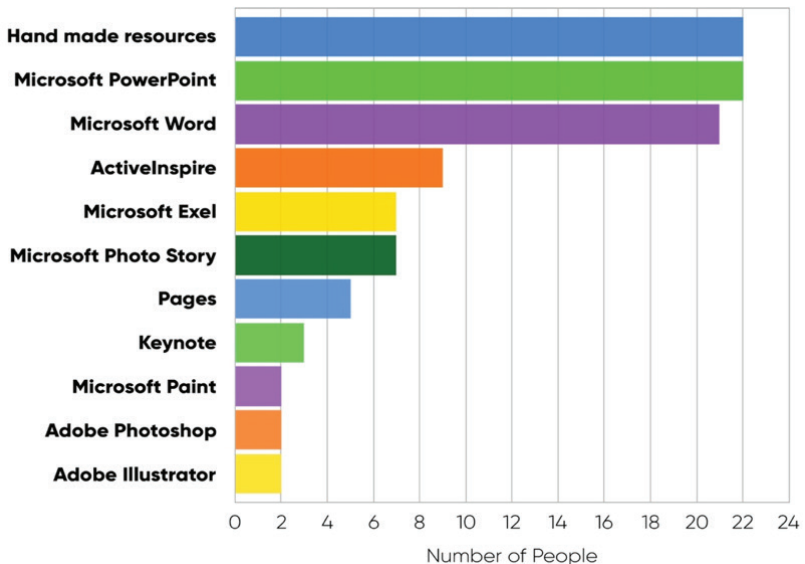. Choice of font type is specified in each of the four schools, with a broad range of other elements included but none conclusively in all of them (Table 4).

Table 4 Elements included in whole school guidelines for visual resources

Answer Choices	Number of people
My school does not have guidelines	19
Use of colour	2
Contrast	0
Alignment	0
Reptition	1
Proximity	0
Font type	4
Specifications for dyslexia or autism	2
Visual timetables	2
Standardised book labels	2
Standardised feedback labels	1
Standardised formatting for learning intentions and success criteria	1
Individual guidelines for specific pupil needs	1

When asked if they received any training on graphic design principles, accessible design, or how to create effective visual resources in their teaching college education, 16 negative responses and 7 positive ones were noted. Of those that did not receive any training of this kind in college, 100% of respondents considered it would have benefited their teaching. All respondents indicated that they would partake in training that would develop their Visual Literacy skills (including graphic design principles and software training), if it were made available (Fig. 9).
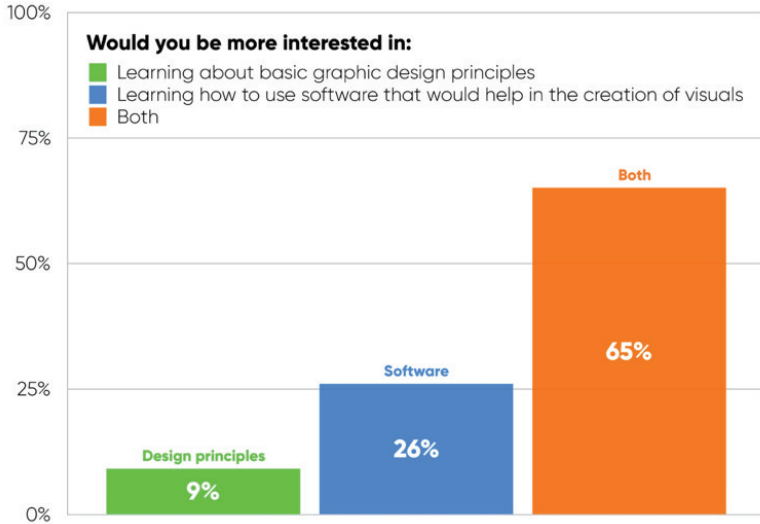
Fig. 9 Interest in specific components of Visual Literacy training

Interview results

Interviewee A, Sarah (pseudonym), a teacher trained at Marino College, has been teaching in a Gaelscoil in Dublin for 5 years. Interviewee B, Jonathon (pseudonym) trained at Hibernia College and has been teaching in an English-medium school in Dublin for 6 years.

Awareness and attitudes towards Visual Literacy

Neither interviewees heard of the term Visual Literacy before but expressed an awareness of the need to work in a visual way and create visual resources as learning aids in their classrooms. Both interviewees discussed the importance of visual resources in their teaching and recounted instances of using ineffective visual aids. Seeing what they termed as 'bad' visual resources highlighted the importance of using colour, font choice, and size. They also discussed time as a major obstacle to creating resources. Interviewees had a high awareness of choice of font. They detailed that they use Comic Sans in teaching junior classes because of the way the 'a' is depicted in the font.

Visual aids – resources and tools

Both participants predominantly use hand-made resources and Microsoft Word and PowerPoint to create visual resources, which align with the survey results.

They stated that they probably do not use technology as much as they should and that they could create better resources if they had more design and technology skills.

Guidelines and training

Interviewees reported that they had not received structured training in the creation of visual resources and that it was only "slightly" covered during Initial Teacher Education. Interviewees mentioned teaching practice supervisors a number of times and referenced their feedback on their visuals while on teaching practice. Jonathon discussed how teachers compare their resources to other teachers' ones and how teachers put pressure on themselves to have 'good displays'. When asked if they would welcome whole-school guidelines for visual resources, both agreed that it would be useful. Jonathon included the caveat that they should, however, be 'loose' guidelines and not be overly prescriptive. Sarah felt that CPD would be beneficial as whole-school training, making the point that it should not be only one teacher committing their effort to upskilling and developing visual resources; all teachers should receive the same training. In contrast, Jonathon expressed a preference for individual training in both graphic design principles and technology skills.

The results of this mixed-methods study highlight teachers' perspectives of Visual Literacy. While many consider that their Visual Literacy skills are good, the survey and interviews indicate a lack of awareness of core visual design principles and technological skills, as well as only the most basic awareness of particular requirements for special learning needs.

Discussion

In light of the exiguity of Visual Literacy literature in the Irish context, considering 65% of respondents had heard of VL is surprising, yet encouraging. Only 48% of respondents expressed knowledge of what the term actually means, indicating that it is only beginning to emerge as a recognised skill. Despite the lack of in-depth knowledge of VL, most teachers are quite optimistic about their ability to create effective visual resources. The two interview participants stated that they do not use any design principles when creating resources but rely on their instincts as to what looks good. This corroborates with Farrell's (2015) study, which found that knowledge of design principles and their use was one of the weakest areas in PSTs. Nonetheless, both interviewees noted that while there is definitely room for improvement, they manage well with the skills they have.

When questioned about obstacles to resource creation, none of the respondents stated that this was not worthwhile or not needed. This clearly

demonstrates that all teachers find visual aids useful, but the value of resources versus the time spent on making them is clearly quite distinctive. 78% of respondents chose lack of time as a barrier to the creation of resources, yet interviewee B pointed out that teachers *could* have the time; it is just a question of what is prioritised. In the course of the interviews, both interviewees independently introduced the topic of font choice. They commented that they use cursive script in older classes and Comic Sans for the junior classes because of the way the 'a' is represented in the latter. This supports the view that teachers tailor visual resources according to the classes they teach and observe the impact such fonts have on children's learning.

Patricia Tarr (2004) challenged teachers' uses of visual displays as merely 'decorate'. While 85% of teachers surveyed stated they use graphics for decoration either 'sometimes', 'frequently' or 'on a daily basis', interview participants were very aware of the higher value of learning aids over displays that may only 'decorate'. The results reiterate the 'purposes' of Visual Literacy set out by Clark-Baca and Braden in Moriarty (1997). Interviewees reported using visual resources for creative expressions and aesthetic enjoyment (displaying student work) along with tools for thinking, learning and constructing meaning (word walls and informational displays).

The issue of college training in graphic design principles is difficult to definitively measure due to differing opinions on what this constitutes. 70% of teachers surveyed said they received 'no training' in graphic design principles, but teachers from both Hibernia College and St Patrick's College answered positively and negatively to the same question. What is clear is that 100% of those that said they did not receive any training considered such training would have benefited their teaching. Similarly, 79% of teachers say that there are no guidelines for the creation of visuals in their school. Of the four schools that do provide guidelines, font choice is the most common use, highlighting design element as the most prevalent awareness amongst teachers. Both interviewees discussed anecdotal evidence or informal discussions with other colleagues as ways of developing their knowledge of graphic design principles and teaching for special visual needs. This supports the view that our education system places more emphasis on reading, writing and verbal forms of communication and neglects formal instruction on the quality of our visual communication (Danos and Norman 2012; Ching Chen 1997; Yeh and Lohr 2010). Notwithstanding, the hugely positive response to the question about participating in training in Visual Literacy skills indicates that all respondents and participants of this study recognise room for improvement if such support were made available.

Finally, findings highlighted that teachers have confidence in their own abilities when it comes to resource creation but recognise that they predominantly use instinct rather than established graphic design principles. Teachers show a preference for hand-made resources for their flexibility and easy access methods

of resource creation. Many, however, would welcome guidance and training on both design principles and new ICT developments.

Conclusion

While there is a dearth of literature on Visual Literacy in Ireland, this research has found that there is some awareness of it amongst primary school teachers. Teachers consider themselves proficient in the interpretation of visuals but less so in the creation of them. The majority of teachers in this study stated they have little or no knowledge of graphic design principles and would welcome training and guidance on ways to create more effective and professional visual resources. Teachers recognise their lack of technological skills and welcome ICT training while acknowledging that sometimes it is lack of time and willingness to experiment, which are more significant barriers to using ICT. Insufficient time is arguably the biggest issue for teachers in everyday school life, and it is also cited as the biggest barrier to the creation of their own visual resources. Results indicate that teachers are becoming aware of Visual Literacy as a skill and have an interest and willingness to learn more about it.

References

Ajayi, L. (2010) 'Preservice Teachers' Knowledge, Attitudes, and Perception of Their Preparation to Teach Multi-literacies/Multimodality', *The Teacher Educator*, 46(1), 6-31.

Avgerinou, M. and Ericson, J. (1997) 'A review of the concept of Visual Literacy', *British Journal of Educational Technology*, 28(4), 280-291.

Avgerinou, M.D. (2009) 'Re-viewing Visual Literacy in the "Bain d'images" era', *TechTrends*, 53(2), 28-34.

Avgerinou, M.D. and Pettersson, R. (2011) 'Toward a Cohesive Theory of Visual Literacy', *Journal of Visual Literacy*, 30(2), 1-9, [online], Available at: http://ezproxy.ace.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=eue&AN=82584418&site=eds-live&scope=site [Accessed: 14 September 2016].

Bell, J. (2005) *Doing Your Research Project: A Guide for First-Time Researchers In Education, Health And Social Science*, Maidenhead, England: Open International Publishing, eBook Collection (EBSCOhost) [Accessed: 02 August 2016].

Blaxter, L., Hughes, C., and Tight, M. (2010) *How to Research (4)*, Open University Press, Berkshire, GB, [online], Available from: ProQuest ebrary [Accessed: 13 September 2016].

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3, 77-101.

British Education Research Association (BERA) (2011) *Ethical Guidelines for Educational Research*. British Educational Research Association, London, [online], Available at: www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-011.pdf [Accessed: 28 June 2016].

Brumberger, E. (2011) 'Visual literacy and the digital native: an examination of the millennial learner', *Journal of Visual Literacy*, 30(1), 19-46, [online], Available at: http://scholar.google.com/scholar?cluster=8453310661933 764014&hl=en&as_sdt=0,22 [Accessed: 13 September 2016].

Ching Chen, L. (1997) 'The Effects of Colour and Background Information on Children's Cognitive Learning', *Journal of Visual Literacy*, 17(2), 39-52, [online], Available at: http://www.tandfonline.com/doi/full/10.1080/ 23796529.1997.11674520 [Accessed: 13 September 2016].

Clark, R.C. and Lyons, C. (2010) *Graphics for Learning: Proven Guidelines for Planning, Designing, and Evaluating Visuals in Training Materials*, 2nd edn. Pfeiffer, Hoboken, US, [online], Available at: ProQuest ebrary [Accessed: 28 June 2016].

Cohen, L., Manion, L., and Morrison, K. (2013) *Research Methods in Education (7)*, Routledge, Florence, GB, [online], Available from: ProQuest ebrary [Accessed: 13 September 2016].

Creswell, J. (2014) *Research Design, Qualitative, Quantitative and Mixed Methods Approaches,* 4thedn. Sage Publications Ltd, Los Angeles.

Danos, X. and Norman, E. (2012) 'Curriculum planning for the development of graphicacy', *Engineering Design Graphics Journal*, 76(3), 13-18.

Government of Ireland *(1988, 2003) Data Protection Acts* Number 25 of 1988, Dublin: Stationery Office, [online], Available at: http://lawreform.ie/_fileupload/RevisedActs/With Annotations/EN_ACT_1988_0025.PDF [Accessed: 23 September 2016].

Dyrud, M.A. and Worley, R.B. (2006) 'Visual Communication', *Business and Professional Communication Quarterly*, 69(4), 397-432.

Farrell, T.A. (2015) 'Visual Literacy (VL) in Teacher Preparation: Measurement to Direction', *Journal of Visual Literacy*, 34(1), 89-104, [online], Available at: http://www.tandfonline.com/doi/full/10.1080/23796529.2015.1167 4724 [Accessed: 23 September 2016].

Fattal, L.F. (2016) 'Visual Culture in the Elementary-School Classroom: Moving from Box-Store Commodities to Out-of-the–Box Thinking', *The New Educator*, 9243(June), 1-19, [online], Available at: http://www.tandfonline.com/doi/full/10.1080/1547688X.2015.1095384 [Accessed: 23 September 2016].

Felten, P. (2008) 'Visual Literacy', *Change, The Magazine of Higher Education*, 40(6), 60-63, [online], Available at: http://www.amazon.com/dp/04159 58105 [Accessed: 16 September 2016].

Kershner, R. and Pointon, P. (2000) 'Children's views of the primary classroom as an environment for working and learning', *Research in Education*, (64), 64-77, [online], Available at: http://search.proquest.com/docview/1307452680?accountid=10673%5Cnhttp://openurl.ac.uk/athens:_edu?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:pio&atitle=Children's+views+of+the+primary+classroom+as+an+environm [Accessed: 03 September 2016].

Moriarty, S.E. (1997) 'A conceptual map of visual communication', *Journal of Visual Literacy*, 17(2), 9-24.

Pettersson, R. (2012) 'Introduction to Message Design', *Journal of Visual Literacy*, 31(2), 93-104.

Pettersson, R. (1993) *Visual Information*, 2nd edn. New Jersey: Educational Technology Publications.

Scott, D. and Morrison, M. (2006) *Key Ideas in Educational Research*, London: Continuum.

The Impact of ICT usage for Teaching Mathematics, by Monica Dynan

Biography

Monica graduated from Hibernia College in 2017 with a Professional Master of Education (PME) in Primary Education. She also holds a Bachelor of Arts in English and Sociology and a Certificate in Training and Continuing Education. She has worked in Adult Education for over 10 years with a specific focus in the areas of ICT training and personal development. Monica's research interests lie in ways ICT is used in primary schools in line with its increased availability and advancements in recent years.

The Impact of ICT Usage for Teaching Mathematics in the Primary School Classroom, by Monica Dynan

Research supervisor: Mr. Adrian Keena

Abstract

This study examines the impact of the use of Information and Communications Technology (ICT) in teaching and learning Mathematics in the primary school classroom. The research was conducted through the use of self-completion questionnaires with a convenience sample of primary school teachers (n=28), followed by semi-structured interviews with primary school teachers (n=2). An analysis of the research data found that the use of ICT in Maths greatly enhances the development of pupils' creative thinking and higher-order thinking skills. However, the level of successful implementation varied significantly amongst respondents and participants. Insufficient access to ICT, no technical support, and time constraints were identified as the main challenges to successful implementation. Further findings indicate that a lack of teacher knowledge in areas such as computer programming affected the level of motivation amongst pupils. The research highlights the need for alternative models of guidance and support with a greater importance on the implementation of ICT policies in schools.

Introduction

In 2016, the Irish government launched an *Action Plan for Education* with the aim of making Irish education the best in Europe by 2026. One of the actions in this plan was the rollout of coding to primary schools in 2018 and the inclusion of computer programming as a Leaving Certificate subject (DES, 2016). The Minister for Education requested that the National Council for Curriculum and Assessment (NCCA) give particular consideration to ensuring students have opportunities to develop flexible and creative thinking skills, that which is the basis of computer science and coding. This research project aimed to evaluate the outcomes of those attempts by exploring teachers' perspectives on the impact of ICT use at a practical level. While research on the use of ICT in primary schools is in abundance, research on the impact of ICT with a specific focus on Maths is not readily available. Binkley et al. (2012) outline qualities required by students to live and work in a digital society to include skills such as critical thinking and problem solving, communication, collaboration, self-regulation, and information management. The research project explored how creative thinking and higher-order thinking skills can be developed through the use of ICT in Maths.

Literature review

According to Way (2003), a school in the modern world without computers is now almost as disadvantaged as a school without books. In the last number of decades, several significant steps have been taken to introduce and develop the use of ICT within Irish schools. The Digital Schools of Distinction (DSoD) programme was launched by the Government in 2013 to promote, recognise, and encourage excellence in the use of technology in primary schools (INTO, 2015). In 2015, 1,374 primary schools were registered on the programme, with 173 schools awarded DSoD status. However, a 2008 report by the Department of Education and Skills (DES) found that only 30% of primary school teachers considered themselves comfortable users of ICT. It was also reported that Junior classes experienced a smaller range of ICT activity than senior levels. The report further claims that where there was evidence of ICT use in Maths; it was mainly for the development of numeracy skills. There was limited use of ICT in developing higher-order thinking skills. This research examined if this evidence has changed since 2008.

Theoretical perspectives

Behaviourism is a worldview that focuses on the principle that all behaviour is caused by external stimuli. According to Skinner (2011), all behaviour can be explained without the need to consider a mental state or "thinking". Pupils' behaviour is then shaped through positive or negative reinforcement (Watson, 2011) provided for by the teacher and this is how learning takes place. Behaviourism is particularly advantageous in relation to ICT use as pupils can learn how to use ICT simply by observing the teacher.

The development of the constructivist paradigm began with the work of Piaget and Vygotsky. According to McCarthy (2006), the main hypotheses of constructivism are that knowledge is constructed by the learner as opposed to received from the environment; all knowledge constructions are private and individual; and social interactions are essential for the learner to be able to construct their own understanding. Thus, by integrating ICT within the teaching of Mathematics,

behaviourism and constructivism can potentially work simultaneously. Seymour Papert further developed Piaget's concept of constructivism and claimed that children have a natural curiosity to construct their own meanings of things in their daily lives. In coining the term 'constructionism', special importance is attached to the role of constructions in the world as a support (Papert, 1993).

Howard Gardner's Multiple Intelligence (MI) Theory identified eight different intelligences through which children learn. According to Armstrong (2009), computers are intelligence-neutral mechanisms and ICT use can be associated with all the intelligences identified in the MI theory. He gives the example of using multimedia software on a project using text (linguistic),

illustrations (spatial), sound (musical or linguistic), and video (bodily-kinaesthetic and other intelligences). The potential for integration of ICT and Mathematics is hugely important when considering pupils of different intelligences and catering for each of them at the same time.

ICT can enhance the teaching and learning of Mathematics in a number of ways. Firstly, by catering for the multiple intelligences with audio and visually rich interactive programmes and software. Secondly, by enabling pupils to create their own understandings of mathematical concepts through constructing their knowledge of ICT. Following the review of literature, this research aimed to discover specifically how teachers are using ICT to enhance learning in Irish classrooms, with a particular focus on how higher-order thinking and problem-solving skills can be developed by using ICT in Maths.

Methodology

This section outlines the research questions posed by this study and the manner in which the research was conducted. A mixed-methods approach was adopted for this research due to the need for both quantitative data on the use of ICT in Mathematics lessons and qualitative data to gain an insight into teachers' perspectives on the advantages and challenges of integrating ICT into Mathematics lessons. The first method of research took the form of a self-completion questionnaire, which was used to collect quantitative data from primary school teachers. This data was then analysed and formed the basis on which the second part of the research, semi-structured interviews, was carried out.

Participants in this research study were all primary teachers of senior and middle classes in the midlands of Ireland. Bell and Waters (2014) point out the difficulty for an individual researcher working on a small-scale project to achieve a true random sample. Therefore, non-probability sampling was used and the researcher selected a convenience sample by distributing questionnaires (n=30) to teachers from schools in a local cluster. The schools are of various size/structures and are located in both urban and rural locations, DEIS and non-DEIS with pupils from various socio-economic backgrounds.

The structured questionnaires were designed to extract specific information that would provide statistics on the use of ICT in the teaching and learning of Maths in middle and senior classes. Questions were planned carefully and consisted of closed, fixed-choice and Likert scale-type questions. The semi-structured approach to the interviews was chosen to direct a more focused and detailed response from respondents on how exactly ICT was being used in Maths lessons in their classrooms.

The data that informed this research was collected by analysing completed questionnaires (n=28) and semi-structured interviews (n=2). Quantitative data was analysed using SPSS software, which produced statistics of

the responses to each question on the questionnaire. The responses from interviews were analysed and key themes and opinions were identified, adopting the method of thematic analysis outlined by Braun and Clarke (2006).

BERA (2011) advises that in order to have voluntary informed consent, participants must understand and agree to their participation without any duress. Therefore, an information sheet and consent form were included with the questionnaire and distributed to participants to ensure voluntary informed consent. The guarantee of confidentiality and anonymity were imperative to encourage participants to respond and, most importantly, to ensure the reliability and validity of responses. According to Cohen et al. (2007), the essence of anonymity regarding information provided by participants should in no way reveal their identity. The names of participating schools and respondents were not used in interview recordings or transcripts.

Results

Questionnaire results

Of the thirty questionnaires distributed to respondents, twenty eight were returned completed. From this sample, 82% of respondents were female and 18% were male. 58% of respondents agreed that pupils have an appropriate amount of ICT use in school. In relation to access to ICT, 75% of respondents said they always have access to a broadband connection with 21% having frequent access. 68% sometimes have access to shared pupil laptops/tablets and 18% did not have access to an Interactive Whiteboard (IWB). More than half of respondents (54%) stated that they use ICT in Maths frequently; 39% use it sometimes; and 7% never use it. Respondents were provided with a list of common programs used to teach Maths as well as an open-ended section to input any other programs they use. Varying results were found and are outlined below.

Programs used to teach Maths

75% of respondents agreed that insufficient access to ICT for students is one of the main obstacles to using it. 36% agreed or strongly agreed that their own level of ICT skills was an obstacle. 43% had no skills in using a computer programming language; 36% had basic skills; and none of the respondents described their skills as high. Although many of the respondents showed an interest in using more ICT in their Maths lessons, only 7% had actively engaged in training in the area in the last three years. Also, 50% of respondents were not sure if their school had an ICT policy in place.

Interview results

Four themes emerged from thematic analysis of the data.

(i) *Skills development*

One interviewee outlined that pupils develop their thinking skills through interactive games in Maths, stating that "they are so much more interested in it when there's ICT involved." Another interviewee stated that children are excited by the use of ICT as it "gets them thinking different too, they are sharper and faster, almost like it's a race." Referring to the Scratch program, one interviewee stated that pupils develop skills in "order of number" and "mental Maths" as a result of using the program. On using the programme, they develop problem-solving skills.

(ii) *Teaching with ICT vs. traditional methods*

One interviewee expressed a clear opinion that the use of ICT in teaching and learning Maths would never replace traditional methods of teaching but it could enhance those methods in certain ways. The interviewee also stated that a priority for Maths teachers is to ensure pupils are confident at basic mathematical concepts, such as multiplication and division, that which must be learned through repetition and "that will always come first before coding or programming or other things like that."

(iii) *Pupil motivation versus teacher motivation*

Both interviewees expressed the opinion that pupils are excited by the use of ICT in Maths and that they enjoy using ICT and programs such as *Scratch*. One interviewee expressed a keen interest in using Scratch in lessons while the other interviewee remarked, "I probably wouldn't be experienced enough at it."

(iv) *Barriers to successful implementation of ICT*

One interviewee stated that there are significant differences in accessing ICT across all primary schools in the country. It was also stated that the use of ICT in Maths can have time-limiting factors, relating to set up as time-consuming along with charging and computer updating, often necessary before the Maths class begins.

Findings indicate that ICT use in Maths is very common in the primary school classroom. A high percentage of schools have broadband access and most pupils have some access to an individual or shared laptop. While some teachers have used computer programming in their classrooms, a high percentage of teachers have no skills in this area.

Discussion

The results of this study found that the use of ICT increases student interest and engagement in Maths lessons with interactive resources used on the IWB as the most popular. Findings noted that creative thinking and higher-order thinking skills can be developed through the use of computer programming programmes

such as Scratch. The DES (2013) guidelines outline that all schools should have an ICT policy in place, which is readily available to all staff. However, 50% of those surveyed were 'not sure' if their school had an ICT policy. Therefore, the availability of an ICT policy not only needs to be communicated more clearly to staff, but a clear plan must be in place in order for its implementation to be successful.

Results from the questionnaires suggest that most teachers have frequent access to broadband and only 18% of respondents did not have access to an Interactive Whiteboard. However, over half of those surveyed only 'sometimes' have access to shared pupil laptops/tablets. 75% of those surveyed felt this poor access to ICT equipment was a major barrier to the successful implementation of ICT in Maths. The quantitative research found that over half of the teachers frequently use ICT in their Maths lessons. The most popular programs identified to teach Maths were Kahoot, IXL Maths Practice, and Khan Academy, which are interactive resources used on the IWB. These activities and programmes are more typical of drill and practice skill development as opposed to development of creative thinking and higher-order thinking skills. The qualitative data also showed that ICT is mainly used to enhance concepts that have been taught using traditional methods of teaching as opposed to teaching new concepts. In relation to teacher skill, a large number of respondents cited their own level of ICT skill as an obstacle to successful use of ICT in Maths. With 57% stating they would like to use more ICT in their Maths lessons, it was interesting to find that only 7% had attended CPD training in this area in the last three years.

This research found that ICT is commonly used to reinforce traditional methods of teaching and learning in Maths. The results of the qualitative data confirm Piaget's hypothesis that pupils are not provided with prolonged opportunities to engage with 'abstract-reasoning' programmes such as Scratch. Instead, teachers have added the use of ICT to their traditional practice and this needs to be addressed in order for ICT to have an effective impact in the classroom. The findings align with the view of Papert (1993), who claimed that in order for children to become motivated learners, critical thinkers, problem-solvers, and metacognitionists, educational reform must take place in which learners are provided with the necessary tools to take ownership of their own learning. The qualitative data found that teaching basic ICT skills is no longer necessary in order to integrate ICT into the classroom. McGarr and Kearney (2009) claim that pupils will not be motivated by simple skill activities in the classroom and suggest that increased use of ICT by pupils in the home may challenge schools to consider alternative uses of ICT. The research found that pupil motivation for ICT use in Maths is very high but it also suggests that pupils may not be challenged enough due to a lack of teacher motivation. This suggests that there should be a focus on communicating to teachers the importance and benefits of alternative uses of ICT, such as the creativity developed through programmes like Scratch and Logo.

Conclusion

This research project investigated the effect of ICT use in teaching and learning Maths in the primary school classroom. Research results found that the majority of teachers are aware of the benefits of ICT use in Maths lessons but are not utilising it to its full potential for a number of reasons. The results found that teacher motivation and confidence of ICT use has a direct impact on pupil motivation. It was also found that while many teachers would like to use more ICT during Maths lessons, the interest and uptake in training is limited. Further findings highlight the positive impact that ICT can have on developing mathematical concepts and skills in the primary school classroom. Finally, findings further highlight the need for a greater emphasis placed on schools' ICT policies, including CPD in the area of ICT in Maths.

References

Armstrong, T. (2009) *Multiple Intelligences in the Classroom*, 3rd edn. ASCD, Alexandria.

Bell, J. and Waters, S. (2014) *Doing your research project: a guide for first time researchers in education, health and social science*, 5th edn. Maidenhead: Open University Press. EBSCO e-books.

Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., and Rumble, M. (2012) 'Defining twenty-first century skills', in Griffin, P., McGaw, B., and Care, E. (eds.), *Assessment and teaching of 21st century skills*, Dordrecht, NL: Springer, 17-66.

Braun, V. and Clarke, V. (2006) 'Using Thematic Analysis in Psychology', *Qualitative Research in Psychology*, 3, 77-101.

British Educational Research Association (BERA) (2011) *Ethical guidelines for educational research*, [online], Available at:http://www.bera.ac.uk /researchersresources/publications/ethical-guidelines-for-educational-research-2011 [Accessed: 21 September 2016].

Cohen, L., Manion, L., and Morrison, K. (2007) *Research methods in education*, 6th edn. London: Routledge.

Department for Education and Skills (DES) (2013) *The National Curriculum in England: Computing programmes of study*, [Online], Available at: https://www.gov.uk/government/publications/national-curriculum-in-england-computing-programmes-of-study [Accessed 26 September 2016].

Department of Education and Skills (DES) (2016) *Action Plan for Education: 2016-2019*, [online], Available at: http://www.education.ie/en/Publications /Corporate-Reports/Strategy-Statement/Department- of-Education-and-Skills-Strategy-Statement-2016-2019.pdf [Accessed 26 September 2016].

Irish National Teachers' Organisation (INTO) (2015) *The use of ICT in Primary Schools, Submission to the Oireachtas Committee on Education and*

Social Protection, [online], Available at: https://www.into.ie/ROI/
Members Area/ReportsandSubmissions/ICTinPrimaryEducation.pdf
[Accessed: 08 September 2016].

Kendall, L. (2008) 'The conduct of qualitative interview: Research questions,
methodological issues, and researching online', in Coiro, J., Knobel, M.,
Lankshear, C. and Leu, D. (eds.), *Handbook of research on new
literacies*, New York: Lawrence Erlbaum Associates, 133-149.

McCarthy, J. (2006) *Revisiting Constructivism*, LEARN 2006.

McGarr, O. and Kearney, G. (2009) 'The Role of the Teaching Principal in
promoting ICT use in small primary schools in Ireland', *Technology
Pedagogy and Education*, 18(1), 87-102.

Papert, S. (1993) *The Children's Machine: Rethinking school in the Age of the
Computer*, New York: BasicBooks, a division of HarperCollins Publishers.

Skinner, B.F. (2011) *About Behaviourism*, New York: Vintage.

Watson, J.B. (2013) *Behaviourism*, Worcestershire: Read Books Ltd.

Way, J. (2003) *ICT and Primary Mathematics*, UK: Open University Press

Primary School Teachers' Involvement in Fís Film Project, by Aoife Bambury

Biography

Aoife Bambury is from Co. Kerry. Her educational qualifications include a Bachelor of Civil Law and a Post Graduate Diploma in Socially Engaged Arts Education. She is a qualified solicitor, specialising in Criminal Law. She qualified from Hibernia College in April 2017 with a Professional Master of Education (PME) in Primary Education. As part of this programme, Aoife completed research entitled 'An Exploration of the Outcomes of Primary School Teachers' Involvement in Fís Film Project: a Qualitative Study'. Aoife is currently working as a mainstream class teacher in St Anne's NS, Ardclough, Co. Kildare.

An Exploration of the Outcomes of Primary School Teachers' Involvement in Fís Film Project: A Qualitative Study, by Aoife Bambury.

Research supervisor: Ms. Charleen Hurtubise

Abstract

This study analyses teachers' perspectives on potential collaborations that support Information Communication Technology (ICT) integration. The study focuses on the barriers and benefits teachers perceive in working on projects for Fís. The study also examines the extent to which teachers have technical knowledge and are equipped with the tools and methodologies required to develop relevant ICT skills. This study used a qualitative approach of semi-structured interviews from a small sample of teachers (N=3) on the model of creative partnership provided by the Fís film project. Findings indicate that teacher perspectives on ICT development (linked to working with Fís) has considerable benefits for students that include, for example, literacy, numeracy, motivation to learn, and collaboration.

Keywords: Technology, creative, partnerships, teachers, digitalised

Introduction

The Fís film project is an initiative between the Professional Development Service for Teachers, Technology in Education (PDST-TiE), and the Institute of Art Design and Technology (IADT), which supports primary school teachers to develop and present film projects produced by students in the classroom. The *Digital Strategy for Schools (2015-2020), Enhancing, teaching learning and assessment* (DES, 2015) outlines the Department's five-year plan to embed ICT in Irish education. *The Digital Strategy* was designed in response to the results of Census 2013 on the status of ICT in Irish education. Arising from the Census report, Cosgrove et al. (2013) highlighted an urgent need for an effective response through education to equip students for life in a digital age and called on teachers to be proactive in adapting their practice to use ICT to enhance classroom learning environments. *The Digital Strategy* reaffirms and develops these recommendations. The Fís film project is listed as an exemplar of collaborative, innovative practice within *The Digital Strategy*. The researcher was interested in exploring teachers' perspectives on creative collaborations of using ICT through their involvement with Fís. The aim of this study was to analyse the experiences of teachers to identify their attitudes of benefits and challenges of filmmaking as a form of ICT integration. The study

also investigated whether teachers noted any changes in their own classroom practice, which they attribute to their involvement in such projects. The research question formulated in this small-scale research project is: What were the outcomes of primary school teachers' involvement in the Fís film project?

Literature review

Luckin (2008) recommends a Vygotskian approach to ICT collaborations where student, teacher, and other collaborators accept that they have both value to bring and learning to gain from such collaboration. While teachers may acknowledge that students have extensive knowledge of ICT tools, the role of the teacher is to scaffold learning through student prior knowledge. In alignment with Vygotsky, teachers' use of learning environment designs that support students in navigating the Zone of Proximal Development (ZPD) is an open one. By doing so, students are offered the opportunity to reach horizons that they may not have achieved independently (Vygotsky, 1986). Loveless and Williamson (2013) outline how creative partnerships impact pedagogies in the UK. Creative partnerships provide an opportunity for experts in innovation to model their ability to think creatively and to apply this thinking to achieve tangible outcomes in mainstream settings. *The ICT Census* (Cosgrove et al., 2014, p.xi) advocates a 'knowledge deepening approach', recommended in international policy (UNESCO, 2008a, 2008b, 2011) and calls on teachers to provide students with 'opportunities to engage in collaborative project-based learning activities that go beyond the classroom'. Connelly, Lawlor, and Tangey (2013) assert that students at third level struggle with tasks involving collaboration, higher-order thinking, and creativity and points to the prevailing education system in Ireland, which remains based on a terminal exam model as failing to develop these skills in students. *The Digital Strategy* (2015) recommends that the strengths of successful collaborative ICT projects be made available to support educators as they adapt their practice. These considerations influenced the selection of the Fís film project as the focus of this study, as a support to teachers. Fullan (2007) accepts that working with outside experts can have merit but also calls to attention the necessity to interrogate the quality of these collaborations, recommended thorough analysis of students' learning outcomes and engagement.

Filmmaking and digital literacy

DES (2013) emphasise the importance of ICT in engaging students in problem solving and collaborative learning experiences. The development of digital literacy was highlighted. Hague and Payton (2010) emphasise the importance of communication skills in developing digital literacy and the relevance of filmmaking as it requires editing, processing, and selecting information. Wiegel, James, and Gardner (2009, p.14) state educators 'cannot afford to ignore' the centrality of the

Internet, images, and film in how students communicate. They must embrace ICT integration to equip students with the skills needed to navigate new technologies, which they will inevitably encounter in this digital age. Wiegel et al. also outline potential challenges in adapting existing pedagogies that include difficulties with facilitating collaborative learning, ensuring students are afforded equal opportunities to participate in problem solving, and negotiating online learning spaces.

Fís has provided support to primary school teachers to develop filmmaking in their practices for over twelve years. Even though the Fís initiative was launched two decades ago, there has never been a focused study on the outcomes of the project. This small-scale study will provide perspectives of a small sample of participants, which might provide some indications of outcomes of involvement with the programme.

Constructivist approaches and ICT integration

The Irish Primary School Curriculum advocates constructivist methodologies and promotes learning through hands-on, student-centered, problem-solving activities (Ireland, 1999). *The Education and Training Sector Integrated Reform and Delivery Plan* (DES, 2014) refers to the wealth of international research, which indicates that ICT integration in schools is more successful when implemented through constructivist approaches. The *Digital Strategy* (DES, 2015) supports this position and highlights the findings of PISA (2009), which found that the full potential of ICT as an interactive learning tool is not being harnessed in Irish education, where ICT remains primarily a medium to present information.

Research in the area of technology in the classroom indicates that constructivist methodologies including active learning, nurturing creativity, and enabling students to develop problem-solving skills. Such skills are essential in the potential of ICT to enhance learning environments (Sullivan et al., 2015; Hermans et al., 2008). The authors of the Digital Strategy (2015, p.32) identify the Fís film project as an exemplar collaborative ICT project. Through collaboration, all participants have an opportunity 'to share and explore new ideas'. Fís resource packs and lesson plans for schools encourage constructivist approaches.

The Digital Strategy acknowledges the existence of a range of definitions for ICT but endorses UNESCO's (1999) explication as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information" (DES, 2015, p.9). The National Council for Curriculum and Assessment (NCCA) (2013) defines the term 'digital literacy' as an enquiry-based process where students:

'…improve their capacity to know what they are looking for, what information to ignore or discard, and how to identify what can be useful or significant. They learn to discriminate between the multiple sources of information available online and to challenge the views they find there. They learn how to create, collaborate and communicate effectively and ethically.' (p.6)

The Role of teachers in ICT integration

The work of Butler et al. (2013) supports the *Digital Strategy* (2015, p.21) in stating that teachers' 'pedagogical orientation' will greatly impact the use of ICT in the classroom. Research by Tondeur et al. (2009) suggests that while teacher attitudes are important, other structural and cultural factors such as whole-school approaches, planning, support, and innovativeness also impact the complex process of how teachers integrate ICT. Wegerif (2010, p.127) argues that the primary role of the teacher in ICT integration is to guide and model how to work appropriately in collaborative situations. Their role is to create opportunities for students to use a range of technologies and to 'critically evaluate' content explored whilst working in this way. While there is certainly merit in this argument, preparing teachers to provide these types of ICT learning experiences will require a radical shift in practice for many. As research indicates (Tondeur et al. 2008; Mishra and Koehler, 2006; Ertmer, 1999 and 2005; Guzman and Nussbaum, 2009), there are complex factors that interplay, often outside the control of the teacher, which must also be considered.

The *Digital Strategy* (2015) outlines anticipated challenges for educators in adapting their practices towards greater ICT integration. Redefining the role of teachers as students shift from 'consumers' to 'creators' is one such challenge. *The Digital Strategy* requires teachers:

'…work to realise the potential of ICT to transform the learning experiences of students by helping them become engaged, creative and critical thinkers, global citizens, and active and self-determined resilient learners in collaborative social-learning environments.' (DES, 2015, p.46)

However, The Digital Strategy does not outline what 'creative and critical thinkers' mean, focusing instead on the need for students and teachers to work collaboratively to develop skills using ICT. Ertmer (1999, p.48) identified two types of barriers impacting how teachers integrate ICT. 'First-order barriers' can be solved by sufficient financial investment in ICT infrastructure and training. 'Second-order' barriers, which encompass teachers' pedagogic orientation and methods, which are founded on core beliefs, are much more difficult to change. Ertmer (2005) proposes that difficulties encountered in changing teachers' core

belief systems in respect to personal capabilities and alignments to traditional pedagogical models are reasons for the persisting inadequacy of ICT integration despite the fact that most educational settings are now equipped with the necessary ICT tools. Mishra and Koehler (2006, p.1028) argue that teaching teachers how to use technology is not in itself sufficient. They propose that ICT integration is dependent on a complex combination of factors, which they refer to as 'Technological pedagogical content knowledge' (TPCK). This framework supports teachers' identify and addresses gaps in their knowledge of new technology implementation. Mishra and Koehler (2006) further argue that an over-emphasis on ICT training and failure to consider the full interplay of factors proposed in the TPCK framework impinges teacher development towards ICT integration.

Curriculum overload has been identified by teachers as one of the greatest issues in delivering quality education experiences in a number of publications by the NCCA (2010, 2008, 2005). Connelly et al. (2013, p.3) indicate that 'the inflexible, overcrowded, exam focused nature of the curriculum' may also be impacting on the development of collaborative ICT learning experiences in the classroom. The *Digital Strategy* also fails to adequately address an issue highlighted by Donnelly et al. (2011) in relation to the conflict that exists between how teachers might like to teach and the pressure to prepare students for exams. Ertmer (2005, p.29) is of a similar view and cites a range of 'contextual factors' including perceived pressure from school stakeholders, the necessity to prepare students for testing, and curricular restraints as factors contributing to the lack of progress in ICT integration. Researchers (Fullan, 2007; Tondeur et al., 2008) propose that whole-school planning and attitudes are tangibly reflected through support structures and policies within the school, that which are pivotal to how teachers define their role around integrating ICT.

ICT as an interactive tool

Papert (1993) suggests that the threat ICT poses to traditional educational methodologies has resulted in computers becoming merely another media to present material, controlled and dictated by the teacher. The *ICT Census* draws attention to the findings of PISA (2009), which outlined how Irish teachers were using ICT primarily as a medium of presentation. Students are then not being afforded sufficient opportunities to engage in hands-on ICT experiences. Ertmer and Ottenbreit-Leftwich (2010, p.257) further state that using 'technology simply to support lecture-based instruction falls far short of recommended best practice'. Donnelly et al. (2011) argue that many of the problems associated with not harnessing the full potential of ICT lie with the teacher themselves. Outlining a framework with appropriate support systems developed to help post-primary teachers integrate ICT into their practice would benefit the primary sector as well as addressing issues of over-reliance on ICT as a presentation media. Fullan

(2007, p.291) outlines the centrality of teacher attitudes in the process of change and proposes that improvements in teachers' classroom practice can only take place within a supportive school environment or culture where whole-school ICT planning and collaboration between staff is evidenced through visible actions that permeate all aspects of school life.

Guzman and Nussbaum (2009) ascertain that a thorough analysis of teacher training is necessary to interrogate whether the pedagogical knowledge being developed goes beyond mere ICT knowledge to actually equipping teachers with the skills and confidence to facilitate meaningful, hands-on ICT experiences for students. Ertmer and Ottenbreit-Leftwich (2010, p.261) state that providing the necessary hardware and ICT knowledge is not sufficient and propose that 'helping teachers gain personal experiences that are successful' is the most effective way of increasing teacher confidence. Butler et al. (2013) also acknowledge that equipping classrooms with ICT is not enough, recommending that insights can be gained into the lack of progress in ICT integration by examining factors which influence the learning environment and the role of teachers in shaping this environment. It is further stated that while digital technologies can make things possible, it is people that make things happen.

ICT creativity

Loveless (2011) advocates that the full potential of ICT as a tool to enhance creativity in the classroom is more likely to occur when the impact of the learning environment, curriculum, and local and national cultural contexts are considered. These factors influence how students perceive the learning experience and interact with ICT accordingly. In the British context, the National Advisory Committee on Creative and Cultural Education (NACCEE, 1999, p.30) propose that creativity has four features, defining creativity as 'Imaginative activity fashioned so as to produce outcomes that are both original and of value.' In outlining how ICT is an intrinsically creative medium, Wegerif (2010, p.109) proposes a model of creativity as having two poles: 'imaginative play (creativity 1)' and 'fashioning a socially valued product (creativity 2)'. These definitions propose models of creativity, which develop imaginative ideas to actual production of outcomes, which have value.

Creativity is an essential component of ICT competence throughout *The ICT Census* (2014, p.xi) and the *Digital Strategy* (2015) but neither publication provides a comprehensive definition of what is meant by *creativity*. Research in the area using ICT in the Irish context is sparse. However, some guidance can be found in NCCA guidelines (2013), which support the new Junior Cycle Curriculum. Guidelines provide learning outcomes for creativity in science, which have similar parameters to international definitions on creativity, focused on creation of outcomes and expression through imaginative, problem-solving, and group

activities. Kelly and Cutting (2014) welcome this framework whilst acknowledging the need for further clarity across subjects at primary level. Luckin et al. (2008) found that although web access and new technologies are readily available to students, their ICT usage was generally not focused on content creation. If students perceive that there was an audience for their work, they were more likely to create rather than just consume content (ibid.). Research by Zhou et al. (2013) indicates some convergence in teacher attitudes towards creativity.

Research indicates the necessity to adapt learning environments to embed ICT usage to support the development of twenty-first century skills in students (Sullivan et al., 2015; Cosgrove et al., 2014; Butler et al., 2013; Law et al., 2008; Wegerif, 2010). When considering whether ICT integration and creativity can be increased through collaborative projects, the literature reviewed here suggests key indicators include the role of the teacher, teacher knowledge and ICT skills, teacher confidence to facilitate collaborative learning, and creativity using ICT and consideration of the school environment.

Methodology

Research design

A number of possible research methods were considered and the benefits and disadvantages of both qualitative and quantitative methods were analysed to assess the suitability of each to answer the research question. The researcher ultimately decided against pursuing quantitative methods as quantitative data is usually collected using surveys, which analyse the frequency of pre-defined phenomenon in the data collection instruments (Cohen et al., 2011). This study aims to analyse the abstract concept of teachers' perceptions on the potential of collaborations to support ICT integration. The rigid nature of quantitative methods would not allow flexibility to gain personal insights of participants. Thus, qualitative methods were used in this research study. Data was gathered through semi-structured interviews with a small sample of primary teachers (n=3). Thematic analysis examined the data in line with Braun and Clarke (2006).

Participants and sampling method

The small-scale nature and limited timeframe influenced the sampling method choice. Purposive sampling was selected. Cohen et al. (2011) recommend purposive sampling where such restrictions exist, provided the limited nature of the study is made explicit. Purposive (*non-probability*) sampling involves identifying potential participants on the basis of the researcher's judgement on their perceived ability to assist in answering the research question because of their prior knowledge and experiences (Cohen et al., 2011, p.153). Participants were included if they met the criteria—namely, were primary school teachers with

at least two years of teaching experience and had made a film with their class, which was submitted to the Fís film festival. Table 1 outlines the profile of participants in the study:

Table 1: Profile of participants

Participant	Class level	Gender	Location	School Type	Interview Duration (mins)	Previous Experience Working with Fís
1	Senior-mixed class levels	F	Sligo	Small Rural	46	Yes
2	Senior-mixed class levels	M	Galway	Small Rural	57	No
3	4th Class	M	Cork	Large Suburban	44	Yes

Semi-structured interviews

Bell and Waters (2014) recommend that a thorough review of relevant literature proceeds and closely informs questions composed to collect data. Interviews consisted of open-ended questions as the research sought to examine personal experiences of participants of working collaboratively using ICT. Bell (2006) recommends that interview questions be piloted to ensure that the questions are suitable to seek data to answer the research question. Questions were carefully composed and piloted to assess suitability, align with the research question, and minimise opportunities for participants to provide anecdotal or inappropriate content (Bell and Waters, 2014). Piloting contributes to greater clarity in the data collection process as the questions have been pre-tested and edited to seek key information and avoid ambiguity for participants and also in the actual data collected (Cohen et al., 2011). The interview questions were piloted on two teachers. The guidelines provided by Bell and Waters (2014) were used as a framework for pilot participants to highlight potential difficulties in terms of ambiguity or unclear, leading, or offensive questions.

Data analysis

Thematic analysis was applied to examine the data generated through interviews by searching for what Braun and Clarke (2006) describe as 'repeated patterns of meaning' (p.80). What Braun and Clarke describe as 'realist thematic analysis' was utilised for this study as the data consisted of participants' recounts of their experiences working with Fís and the 'meanings' that they applied to whether their creativity and ICT integration in the classroom was enhanced as a result (ibid, p.81). The researcher endeavoured to retain flexibility of approach throughout this study so the parameters for what would establish a pattern as a theme were not fixed at the outset of this research (ibid.). All interviews were transcribed, read, and re-read for familiarity, through which four main themes emerged. Extracts in the data, which corresponded with these themes were highlighted (colour-coded) and extracted, and developed into a table of analysis to assist in determining prevalence (ibid, pp.82-83). The researcher endeavoured to be consistent in applying these techniques to all of the data and the process was repeated a number of times. A critical friend analysed the data to ensure objectivity.

Validity and reliability

Bell (2006, p.117) defines reliability as 'the extent to which a test or procedure produces similar results under constant conditions on all occasions' and relates to the suitability of the research instrument to collect data appropriate to answer the research questions. Bell and Waters (2014) argue that the small-scale nature of some research projects renders it difficult to properly interrogate whether the research instruments chosen were appropriate, however, emphasises that it is still necessary to test and analyse the reliability of the chosen instrument for the research to have credibility. The interview questions were carefully composed and tested for reliability through the pilot study, and the wording of the questions was adapted in response to potential issues highlighted (Bell, 2006). Cakir (2012) makes reference to the work of Messick (1989), who argues that validity is not static and must adapt to remain appropriate as the study progresses. Cakir (ibid., p.671) interprets this as meaning that validation is 'making the most reasonable case with the evidence available while recognising that these judgements will evolve as new evidence is brought to our attention'. This study attempted to be flexible in response to the data collected and what emerged as the data was analysed.

Bell (2006) proposes that credibility is a key feature of validity; for results to be valid, they must be plausible so that if another researcher applied the same procedure to the data collected, they would reach similar results. Following the recommendations of Bell (ibid.) in respect of validity testing for small-scale studies, the pilot study provided a platform of analysis for the initial interview questions and their suitability to answer the core research question.

Interview questions, responses, and researcher interpretations were also analysed by a critical friend and through consultations with the research supervisor.

Limitations

Although the researcher endeavoured to ensure reliability and validity, the limitations of this study must be acknowledged. The limited sample used to generate data and the short timeframe within which this small-scale study had to be completed were obvious constraints. Glaser and Strauss (1967) state that researcher bias must also be identified and acknowledged if the research is to be robust and reliable. All participants in this study had been nominated for prizes with the Fís film project. This is a potential limitation as this sample was more likely to have had positive experiences than teachers who were less successful with the project. Failure to identify the potential bias in qualitative research can impact its reliability (Cohen et al., 2007). The fact that data was collected from such a limited sample is an obvious limitation. Other biases were less obvious and required analysis of personal motivations and potential to create bias through the ordering and wording of interview questions and through how interviews are conducted, which may influence reliability of data collected (Cohen et al., 2011).

Reflexivity involves the researcher acknowledging and identifying their role as part of the research process (Cohen, 2007). The researcher was careful to systemically examine the process by which the research was conducted, the researcher's role, and connections with the research (Bell, 2010). The researcher attempted to counteract any potential bias by identifying and analysing her personal motivations for engaging in this study, which Bell (ibid.) highlights as important to avoid bias. The researcher's personal belief in the potential of collaborative projects using ICT to enhance creativity and ICT integration was a preconceived concept, which potentially may have affected objectivity in this study. Awareness of and attention to the researcher's role and the limitations of this study assisted in the process of reflexivity, and strict application of established data analysis methods and objective input from a critical friend were methods applied to avoid researcher bias.

Ethical considerations

Qualitative research requires a high level of ethical consideration due to the level of direct contact and potential for participants to divulge personal or sensitive information (Cohen et al., 2011). An ethical review form was submitted to and approved by the Hibernia College Ethics Committee before this study was commenced. The British Educational Research Association (BERA) (2011) guidelines denoting ethical standards for researchers were closely followed for the purpose of this research. BERA outlines that consent must be informed and voluntary, which requires that participants are fully informed of objectives, and

how the research would be conducted. A cover letter was sent to all participants in advance of interview, clearly stating objectives and interview procedures, the potential for the research to be published, and reassuring them of confidentiality and that they could opt out at any stage. *The Data Protection Act* (Government of Ireland, 1998) placed the requirements of researchers in respect of data collection, storage, and dissemination on a statutory basis. To comply with these requirements, all data collected for the purpose of this study was stored on a password-protected computer and on an external hard-drive, which was also password protected. An opt-in form was utilised, outlining how the data collected from them would be stored, used, and disseminated, which participants had to sign and return prior to commencement of interviews.

Results

This qualitative study analysed teachers' experiences of working with the Fís film project. Four themes emerged from thematic analysis that included the Impact of Fís on Teachers' Practice, Collaboration with Fís, School Culture, and Involvement with Fís.

Theme 1: Impact of Fís on Teachers' Practice

When asked about ICT knowledge and skill set, prior to their involvement with Fís, all participants reported a personal interest in new technologies and their own ICT development. One participant stated, 'Every time that I achieve something new in terms of IT I get a bit of a kick out of it saying I can do that' (Participant Two). None of the participants had experience of filmmaking in the classroom prior to making the first films they submitted for Fís. All participants commented that they had previous involvement in arts-based, creative activities including design and making, photography, and music. Teachers indicated that ICT confidence increased through engagement in filmmaking. Two participants stated that they developed skills in designing and delivering filmmaking courses to other teachers. Participants indicated that increased ICT usage in their classroom practice may be attributable to the skills developed through the filmmaking process. All participants reported facilitating hands-on ICT experiences for students, focused on content creation rather than just content consumption.

Theme 2: Collaboration with Fís

All participants described their role as a facilitator in supporting students learning through the filmmaking process. Findings indicate that they had not worked with an outside agency on ICT projects prior to involvement with Fís. All participants reported positively on their experiences of collaboration with Fís. Participant 3 noted that, 'I don't think that we would have achieved what we achieved without

that support there.' Participant 1 commented, 'In terms of support from outside partners, like Fís, at the start it's absolutely essential.' All participants referred to that training and online supports provided by Fís. In reference to the supports availed of, Participant 2 reported, 'Everything that was available, mainly through the website, we would have made use of.' Another participant, who has produced films for Fís for many years, reported, 'We would have availed of all that was available for the first year or so and we just sort of did our own thing after that.' In respect of the lesson plans that Fís provide, Participant 2 commented:

'I thought that they were simple, easy to follow and from the point of view of actually teaching something, I felt that at the end of a lesson that I had actually taught something and that I had everybody on board.'

Findings illustrate that there has been success of collaboration with Fís especially how the programme was delivered at class level. The quality of support especially in the initial project phase was noted.

Challenges to working on projects with Fís

The study found that time was the greatest challenge teachers experienced in facilitating filmmaking projects. Participant 1 stated, 'the biggest challenge is just to have that commitment and to commit to that kind of time.' Participant 2 also commented that one of the biggest challenges in filmmaking 'is finding the time to timetable that and to do it meticulously'. Participant 3 made similar comments:

'You know it does take a long time and because it's not something that you can just start and two weeks later have a movie… it's all the work that's been put into creating the story, narrowing it down, putting a script together...'

Participant 1 described designating significant blocks of time to filmmaking projects to deepen opportunities for engagement and learning:

'You won't get the benefit or engagement, or long term benefits of actual learning or developing your own practice, you won't get that if you just dedicate two weeks to it in the end. You have to give it time and we plan and give it about six months, and we work at varying levels within that six months.'

Thematic analysis also noted that filmmaking can support cross-curricular integration, therefore providing remedial effects in relation to time pressures to provide for differentiation across all subjects. This research found that supports provided by Fís were sufficient and all participants alluded to the fact that any gaps in technical skills could be easily addressed using YouTube tutorials or other web-based supports.

Theme 3: School culture

This theme relates to whole-school attitudes and planning for ICT integration and development. Two of the participants are teaching principals so they may have greater autonomy to direct how filmmaking is approached. Participant 1 pointed out that whole-school attitudes and commitment contribute to the sustainability of collaborative projects with outside partners: 'Fís will give you the skills and get you off the ground, but it really needs the commitment within the school to keep it going themselves.' She also outlined how filmmaking contributed to collaboration amongst school staff, stating that when staff are supportive of the project it 'gains far more momentum than somebody just going off on their own doing something'.

Participant 2 outlined how planning for this project may have been more straightforward due to the small student cohort in the school. Participant 1 also stated, 'I suppose it's more manageable because it is a small school, that we would have a lot more communication about what we are using and how we are using it'. Participant 3 asserted that he had worked with a very small class to produce films over the past number of years. Participant 1 and 2 made reference to the whole-school approaches to ICT integration and development practised in their schools. Participant 2 stated,

'We are looking all the time at the future and how we can be current and use whatever is available.'

Participant 1 outlined how the school plans for ICT integration: 'We very much match the technology to where we want the children to go, and the skills that they want.' These narratives suggest that ICT integration is facilitated by whole-school planning based on agreed targets for students' learning.

Theme 4: Student involvement with Fís

All participants made positive comments on the impact filmmaking has on student learning, which is summarised in the following table.

Table 3: Effects of involvement with Fís on students

Participant responses	One	Two	Three
Develops literacy skills	✓	✓	✓
Develops numeracy skills	✓	✓	✓
Develops problem-solving skills	✓	✓	✓
Increases student confidence	✓	✓	✓
Increases motivation to learn	✓	✓	✓
Supports collaborative learning	✓	✓	✓

Literacy

All participants believed that filmmaking enhances literacy skills. Script development and editing processes were noted as supportive of literacy development. Participant 2 stated, 'When you have a script, you have to constantly tweak it and add to it and I think that fact that they are acting out what they have written really helps.' Participant 3 highlighted the challenges of editing but noted that this was a positive learning experience for students in terms of developing story structure. Participant 1 commented that having a real audience for the film motivated students: 'they know they have an audience, so they know when they start editing … it has to be clear. Oral language development was also perceived as a positive outcome. Participant 3 described how filmmaking can facilitate children with speech difficulties to experience success: 'they only have to get their line right once and they have this permanent record of "I succeeded".' Similarly, Participant 2 outlined how filmmaking is used to support oral language development in his school.

Numeracy

All participants stated that filmmaking, in particular editing processes, could support the development of numeracy skills. Two participants noted that stop-motion animation in the filmmaking process requires the application of numeracy skills.

Problem-solving

Increased student engagement in 'real-life' problem-solving tasks were effective as solutions were necessary for the film projects to proceed. Participant 1 noted, 'Even in terms of the children's learning, they find that they have to try things a different way by problem solving, and it's the same with teachers as well, that we

are all problem-solving as we go along.' Participant 2 outlined how his school used pre-agreed rules for problem solving. Participant 3 also highlighted the practical nature of problem-solving tasks associated with filmmaking stating: 'We'd say "that's brilliant but how are you going to film it?" and sometimes that problem solving is working around it.' Participants' perceptions indicate, therefore, that filmmaking may provide opportunities for students to develop problem-solving skills.

Confidence

Analysis of the findings highlighted that filmmaking may support student confidence, providing an alternative medium for students to demonstrate their learning. One participant with experience of producing films for Fís in a SEN classroom setting commented: 'It has done wonders for their confidence. The rest of the school have stopped seeing them just as the special class.' Participant 2 noted how filmmaking provides an alternative platform to validate skills students may have, making reference to how standardised tests 'look at literacy and numeracy and there are other areas of the curriculum that cannot be assessed'.

Motivation to learn

Participant 1 noted how students seem to 'engage more deeply' in learning: 'I suppose it is just a broader form of literacy, than just taking up a text book that you might not engage with at all.'

The other two participants commented that students appeared to be more motivated and retained more information on topics, which they had developed into films.

Collaboration

All participants outlined how film projects intrinsically support group work and require students to collaborate. Each participant stated that once students are supported in the initial planning stages, they take ownership of the project. The teacher then becomes the facilitator. One participant noted:

'it just needs collaboration because there are so many jobs to do and the children just recognise that immediately.' Participant 2 made similar points, stating: 'it was very much the children's project, and I think they all say that as individuals they were all part of the project, were included, and that they had the power.' Participant 3 outlined similar experiences on how students took ownership of the project in that 'they did pretty much everything'. A common perception was that filmmaking helped students to highlight their own particular skills, which they could contribute to achievement of the overall group goal. All participants

mentioned that student engagement in collaboration was enhanced by it being a real project. Participant 3 noted: 'this is an authentic task, you are not asking us to work in a group just for the sake of it'. There is a perception therefore that filmmaking might support collaborative learning and the authenticity of the filmmaking tasks may contribute to student engagement.

Discussion

This study explored teacher experiences of working with Fís. The main themes from the findings frame the discussion, which aligns with the relevant literature.

Impact of Fís on teachers' practice

A wealth of research is available to support constructivist methodologies on ICT integration (Sullivan et al., 2015; Luckin, 2008; Hermans et al., 2008). The *Digital Strategy* endorses constructivist approaches, calling for teachers to provide active, hands-on ICT learning experiences for students. Findings revealed that participants viewed themselves as facilitators, providing the tools and taking a supportive role within the filmmaking process. All participants indicated that their students took ownership of the projects and engaged in discovery learning through filmmaking. There was a recurring theme amongst participants that these approaches supported ICT integration and creativity and that there were benefits to student learning and developments within their own practice.

Findings reveal that participant involvement in creative ICT collaborations positively impact their skill sets and confidence to facilitate ICT integration (Cosgrove et al., 2014; Loveless and Williamson, 2013; Luckin, 2008). Literature reviewed for this study pointed to the importance of teachers' pedagogic orientations in shaping the impact of ICT collaborations. This in turn influences how they adapt their practice and methods to integrate ICT in their classroom practice (Butler et al., 2013; Ertmer, 2005 and 1999; Mishra and Koehler, 2006). All participants demonstrate a personal commitment to reflection and expressed a desire to match their teaching methods to student learning needs. Findings also indicated that engagement with Fís was the first time each participant worked with an outside partner on an ICT-based project. All three interviewees stated increased ICT skills resulted from working on these film projects. They commented that their use of ICT in the classroom was now more focused on students as content creators, which they linked with these enhanced skills. The fact that all participants expressed a personal interest in ICT and in creative activities is also an important consideration in this regard. Participants expressed a sense of personal achievement and increased ICT skills, which they attribute to successful filmmaking. This concurs with Ertmer and Ottenbreit-Leftwich (2010), who state that teachers who experience success as a result of ICT experiences in the classroom are likely to be motivated towards further development. Creative

activities with tangible outcomes are the preferred model of creativity emerging in the context of national and international education (NACCEE, 1999; NCCA, 2013; Kelly and Cutting, 2014).

The main challenge identified by participants in using filmmaking in class was lack of time. Interestingly, each participant also highlighted the beneficial nature of film projects as a method of cross-curricular integration. Numerous studies in Irish education have indicated that teachers perceive the current primary curriculum to be overcrowded (NCCA, 2010, 2008, 2005). This may indicate that teachers need further support if they are to fully embrace the shifts in pedagogy and practice called for in the *Digital Strategy* within the existing primary education model and the requirements of the current curriculum. The time constraint and identified benefit of supporting ICT integration is thought provoking and warrants further study. McGarr (2009) argues that ICT initiatives usually target educators with an existing skill set in technology and proposes that failure to appeal to teachers who are not confident using ICT impinges on the impact of such initiatives. The depth of this study did not provide scope to analyse this point thoroughly but it may be noteworthy that all of participants revealed a personal interest in new technologies, which could have influenced their decision to become involved with Fís. It may have also contributed to the success of the collaboration from their perspectives. Future studies into the area could address this point more deeply.

Collaboration

Leahy et al. (2016) refer to the emergence nature of 'smart' (technology) partnerships and the resulting difficulties associated with analysis of the quality of such collaborations in the context of education.

Fullan (2007) makes reference to the importance that external partners are properly equipped and prepared to provide the support and expert knowledge needed to contribute to the viability of creative partnerships. Such success works towards student learning. All participants reported positive experiences of producing films for Fís and stated they would recommend such collaborations to other schools. Luckin et al. (2012) emphasise that educational attainment is a primary factor in the success or failure of creative partnerships. As all participants in the current study perceived positive impacts on their students' learning, it may be argued that this was influenced by the collaboration of working in such projects.

School culture

Fullan (2016) argues that when education policy calls for major changes in existing structures, there must as a pre-requisite. There needs to be consideration

of how that policy will be interpreted and implemented at school level. Policy in Ireland regarding ICT integration is summarised in a framework for change proposed in the *Digital Strategy* (2015). While the strategy provides some consideration of the importance of whole-school policies; it also places a significant onus on the educator to reappraise their own practice in terms of ICT integration. Luckin et al. (2012, p.53) describe the school context in which new technologies are explored as 'crucial to their success or otherwise'. Each interviewee demonstrated a commitment to integrating ICT and exploring new technologies in their practice. Findings, however, revealed that film projects received support within the wider school context. Rincon-Gallardo (2016) researched processes in major pedagogical changes and outlined the importance of establishing common goals for student learning at the outset along with models for change then designed around such goals. Luckin et al. (2012, p.64) argues 'If we are to make progress, we need to clarify the nature of the goal we want to satisfy through future innovation.' Two of the participants in the current study commented on how their school endeavours to plan for ICT integration to match agreed learning targets for students. While this appears to concur with the research, the small-scale nature of this study prohibits conclusions regarding transferability. The results therefore imply that personal, professional, and whole-school commitment may have contributed to the success of these particular collaborations. Further research in this area could perhaps interrogate these findings by focusing on a wider, more representative sample and by using a variety of research instruments.

Impacts on student learning

Fullan (2007) recommends that the outcomes of any creative partnership must be considered in light of the impact on student learning and engagement. Findings indicate that filmmaking may result in gains for literacy, numeracy, motivation to learn, and collaboration in the classroom. Hague and Payton (2010) propose that filmmaking provides a platform where digital literacy skills and creativity can be developed in tandem with planning, editing, and selection processes necessary for film to provide opportunities to develop imaginative ideas into products. Results revealed that literacy skills in particular were highlighted as being supported and potentially developed through processes intrinsic in filmmaking. Stop-motion animation and film-editing processes were also identified as potentially supportive of numeracy development. The targets for literacy (including digital literacy) and numeracy skills outlined in the *Literacy and Numeracy Strategy (2011-2020*) (DES, 2017) collaborative ICT models, such as Fís, have the potential to help develop these skills. Key stakeholders consider collaboration as having positive outcomes in terms of ICT integration in the classroom (DES, 2015; Butler et al., 2013; NCCA, 2013a). Findings align with Wiegel and Gardner (2009) in pointing to the challenges associated with ICT integration, such as ensuring equal

participation amongst students and adapting methodologies to provide for collaborative ICT project-based learning. Findings in the current study indicate that the collaborative nature of filmmaking is supportive of student engagement. All participants commented on the ease at which students took on various roles and described how students developed problem-solving strategies during filmmaking. Tomlinson (2017, p.89) outlines how reflection on outcomes of theatre performances she facilitated with students revealed that 'Students and teacher did better work because it was real. It mattered. It both shaped us and reflected us.' Participants in the current study attributed the high levels of student motivation to a real audience as well as tangible steps and outcomes in the filmmaking process. Such considerations are important regarding outcomes of Fís as they may contribute to both the suitability and the uniqueness of filmmaking as a form of ICT integration in education.

In summary, findings imply that working with Fís to create films may have the potential to support teachers' professional development and confidence in respect of ICT integration. Findings indicate that was supportive of student engagement and learning was prevalent in the data and is perhaps a more pertinent consideration. This is potentially indicative of certain successes from the particular model of ICT integration proposed by Fís, and further study on the outcomes of the project should make this a focus.

Conclusion

Findings indicate mainly positive outcomes of teachers' involvement with Fís. However, teacher confidence and lack of time were found to be potential barriers. Findings suggest that whole-school planning for ICT integration, a shift in teacher attitudes, and professional development towards trying new technologies might assist. Results further indicate that outcomes include increased literacy, numeracy, motivation to learn, and collaborative learning. The limited timeframe and small-scale nature of this study impact the scope of the findings. Data was collected from just three participants, who had all had successful experiences working with Fís. Therefore, it is not representative of the population of teachers who have participated in the project. While these findings may provide some indication that constructivist methodologies are worthy approaches to filmmaking and ICT integration, the small sample and limited methods used for this study prohibit definitive conclusions. Findings linked ICT skill development to hands-on filmmaking experiences yet the depth of this study did not provide sufficient scope to conclude that teachers' pedagogic orientation in terms of ICT integration was enhanced as a result. Analysis of the data and literature revealed the issue of teacher confidence is complex. Further research should investigate data from a larger sample to examine this further as well as the extent to which this applies to other teachers who have created films for Fís. Further investigations into student perspectives and those of Fís would provide a more multi-faceted analysis.

Whether the success experienced by teachers through filmmaking was a motivating factor in their ICT development deserves deeper interrogation with a wider sample. The extent to which creative processes and the product-based nature of filmmaking support creativity also deserves further investigation as there are suggestions in the findings that filmmaking may be particularly suitable in this regard. Engagement in this study has inspired the researcher to incorporate filmmaking in her future practice as the findings indicate benefits for integrating ICT but also may have positive outcomes for student learning.

References

Bell, J. and Waters, S. (2014) *Doing your research project: a guide for first time researchers in education, health and social science*, 5th edn. Maidenhead: Open University Press.

Bell, J. (2006) *Doing your research project: A guide for first time researchers in Education, Health and Social Science*, 4th edn. Berkshire: Open University Press.

Boden, M.A. (1990) *The Creative Mind: Myths and Mechanism*, London. Basic Books.

British Educational Research Association (2011) *Ethical Guidelines for Educational Research*, [online], Available at: http://www.bera.ac.uk/system/files/3/ BERA-Ethical-Guidelines-2011.pdf [Accessed: 01 March 2017].

Braun, V. and Clarke V. (2006) 'Using thematic analysis in psychology*', Qualitative Research in Psychology,* 3(2), 77-101, Routledge.

Butler, D., Shiel, G., Leahy, M., and Cosgrove, J. (2013) *Building Towards a Learning Society: A National Digital Strategy. Consultative Paper*, [online], Available at: http://www.education.ie/en/Schools-Colleges/Information/ Information-Communications-Technology-ICT-in-Schools/Digital-Strategy-for-Schools/Building-Towards-a-Learning-Society-A-National-Digital-Strategy-for-Schools-Consultative-Paper.pdf [Accessed: 03 April 2017].

Cakir, M. (2012) 'Epistemological dialogue of validity: building validity in educational and social research', *Education,* 132(3), 664-674.

Cohen, L., Manion, L., and Morrison, K. (2011) *Research methods in education*, 7th edn. Routledge.

Cohen, L. and Manion, L. (2007) *Research Methods in Education*, 6th edn. London: Routledge.

Conneely C., Lawlor J., and Tangney B. (2015) '*Technology, teamwork and 21st Century skills in the Irish classroom,'* in Butler, D., Marshall, K., and Leahy, M. (eds.), *Shaping the future: How technology can lead to educational transformation*, The Liffey Press.

Cosgrove, J., Butler, D., Leahy, M., Shiel, G., Kavanagh, L., and Creaven, A.M. (2014) *The 2013 ICT Census in Schools-Summary Report*, Dublin: Educational Research Centre, Department of Education and Skills.

Department of Education and Skills (2017) *Literacy and Numeracy Strategy (2011-2020): Interim Review 2011-2016; New Targets 2017-2020*, [online], Available at: https://www.education.ie/en/Publications/ Educaiton-Reports/pub_ed_interim_review-literacy_numeracy-2011.2020.PDF [Accessed: 23 March 2017].

Department of Education and Skills (2015) *The Digital Strategy for Schools (2015-2020); Enhancing, teaching learning and assessment (The Digital Strategy)*, Department for Education and Skills, Dublin: Stationery Office.

Department of Education and Skills (2014) *The Education and Training Sector Integrated Reform and Delivery Plan*, Department of Education and Skills, Dublin: Stationery Office.

Department of Education and Skills (2013) *Submission by the Department of Education and Skills to the Joint Oireachtas Committee on Education and Social Protection*, February 2013, Department of Education and Skills. Dublin: Stationery Office.

Department of Education and Skills (1999) *Primary School Curriculum; Introduction*, Dublin: The Stationary Office.

Donnelly, D., McGarr, O., and O'Reilly, J. (2011) 'A framework for teachers' integration of ICT into their classroom practice', *Computers and Education*, 57, 1469-1483.

Ertmer, P. and Ottenbreit-Leftwich, A. (2010) 'Teacher Technology Change: How Knowledge, Confidence, Beliefs, and Culture Intersect', *Journal Of Research On Technology in Education*, 42(3), 255-284, Education Source, EBSCO*host* [Accessed: 24 March 2017].

Ertmer, P.A. (2005) 'Teacher Pedagogical Beliefs: The Final Frontier in Our Quest for Technology Integration?' *Educational technology research and development,* 53(4), 25-39.

Ertmer, P.A. (1999) 'Addressing first- and second-order barriers to change: strategies for technology integration', *Educational Technology Research and Development*, 47(4), 47–61.

Freire, P. (1972) *Pedagogy of the oppressed*, London: Sheed and Ward.

Fullan, M. (2016) 'The elusive nature of whole system improvement in education', *Journal of Educational Change,* 17(4), 539-544.

Fullan, M. (2007) *The new meaning of educational change*, 4th edn. London: Teachers College Press.

Glaser, B. and Strauss, A.L. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*, Chicago: Aldine Publishing Company.

Government of Ireland (1998) *Data Protection Act 1998.* Dublin: The Stationery Office, [online], Available at: https://www.dataprotection.ie/viewdoc .asp?DocID=796 [Accessed: 07 March 2017].

Guzman, A. and Nussbaum, M. (2009) 'Teaching competencies for technology integration in the classroom', *Journal of computer assisted learning,* 25(5), 453-469.

Hague, C. and Payton, S. (2010) *Digital literacy across the curriculum*; *Futurelab*, [online], Available at: https://www.nfer.ac.uk/publications/FUTL06 /FUTL06.pdf [Accessed: 02 April 2017].

Hermans, R., Tondeur, J., van Braak, J., and Valcke, M. (2008) 'The impact of primary school teachers' educational beliefs on the classroom use of computers', *Computers & Education*, 51(4), 1499-1509.

Holton, J.A. (2010) *The Coding Process and its challenges*, [online], Available at: http://groundedtheoryreview.com/2010/04/02/the-coding-process-and-its-challenges/ [Accessed: 04 April 2017].

Ito, M. (2009) *Media literacy and social action in a post-Pokemon world,* A keynote address for the 51st NFAIS Annual Conference, [online], Available at: www.itofisher.com/mito/publications/media_literacy.html [Accessed: 03 March 2017].

Kampylis, P. and Berki, E. (2014) *Nurturing creative thinking*, UNESCO Gonnet Imprimeur, 01300 Belley, France, [online], Available at:http://unesdoc. unesco.org/images/0022/002276/227680e.pdf [Accessed: 03 March 2017].

Kelly, O. and Cutting, R. (2014) 'Primary Science and Creativity: Strange Bedfellows?' [online], Available at: https://www.dcu.ie/sites/default/files/ smec/pdfs/OKelly-primary-science-and-creativity-strange-bedfellows.pdf [Accessed: 03 April 2017].

Law, N., Pelgrum, J., and Plomp, T. (2008) *Pedagogy and ICT use in schools around the world: Findings from the IEA SITES 2006 study*, Hong Kong: The Comparative Education Research Centre.

Leahy, M., Davis, N., Lewin, C., Charania, A., Nordin, H., Orlič, D., Butler, D., and Lopez-Fernandez, O. (2016) 'Smart Partnerships to Increase Equity in Education', *Journal of Educational Technology & Society,* 19(3), 84-98.

Lo Iacono, V., Symonds, P., and Brown, D.H.K. (2016) 'Skype as a Tool for Qualitative Research Interviews', *Sociological Research Online,* 21(2), 12 [online], Available at: http://www.socresonline.org.uk/21/2/12.html [Accessed: 02 April 2017].

Loveless, A. and Williamson, B. (2013) *Learning Identities in a Digital Age – Rethinking creativity, education and technology*, 1st edn. Routledge.

Loveless, A. (2011) 'Technology, pedagogy and education: reflections on the accomplishment of what teachers know, do and believe in a digital age', *Technology, Pedagogy and Education*, 20(3), 301-316.

Luckin, R., Bligh, B., Manches, A., Ainsworth, S., Crook, C., and Noss, R. (2012) *Decoding learning: the proof, promise and potential of digital education*, NESTA.

Luckin, R., Clark, W., Graber, R., Logan, K., Mee, A., and Oliver, M. (2009) 'Do Web 2.0 tools really open the door to learning? Practices, perceptions and profiles of 11–16 year-old students', *Learning, Media and Technology,* 34(2), 87-104, Routledge.

Luckin, R. (2008) 'The learner centric ecology of resources: A framework for using technology to scaffold learning', *Computers and Education,* 50(2), pp.449-462.

McGarr, O. (2009) 'The development of ICT across the curriculum in Irish schools: A historical perspective', *British Journal of Educational Technology,* 40(6), pp.1094-1108.

Mishra and Koehler (2006) 'Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge', *Teachers College Record,* 108(6), June 2006, pp.1017–1054 Copyright by Teachers College, Columbia University.

National Council for Curriculum and Assessment (2013a) *Digital Media Literacy Short Course*, [online], Available at: http://www.juniorcycle.ie/NCCA _JuniorCycle/media/NCCA/Documents/Curriculum/Short%20Courses/Digi tal-Media-Literacy-Final.pdf [Accessed: 23 March 2017].

National Council for Curriculum and Assessment (2013) *Key Skills of Junior Cycle. National Council for Curriculum and Assessment*, [online], Available at: http://www.juniorcycle.ie/NCCA_JuniorCycle/media/NCCA/Documents/Ke y/KeySkills-overview-Feb-2013.pdf [Accessed: 10 March 2017].

National Council for Curriculum and Assessment (2008) *Primary Curriculum Review: Phase 2 (Gaeilge, Science, SPHE)*, [online], Available at: http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_an d_Primary_Education/Primary_School_Curriculum/Primary_Curriculum_R eview_PCR_/Phase_2_Gaeilge,_Science_and_SPHE/PCR2_finalreport.pdf [Accessed: 23 March 2017].

Mannix McNamara, P. (2012) *So what is really worth fighting for in our schools: the role of the teacher in challenging educational times?,* Teachers Union of Ireland Annual Conference (2012).

Merriam, S.B. (2009) *Qualitative Research: A Guide to Design and Implementation*, 3rd edn. Somerset: Jossey-Bass.

Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis*, 2nd edn. Thousand Oaks, CA: Sage Publications.

Papert, S. (1993) *The Children's Machine; Rethinking School in the Age of Computer,* New York: BasicBooks.

Patton, M.Q. (2002) *Qualitative Research & Evaluation Methods*, 3rd edn. Thousand Oaks, California: Sage.

Rincon-Gallardo, S. (2016) 'Large scale pedagogical transformation as widespread cultural change in Mexican public schools', *Journal of Educational Change*, 17, 411-436.

Sarantakos, S. (2005 & 2015) *Social research,* New York: Palgrave Macmillan.

Sullivan, K., Marshall, K., and Tangney, B. (2015) 'Learning circles: A collaborative technology-mediated peer teaching workshop', *Journal of Information Technology Education: Innovations in Practice*, 14, 63-83.

The National Advisory Committee on Creative and Cultural Education (NACCEE) (1999) *All our futures: Creativity, Culture and Education,* National Advisory Committee on Creative and Cultural Education. London: DfEE, [online], Available at: http://sirkenrobinson.com/pdf/allourfutures.pdf

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2008a*) ICT competency standards for teachers: Policy framework*, [online], Available at: http://unesdoc.unesco.org/images/0015/001562/156210E.pdf [Accessed: 02 April 2017].

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2008b) *ICT competency standards for teachers: Competency standards modules*, Paris: UNESCO.

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) (1999) *New Directions for ICT-Use in Education*, UNESCO World Communication and Information Report, [online], Available at: http://www.unesco.org/education/educprog/lwf/dl/edict.pdf [Accessed: 03 April 2017].

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2011) *ICT competency standards for teachers: Policy framework*, [online], Available at: http://iite.unesco.org/pics/publications/en/files/3214694.pdf [Accessed: 02 April 2017).

Tomlinson, C.A. (2017) 'Making Meaning in the Disciplines', *Educational Leadership*, 74(5), 88-89.

Tondeur, J., Devos, G., Van Houtte, M., Van Braak, J., and Valcke, M. (2009) 'Understanding structural and cultural school characteristics in relation to   educational change: the case of ICT integration,' *Educational Studies,* 35(2),   223-235.

Tondeur, J., Valcke, M., and Van Braak, J. (2008) 'A multidimensional approach to determinants of computer use in primary education: teacher and school characteristics'*, Journal of Computer Assisted Learning*, 24(6), 494-506.

Wegerif, R. (2010) *Mind-Expanding: Teaching for Thinking and Creativity*, Buckingham, UK: Open University Press/Mcgraw Hill.

Wiegel, M., James, C., and Gardner, H. (2009) 'Learning: Peering backward and looking forward in the digital era', *International Journal of Learning and Media,* 1(1), 1-18.

Wong, D., Mishra, P., Koehler, M.J., and Siebenthal, S. (2007) 'Teacher as filmmaker: iVideos, technology education, and professional development', *Technology in the college classroom*, 181-195.

Vygotsky, L.S. (1986) *Thought and language*, Cambridge, MA: MIT Press.

Zhou, C., Chen, H., and Luo, L. (2014) 'Students' perceptions of Creativity in Learning Information Technology (IT) in Project Groups', *Computers in Human Behaviou*r, 41, 454-463.

Zhou, C., Shen, J., Wang, X., Neber, H., and Johji, I. (2013) 'A Cross-Cultural Comparison: Teachers' Conceptualizations of Creativity', *Creativity Research Journal*, 25(3), 239-247.

Supporting Parentally Bereaved Children in the Classroom, by Anita-Jane Nolan

Biography

Anita-Jane Nolan is from Co. Wicklow. She completed the Professional Master of Education (PME) in Primary Education with Hibernia College and received first class honours. Prior to this, she studied for a Bachelor of Science Degree in Business and Management in DIT. After receiving her degree she trained to become a qualified Irish Dance Teacher, this reinforced her passion for teaching. The topic of this research was subsequently influenced by her own experience of bereavement after losing her father when she was in secondary school. Anita has a keen interest in the area of childhood bereavement and education. She is currently teaching first class in a primary school in Dublin.

A Quantitative Study of Teachers' Perspectives on Supporting Parentally Bereaved Children in the Irish Primary School, by Anita-Jane Nolan

Research supervisor: Dr Aoife M. Lynam

Abstract

Death is a topic that is avoided but unfortunately death itself is unavoidable. This quantitative study explored teachers' perspectives (N=26) of dealing with children who are parentally bereaved in the primary school classroom. Results indicate that there are perceived needs for training and external support to enable the teachers provide appropriate support to pupils. The majority (88%) of respondents believed that all teachers should receive training in childhood bereavement with a further 73% of respondents stating they would seek external support if a child in their class was parentally bereaved.

Keywords: Parental Bereavement, childhood bereavement

Introduction

It is likely that teachers will come in contact with a bereaved child at some stage during the course of their career (Lowton and Higginson, 2003). Draper and Hancock (2011) state that the number of children bereaved of a parent or primary care giver is set to rise if the increasing rate of suicide is taken into account. There are support services in place that support teachers such as the National Educational Psychological Service (NEPS). However, not all deaths fall under 'critical incidents' or traumatic; 'routine' deaths occur where the classroom teacher has the role and responsibility to support. The researcher has had personal experience of parental bereavement (PB) in post-primary school. Having a few days off from school does not constitute adequate support. The research project addresses three main research questions:

1. In what ways do primary school teachers deal with bereavement?
2. Should all primary school teachers receive training in the area of childhood bereavement?
3. Do Irish teachers feel confident in supporting children who experience parental bereavement in the primary school classroom?

Literature review

Freud (1917) initiated responses to bereavement in viewing grief and bereavement as being isolated. Bowlby's original publication in 1951 specifically focuses on attachment and loss (1969, 1973, and 1980). Bowlby (1980) describes bereavement and grief as that response to the loss or separation from the attachment figure. Stroebe's (2002, pp.28) latter work, known as 'monumental

trilogy', outlines patterns of grieving and how these are influenced both positively and negatively by experiences and attachment.

Freud's idea of a reconstruction process is a view supported by Parkes (1988), who introduced the concept of the assumptive world. Holland (2008) refers to this as the child's apparent certainty that their parents will always be there. This assumption is partially removed by parental separation and totally removed in the case of death. Essentially, when bereavement occurs, our assumptive world is shattered and we are forced to reconstruct it. When a death is traumatic, this reconstruction process can be more difficult. Therefore, teachers need to be aware that children who are experiencing a loss 'have difficulties in school as a consequence of such disruptive events' (Burns, 2010, p.13).

Children's grief responses

A child's understanding of death depends on numerous factors such as their level of cognitive development, their relationship with the deceased, and also the nature of the death. Literature on children's cognitive understanding of death mainly relies on Piaget's theory of cognitive development (1954). The Pre-Operational Stage (ages 2–7) is characterised by magical and unrealistic thinking, leading children to fantasise about a reunion with the deceased (Samide and Stockton, 2002; Boyd Webb, 2003). In the Concrete-Operational Stage (ages 7–11), children begin to understand that death is final and will eventually happen to everybody. However, they usually associate death as occurring when somebody is old; therefore, the death of a parent is distressing at this age (Webb, 2003). In the Formal-Operational Stage (ages 9–12), children tend to understand the concept of death but they may not be able to adequately express their feelings about it (Webb, 2003; Samide and Stockton, 2002).

Dealing with bereavement in school

Luk-Fong (2011) asserts that a child's two worlds, of home and school, are merged in one context and these impact each other. An Irish study by McGovern and Barry (2000) found that 35% of 142 teachers had dealt with the death of a child's parent in their classroom. Lowton and Higginson (2003) ascertain that it is likely that every teacher deals with bereaved children at some stage of their career, especially when one considers that children tend to regrieve at a later stage.

The teacher's role

Considering children spend a significant amount of time in the classroom, teachers should be able to provide additional help and support to children when they are bereaved (Holland, 2008; McGovern and Tracy, 2010; Lowton and Higginson, 2003). Holland (1993) views schools as a second home and children spend a large portion of their day with individual teachers. Death can be perceived as a 'taboo'

subject; teachers and parents alike find it hard to discuss it with children (McGovern and Barry, 2000; Holland, 2008; Walter 1991). Schools need to be more responsive in dealing with a death in a proactive way—creating environments where both pupils and their teachers are better prepared for the challenges that it poses (Holland, 2008).

The need for training

The UK charity Winston's Wish (2009) states that 'our first thought is "Help!" and we don't know what to say, fearing we will "make it worse"' (p.10). Tracey and Holland's (2008) research found that teachers want to support bereaved students but are sometimes afraid to approach the topic. Holland (2008, p.415) maintains that 'a sensitive teacher who is able to acknowledge the needs of the pupil and help them through the mourning process is crucial in helping children to adjust to a loss through death'. The teachers' primary role is to teach but they also have a direct role in the well-being of their pupils (Holland, 2008). Webb and Vulliamy (2001) state that this pastoral care role is understated and, at times, largely unacknowledged. Teachers have to deal with the recent bereavement and also any current reactions to past bereavements throughout their working day (ibid.).

Support services

The National Educational Psychological Service (NEPS) was established in 1999 to provide support to schools in times of tragedy. They offer immediate short-term support, information, and advice (NEPS, 2016). However, not all PBs are considered 'critical incidents' and Lowton and Higginson (2003) remind us that it is important that members of the school staff feel capable of providing support to bereaved children in times where there are 'routine' deaths as opposed to those occurring through traumatic circumstances.

School policies

McGovern and Tracey (2010) emphasise the importance for all schools to have policies and procedures in place regarding bereavement. Lowton and Higginson (2003) stress the need for schools with policies that deal with critical incidents to also have procedures that teachers can follow when dealing with routine deaths. Holland and Wilkinson (2015) further agree that such policies and procedures should provide a clear pathway for support both for the school staff and the bereaved children.

Methodology

Research design

The researcher considered qualitative and quantitative approaches for this project. A qualitative design allows for flexibility in the collection of data, allowing the

researcher to understand the world of the respondent (Sarantakos, 1993). Corbin and Strauss (2008, p.16) state that qualitative research enables the researcher to 'enter into the world of its participants'—to see things from their perspectives and essentially, 'attention is given to the holistic picture in which the research is embedded' (Scott and Morrison, 2005, p.183). A quantitative approach was deemed more appropriate and the researcher was mindful that this approach minimises personal bias (Rubin and Babbie, 2010). Burton et al. (2008) state that questionnaires easily generate information while providing participants with security in relation to confidentiality, anonymity, and also allows for reflection. Mixed questionnaires were used with qualitative components whereby participants could provide additional information. Denscombe (2007, p.166) assert the inclusion of open-ended questions in a questionnaire can be a huge advantage as it can 'reflect the full, richness of the complexities for the views held by the respondents'.

Research participants and sampling

The research was carried out across three schools in the South East of Ireland. To increase the validity and prevent a non-biased response, the participants targeted were a mix of Principals, Newly Qualified Teachers (NQTs), experienced teachers and Resource/Learning Support Teachers. A purposive and a convenience sample (Bell, 2010) were used. The researcher distributed paper questionnaires and used this opportunity to brief school staff on the research (n=32). Respondents were invited through word of mouth and also through personal connections with the researcher. Through purposive sampling, the researcher ensured that there was a mix of respondents, including those who had experienced PB in their school community and those who had not.

Data analysis

Questionnaires produced both quantitative and qualitative data. The quantitative data was produced by closed questions whereby respondents were asked to tick the most appropriate answer. Using open-ended questions produced qualitative data. Microsoft Excel was used to compile and analyse the quantitative data and the qualitative data was processed using thematic analysis. Braun and Clarke (2008, p.79) describe thematic analysis as a 'method for identifying, analysing and reporting patterns within the data', out of which the researcher identified emerging themes.

Ethical considerations

Ethical approval was sought from the Hibernia College Ethics Committee before any research was conducted. All areas of ethical considerations were adopted to ensure that the participants would not feel uncomfortable when participating in this sensitive research. The researcher included a cover page recommended by
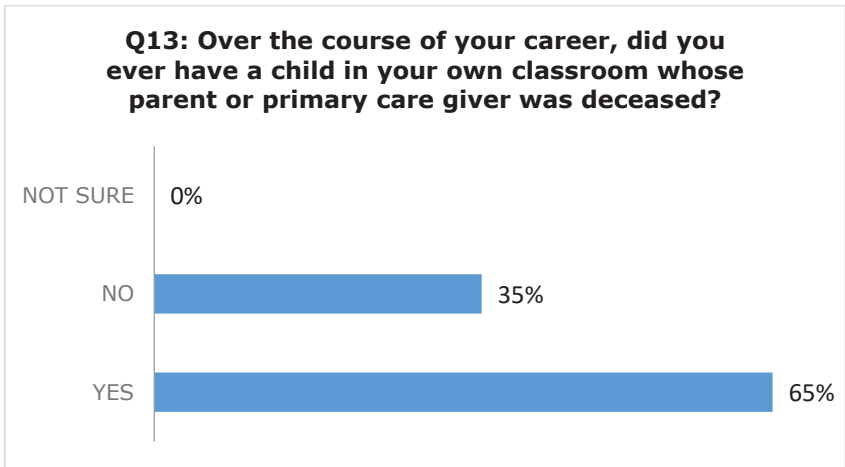
Ruane (2005) along with the questionnaire to satisfy the requirement for voluntary informed consent. All parties involved were assured confidentiality, anonymity, and access to the finished research project on completion if they wished.

Results

A total of 32 questionnaires were distributed with a response rate of 81.25% (26 respondents).

Theme 1: Supporting parentally bereaved pupils

Question 12 sought to identify if teachers were aware of any children who experienced a PB in their school community over the past three years. 73% of respondents stated 'yes', illustrated in the following line chart:

Q13: Over the course of your career, did you ever have a child in your own classroom whose parent or primary care giver was deceased?

NOT SURE	0%
NO	35%
YES	65%

Fig. 1 Experience of bereavement in the classroom

Question 13 a) sought to establish how many times respondents recalled having a pupil who was parentally bereaved in their classroom. The following chart shows the frequency of respondents 13 and 19 recalling dealing with such bereavement six times.
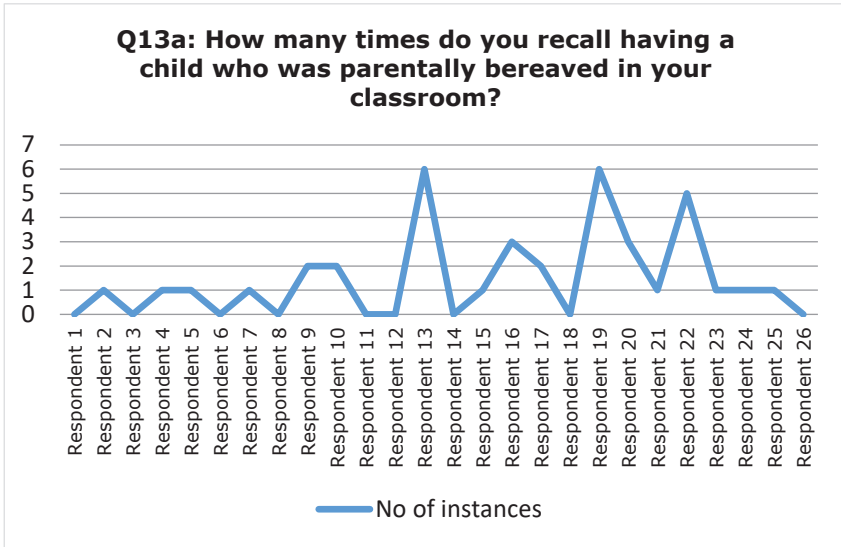
Fig. 2 Frequency of having a parentally bereaved child in the classroom

Teacher support to pupils

Question 13 c) sought to discover how the teacher provided support. All seventeen respondents completed this question; 13 of the 17 respondents wrote a short account of the various steps they have taken along with activities they have used to support the bereaved child. Many respondents noted marking special occasions such as Father's Day (Respondents 7, 15, 17, 20, 23).
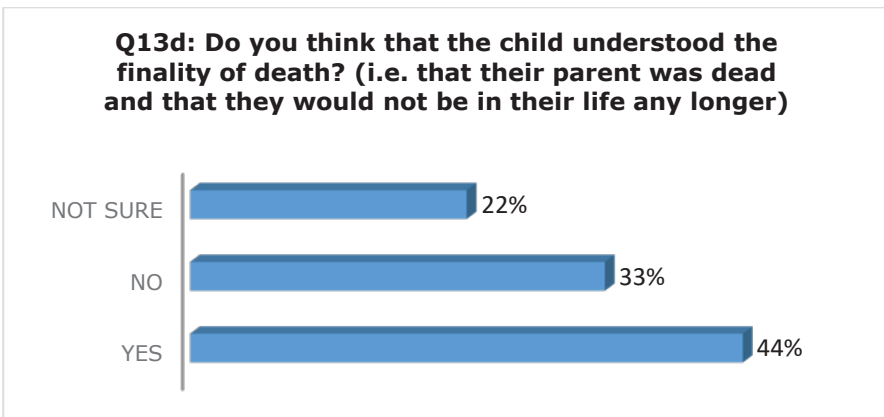

Fig.3 A child's understanding of the finality of death

Theme 2: Discussing death in the classroom

Question 10 sought to establish if respondents felt comfortable discussing the topic of death in the classroom. 50% of respondents noted they feel comfortable discussing this topic; 35% of the respondents stated that they are not comfortable. The following question asked respondents to give their opinions regarding Question 10.

Theme 3: PB: an area of high priority

Question 3 sought to identify how respondents rate the area of PB in terms of school priorities.

Q3: How do you rate the area of parental bereavement in terms of priotities in your school?
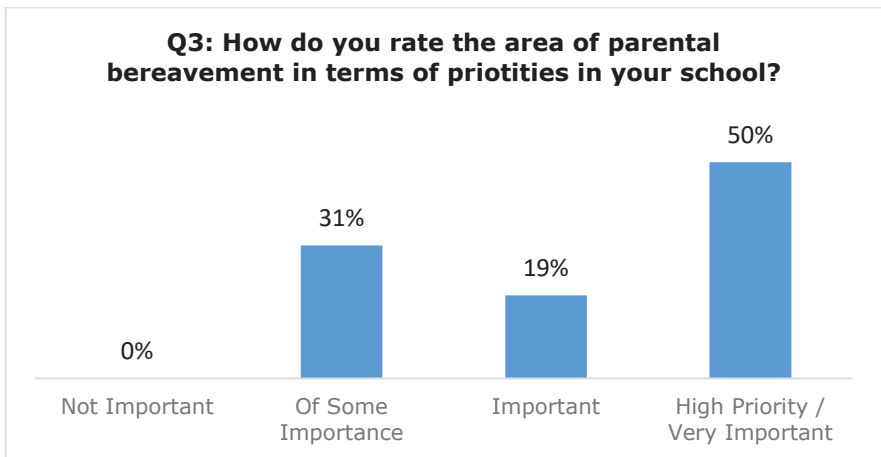
Fig 4. Rating the area of parental bereavement

Question 6 sought to identify the school's approach to responding to a PB. 31% of respondents believed that their school had a proactive approach with formal procedures in place; 58% of respondents believed that their school had a reactive approach, with a more ad-hoc response when an incident arises; and 12% of respondents were 'not sure'. Question 7 set out to establish if respondents considered their school should or should not have a role in supporting parentally bereaved children. The majority of respondents (96%) stated that the school should be involved.

Theme 4: Need for training

Questions 8 and 9 dealt with the area of training. 88% of respondents regarded training as important for all teachers. The second part of question, displayed in the figure below, asked those who answered 'yes' to state when they thought teachers should receive training.
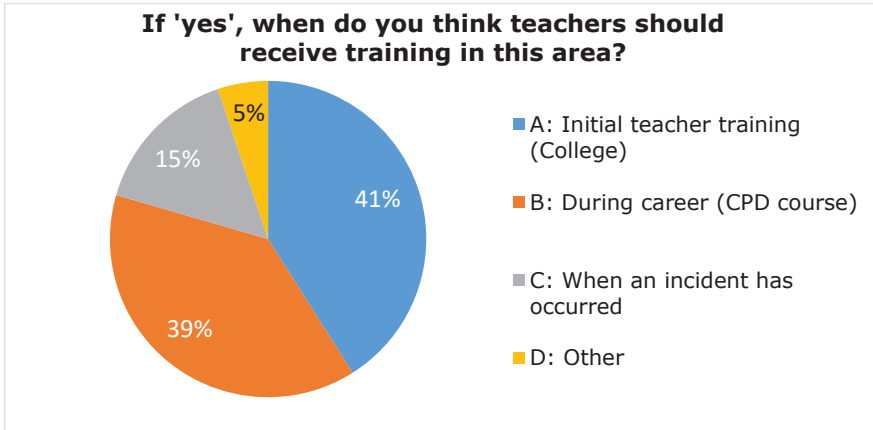
If 'yes', when do you think teachers should receive training in this area?

- A: Initial teacher training (College) — 41%
- B: During career (CPD course) — 39%
- C: When an incident has occurred — 15%
- D: Other — 5%

Fig. 5 Teacher training in the area of bereavement support

Theme 5: External support

Question 13 b) focused on whether respondents who had experienced PB in the classroom sought help from a service outside of the school when the situation arose. NEPS was the most frequent response noted with seven out of nine respondents naming it. Question 14 sought to identify if respondents would consider assistance if a child was parentally bereaved in this academic year. 73% of respondents stated that they would need external support.

Discussion

The discussion is presented under five main themes that emerged from the results:

Supporting parentally bereaved pupils

Lowton and Higginson (2003) assert that it is likely teachers will come in contact with bereaved children at some stage during the course of their career. The results show that 73% of the respondents stated that they were aware of a child who had experienced a PB in their school over the past three years. It is important to note that not one of the respondents had received formal training in this area.

Children's understanding of death

Results indicate that there was a mix of responses regarding whether respondents thought the child understood the finality of death. 33% stated the child did not understand and 22% stated that they were not sure. A number of respondents (5 in total) noted that it depended on the age of the child. Respondent 17 mentioned

that the child did not understand the finality of death as 'the child's family were trying to shelter them from the reality'. They added that this was a family choice and that the school had to respect this. Holland (2008) discusses how contemporary society strives to protect children from emotional aspects of death. Barber (2014) disagrees with shielding children from death, asking the question: 'Are we really "protecting" our children by pretending the inevitable doesn't happen?' Respondent 7 observed a polar opposite case where, stating, 'the child understood that the parent was gone and that they would not be seeing them again. This child seemed to have a positive attitude and would compare herself to somebody worse off.' This comment aligns with Janoff-Bulman (1992) in comparing one's outcome with others whose outcomes are deemed to be worse in order to feel better.

Teacher support to pupils

Nine respondents noted the importance of allowing time to talk and discuss at the child's request. Respondent 4 named this as 'the talking cure'. Respondents 17, 23, and 24 referred to the significance of consultation with the child and the surviving parent. Respondent 23 highlighted the importance of ensuring that the same message was being given both at home and at school. Respondent 15 mentioned visiting the child on the evening of the incident to 'let her see that there was a link between her home life and her school life'. This ties in with Holland and Wilkinson (2015, p.53) in pertaining to the view that the school could offer bereaved children 'tranquility, in contrast to a grieving home', where sometimes the surviving parent may not be able to facilitate their grief.

Discussing death in the classroom

Results indicate a variation in responses when asked if they considered it a good idea to refer to the deceased parent as 'having gone to sleep' or 'as a star in the sky'. 37% of respondents stated that they were not sure; 19% stated that it was a good idea. In line with perceiving death as a 'taboo' subject, respondents who were both teachers and parents alike find it hard to discuss this topic with children (McGovern and Barry, 2000; Holland, 2008; Walter 1991). As young children are literal thinkers, it is important to emphasise the finality of death using concrete language that avoids referring to their loved one as having 'gone asleep' and as the child suffering a 'loss'. Children may take such terms literally and may think that they can be woken up or found again (Webb, 2003; Holland 2008; Jones et al., 2015; Samide and Stockton, 2002).

PB: an area of high priority

Research shows that teachers rate bereavement as being a top priority for concern and aligns with Holland (2008). Results indicate that all respondents rated PB as an area of importance in their school. Even though all of the

respondents ranked PB as an area of importance, 58% of respondents described their schools' approach to dealing with bereavement as reactive with an ad-hoc response depending on the circumstances. Holland (2008) believes that schools should become more responsive and more proactive in creating environments in which pupils and their teachers are better prepared for the challenges that death poses.

Need for training

The main theme emerging in this research is the need for training and guidance for primary school teachers in the area of childhood bereavement. 88% of respondents stated that they thought teachers should receive training. It is evident that there is a severe lack of training in the area of childhood bereavement in Ireland (McGovern and Barry, 2000; O'Brien and McGuckin, 2014). This is an area of concern, considering the amount of time children spend at school. Children may re-grieve and focus should not be solely on bereavement directly following the event. Webb and Vulliamy (2001) assert that a pastoral care role is understated and, at times, largely unacknowledged. Teachers have to deal with both recent bereavements and also any current reactions to past bereavements throughout their working day. Teachers need the appropriate training to be able to support pupils.

External support

Findings indicate that 73% of the respondents answered that they required external support. Eleven respondents mentioned that they would revert to NEPS psychologists, who provide immediate short-term support and offer information and advice to schools in times of tragedy (NEPS, 2016). Others stated some other popular services, such as the *Hospice Foundation*, *Barnardos*, *Winston's Wish*, and *Rainbows* (Respondent 5). Respondent 7 stated that they noticed that 'there is plenty of help when there is a traumatic death'. Respondents noted that their school has dealt with suicides but stated 'there is not as much help available for natural deaths, e.g. parent dying from an illness'. Findings align with Holland (2008) in ascertaining that where there have been incidents of regular parental death, the school is expected to take the lead. This can be a difficult leadership role to take and one that requires external help.

Conclusion

Results reveal that respondents do not feel confident in supporting children who experience PB in the primary school classroom. 96% of participating teachers believed that the school should have a role in supporting parentally bereaved children and all respondents rated PB as an area of importance in their school. There are many opportunities for further research and it may be interesting to

include the perspectives of surviving parents. The research study calls to attention the following three recommendations:

- *Training:* The need for training is evident and would provide support according to the child's age. More critical understandings into the concept of resilience could provide additional help.
- *Addressing loss and death in the classroom:* Teachers should make a conscious effort to address these areas across the curriculum where possible, for example, in Religion, SPHE, and through picture books, class novels to name a few.
- *School policy development and procedures:* There are critical incident policies but not all cases of PB are considered as critical. Thus, there is a need for procedures to be put in place for dealing with bereavements. One member of staff could be the main point of contact, and the school could develop a bereavement support team. Training has the potential to both raise awareness and build confidence and skills. Holland (2008, p.415) believes that 'A sensitive teacher who is able to acknowledge the needs of the pupil and help them through the mourning process is crucial in helping children to adjust to a loss through death'.

References

Barber, E. (2014) *Is Daddy coming back in a minute?* Available at: https://www.youtube.com /watch?v=XD- 1X6pf-34 (Accessed: 15 December 2016).

Bell, J. (2010) *Doing Your Research Project.* 5th edn. England: Open University Press.

Bowlby, J. (1951) *Maternal care and mental health.* Geneva: World Health Organisation. WHO Monograph Series, 2.

Bowlby, J. (1969) *Attachment and loss.* London: Hogarth Press*.*

Bowlby, J. (1980) *Attachment and Loss: Loss; sadness, and depression.* Vol. 3. New York: Basic Books.

Boyd Webb, N. (2003) 'Play and expressive therapies to help bereaved children: Individual, family and group treatment', *Smith College Studies in Social Work*, 73(3), pp. 405-422.

Braun, V. & Clarke, V. (2008) 'Using thematic analysis in Psychology'*, Qualitative Research in Psychology,* 3(2), pp. 77-101.

Burns, D.M. (2010) *When kids are grieving: Addressing grief and loss in school*. California: Corwin Press.

Burton, N., Brundrett, M. and Jones, M. (2008) *Doing Your Education Research Project.* London: SAGE Publications Ltd.

Corbin, J. and Strauss, A. (2008) *Basic of Qualitative Research: Techniques and Procedures for Developing Grounded Theory.* (3rd Edition). London: SAGE Publications.

Denscombe, M. (2007). *The good research guide for small-scale social research projects.* 3rd ed, London: Open University Press, McGraw-Hill.

Draper, A. and Hancock, M. (2011) 'Childhood parental bereavement: the risk of vulnerability to delinquency and factors that compromise resilience', *Mortality*, 16(4), pp.285-306

Freud, S. (1917) *Mourning and Melancholia*. London: Hogarth Press.

Holland, J. (1993) 'Child bereavement in Humberside'. *Educational Research*, 35(3), pp. 289-297.

Holland, J. (2008) 'How schools can support children who experience loss and death', *British Journal of Guidance & Counselling*, 36(4), pp.411-424.

Holland, J. and Wilkinson, S. (2015) 'A comparative study of the child bereavement response and needs of schools in North Suffolk and Hull, Yorkshire' *Bereavement Care*, 34(2), pp.52-58.

Janoff-Bulman, R. (1992) *Shattered assumptions: Toward a new psychology of trauma*. New York: The Free Press – A Division of Simon & Schuster.

Lowton, K., and Higginson, I. (2003) 'Managing bereavement in the classroom: A conspiracy of silence? *Death Studies,* 27(1), pp.717-741*.*

Luk-Fong, P.Y.Y. (2008) 'Initial development of a model of care and support for primary school children in changing familial situations: a Hong Kong hybrid case', *Pastoral Care in Education,* 26(4), pp.281-295.

McGovern, M. and Barry, M. (2000) 'Death education: Knowledge, attitudes and perspectives of Irish parents and teachers', *Death Studies*. 24(4), pp.325-353.

McGovern, M. and Tracey, A. (2010) 'A comparative examination of schools' responses to bereavement and the associated needs of the school community in Galway, West of Ireland and Derry, Northern Ireland', *Pastoral Care in Education*. 28(3), pp.235-252.

National Educational Psychological Service (NEPS), (2016) Available at: http://www.education.ie/en/Schools-Colleges/Services/National-Educational-Psychological-Service-NEPS-/NEPS-Home-Page.html (Accessed on: 16 December 2016).

O'Brien, A. and McGuckin, C. (2014) 'Grieving students: The response and support of educators in Irish schools', *Journal of Postgraduate Research, Trinity College Dublin*, pp. 159-176.

Parkes, C.M. (1988) 'Bereavement is a psychological transition: Process of adaption to change'. *Journal of Social Science,* 44(3), pp. 53-65.

Piaget, J. (1954) *The construction of reality in the child.* New York: Basic Books.

Ruane, J.M. (2005) *Essentials of Research Methods: A Guide to Social Science Research.* Oxford: Blackwell Publishing.

Rubin, A. and Babbie, E. (2010) *Research methods for social work*. Belmont, CA: Brooks and Cole.

Samide, L.L., and Stockton, R. (2002) 'Letting go of grief: Bereavement groups for children in the school setting'. *Journal for Specialists in Group Work*, 27(2), pp.192-204.

Sarantakos, S. (2005) *Social Research.* 3rd edn. New York: Palgrave MacMillan.

Scott, D. and Morrison, M. (2005) *Key ideas in Educational Research*. London: Continuum International Publishing.

Stroebe, M. (2002) 'Paving the way: From early attachment theory to contemporary bereavement research'. *Mortality,* 7(2), pp.127-138.

Tracey, A. and Holland, J. (2008) 'A comparative study of the child bereavement and loss responses and needs of schools in Hull, Yorkshire and Derry/Londonderry, Northern Ireland'. *Pastoral Care in Education,* 26(4), pp.253-266.

Walter, T. (1991) 'Modern death: Taboo or not taboo?', *Sociology* 25(2), pp.293-310.

Webb, R., and Vulliamy, G. (2001) 'The primary teacher's role in child protection'. *British Educational Research Journal,* 27(1), pp.59-77.

Winston's Wish (2009) *Beyond the Rough Rock: Supporting a child who has been bereaved by suicide*. Glouchester: Winston's Wish.

Schools' Preparedness in Dealing with Medical Emergencies, by Elaine O'Donoghue

Biography

Elaine is a primary school teacher, currently teaching 5th class in Mallow, Co. Cork. She completed the Professional Master of Education (PME) in Primary Education with Hibernia College, in which she received first class honours. Elaine previously studied Pharmacy in UCC and subsequently received a Master's in Pharmacy from the RCSI. She practised as a pharmacist for seven years before fulfilling her ambition to be a primary school teacher. Elaine is passionate about the promotion of Science and Maths in primary school and has a keen interest in health promotion amongst students and teachers.

A Study of Irish Primary Schools' Preparedness in Dealing with Asthma and Anaphylaxis Medical Emergencies, by Elaine O'Donoghue

Research supervisor: Avril Carey

Abstract

This study investigates the preparedness of Irish Primary Schools to treat students suffering from an asthma attack or anaphylaxis in the context of new legislation in the area. Using an online questionnaire (n=239), training, perspectives, and perceived self-confidence of teachers and principals in responding to these medical emergencies are examined according to new legislation. A review of administration of medication policies in twenty schools was also conducted (n=20). Results indicate a low average level of confidence in treating such medical emergencies amongst respondents. Recommendations include a need for clearer guidance and increased support for teachers and school management.

Keywords: Asthma, anaphylaxis, preparedness, primary school

Introduction

The 'Medicinal Products (Prescription and Control of Supply) (Amendment) (No.2) Regulations 2015' was passed into law in October 2015. The law allows certain organisations, including schools, to hold in supply specific medications, including adrenaline pens for anaphylaxis and salbutamol inhalers for asthma, which could be administered to a student in an emergency situation by specially trained members of staff. Approximately 4% of school-age children have a food allergy—the most common trigger of anaphylaxis (Sicherer and Mahr, 2010). Almost 20% of anaphylaxis in children first happens on school grounds (Sicherer and Mahr, 2010). Asthma is prevalent in Irish schoolchildren aged between 6 and 9 years—just over 20% (Duggan et al., 2012). Despite these statistics, there is no existing research on how prepared Irish primary schools are in treating medical emergencies. The researcher also examines what policies are in place in relation to such treatment. The research questions include:

1. What are the levels of Primary teachers' confidence in dealing with the emergency situations of asthma and anaphylaxis?
2. What are teachers' perspectives regarding the potential implementation of the permissions of the new legislation in primary schools?
3. To what extent are Administration of Medicines policies in place in Irish primary schools?

Literature review

Asthma is the most common chronic health condition in childhood. Ireland has one of the highest prevalence rates in the world (Department of Health, Health Service Executive, 2015). Severe attacks can be life-threatening and prompt treatment is critical to reduce risk to the patient (Reading et al., 2003). It is crucial that patients and their caregivers know how to recognise an attack, including what steps need to be taken to treat it (Pollart, Compton, and Elward, 2011). Approximately one in twenty-five school-aged children are estimated to have some kind of food allergy and this is the leading cause of anaphylaxis in this age group (Branum and Lukacs, 2009). Delayed administration of life-saving adrenaline for the treatment of anaphylaxis has been associated with increased morbidity and fatalities (Boyce et al., 2010). Due to the quick onset of anaphylaxis, once an allergen has been ingested, many young people do not have the appropriate medical support at hand when they need it most (Kelleher et al., 2013).

Considering the large amount of time children spend in school, it is critical that management of these conditions is optimised in schools (Muraro et al., 2010). According to UK research, 86% of asthmatic children have not had access to an inhaler at school due to its misplacement, damage, or left at home (Department of Health, 2015). Epinephrine availability research found that despite the advice that children at risk of anaphylaxis have emergency medication with them at all times, 41% of at-risk children did not have their epinephrine auto-injector with them at the time of assessment (DeMuth and Fitzpatrick, 2011). Such statistics highlight the need for schools to have a supply of such medicines for emergency use. International research illustrates that primary school teachers in general are not well informed about anaphylaxis and asthma—lacking the knowledge to recognise symptoms and of the emergency treatments available (Ercan et al., 2012; Cicutto et al., 2011; Al Aloola et al., 2014). Teachers may feel overwhelmed when faced with the responsibility of medically attending to a child who is considered at risk of medical emergency in their class. Such fears could be allayed, however, by supplying teachers with the necessary information and resources needed take action should a situation arise (Muraro et al., 2014). Misunderstandings and misinformation received from second-hand sources lead to teacher unease with these issues (Boden et al. 2012). Research has also shown that teachers are concerned about liability issues and insurance cover should they administer emergency medications (Watura, 2002). Explicitly providing teachers with sound information may reduce their anxiety and increase their willingness to act if faced with an emergency (Watura, 2002).

Methodology

Although questionnaires may not be expected to provide the same depth of insight as interviews, they are beneficial as the completion of them does not have the researcher present and are comparatively less complex to analyse (Wilson and

McClean, 1994). Internet questionnaires were selected as they allow for the collection of larger amounts of data in a shorter time scale (Brace, 2008). The questions were chosen with the objectives of the research in mind and informed by literature reviewed. The questions related to the teachers' role and experience, their current perceived confidence in dealing with such situations, and their personal experience of anaphylaxis and asthma attacks in the school setting. The researcher further inquired into teacher perspectives on the new legislation and concerns they have regarding it, if any.

Snowball sampling was utilised as described by Noy (2008). An invitation to participate was emailed to all 3,262 schools listed on the 'Primary and Special School List 2015/2016' (DES, 2016). This email was addressed to the Principal of each school and also asked the recipient to forward the link to the survey to any other primary school teachers they knew would be interested in participating. Random sampling, both stratified and systematic, was used to ensure the policies chosen for review were unbiased and representative (Blaxter, 2012). By employing snowball sampling, the researcher relinquished control of the sample to the 'informants' who received the original email with the link to the questionnaire (Noy, 2008).

Qualitative data was analysed using thematic analysis as described by Braun and Clarke (2006). Responses were examined for key themes and opinions. Content analysis was conducted on the Administration of Medication policies, which involves examining the frequency at which certain phrases occur in the texts being studied (May, 2001).

Despite measures taken to ensure the validity and reliability of this study, it is not without potential limitations. The structure of questionnaires can put restrictions on participants' responses (Cohen et al., 2011). Giving respondents the option to participate in the study allows for self-selection bias, whereby people may be more likely to participate in the study because they have an interest in the issue in question (Lavrakas, 2008). Content analysis is a product of respondents' perspectives and, so, can be subjective (Blaxter, 2012). This form of analysis may also result in an oversimplification of qualitative data and negates the 'common-sense' element of the text's production and interpretation as part of how readers make sense of their social environment (May, 2001).

Results

The questionnaire found that 39% and 23% of all respondents respectively had never received any form of training in the treatment of asthma and anaphylaxis. Of the respondents who had a child in their class with asthma at the time of questioning, 30% of these teachers had never received training of any kind on this condition. 12% of respondents teaching children with anaphylaxis had never received training on anaphylaxis. However, 77% agreed that schools should have

teachers that are formally trained in the administration of emergency medication for these conditions, with only 7% disagreeing outright.

The average confidence level of all respondents in treating asthma was 51%. In those with training of any form, this rose to 62%, while those with no form of training reported an average confidence of 33%. The average confidence level of all respondents in treating anaphylaxis was 44%. Of those with training of any kind, this rose to 52%, while those with no form of training reported an average confidence of only 18%. There was no significant difference in confidence between those that had undergone formal versus informal training in responding to either emergencies. Teachers in management roles were on average 8% more confident than other teachers in responding to both emergencies. 84% of principals and vice principals also described themselves as 'very familiar' with their school's emergency medication policy versus only 18% of other teachers. 57% of respondents said they could envisage themselves taking on a role as emergency medicine administrator in their school. Several respondents commented that a teacher's role is to teach and not to administer medication. However, others believed it is essential that these medications are available in schools and that all staff should receive professional training on their administration. The main challenges schools may face in enacting the permissions of the legislation were identified as 'concerns regarding liability' and 'staff not willing to take on the extra responsibility'. Others included:

- Appropriate storage facilities for medications
- Medication expiry dates
- The prohibitive cost of training and medications
- Arrangements for when trained staff are absent
- The burden of having to retrain regularly
- The responsibility to care for the other students during an emergency situation

The main supports respondents felt schools would need were 'clarity on any potential liability' and 'clear Department of Education policies'. Others included the need for:

- Comprehensive training and ongoing support
- Standardised training provided free of charge
- Substitute cover for those attending the training
- Briefing sessions on the new legislation
- Safe storage facilities
- Relevant medication to be supplied for free to participating schools
- Creation of a standard form/letter of indemnity for parents

In the policy review, it was found that 15% of policies stated that, generally, staff should not be involved in medication administration to students. 80% stipulated that no teacher should administer medication without specific Board of Management approval while 60% stated that teachers should do no more than is 'obviously necessary'. Only 30% of schools specify that the board will make provisions in the event of the authorised staff member(s) being absent and 25% put the onus on parents to ensure the authorised teacher is present each day. Only 25% of policies identified the location of epinephrine pen(s) in the school.

Discussion

Comprehensive training in the emergency treatment of asthma and anaphylaxis is of the utmost importance. Any delay in treatment can greatly increase the chances of morbidity and mortality for the patient (Pumphrey, 2000). Despite these recommendations, research indicates that a significant percentage of teachers have never received any training in managing these emergency situations, including teachers who had a child with one of these conditions in their class at the time that the study was conducted.

Existing research shows teachers' knowledge to appropriately respond to an asthma and anaphylaxis emergency is often inadequate (Al Aloola et al., 2014; Ecran et al., 2012; Cicutto et al., 2011). The findings of this study align such research in indicating the average confidence level in treating an asthma attack was 51% and anaphylaxis at 44%. The difference in confidence between those that had undergone formal versus informal training in responding to these emergencies may indicate that formal training currently provided may not be effective. The increased confidence of principals and vice principals in treating both conditions may be a result of having more teaching experience and responsibility in their roles, or due to being more familiar with the relevant school policies.

Supports which were deemed most necessary by respondents were 'clarity on any potential liability' and 'clear Department of Education policies'. This reinforces the suggestion of Watura (2002) in the need for explicitly providing teachers with well-founded information regarding liability. This may reduce their anxiety and increase their willingness to act (ibid.). However, several respondents commented that the role of the teacher is to educate and that teachers cannot be expected to take on a medical role—a view which Boden et al. (2012) take. In general, statements in the reviewed policies seem to have quite negative connotations, which may explain why many teachers may be afraid to act on them in emergency situations. While concerns were raised about enacting the new legislation, some respondents saw medical emergencies as a very pertinent issue in schools. One respondent highlighted that these children have a 'right to education' and 'a right to be safe and healthy in school', which reflects the 'rights of the allergic child' outlined by Muraro et al. (2010).

A quarter of policies put the responsibility on the parent to ensure that the authorised teacher(s) are in school each day. This impractical stipulation could put incredible pressure and anxiety on parents. It is imperative that schools have as many staff members as possible trained to ensure the best possible chance of a positive outcome in the event of such an emergency. Also, only a quarter of the school policies reviewed specified the location of the epinephrine pen(s) in the school and some of these locations did not seem easily accessible in case of an emergency. It is strongly recommended that these pens and other emergency medication be stored in easily accessible locations so that they can be administered quickly if the need arises (Muraro et al., 2014).

Conclusion

Given the serious nature of these medical emergencies and prevalence in Irish primary schools, the necessity to act promptly at the onset is strongly recommended. A standardised programme for training could be implemented with a view to training as many school personnel as possible. These recommendations arise from the poor, overall self-perceived confidence levels amongst respondents in their ability to treat children in emergency situations. Results demonstrate that teachers are requesting clarity and transparency in the advice and guidelines they receive. The results also suggest that the formal training courses currently provided may not be sufficiently adequate in developing appropriate skills and knowledge to manage these emergencies in their schools. The vast majority of respondents envisaged their school's policy changing in light of the new legislation. However, teachers need clarity regarding liability and more straightforward, perhaps even standardised, policies. All relevant stakeholders should ensure that they are doing as much as possible to allay teachers' fears and empower them to act in these potentially life-saving scenarios. It would be strongly recommended to incorporate the permissions of the new legislation into primary school policy so as to ensure a supply of potentially life-saving medications is available at all times in Irish primary schools. However, the cost of these medications and of appropriate storage facilities, along with the cost of the associated training courses for staff, are issues that would need to be addressed so as to incentivise schools to participate.

References

Al Aloola, N., Naik-Panvelkar, P., Nissen, L., and Saini, B. (2014) 'Asthma interventions in primary schools – a review', *Journal of Asthma*, 51(8), 779-798.

Bell, J. and Waters, S. (2014) *Doing your research project: a guide for first-time researchers*, Maidenhead: McGraw-Hill Education.

Blaxter, L. (2012) *How to Research*, 4th edn. Berkshire: Open University Press.

Boden, S., Lloyd, C., Gosden, C., Macdougall, C., Brown, N., and Matyka, K. (2012) 'The risk management of childhood diabetes by primary school teachers', *Health, Risk and Society*, 14(6), 551-564.

Boyce, J.A., Assa'ad, A., Burks, A.W., Jones, S.M., Sampson, H.A., Wood, R.A., Plaut, M., Cooper, S.F., and Fenton, M.J. (2010) 'Guidelines for the diagnosis and management of food allergy in the United States: report of the NIAID-sponsored expert panel', *Journal of Allergy and Clinical Immunology*, 126(6), 51-58.

Brace, I. (2008) *Questionnaire design: how to plan, structure and write survey material for effective market research*, 2nd edn. London: Kogan Page Ltd.

Branum, A.M. and Lukacs, S.L. (2009) 'Food allergy among children in the United States', *Pediatrics*, 124(6), 1-7.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), 77-101.

Cicutto, L., Julien, B., Li, N., Nguyen-Luu, N., Butler, J., Clarke, A., Elliott, S., Harada, L., McGhan, S., Stark, D., Vander Leek, T., and Waserman, S. (2011) 'Comparing school environments with and without legislation for the prevention and management of anaphylaxis', *Allergy*, 67(1), 131-137.

Cohen, L., Manion, L., and Morrison, K. (2011) *Research methods in education*, 7th edn. Oxon: Routledge.

DeMuth, K. and Fitzpatrick, A. (2011) 'Epinephrine autoinjector availability among children with food allergy', *Allergy and Asthma Proceedings*, 32(4), 295-300.

Department of Health (2015) *Guidance on the use of emergency salbutamol inhalers in schools*, [online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416468/emergency_inhalers_in_schools.pdf [Accessed: May 2017].

Department of Education and Skills (2016) *Data on individual schools*, [online], Available at: http://www.education.ie/en/Publications/Statistics/Data-on-Individual-Schools/ [Accessed: May 2017].

Department of Health, Health Service Executive (2015) *Emergency paediatric asthma guidelines*, [online], Available at: http://www.hse.ie/eng/about/Who/clinical/natclinprog/asthma/workstreams/paed%20guideline.pdf [Accessed: May 2017].

Duggan, E.M., Sturley, J., Fitzgerald, A.P., Perry, I.J., O'B. Hourihane, J. (2012) 'The 2002-2007 trends of prevalence of asthma, allergic rhinitis and eczema in Irish schoolchildren', *Paediatric Allergy and Immunology,* 23, 464-471.

Ercan, H., Ozen, A., Karatepe, H., Berber, M., and Cengizlier, R. (2012) 'Primary school teachers' knowledge about and attitudes toward anaphylaxis', *Pediatric Allergy and Immunology*, 23(5), 428-432.

Kelleher, M., DunnGalvin, A., Sheikh, A., Cullinane, C., Fitzsimons, J., and Hourihane, J. (2013), 'Twenty four-hour helpline access to expert management advice for food-allergy-triggered anaphylaxis in infants, children and young people: a pragmatic, randomized controlled trial', *Allergy*, 68(12), 1598-1604.

Lavrakas, P. (2008) *Encyclopedia of survey research methods*, 1st edn. Thousand Oaks, California: SAGE Publications.

May, T. (2001) *Social issues: research, methods and process*, 3rd edn. Buckingham: Open University Press.

Medicinal Products (Prescription and Control of Supply) (Amendment) (No. 2) Regulations 2015, S.I. No. 449 of 2015. Dublin: The Stationery Office.

Muraro, A., Clark, A., Beyer, K., Borrego, L., Borres, M., Lødrup Carlsen, K., Carrer, P., Mazon, A., Rancè, F., Valovirta, E., Wickman, M., and Zanchetti, M. (2010) 'The management of the allergic child at school: EAACI/GA2LEN task force on the allergic child at school', *Allergy*, 65(6), 681-689.

Muraro, A., Agache, I., Clark, A., Sheikh, A., Roberts, G., Akdis, C., Borrego, L., Higgs, J., Hourihane, J., Jorgensen, P., Mazon, A., Parmigiani, D., Said, M., Schnadt, S., van Os-Medendorp, H., Vlieg-Boerstra, B., and Wickman, M. (2014) 'EAACI food allergy and anaphylaxis guidelines: managing patients with food allergy in the community', *Allergy*, 69(8), 1046-1057.

Noy, C. (2008) 'Sampling knowledge: the hermeneutics of snowball sampling in qualitative research', *International Journal of Social Research Methodology,* 11(4), 327-344.

Pollart, S.M., Compton, R.M., and Elward, K.S. (2011) 'Management of acute asthma exacerbations', *American Family Physician,* 84(1), 40-47.

Reading, R., Jones, T., and Upton, C. (2003) 'Emergency asthma inhalers in school', *Archives of Disease in Childhood,* 88, 384-386.

Sicherer, S. and Mahr, T. (2010) 'Management of food allergy in the school setting' *Pediatrics*, 126(6), 1232-1239.

Watura, J.C. (2002) 'Nut allergy in schoolchildren: a survey of schools in the Severn NHS Trust', *Archives of Disease in Childhood,* 86(4), 240-244.

Wilson, N. and McClean, S. (1994) *Questionnaire design*, Newtownabbey, Northern Ireland: University of Ulster.

Challenges in the Development of an Arts Education, by Laura Kingston

Biography

Laura is from Cork. She graduated from Hibernia College with a Professional Master of Education (PME) in Primary Education. Prior to this, she completed a Bachelor of Arts Degree in Early Childhood Care and Education. Laura spent three years working in the childcare sector, which she believes has greatly benefited her on entering the teaching profession. Laura has always had a keen interest in the Arts, which has provided motivation for this study.

Challenges That Irish Primary School Teachers Face in the Developement of an Arts Education, by Laura Kingston

Research supervisor: Ms. Barbara Fogarty

Abstract

Primary schools are required to make provision for the visual arts, music, and drama as key components of the Irish Primary School Curriculum. There is an expanding body of research to suggest that learning and engagement in the arts have a range of positive outcomes in the lives of young people. With the implementation of the *National Strategy* (2011) to improve the development of literacy and numeracy among young people, the project explores teachers' attitudes on where the arts may be situated in the curriculum in terms of priority. Using a quantitative method approach, primary school teachers completed questionnaires. Results indicate that challenges include time constraints, an overloaded curriculum, teacher confidence, age and ability of children, and resources. Recommendations consist of adequate funding and resources, continuous professional development, and the use of specialist arts teachers.

Keywords: Literacy and numeracy, national strategy, music, drama, visual arts

Introduction

The position and value of the arts in Irish Education has dictated education policy and provision since the nineteenth century. It was not until the late twentieth century that the arts found a central location in a curriculum that had centred on reading, writing, and arithmetic. Today, primary schools are obliged to make provision for the visual arts, music, and drama as key components of the Primary School Curriculum (1999). The *National Strategy* sought to improve the development of literacy and numeracy skills amongst young people in 2011, introducing a potential threat to implementing a full arts education in schools. Time allocation and an overloaded curriculum that prioritises literacy and numeracy may affect time spent on the arts. The researcher focused on issues and challenges that teachers encounter in enacting the arts curriculum. As a teacher in training, the researcher has seen many benefits of an education in the arts. With such an emphasis on the attainment of literacy and numeracy in schools today, the researcher explored whether such focus has had an impact on arts education. The three main research questions for this present study are:

1. What factors hinder the learning and teaching of the arts in the primary classroom?

2. To what extent does the dominance of literacy and numeracy affect the position of the arts?
3. What is the correlation between teacher confidence and the ability to teach the arts?

Literature review

A growing body of evidence suggests arts learning and engagement have a range of positive outcomes in the lives of young people (Bamford, 2006; Fiske, 1999). Despite a renewed interest, these subjects remain marginalised. This marginalisation has been highlighted in a series of Irish reports over the past few decades. Ciarán Benson's 1979 report on 'The Place of the Arts in Irish Education' highlights the place, as well as the grave neglect, of the Arts in Irish education.

The link between society and the curriculum

The historical changes in the primary school curricular provision, dating from the establishment of the first primary school system in 1831 informs this research project. Williams (1961) asserts that an educational curriculum that 'expresses a compromise between an inherited selection of interests and an emphasis of new interests' is essential (p.104). Kelly (2009) describes the curriculum as a 'battleground for competing ideologies' (p.60). Irish schools reflect the society that produces them and the curriculum reflects how knowledge was interpreted at the time (Akenson, 2011).

The National Strategy

In 2011, the Minister for Education and Skills released 'The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020'. This strategy aims to improve the literacy and numeracy of children through 'a strong focus on literacy and numeracy skills' as part of a balanced educational programme (National Strategy, p.10). Professor John Coolahan (2015) noted the worrying lack of investment by the Irish government towards arts education in comparison with the national strategy, which received considerable financial support. This strategy has gained generously from the budgets of 2014 (€9 million) and 2015 (€13.8 million) (Dowling, 2015). In accordance with Ireland's Labour Market Policy, the strategy calls for a smart, inclusive, sustainable jobs, and growth strategy for the European Union by 2020. Several representatives of business and enterprise have highlighted the need for high levels of literacy and numeracy in all areas of employment to continue to expand our 'indigenous knowledge economy' (National Strategy, p.8). This current thinking calls to mind 19th-century Irish education policy, when theorists such as Adam Smith proposed

the state foster literacy and numeracy in national schools 'as an essential factor for industrial progress' (Coolahan, 1981, p.4).

The current threat to arts education

One of the key requirements of the National Strategy requires teachers to achieve objectives through annual standardised testing. These results are communicated to parents, boards of management, and annually to the Department of Education and Skills. Dowling (2013) argues that this demand creates anxiety amongst teachers that data will be used to 'assess teacher performance' (p.272). Sahlberg (2009) argues that the increased focus on standardised testing will result in 'less creative and less imaginative' forms of teaching and learning (p.338). Franklin and Snow-Gerono (2007) suggest that in a standardised testing environment, 'a lack of student choice' exists (p.12). A criticism of the National Strategy outlined by Dowling (2013) calls attention to the 'notable absence' of the recognition or appreciation of the arts (p.267). Dowling warns of the present danger attached to this; teachers may take time away from the music, visual arts, and drama curriculum to focus rigidly on the children's attainment of the skills (ibid.).

Teacher's self-perception

Apart from current education policy, another significant barrier to the effective learning and delivery of the arts is a lack of confidence amongst teachers. Welch (1995) asserts that a teacher's perception of themselves in relation to their own artistic ability impacts on the degree of effectiveness they exhibit in their practice. Some of the problems teachers face in the delivery of an arts education are a lack of motivation and confidence (Hennessy et al., 2001). These factors can result in limited teaching and learning of arts in the classroom. Bandura and Locke (2003) argue that a teacher's motivation to participate in activities is related to their previous life experiences. In relation to the arts, if such experiences are positive, it is likely that they will be motivated to participate and contribute fully in the same way that negative experiences may have implications for arts engagement. When teachers possess a high sense of self-efficacy, they are better able to deliver lessons that cater for student's learning (Tschannen-Moran et al., 1998).

Methodology

The researcher considered different methods of research prior to the study. One method considered was interviewing. Interviews have been described as a 'highly subjective technique' Bell (2005) that may have the danger of bias (p.157). Cohen et al. (2011) found interviews to be limited in the number of respondents they can reach and are time-consuming. Subsequently, the questionnaire was chosen as the most appropriate research technique. Wilson and McLean (cited in

Cohen et al., 2006) state the questionnaire is a popular method of data collection. It offers structure, numerical data, and can be conducted in the absence of the researcher. In addition, the analysis is relatively straightforward. Wellington (2000) suggests there is a tendency for respondents to provide more truthfully in questionnaires than during the interview process.

The questionnaire design

Each participant received a questionnaire accompanied by a cover letter. The cover letter introduced the research study and included details of the participant's right to withdraw and assurance of anonymity. Each questionnaire consisted of 23 questions where respondents were required to tick a box. The researcher followed several guidelines in the crafting of this questionnaire. Following Leung's (2001) advice, the researcher used short and easy-to-understand questions. Careful piloting was conducted to ensure all questions had the same meaning. Assumptive, leading, or offensive questions were excluded from the questionnaire (Bell, 2005). Questions related to teaching experience and time spent on the teaching of various strand units. The design of the questionnaire included open-ended questions, which required the respondents' opinions on issues relating to the research questions.

Data analysis

The open-ended questions were analysed according to guidelines set down by Roberts-Holmes (2011) and Braun and Clarke (2006). Emerging themes were identified through thematic analysis. Finally, the researcher presented the results from closed questions using Microsoft Excel. Varieties of charts were designed to illustrate and compare findings. The researcher identified the major issues that arose from the data under six emergent themes.

Ethical issues

The researcher was granted ethical approval from the Hibernia College Ethics Committee before any research was undertaken. Permission from the principals of two schools was sought prior to data collection of their staff. The researcher adhered to guidelines of the British Educational Research Association (2011). BERA (2011) outlines the importance of securing voluntary informed consent from research participants. On following BERA recommendations, the researcher provided respondents with a cover letter attached to the questionnaire. This letter included details of the research project and outlined the importance of their participation, anonymity, and confidentiality. The treatment of their information was also clarified. The letter explained participants' 'right to withdraw' at any stage during the process (BERA, 2011, p.6). In addition to the informed consent

process, participants were informed of the option to request written feedback of the findings of the research. This was carried out to enable the participant to see how they benefited the study (Robert-Holmes, 2011).

Results

The following themes emerged from data analysis:

Teacher attitudes

The value of an arts education was something that respondents acknowledged. All teachers agreed with this statement while 16 out of 20 'strongly agreed'. Comments included that 'The arts encourage alternative thinking, enhance learning across the curriculum, and nurture creativity and imagination.'

Time

Opinions on the time allocation to teach the three arts subjects varied. Respondents focused on the teaching of the visual arts. It was found that 17 out of 20 teachers spent more than 46 minutes a week teaching visual-arts-related lessons. The minimum amount of time spent teaching a music-related lesson was 30 minutes. In contrast, nine teachers admitted to teaching drama for 15 minutes or less a week. Junior classes spend the majority of time engaging with drama and it is integrated with Aistear. When asked to provide responses to challenges in the teaching of drama, one fifth class teacher reported that 'There is so much to cover on the fifth-class curriculum that some weeks I don't even get to teach it. If I had to choose between doing art and drama, it would be art.' Furthermore, when teachers were asked to respond to literacy and numeracy affecting the position of the arts, all 20 respondents reported that it had an impact. One respondent stated, 'I tend to spend a lot of time on literacy which may eat into the assigned arts times.' Anoher respondent offered the view, 'I am conscious of the fact that society is not concerned with how well a child can paint, but how well they can read and write.'

Standardised testing

All twenty teachers either 'agreed' or 'strongly agreed' with the statement that standardised testing in Ireland 'will most likely result in teaching and learning that is less creative and less imaginative'. In addition, all respondents either 'agreed' or 'strongly agreed' that there was an element of fear amongst teachers regarding the use of testing as it may also be used to assess teacher performance. 55% of respondents 'agreed' that 'teachers who find themselves under pressure to achieve good test results are likely to make decisions to teach to the test.' On the contrary, 45% of participants 'disagreed'.

Teacher confidence

17 teachers stated they were confident teaching all aspects of the visual arts curriculum. Of the respondents, 16 reported that they prefer teaching visual art to any other art form. Only six out of 20 teachers said they felt 'confident teaching all aspects of the music curriculum'. Only two out of the 20 preferred teaching music to any other arts subjects. A common trend in the obstacles to teaching music proved to be a lack of confidence, especially regarding the composing strand. One respondent noted that, 'Instruments- the confidence to teach a whole class percussion. This takes a lot of patience and practice. I do not have a musical background but I think if I did, I would feel a lot more confident teaching music.'

Age and ability

Teachers with younger classes listed 'organisation' as a challenge to their effective teaching of the visual arts. In relation to infant classes, the importance of having resources organised beforehand, particularly with fabric and fiber and paint was noted. In one case, a junior infant teacher described her experience of an art lesson in making caterpillars as involving 'cutting out 6 circle templates for each child, and 24 children in total'. Another respondent stated that 'much of the cleaning is left till after school'. In music, the composing stand proved to be an issue for some participants. One respondent reported that 'patience' and 'confidence' were both required when it came to teaching an instrument to a younger class. Other teachers noted the difficulty in teaching 'music literacy' to certain age groups.

Resources

Respondents reported that the allowance (in some cases, €100) they are given at the start of the year to buy art supplies is not enough. They expressed dissatisfaction with having to 'reach into our own pockets'. Certain resources are more readily available than others, i.e. paint and paper. For music, a respondent noted that 'There is one box of instruments to cater for the whole school.' Another response pointed to the need for a specialist teacher: 'my class would benefit from the expertise of a specialist music teacher to teach certain components on the curriculum.'

Discussion

This critical discussion highlights the different challenges teachers face in the implementation of an arts education. These challenges range from teacher confidence to the age and ability of children. In addition, the findings draw

attention to the status of the arts in relation to literacy and numeracy. Furthermore, it highlights a lack of government funding in the arts.

Teacher attitudes

The attitudes of teachers towards the Arts have improved. Findings from the study reveal that respondents are aware of the value of an arts education. The subjects are no longer perceived as a 'pleasant means of passing time' (Benson, 1979). When asked if the dominance of literacy and numeracy affected the position of the arts in the classroom, one response stated, 'I am conscious of the fact that society is not concerned with how well a child can paint, but how well they can read and write.' These findings build upon literature by Akenson (2011), who contends that Irish schools reflect the society that produces them. For the researcher, this highlights how educational expectations of society can influence the attitudes of teachers towards the teaching of the arts.

Time

In following the guidelines of the National Strategy (2011) that centres on improving literacy and numeracy amongst young people, teachers have been asked to increase their time commitment to developing these skills. In doing so, time devoted to the arts has been reallocated. This has emerged through the analysis of the questionnaires, where one respondent reported: 'I tend to spend a lot of time on literacy which may eat into the assigned arts times.' These findings align with Dowling (2013) highlighting that teachers may take time from the arts to focus on children's attainment of literacy and numeracy skills.

Standardised testing

Participants acknowledge the potential implications that standardised testing may have on the teaching of the arts in the classroom. This builds upon studies by Franklin and Snow-Gerono (2007) in suggesting a standardised testing environment would give rise to 'a lack of student choice' (p.12).   The emphasis on standardised testing reflects 19th-century policy, whereby the rigid academic system and the 'payment by results' contributed to the marginalisation of the arts. While the pressure to achieve results in this manner has diminished, findings indicate an element of fear amongst teachers that their classes' performance will reflect on their own teaching.

Teacher confidence

Teacher confidence was an explicit theme that emerged regarding the implementation of an arts education. This finding aligns with Welch (1995) in asserting a teacher's perception of themselves in relation to their own artistic ability affects the degree of effectiveness they exhibit in their practice. This was certainly evident from the data generated through the questionnaires.

Age and ability

The age and ability of children presented itself as a challenge for many respondents. It was apparent that this led to some strands being utilised more than others, i.e. paint and colour. In music, the composing stand proved to be an issue for some participants. One respondent reported that 'patience' was required to teach an instrument to a younger class. Other teachers noted the difficulty in teaching 'music literacy' to certain age groups. This is an interesting area that further research could focus on.

Resources

Respondents drew attention to the lack of resources available to teach drama. The need for more books, props, costumes, and online resources was emphasised. These findings are consistent with those of Dowling (2013), who argues for more investment in arts education.

Conclusion

Findings indicate that particular factors have led to the exclusion of the arts in the classroom. Such constraints include an overloaded curriculum, teacher confidence, age and ability of the child, and resources. Findings of this study suggest that adequate funding is essential for the delivery and maintenance of an effective arts education. Perhaps, there is a need for additional professional development in the arts to enable teachers to teach all strands with confidence. Indeed, some teachers may benefit from the expertise of a specialist teacher to teach certain components of the arts curriculum. A reduction in class size may also facilitate teachers in the teaching of the arts. Cohen et al. (2011) argue that the questionnaire can only achieve a limited scope. Similarly, Tuckman (1972) asserts that in the case of the questionnaire, respondents may only respond with how they think the researcher wants them to. This may lead to inaccurate findings. Sample size and time constraints also led to limitations in this study. This was a small-scale research project conducted on 20 primary school teachers over a short period.

References

Akenson, D.H. (2011) *A Mirror to Kathleen's Face: Education in Independent Ireland 1922-1960*, London: Routledge

Bell, J. (2005) *Doing your Research Project: A guide for first-time researchers in Education, Health and Social Science*, 4th edn. Maidenhead: Open University Press.

Bell, J. and Waters, S. (2014) *Doing Your Research Project: A Guide for First-Time Researchers*, Maidenhead: McGraw-Hill Education.

Benson, C. (1979) *The Place of the Arts in Irish Education: Report of the Working Party appointed by the Art Council*, Arts Council of Ireland.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3, 77-101.

British Educational Research Association (2011) 'Ethical Guidelines for Educational Research', [online], Available at: https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf?noredirect=1 [Accessed: 23 April 2017].

Cohen, L., Manion L., and Morrison, K. (2007) *Research Methods in Education*, 6th edn. London: Routledge.

Coolahan, J. (2015). 'A Portal to the Future of the Arts in Education', *The Irish Times*, 19 May, [online], Available at: http://www.irishtimes.com/news/education/a-portal-to-the-future-of-the-arts-in- education-1.2212746 [Accessed: 23 April 2016].

Coolahan, J. (1981) *Irish education: its history and structure*, Dublin: IPA.

Dowling, S. (2015) 'The Arts in and Out of School: Educational Policy, Provision and Practice in Ireland Today', *International Electronic Journal of Elementary Education*, 8(2), 267-286.

Fiske, E. (ed.) (1999) *Champions of change: The impact of the arts on learning*, Washington DC: Arts Partnership & President's Committee on the Arts and Humanities.

Franklin, C.A. and Snow-Gerono, J.L. (2007) 'Perceptions of teaching in an environment of standardized testing: Voices from the field', *The Researcher*, 21(1), 2-21.

Hennessy, S., Rolfe, L., Chedzoy, S. (2001) 'The Factors which Influence Student Teacher's Confidence to Teach Arts in the Primary Classroom', *Research in dance education*, 2(1), 53- 71.

Kelly, A.V. (2009) *The Curriculum: Theory and Practice*, 6th edn. London: Sage Publications.

Leung, W-C. (2001) 'How to design a questionnaire', [online], Available at: http://www.dpcdsb.org/NR/rdonlyres/138975AC-B110-4D1E-902F-81C8E69BF9A0/107060/How_to_design_a_questionnaire.pdf [Accessed: 27 April 2017].

Sahlberg, P. (2009) The Role of Education in Promoting Creativity: Potential Barriers and Enabling Factors, in Villalba, E. (ed.), *Measuring Creativity*, Luxembourg: OPOCE, 337-344.

Tschannen-Moran, M. and Hoy, A. (2001) 'Teacher efficacy: Capturing an elusive construct'*, Teaching and Teacher Education*, 17(7), 783-805.

Tuckman, B.W. (1972) *Conducting Educational Research*, The Ohio State University: Harcourt Brace College Publishers.

Welch, A. (1995) 'The self-efficacy of primary teachers in art education', *Journal of Issues in Educational Research*, 5, 71-84.

Wellington, J. (2000) *Educational Research: Contemporary Issues and Practical Approaches*, London: Continuum International Publishing Group.

Williams, R. (1961) *The Long Revolution*, Harmondsworth: Penguin.

Responding to Pupils with English as an Additional Language, by Sarah May Keyes

Biography

Sarah May Keyes graduated from Hibernia College in 2017 with a First Class Honours. Prior to her studies in Primary Education, she received a BA (Hons) degree from UCD in Music and Geography. Soon after obtaining her undergraduate degree, Sarah pursued a career in Teaching English as a Foreign Language (TEFL). Teaching English as a foreign language to children inspired her to become a primary school teacher. She taught in Dublin and developed an interest in second language acquisition and teaching methodologies. English as an Additional Language (EAL) was a specialised area that Sarah decided to conduct her research in. She believes that every child should experience quality learning, regardless of language ability.

An Exploratory Investigation: Ways Irish Primary Teachers Respond to Pupils with English as an Additional Language, by Sarah May Keyes

Research Supervisor: Ms. Fionnuala O'Connell

Abstract

This research investigates how Irish mainstream primary teachers respond to pupils with English as an additional language (EAL). A qualitative approach is undertaken in the form of semi-structured interviews. Themes that emerge from the data included training in EAL, accommodating the learning needs of an EAL pupil, approaches to fostering inclusion, and language support. Findings indicate that training in EAL is limited, differentiation for EAL pupils is used, a variety of inclusion approaches are implemented, native language is valued as a form of inclusion and differentiation, and a concern regarding the two year language support model. The researcher recommends further study into training in EAL and inclusion practices for EAL pupils. Furthermore, it is recommended that ICT and dual language resources are available to mainstream teachers and the cap on language support be extended beyond two years.

Keywords: EAL, Inclusion, second language acquisition, language support, native language

Introduction

According to the *National Council for Curriculum and Assessment* (NCCA) (2006), Ireland has seen an increase in children whose first language 'is neither English nor Irish' (p.5). The increase in immigrants coinciding with economic growth in Ireland (Devine, 2005) has meant developing the education system to meet the needs of pupils whose English is an additional language. Much of the research that explores EAL and bilingualism in the Irish education system outlines issues that EAL pupils face. Research suggests that EAL pupils have faced cuts in support, a widening of educational gaps between the EAL pupil and their peers, and a lack of trained mainstream teachers. Based on literature in EAL, the researcher considered there was a need to study how mainstream teachers were responding to EAL pupils in the classroom in an Irish context. The researcher also explores second language acquisition, methods and strategies used to give EAL pupils access to the curriculum, as well as providing an inclusive teaching environment. Inclusion of EAL pupils needs to be supported and accompanied by research studies that examine models of best practice. Four research questions are addressed in the project:

1. Is there adequate support for EAL pupils in Irish schools?

2. What are mainstream teachers' attitudes towards pre-service and in-service training in relation to EAL pupils?

3. How do mainstream teachers accommodate the learning needs of EAL pupils in their practice?

4. What approaches do mainstream teachers use to foster an inclusive environment for EAL pupils in the classroom?

Literature review

Immigration to Ireland has been the product of economic growth as well as growth of the European Union (EU) (Murtagh and Francis, 2012). Regardless of nationality, every child in Ireland has a right to education as stated by polices such as the *Education Act 1998*, the *Equal Status Act (2000)*, and the *Equality Act (2004)* (Murtagh and Francis, 2012).

Background in EAL support in Ireland

Since the migration trend in Ireland sharply increased alongside economic growth in the 1990s, the Department of Education and Skills (DES) established educational supports for EAL pupils. The Refugee Language Support Unit (RLSU), later renamed as Integrate Ireland Language and Training (IILT), was set up in 1999 to provide support and materials for teaching EAL pupils (DES, 2012). DES granted each EAL pupil two years of support with a language support teacher (LST) to provide EAL pupils with opportunities to access the curriculum inclusively. Murtagh and Francis (2012) state that 'At the outset, schools were allocated one full-time LST post if they had between 14 and 30 children' (p.202). The economic crisis saw the numbers of the LST drastically reduce as funding was cut. As of the school year 2016/17, there are approximately 360 LST in Irish primary schools (DES, 2016).

Pre-service and in-service training in EAL

Murtagh and Francis (2012) and Nowlan (2008) indicate that it is not a requirement for student teachers to observe or teach an EAL pupil during school placement. Murakami's (2008) study argues for high-quality training of teachers in providing support for EAL pupils, asserting that 'learning-on-the-job is not producing teachers who feel entirely competent' (p.279). This argument is further confirmed in the study by Murtagh and Francis (2012) in stating that 'the inclusion of specific training for EAL teaching in pre-service education should be prioritised for all teachers' (pp.208-209). Cajkler and Hall (2009) argue that EAL is a specialist subject that has been marginalised in the school system, which is also neglected in initial teacher education. After teacher training is complete, teachers

enter into a probation period. Kelly (2014) makes the argument that approximately 35% of time in a language support role for EAL pupils should be made a requirement for full-qualified status. Hereafter, teachers can continue to develop their knowledge on providing adequate support for EAL pupils through Continuous Professional Development (CPD) courses. Irish schools must ensure that all teachers have adequate knowledge of EAL (DES, 2012) as preparation and training is needed so that teachers can have a stable and fulfilling career (Tsui, 2007).

Best practice

The DES states that 'The provision of high-quality teaching for all pupils, including EAL pupils, is the professional responsibility of teachers, schools, and boards of managements' (p.34). It is commonly acknowledged that the mainstream teacher should be planning and teaching while keeping the various abilities of the pupils in mind (Teaching Council, 2012). Devine et al. (2013) argue that an effective teacher can display 'flexibility and adaptability to the unpredictability' (p.105). These skills are aligned with the DES (2012) statement of best practice whereby the mainstream teacher should differentiate to accommodate the learning needs of EAL pupils and use active learning strategies to enable the EAL pupil to participate in class. The DES (2012) further outlines criteria in stating, 'EAL pupils are affirmed in using their first language' (p.38). EAL pupils should then be encouraged to develop bilingualism. This statement reflects a study by Soderman (2010) and Parker-Jenkins et al. (2007) in arguing that bilingualism promotes and develops problem-solving skills in pupils, thus providing skills required to achieve learning objectives set out in the curriculum. The omission of the native language from the classroom can have a negative effect as confirmed in studies by McGinnity et al. (2015) and Nowlan (2008).

Second language acquisition

Acquiring a second language is quite similar to the way a child can acquire their native language. It is a developmental process wherein the pupil needs to make sense of the second language internally before speaking (NCCA, 2006). This process aligns with the work of Krashen and the *Input Hypothesis* in particular, which describes the pupil as acquiring a second language not through grammatical lessons but through a more communicative approach of completing activities (Leonardi, 2011). Leonardi also argues that Krashen was of the opinion that SLA should occur by acquiring grammatical structure subconsciously and in a natural way (ibid.). This theory is called *Acquisition-Learning Hypothesis* and is supported by the DES in the 1999 Curriculum whereby a print-rich environment is crucial in a classroom. Pupils are consistently and subconsciously learning the language to progress to the proficiency stage. There are two separate types of proficiency:

BICS and CALP (Cummins, 1981). Undoubtedly, CALP is the type of proficiency that EAL pupils need to access the curriculum (Bylund, 2011). However, as stated by Murtagh and Francis (2012), the two-year provision for EAL support in Irish primary schools does not sufficiently accommodate the acquirement of CALP. More resources and supports, as well as more allocated time, are required to enable the teacher to provide the EAL child with the opportunity to become proficient.

Inclusion

Approaches and strategies that foster inclusion in the classroom have been presented, tested, and revised since the ratification of the United Nations Convention in 1992 (Kelly, 2014). In an EAL context, these approaches and strategies are clearly linked with theories of SLA. One such strategy refers to when a new pupil is introduced to the class; it must be emphasised that the pupil is fluent in their native language but has little knowledge of English and must not be forced to speak English (NCCA, 2005). This strategy is supported by Krashen's theory that teachers should give the pupils time to acquire the second language in the silent stage (Kelly, 2014). Another inclusive strategy is presented in the Intercultural Education Guidelines (2005) and the resource book *Up And Away* (2006) in integrating the EAL pupil with native pupils in the classroom and forming a 'buddy system'. This strategy bears many similarities to the interactive theory of acquiring a second language (Kelly, 2014). As well as giving the EAL pupil the opportunity to develop the second language, they can 'integrate socially with both peers and teachers' (Kelly, 2014).

Methodology

The aim of this research was to identify how mainstream teachers are responding to EAL pupils in their classroom in Ireland. As such, this research aimed to gather data on strategies, supports, and training of mainstream teachers with regards EAL pupils. A qualitative methodology was deemed appropriate for this type of research. A qualitative approach allowed the researcher to gain meaningful insights into participants' views while obtaining findings (Scott and Morrison, 2006). Through this approach, reflexivity could be applied to understand and reflect on data presented and to add credibility to the study (Dowling, 2006). To foster reflexivity in this study, a reflective journal was used. The researcher used semi-structured interviews as the data instrument.

Semi-structured interviews were designed with open-ended questions, which allowed themes within this research to emerge. The interviews were analysed to inform how 'individual respondents define the world in unique ways' (Merriam, 2014, p.90). The questions were piloted before formal data collection was conducted to highlight the suitability of the data method. Goodyear et al.

(2014) promote this approach wherein a researcher engages in a reflective process to obtain quality research.

When all data was collected, thematic analysis was used to interpret the results from the data. Braun and Clarke (2006) argue that thematic analysis should be seen as a 'foundational method for qualitative analysis' (p.78). Taking limitations of thematic analysis into consideration, the researcher used a critical friend to review the transcripts with identifiers removed. The critical friend highlighted and confirmed themes that the researcher found during the first round of analysis.

This research was conducted through non-probability sampling, more specifically purposeful sampling. Convenience sampling was used at first due to location and time restraints (Cohen et al., 2007). Snowball sampling was also used as mainstream teachers gave recommendations as to who they considered would also participate in the research. The researcher continued to gather data until five interviews were conducted. Inclusion criteria required that participants be primary school teachers actively teaching in an Irish classroom, have over two years' experience, and have some experience of an EAL pupil in their class.

Ethical approval was requested and granted by the Hibernia College Ethics Committee.

This research abided by the standards set out by the British Educational Research Association (2011). Participants were given a letter that included information about the research, aims, and purpose. Further information in relation to the recording, transcribing, storage, and analysis of the data was explained. It was stated clearly that all identifiers would be removed in the transcribing process of the interviews, making the participants anonymous. The participants were also made aware that participation was voluntary and that they could withdraw from the interview at any stage. This was made clear in the letter, consent form, and again, prior to the interview.

Results

Four themes emerged from thematic analysis, which included: Training in EAL, Differentiation Strategies for EAL pupils, Inclusion, and EAL Student Support.

Training in EAL

All participants affirmed that their pre-service training did not lead them to feeling equipped to teach an EAL pupil. Interviewees C and D stated that there was a module on AL. Interviewees B and C stated that there was too much of a theoretical focus on this module instead of a practical-led one.

When asked about the level of in-service training on EAL, all participants confirmed they had not found any available CPD courses. However, Participants A,

B, and E acknowledged that an EAL CPD was not relevant to them as the majority of their students were non-EAL pupils. Therefore, they did not actively search for courses on it.

Differentiation strategies for EAL pupils

Findings indicate that the language used in the classroom and adjusting levels of the task were regarded as important. One such way of differentiating the classroom was suggested in labelling and the use of pictorial instruction. Interviewee C and D highlighted that they employ dual language labels in the classroom. Pair work, strategic seating, and grouping arrangements of EAL pupils were highlighted. Participant B commented on using Aistear in her class. She would separate the EAL pupils in her class into different play areas. Participant D also noted the use of seating arrangements and stated she would generally seat the EAL pupil beside a pupil who 'is a good model of English'. She further explained that it is important not to seat EAL students beside less-able pupils of the class.

All participants expressed that clear, concise instructions are necessary when differentiating for EAL pupils. Strong models of English in the classroom were emphasised. Three interviewees expressed a concern regarding changing the levels of tasks rather than providing scaffolding for EAL pupils to access them.

Inclusion

The theme of inclusion was prominent across the data analysis. In responding to the use of EAL pupils' native language in the classroom, four of five participants expressed their preference for using the native language in the class and encouraged EAL pupils to teach the class simple phrases and numbers. Participant C asserted that a pupil's 'sense of pride and confidence is hugely linked to [their] sense of culture'. Using the native language enables spaces that help students feel their culture is not only acknowledged but also celebrated. Participant C further explained that she makes connections for the EAL pupil between their native language and English. In contrast, Participant E did not consider using native language in the classroom as a benefit to the EAL pupil and stated that full immersion is best practice. Participants state they use various parts of the curriculum to discuss an EAL pupil's culture within the class. With regards to the school's ethos on inclusion, all participants agreed that their own school was very inclusive in treating all children equally. Findings further indicate that there was no formal approach to inclusion regarding EAL pupils. Instead, all participants devised their own strategies and approaches. Participants A and B outlined a 'Buddy Bench' system in their school, while Participants C and D had similar systems in their classes. Participant C also considers that the EAL pupil should participate in Irish lessons in an informal approach. Finally, findings on this theme

illustrate that the school community needs to be aware that EAL pupils may learn swear words first and to be 'understanding that we don't assume that a child is being bold' (Participant D).

Language support for EAL

There was a general consensus that there is not enough language support or resources for EAL pupils. Interviewees A and B had pupils who were withdrawn from class for language support. Participant A explained that support for her students had been reduced to once a week in Senior Infants as 'the younger ones pick it up a lot quicker'. Participants A and B noted that the two-year cap on language support was sufficient at infant level. Participant C argued for more support for EAL pupils, referring to the child's future in stating, 'so much of actual secondary and tertiary level experience is based on your ability to put together a piece of writing and they would be so limited in that'. Participant D suggested that the cap on language support is unfair as 'that child will probably be disadvantaged for more than two years in education'. Participant D reiterated the statement that supports needs depend on the pupil's age. Participant E expressed another view on language support, maintaining that two years in language support is 'enough to fully integrate if you've got no other educational or like learning needs'.

Discussion

Training

The findings from this study indicate that participants were aware of a lack of EAL training. Additionally, participants understood that this had an effect on pupil mental health and well-being. Such findings align with Murtagh and Francis (2012) in stating that initial teacher training has at 'least one module on language studies/second language learning' (p.203). Participants asserted that one module was inadequate and teachers need more practical training. Murakami (2008) claimed that learning about EAL during in-service is 'not producing teachers who feel entirely competent' (p.279). This view is evident in this study. DES (2012) states that all Irish schools must ensure teachers have adequate knowledge of EAL. All participants in this study noted there were no current CPDs in EAL. Two participants had taught for a time in the UK and in comparison to Ireland, found that 'Ireland is hugely different in terms of training' (Participant D). This finding mirrors Kelly's (2014) study that argues teachers have noticed the 'lack of appropriate and funded language support training' (p.861). Even with low instances of training in EAL, participants have found and designed their own methods and strategies for SLA and inclusion.

Accommodating the learning needs of EAL pupils

From the findings in this study, it was identified that there was a significant difference in language acquisition between infants and senior EAL pupils. Aistear played an important role in SLA for infant pupils. Participant B outlined specific objectives in place for EAL pupils within Aistear and encourages more communicative language learning amongst all students. This method supports theories of language acquisition through imitation and reinforcement (Leonardi, 2011). This study indicates that participants were aware of the effectiveness of differentiation for EAL pupils. Visual cues, shorter instructions, a slow pace of delivery, individual support, and co-operative learning are factors that participants identify as providing EAL pupils appropriate access to the curriculum. Such practices are consistent with examples of good practice as outlined by DES (2012).

Participants were conscious that pupils' ability to speak English does not equate to their level of cognitive ability. This finding aligns with Nowlan (2008) in maintaining that EAL pupils 'should not be viewed in deficit terms' (p.258). Data findings on the two-year cap of language support align with the literature (Kelly, 2014; Murtagh and Francis, 2012; Nowlan, 2008). The majority of participants consider not having sufficient time to acquire fluency in CALP to be unfair to EAL pupils. Cummins (2011) proposes that a minimum of seven years' learning in the second language is needed in order to achieve fluency close to that of a native speaker. However, interviewees who have taught at junior level noted that two years is sufficient in relation to the emphasis of oral language at that age in the curriculum.

Inclusion

Findings indicate clear participant acknowledgement of EAL pupil inclusion. Literature places EAL pupils with a 'buddy', with the intention to help with language and social development (IILT, 2006; Kelly, 2014; NCCA, 2005). It was evident that participants used this strategy in their classrooms and acknowledged the practice of strategically positioning EAL pupils in seating arrangements to support their language abilities. Furthermore, IILT (2006) suggests using class projects, multicultural storytelling, and drama as methods that integrate EAL pupils more in class. Participants use homework and subjects such as English and religion to share and celebrate diverse EAL pupil cultures. All participants highlighted an informal whole-school approach to the inclusion of EAL pupils. Participants actively engage with EAL pupils informally. Schools hold cultural celebration and the ethos is conducive to an inclusive environment. The approaches found in this study are consistent with DES (2012) recommendations.

Native language

Literature places native language of the EAL pupil firmly in the mainstream classroom. Celebrating diverse pupil culture and native languages is a strategy outlined in Intercultural Education in the Primary School (2005). When an EAL pupil is introduced to the class, it is good practice to acknowledge they are fluent in their own language but have little knowledge of the second language (NCCA, 2005). In this study, it was revealed that Participants C and D use this strategy in their classes. In contrast to this, Participant E considered full immersion in the English language as best practice. However, it is reiterated that the use of the pupil's native language affirms their first language and can close the educational gap between peers and the EAL pupil (Parker-Jenkins et al., 2007; McGinnity, Darmondy, and Murray, 2015; Nowlan, 2008). The use of native language for differentiation was used by the majority of participants in the form of dual language labels in the classroom. This is considered as developing bilingualism, which extends pupils' cognitive and academic skills (Nowlan, 2008; Soderman, 2010) and allows EAL pupils to access the curriculum. This study indicates that bilingualism has motivated non-EAL pupils to learn other languages and promotes problem-solving skills. This is an area worthy of future research.

Conclusion

Results explicitly illustrate that there was a lack of training at both pre-service and in-service levels. These findings are consistent with studies on EAL pupils in Ireland and focuses on the necessity to provide adequate training of student teachers (Kelly, 2014; Murtagh and Francis, 2012; Nowlan, 2008).

Even with the low instances of training among the participants, participants adapted and altered their methodologies to accommodate the needs of the EAL pupils in their class. Resources are also required. Participants employed best practice to give EAL pupils every opportunity to reach their full potential. Participant practices are consistent with NCCA documents (2005, 2006), which included implementing strategic seating arrangements, using visual cues and labels in the classroom, and providing scaffolding for EAL pupils to access the curriculum. Additionally, findings indicate there is a concern amongst mainstream teachers regarding the two-year cap on language support in the senior classes particularly.

All participants in this study outlined strategies for fostering inclusion in class and as a whole-school approach. It was found that the native language of an EAL pupil was used both as a strategy of inclusion and as a form of differentiation. These findings are consistent with the DES (2012) Inspectorate Report on EAL in Primary School as well as Kelly's (2014) study, which emphasises a need for EAL pupils to 'maintain their heritage language' (p.872). EAL is a specialised area that would benefit greatly from further research and study.

References

Baker, C. and Prys Jones, S. (1998) *Encyclopaedia of Bilingualism and Bilingual Education*, Clevedon: Multilingual Matters.

Bell, J. (2005) *Doing Your Research Project*, 4ᵗʰ edn. England: Open University Press.

Braun, V. and Clark V. (2006) 'Using thematic analysis in Psychology', *Qualitative Research in Psychology,* 3, 77-101.

British Education Research Association (2011) *Ethical Guidelines for Educational Research*, [online], Available at: https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-Ethical-Guidelines-2011.pdf [Accessed: 20 Nov 2016].

Bylund, J. (2011) 'Thought and Second Language: A Vygotskian Framework for Understanding BICS and CALP', *Communiqué,* 39(5), 4-6.

Cajkler, W. and Hall, B. (2009) '"When they first come in what do you do?" English as an additional language and newly qualified teachers*', Language and Education*, 23(2), 153-170.

Central Statistics Office (2016) *Population and Migration Estimates*, [online], Available at: http://www.cso.ie/en/releasesandpublications/er/pme/populationandmigrationestimatesapril2016/ [Accessed: 23 September 2016].

Cohen, L., Manion, L., and Morrison, K. (2007) *Research Methods in Education*, 6ᵗʰ edn. London: Routledge.

Culleton, J. (2004) 'Ireland's immigrant children', *Child Care in Practice,* 10(3), 265-270.

Cummins, J. (1981) 'Empirical and theoretical underpinnings of bilingual education', *Journal of Education*, 163, 16-30.

Cummins, J. (2011) 'Diverse Futures', in Duibhir, P., McDaid, R., and O'Shea, A. (eds.) (2011) *All Changed? Culture and Identity in Contemporary Ireland*, Dublin: Duras Press, 49-70.

Department of Education and Skills (2016) *Circular 0007/2016 Staffing arrangements in Primary Schools for the 2016/17 school year*, Dublin: DES.

Department of Education and Skills (2012) *English as an Additional Language in Primary Schools in 2008: Inspectorate Evaluation Studies*, Dublin: Evaluation Support and Research Unit.

Department of Education and Skills (2007) *Circular 0053/2007: Meeting the news of pupils learning English as an additional language*, Dublin: DES.

Department for Education UK (2010) *Teachers' Standards*, [online], Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/283566/Teachers_standard_information.pdf [Accessed: 12 October 2016].

Devine, D., Fahie, D., and McGillicuddy, D. (2013) 'What is "good" teaching? Teacher beliefs and practices about their teaching', *Irish Educational Studies*, 32(1), 83-108.

Devine, D. (2005) 'Welcome to the Celtic Tiger? Teacher Responses to Immigration and Increasing Ethnic Diversity in Irish Schools', *International Studies in Sociology of Education,* 15(1), 49-70.

Dowling, M. (2006) 'Approaches to reflexivity in qualitative research', *Nurse Researcher,* 13(3), 7-21.

Freebody, P.R. (2003) *Introducing Qualitative Methods series: Qualitative Research in Education: Interaction and Practice*, London: SAGE Publications Ltd.

Goodyear, L., Barela, E., and Jewiss, J. (2014) *Research Methods for the Social Sciences: Qualitative Inquiry in Evaluation: From Theory to Practice* (1), U.S: Jossey-Bass.

Integrate Ireland Language Training (2006) *Up and Away; A resource book for English language support in primary schools*, Dublin: Integrate Ireland Language and Training.

Kelly, N. (2014) 'Does equal access mean treat the same? From theory to practice in the classroom of English as an Additional Language learner in Ireland — towards a transformative agenda', *International Journal of Inclusive Education*, 18(9), 857-876.

Leonardi, V. (2011) *The Role of Pedagogical Translation in Second Language Acquisition From Theory to Practice*, Switzerland: Peter Lang AG.

MacGiolla Phádraig, B. (2007) 'Towards inclusion: the development of provision for children with special educational needs in Ireland from 1991 to 2004', *Irish Educational Studies*, 26(3), 289- 300.

McGinnity, F., Darmondy, M., and Murray, A. (2015) 'Academic Achievement among Immigrant Children in Irish Primary Schools', *The Economic and Social Research Institute*, Dublin: ERSI.

Merriam, S.B. (2014) *Qualitative Research: A Guide to Design and Implementation*, 3rd edn. U.S: Jossey-Bass, Somerset.

Murakami, C. (2008) 'Everybody is Just Fumbling Along: An Investigation of Views Regarding EAL Training and Support Provisions in a Rural Area', *Language and Education*, 22(4), 265-282.

Murtagh, L. and Francis, T. (2012) 'Supporting pupils with EAL and their teachers in Ireland: the need for a co-ordinated strategy', *Language and Education*, 26(3), 201-212.

National Council for Curriculum and Assessment (2006) *English as an Additional Language in Irish Primary School: Guidelines for Teachers*, [online], Available at: http://www.ncca.ie/uploadedfiles/publications /EALangIPS(1).pdf [Accessed: 30 September 2016].

National Council for Curriculum and Assessment (2005) *Intercultural Education in the Primary school*, National Council for Curriculum and Assessment,

[online], Available at: http://www.ncca.ie/uploadedfiles/Publications /Intercultural.pdf [Accessed: 30 September 2016].

Nowlan, E. (2008) 'Underneath the Band-Aid: supporting bilingual students in Irish schools', *Irish Educational Studies,* 27(3), 253-266.

O'Leary, Z. (2007) *The Essential Guide to Doing Research*, London: Sage.

Parker-Jenkins, M., Hewitt, D., Brownhill, S., and Sanders, T. (2007) *Aiming High: Raising the Attainment of Pupils from Culturally Diverse Backgrounds*, London: Paul Chapman Publishing.

Scott, D. and Morrison, M. (2006) *Key Ideas In Educational Research*, London: Continuum.

Soderman, A.K. (2010) 'Language Immersion Programs for Young Children? Yes…But Proceed with Caution', *Kappan*, 98, 54-61.

State of Victoria Department of Education and Training (2015) *The EAL Handbook: Advice to schools on programs for supporting students learning English as an Additional Language*, Melbourne: Department of Education and Training.

The Teaching Council (2012) *Code of Professional Conduct for Teachers*, [online], Available at: http://www.teachingcouncil.ie/en/Publications /Fitness-to-Teach/Code-of-Professional-Conduct-for-Teachers.pdf [Accessed: 12 Oct 2016].

The Teaching Council (2015) *Providers of Initial Teacher Education*, [online], Available at: http://www.teachingcouncil.ie/en/Teacher-Education/Initial-Teacher-Education/Providers-of-Initial-Teacher-Education/ [Accessed: 30 September 2016].

Tsui, A.B.M. (2007) 'What Shapes Teachers' Professional Development?', in Cummins, J. and Davison, C. (2007) *International Handbook of English Language Teaching*, USA: Springer US, 1053-1066.

Turner, M. (2015) 'The collaborative role of EAL teachers in Australian schools from the perspective of EAL teacher education', *Australian Journal of Language and Literacy*, 38(2), 95-103.

Veliyeva, M. (2015) 'Bilingualism in Education', *Theory and Practice in Language Studies*, 5(12), 2448-2452.

Walker, D.H.T. (1997) 'Choosing an appropriate research methodology', *Construction Management and Economics,* 15(2), 149-159.

The Needs of Schools Responding to Critical Incidents, by Susan Bracken

Biography

Susan completed the Professional Master of Education (PME) in Primary Education with Hibernia College receiving First Class Honours. She holds a Bachelor degree in International French and Modern Irish from University College Dublin. She has worked as an English Language Assistant in a primary school in Bordeaux. The death of a young family friend provided her with the motivation to undertake this study. Her research interests lie in focusing on ways teachers cope in the aftermath of a death of a pupil. She is interested in creating more awareness about the potential trauma of experiencing such an event and the role of the teacher in providing support.

A Phenomenological Study of the Perceptions of Professionals Regarding the Support Available and Needs Within the Irish Primary School System in Response to Critical Incidents, by Susan Bracken

Research supervisor: Dr Aoife M. Lynam

Abstract

The current small-scale study explored professionals' perceptions regarding the needs and supports available within the Irish school system in response to critical incidents. For the purpose of this research, the critical incident refers to the death of a pupil. The study adopted a qualitative approach in the form of semi-structured interviews (n=5). The results generated suggest that trauma has a profound impact on a school community. The general lack of awareness, nationwide, surrounding the necessity for teacher training in the area of critical incidents denoted feelings of inadequacy and unpreparedness amongst participants. All participants advocated the need for further supports, with a consensus purporting to a need for training in critical incidents at all levels of teacher education.

Keywords: Critical incident, pupil death, trauma, inadequacy, training, support

Introduction

Internationally, research focuses on schools' responses to a pupil's death (Bennett and Dyehouse, 2005; Hart and Garza, 2013). However, there is a dearth of research in this area in an Irish context despite 'an increase in the number of requests from schools for intervention in the aftermath of critical incidents' (NEPS, 2016, p.12). The researcher considered this research was necessary to bridge the information deficit. The aim of this study was to (1) ascertain the impact of critical incidents on schools from a teaching (primary school teachers and principals) and social care (psychologist) perspectives, (2) explore professionals' feelings of preparedness in dealing with critical incidents, and (3) explore the perspectives of these professionals in relation to assistance measures and supports required to support grieving children in the aftermath of a critical incident. Semi-structured interviews were carried out (n=5) enabling the researcher to gather in-depth knowledge from professionals from the primary education and social care sector. Results generated from the study cannot be generalised but do provide some insight into areas which need further research to enhance the reliability and credibility of the findings. The following research questions inform this study:

1. According to relevant professionals, how does the death of a pupil impact on a school?
2. Are Irish educators prepared and equipped to deal with the death of a child in a school?
3. What assistance measures and supports would educators need to be put in place for teachers and children affected to deal with the impact of a child's death?

Literature review

Trauma in schools

An Irish study by McGovern and Barry (2000) found that 23% of 142 teachers reported dealing with a pupil's death. Papadatou et al. (2002) describe a pupil's death as a community loss which affects everyone and distorts school life. Many studies document that in times of critical incidents, schools seek help from outside support (McGovern and Tracey, 2010; O'Brien and McGuckin, 2014). In Ireland, National Educational Psychological Service (NEPS) representatives visit schools to provide staff with immediate, short-term support (NEPS, 2016). However, McElvaney (2016) claims that the NEPS needs to facilitate schools nationwide and, therefore, there is a rationed service. The consequential void is being filled by online resources such as *Listen with Eyes, Ears and Heart* (ICBP, 2016), which aims to support teachers and instil confidence when dealing with bereavement.

The teacher's role and challenges for the teacher

The teacher faces many challenges in the aftermath of a pupil's death including time constraints due to curriculum pressures (Lowton and Higginson, 2003) and anxiety in discussing death (Cullinan, 1990). Page and Page (2011) assert that children will discuss and notice the absence of the student and a lack of information will result in a fear of death (Higgins, 1999) and a fear for their own mortality (Evans, 1982). Lowton and Higginson (2003) report that teachers' anxiety prevent them from discussing death, although pupils pleaded discussion, despite findings that show children's adjustment to loss improves greatly through discussion (Dowling et al., 2011).

Prerequisites for successful responses to trauma in schools

Critical incidents policies

Critical incident policies demonstrate the Department of Education and Skills' recognition of schools' responsibility in responding to a death within the school community. Policies provide structured guidelines on procedures in dealing with crisis, including 'talking to classmates about the death, removing the dead student's belongings, working with the family, and for some form of memorial

activity' (Page and Page, 2011, p.415). Hart and Garza (2013) suggest that structured preparation and planning helps reduce anxiety and build competency for professionals charged with providing support.

Schools in the United States (Page and Page, 2011) and Australia (Rowling and Holland, 2000) are obliged to have crisis response plans in operation. In the Irish context, the DES mandates schools to have a policy in place for such incidents. McGovern and Tracey (2010) discovered that 83% of Irish primary schools in Galway did not address the issue of loss in their policy documents. These findings led to the creation of a NEPS publication, which provides guidelines for the creation and implementation of critical incident policies in Irish primary schools.

Training

Unlike psychologists and alternative caring professions, bereavement training is not included as a component of formal coursework for teachers. O'Brien and McGuckin (2014) suggest a deficiency of training is prevalent throughout many countries worldwide. McGovern and Tracey (2010) report only 18% of 73 Irish educators received any form of bereavement training. Irish research shows that desires have not been met in terms of bereavement support as teachers expressed a need for further assistance (O'Brien and McGuckin, 2014) and the need for training packs and courses (McGovern and Tracey, 2010). The importance of providing developmentally appropriate information following a traumatic event is highlighted in the literature (NEPS, 2016; Page and Page, 2011). Without training, teachers may respond inadequately to children's unique needs and struggle with what information and procedures are considered age appropriate. Hart and Garza (2013) suggest that a teacher's ability to cope after a pupil's death can be greatly influenced by the standard of crisis response training provided.

Methodology

Research design

According to Corbin and Strauss (2008, p.16), qualitative research enables the researcher to 'enter into the world of its participants' and to 'see the world from their perspective'. The researcher was intent on capturing the perspectives of participants due to the sensitive nature of this topic; thus it was decided that a qualitative research design in the form of semi-structured interviews would be the most fitting data collection instrument.

Sampling and selection of participants

Non-probability sampling in the form of criterion sampling and snowball sampling was employed for this study. According to Patton (2015), criterion sampling involves selecting participants that meet some predetermined criterion of importance. Accordingly, a teacher and principal who have experienced the death of a pupil were sought to gain insights into how such an issue is approached. Furthermore, the researcher was interested in hearing the perspectives of a teacher and principal who have not experienced such a trauma. Finally, the researcher was intent on exploring the insights of a professional who was proficient and well-informed with the phenomenon of interest (Creswell and Plano Clark, 2011). A clinical psychologist with a background in education was therefore sourced. Snowball sampling enabled the researcher to use participants, already known to her, to make contact with further participants who would participate in the study (Sarantakos, 2005).

Data analysis

The emergent strategy of inductive thematic analysis (Braun and Clarke, 2006) was adopted for the data analysis. Firstly, the researcher familiarised herself with the transcribed transcripts, noting patterns (Howitt and Cramer, 2008) relating to the research question (Braun and Clarke, 2006). Secondly, initial codes forming the basis of repeated patterns across the data were produced (Namey et al., 2008). Thirdly, codes were sorted into potential themes and coded data extracts were collated under relevant themes (Howitt and Cramer, 2008). The researcher re-read the entire data to ascertain the relevant relationship between the themes and coded any additional data that had been missed (Dempster, 2011). Following this, the researcher defined and named the themes (Howitt and Cramer, 2008). Finally, the report was produced with comprehensive data extracts supporting the themes and analytical claims made (Braun and Clarke, 2006).

Enhancing integrity of qualitative research method

Reliability was ascertained through question wording and a pilot interview (Bell, 2005) in order to establish their suitability and reveal any discrepancies or useful amendments. The researcher was cognisant of the danger of bias arising from interviews and best efforts were made to counteract this. According to Berg (2007), reviewing the data several times helps to produce an accurate interview report. Considering this, the interviews were transcribed ad verbatim and the researcher critically examined the content through listening and re-listening to the recordings. Finally, a process known as triangulation was carried out, which is defined as 'a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study' (Creswell and Miller, 2000, p.126). Data source triangulation, which refers

to multiple sources of data used in a study (Bryman, 2004), was applied as five key professionals with expertise in education were interviewed. Additionally, investigator triangulation, referring to the use of more than one person to collect, analyse, and interpret the data (Denzin, 1989) was utilised as the researcher's supervisor supported her throughout the analysis process, furthermore strengthening the trustworthiness of the findings.

Ethical considerations

Prior to interview conduction, the Revised Ethical Guidelines for Educational Research (British Education Research Association (BERA) (2011) was adhered to and ethical approval was sought and approved by the Hibernia College Ethics Committee. Furthermore, the researcher outlined the purpose and nature of the study (Bell, 2005) to participants both verbally and in written form to reduce any potential issues of sensitivity. Subsequently, interviews were conducted in a manner which was mindful of this and respectful of interviewees' opinions and experiences by creating a safe environment. Furthermore, participants had no obligation to answer questions or share any information they found emotionally overwhelming. DiCicco-Bloom and Crabtree (2006) assert that psychological support must be provided to participants in research which has the potential to create undue stress or raise psychological complications. The researcher was aware that the research matched this description, thus, participants were provided with a list of support service details. Additionally, respondents were informed both verbally and in written form that they could contact the researcher, the Head of Research, or the researcher's supervisor at any given time.

Results

Theme One - Training: 'nobody had mentioned that children might die'

All five participants discussed the general lack of awareness surrounding the area of critical incidents stating, 'I don't remember it [children dying] ever being mentioned' (Participant 2, Primary School Teacher, 35 years). In an attempt to discover if respondents felt competent in the area of death education, the question of training was put forward. All five respondents replied that 'it is one area that has never been dealt with and training has never been provided' (Participant 3, Principal, 36 years). Additionally, it was evident that training was not provided in relation to the recent NEPS 2016 Critical Incidents Policy with Respondents (P1, P3, and P4) making reference to the policy, however explaining how they are '...used to a document arriving on your desk and being told to deal with it' (Participant 3).

Theme Two - The Impact: 'Such a tragedy has profound effects on a school'

P1, P2, and P5 discussed their experiences of dealing with a critical incident stating that '…the reality of it was that it had come in [to] our own four walls and a pupil who had been attending here' (Participant 1, Principal, 38 years). Although Participants 3 and 4 had not previously encountered a critical incident, it was clear they realised '…in a case like this it could be any individual teacher and their classroom of 30 children' (Participant 4, Primary School Teacher, 5 years). Memories of a school atmosphere that was 'somewhat sombre' where 'nobody was prepared' (Participant 2) following the pupil's death resonated amongst participants. Participant 1 declared '…if you have a child in your class and this happens to them I mean the effect on a teacher can be absolutely devastating'. Although respondents advocated the importance of discussion, they did not feel '…in any way well prepared' (Participant 3). Following the news of the pupil's death, Participant 2, teacher of the deceased pupil, reflected on the first initial meeting with the class, stating:

> 'I said I prefer if somebody for the very first time I meet the class if somebody were with me because I don't know I'll take it, I don't know whether I'll break down, I don't know what I'll do.'

Theme Three - Discussion: 'it's like the elephant under the table so I bring it out'

All five participants strongly believed in the importance of encouraging children to discuss their grief. All respondents were 'not into avoidance at all' proclaiming that '...it absolutely has to be discussed with them' (Participant 3). Respondents who had experienced a critical incident (P1, P2, and P5) discussed how following the death of a friend, the children '…in the classroom they were very keen to talk about it' (Participant 2). Participant 5 explained how '…it's okay for children to feel sad, feel upset, feel worried, feel alright, angry, etc.' (Participant 5, Psychologist, 29 years). Participant 2 had a similar outlook as he explained following the pupil's death, he told the children:

> 'it's good to talk to people about it and it's good to be open about it and it's healthy to be open about it' (Participant 2).

Theme Four - Grief: 'it is something that is ongoing'

The need for long-term support and short-term arose as 'not good if it's just at the actual time' (Participant 3). The Principal of the deceased pupil explained that '…while some guys were fine at the beginning of the week, obviously as the funeral and things took place…they still needed talking to and they still needed you know that educated listening ear' (Participant 1). Participant 4 advocated the

need for long-term support, explaining that there are always children in the class who '…don't show the emotion and all of a sudden it comes to the forefront a year later' (Participant 4).

Theme Five - Supports: 'why was I not taught anything about the area?'

When asked what supports educators would like to assist them in dealing with crtical incidents, all agreed that 'a module in teacher training would be useful' (Participant 2) at 'every stage' (Participant 5) of their teaching career. The psychologist involved in this research posed the question, '…why was I not taught anything about the area of children dying and was it something that as a teacher you develop?' As a result, she provided a psychoeducational course in the area of teachers' abilities to deal with grief in children for final year students. She compared her findings to teachers with many years in education, discovering that 'the student teachers who did the course came back that they felt more confident, more comfortable after doing it' while experienced teachers who had no training in the area 'were coming back saying that they didn't feel confident, they didn't feel comfortable and they didn't feel competent' (Participant 5).

Discussion

Training

Despite previous research (Hart and Garza, 2013; Bennett and Dyehouse, 2005; McGovern and Barry, 2000)**,** three out of five participants in this study had dealt with a pupil's death. Findings align with research that notes a clear deficit in teacher training in the area of trauma (MacEachron, 2014; McGuckin and O'Brien, 2014; McGovern and Tracey, 2008; Tracey and Holland, 2008). This study found that a participant had provided a psychoeducational programme for teachers in the area of grief. Although,'the stats show that it was beneficial' (Participant 5), it was not further introduced, which supports the findings in that all 5 participants reported that no preparation was provided at any stage of their career.

Impacts

Papadatou et al. (2002) describe a pupil's death as a community loss which affects the whole school community. Participant 2, reflecting on a pupil's death, stated how every member of staff knew 'it was going to affect them at some point'. Hart and Garza's (2013) study reported a sense of 'helplessness' permeating the school environment following a pupil's death. Similarly, Participant 2 explained how he 'felt so helpless' following the news of the pupil's death. Many studies have found that teachers suppress their own personal grief and feel the need to hold composure for grieving pupils (Hart and Garza, 2013; Lowton and

Higginson, 2003; Rowling, 1995). In contrast to these statements, the participant who had experienced the death of a pupil described it as 'really cathartic' when he broke down in front of his class. Lazenby (2006) firmly believed in the need for teachers to deal with their own personal emotions before they can be of any assistance to grieving pupils. Participant 2 made no reference to the importance of dealing with his own personal grief following the pupil's death. Participant 4 stated, 'I think you yourself would have to definitely deal with your own grief before you even try and help the children in the class.'

Discussion

A common misconception regarding death described by Hart and Garza (2013, p.303) is the 'great mistruth' that which shelters children from death as the best course of action. Participant 5 stated, 'I think people underestimate how able children are for the area'. This statement is supported by literature which contends that children have the capacity to deal and talk about death (Raveis et al., 1999; Silverman and Worden, 1992). Following the death of a classmate, pupils wish to talk about their friend and will discuss and notice their absence (Page and Page, 2011; Bennett and Dyehouse, 2005; Lowton and Higginson, 2003). Similarly, participants explained how the children 'very much wanted to' (Participant 2) discuss the pupil's absence. Feelings of anxiety is an issue for teachers when discussing death (Cullinan, 1990; Holland and Rowling, 2000; Lowton and Higginson, 2003). Participant 5 explained how 'some people aren't anxious about teaching children with death until they start to talk about it and then their anxiety levels go up' (Participant 5).

Grief

The literature argues the need for long-term and short-term responses (Page and Page, 2011). Additionally, there is a myriad of research supporting that grief expands throughout a child's lifetime (LeShan, 1988; Scott, 2004). As a result of the 'huge long term effects it [a critical incident] could have on every child in the class' (Participant 2), all participants advocated the need for long-term support proclaiming that it is 'down the road' (Participant 4) where grief can manifest itself.

Supports

Both national (McGovern and Tracey, 2010; McGuckin and O'Brien, 2014; Tracey and Holland, 2008) and international (Dyregrov et al., 2013, 2015; MacEachron, 2014; Page and Page, 2011) research assert a need for educational programmes, further assistance, and training packs to support teachers in the area of death. Similar to the literature, all five participants declared a need for the above

supports with a consensus that training is needed at 'every stage' (Participant 5) of a teacher's career. Illuminated in the literature is the importance of providing children with information regarding death in an age-appropriate manner (NEPS, 2016; Page and Page, 2011). Similar beliefs stemmed from this research as Participant 3 stated, 'I think knowing the correct language and knowing what's age-appropriate would be extremely valuable' (Participant 3). It could be argued that without training, teachers may struggle with what information is considered age-appropriate.

Conclusion

This small-scale research ascertained the impact of critical incidents on schools from an educational and social care perspective while assessing professionals' preparedness and their needs and desires in terms of assistance measures and supports required to deal with critical incidents. A number of the results generated illustrate the profound impact of critical incidents on a school. It is clear that primary educators have a significant role to play in aiding children to deal with death and grief on a short- and a long-term basis due to ongoing process of grief. However, it was evident that participants are not prepared at ITE or any stage of their career to deal with critical incidents. Finally, there is a significant need for a module at ITE as well as CPD and whole-school training in this area. A number of limitations are associated with this study; however, such limitations enabled the researcher to develop further research opportunities. Participants who had dealt with a critical incident reflected on an incident which occurred a number of years ago, which may have hindered their memory. The academic effects of loss on pupils were difficult to assess as the death of this pupil occurred late in the school year. Finally, due to the small-scale nature of this research, the sample size is too small to be considered representative of the whole population of educators who have dealt/are yet to deal with a critical incident. Therefore, further research, involving a longer period of time and a larger representative sample of professionals is necessary to enhance the reliability and credibility of the results of this study.

References

Bell, J. (2005) *Doing Your Research Project: A Guide for first-time Researchers in Education and Social Science*, 4th edn. United Kingdom: Open University Press.

Bennett, P.L. and Dyehouse, C. (2005) 'Responding to the death of a pupil — reflections on one school's experience', *British Journal of Special Education*, 32(1), 21-28.

Berg, B.L. (2007) *Qualitative research methods for the social sciences*, London: Pearson.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), 77-101.

British Educational Research Association (2011) *Ethical Guidelines for Educational Research*, London: BERA.

Bryman, A. (2004) *Social Research Methods*, 2nd edn. Oxford: Oxford University Press.

Corbin, J. and Strauss, A. (2008) *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 3rd edn. London: Sage Publications.

Creswell J.W. and Plano Clark, V.L. (2011) *Designing and Conducting Mixed Methods Research*, 2nd edn. Los Angeles: Sage Publications, Inc.

Creswell, J.W. and Miller, D.L. (2000) 'Determining validity in qualitative inquiry', *Theory into Practice*, 39(3), 124-131.

Cullinan, A.L. (1990) 'Teachers' death anxiety, ability to cope with death and perceived ability to aid bereaved students', *Death Studies*, 14, 147-160.

Dempster, M. (2011) *A Research Guide for Health and Clinical Psychology*, Basingstoke: Palgrave Macmillan.

Denzin, N. (1989) *The Research Act: A Theoretical Introduction to Sociological Research Methods*, 3rd edn. New Jersey: Prentice Hall.

DiCicco-Bloom, B. and Crabtree, B.F. (2006) 'The qualitative research interview', *Medical Education* (40), 314-321.

Dowling, M., Kiernan, G., and Guerin, S. (2007) 'Responding to the needs of children who have been bereaved: A focus on services in Ireland', *The Irish Psychologist*, 33(10), 259-62.

Dyregrov, A., Dyregrov, K., Endsjo, M., and Idsoe, T. (2015) 'Teachers' perception of bereaved children's academic performance', *Advances in School Mental Health Promotion*, 8(3), 187-198.

Dyregrov, A., Dyregrov, K., and Idsoe, T. (2013) 'Teachers' perceptions of their role facing children in grief', *Emotional & Behavioural Difficulties*, 18(2), 125-134.

Evans, B.J. (1982) 'The Death of a Classmate', *The Journal of School Health*, 52(2), 104-107.

Hart, L. and Garza, Y. (2012–2013) 'Teachers' perceptions of effects of a student's death: A phenomenological study', *Omega Journal of Death and Dying*, 66(4), 301-311.

Higgins, S. (1999) 'Death Education in the Primary School', *International Journal of Children's Spirituality*, 4(1), 77-90.

Howitt, D. and Cramer, D. (2008) *Introduction to Research Methods in Psychology*, 2nd edn. Harlow: Pearson Education Limited.

Lazenby, R.B. (2006) 'Teachers Dealing With the Death of Students: A Qualitative Analysis', *Journal of Hospice and Pallitative Nursing*, 8(1), 50-56.

LeShan, E. (1988) *Learning to say goodbye: When a parent dies*, New York: Avon.

Lowton, K. and Higginson, I.J. (2003) 'Managing bereavement in the classroom: A conspiracy of silence?' *Death Studies*, 27, 717-741.

MacEachron, G. (2014) 'Compassion for the Young Experiencing the Trauma of Death', *Journal of Child and Adolescent Trauma*, 7, 63-72.

McGovern, M. And Barry, M.M. (2000) 'Death Education: Knowledge, attitudes and perspectives of Irish parents and teachers', *Death Studies*, 24(4), 325-333.

McGovern, M. And Tracey, A. (2010) 'A comparative examinations of schools' responses to bereavement and the associated needs of the school community in Galway, West of Ireland and Derry, Northern Ireland', *Pastoral Care in Education*, 28(3), 235-252.

Namey, E., Guest, G., Thairu, L., and Johnson, L. (2008) 'Data Reduction Techniques for Large Qualitative Data Sets', in Guest, G. and MacQueen, K.M. (eds.) *Handbook for Team-Based Qualitative Research*, Lanham: Altamira Press, 137-161.

National Educational Psychological Services (NEPS) (2016) 'Responding to Critical Incidents: Guidelines & Resource Materials for Schools', Ireland: Department of Education and Skills.

O'Brien, A. and McGuckin, C. (2014) 'Grieving students: The response and support of educators in Irish schools', *Journal of Postgraduate Research*, Trinity College Dublin, 159-176.

Page, R.M. and Page, T.S. (2011) *Promoting Health and Emotional Well-being in Your Classroom*, 5th edn. Massachusetts: Jones and Bartlett Publishers.

Papadatou, D., Metallinou, O., Hatzichristou, C., and Pavlidi, L. (2002) 'Supporting the bereaved child: Teacher's perceptions and experiences in Greece', *Mortality*, 7, 324-339.

Patton, M.Q. (1990) *Qualitative evaluation and research methods*, 2nd edn. Newbury Park, CA: Sage.

Rowling, L. (1995) 'The disenfranchised grief of teachers', *Omega*, 31(4), 317-329.

Raveis, V.H. Siegel, K., and Karus, D. (1999) 'Children's psychological distress following the death of a parent [Electronic version], *Journal of Youth and Adolescence*, 28, 165-180.

Rowling, L. and Holland, J. (2000) 'Grief and School Communities: The Impact of Social Context, A Comparison between Australia and England', *Death Studies*, 24(1), 35-50.

Sarantakos, S. (2005) *Social Research*, 3rd edn. New York: Palgrave MacMillan.

Scott, C. (2004) Children's grief theory: A critical literature review. Unpublished Masters thesis. Pacific University, Oregon.

Silverman, P.R. and Worden, J.W. (1992) 'Children's reactions in the early months after the death of a parent', *Am J Orthopsychiatry*, 62, 93-104.

Today With Sean O'Rourke (2016) 'Counselling in Primary Schools', [podcast], 21 October, Available at: http://www.rte.ie/radio1/today-with-sean-o-rourke/programmes/2016/1021/825806-today-with-sean-o-rourke-friday-21-october-2016/ [Accessed: 01 November 2016].

The use of Music to Support Literacy and Numeracy Development, by Stephen Naughton

Biography

Stephen Naughton is from Cork city. His qualifications include a Bachelor of Music, a Higher Diploma in Computer Science, a Professional Diploma in Secondary Education, and a Master's in Primary Education. As part of the PMEP programme, Stephen completed research on how music is used to support the development of literacy and numeracy in Irish primary schools.

A Study on the Use of Music to Support Literacy and Numeracy Development in Irish Primary Schools, by Stephen Naughton

Research supervisor: Ms. Elaine Shanahan

Abstract

In 2011, the Literacy and Numeracy Strategy was launched by the Department of Education and Skills (DES). There has been little research on how this strategy has affected time spent on teaching music and whether music is used to support the approach. Quantitative analysis was used in this research (n=20). Findings indicate that more teachers integrate music with languages than with mathematics. 50% of respondents consider it would be better if music was taught by a specialist teacher.

Keywords: Music, literacy, numeracy, reading, performing, composing

Introduction

There has been little research in an Irish context on how the teaching of music in the classroom has been affected by the introduction of the Literacy and Numeracy Strategy (2011). The current strategy states that 'All teachers should be teachers of literacy and numeracy' (DES, 2011, p.26). There is a compelling argument that music can be used across the curriculum. In the Irish context, DES has recommended that schools 'increase the time spent on the development of literacy skills by one hour overall' and increase the 'time on mathematics by 70 mins' (DES, 2011). This has inevitably meant less time for other subjects, including music. The researcher's interest arose from teaching music and the first school placement. The research project focused on the following questions:

1. To what extent do teachers use music to support a literacy and numeracy-based curriculum?
2. What are teachers' attitudes on the impact of a literacy and numeracy-focused curriculum on the teaching of music?

Literature review

According to the Department of Education and Skills, 'literacy conventionally refers to reading, writing, speaking, viewing, and listening effectively in a range of contexts' (DES, 2010, p.6). Butzlaff (2002) asserts that students who study music have significantly higher scores in standardised reading tests. Paquette (2008) identified that 'strong social bonds are encouraged through music and songs beginning in pre-school' (p.228).

In the nineteenth century, research found that Hungarian children who started music at an early age and practised every day tended to do better in other

subjects. In a study conducted by Barkóczi and Pléh (1977), 'it was found that Kodály-based music education had a clear impact on the development of creativity and personality' (Goopy, 2013, p.72). While teachers may be aware that music can be used to teach literacy and numeracy, they may not 'require students to participate in schoolwide music programs because they do not believe all students would reap these benefits from musical study without a sufficient level of innate talent' (Scrip et al., 2013, p.54). However, numerous studies have shown musical talent is a skill that everyone can learn with the right instruction and dedication. One of the most important music innovators of the twentieth century, Shinichi Suzuki, believed that all children could flourish and their ability to succeed was not pre-determined by innate talent.

Music and numeracy

The development of 'numerical skills and rhythmic development evolve in parallel' and as 'mathematics and music are embodied forms of knowledge; that is, based on action' (Habegger, 2010, p.278). Habegger (2010) states:

> The correlation seen between number concept development and rhythmic response in early childhood suggests that both fields share basic mechanisms in the formation of perceptual categories which are governed by the limits of short-term memory. (p.276)

It can be therefore inferred that such subjects should be taught together as they support each other.

England and the USA are calling for 'improved standards in literacy and numeracy' which 'have seen sweeping changes introduced to music education' (Burke, 2015, p.49). In Finland, there is less emphasis placed on literacy and numeracy and it still has an education system that is regarded as one of the best in the world.

Methodology

Research design

Quantitative methodology was chosen to investigate whether music is being used to support literacy and numeracy in Irish primary schools. The rationale for using this methodology was based on the premise that 'people's opinions about music can be measured and many of the physical features of music such as time, pitch, and volume almost beg for quantitative analysis' (Hartwig, 2014, p.37). The philosophy of logical positivism underpins quantitative research. It was believed that if common ideas were identified using scientific data analysis, it would enhance society (Pickering, 2009). A quantitative approach was used to gather data from primary school teachers (n=20).

A questionnaire was used as the data instrument. A questionnaire is a very useful tool for collecting structural numerical data. This method does not need the researcher to be there (Wilson and Maclean, 1994, cited by Cohen et al., 2013). Bell (2010) asserts that it is imperative that the questionnaire has well-structured questions and should not 'present so many problems at the analysis stage' (Bell, 2010, p.138). Therefore, the questionnaire had a mix of clearly structured questions that included closed questions, ranking questions, and questions that used Likert scales. All questions were designed in plain and coherent language so as to avoid 'confused, irritated or even offended' respondents as 'they may leave the item blank or even abandon the questionnaire' (Bell, 2010, p.140). Therefore, it was paramount that the questions remained objective and impartial.

Research setting and participants

Data was collected from two separate schools. One school is an urban school with over 19 different nationalities present. The second school is smaller, based in a rural setting.

Ethical considerations

Ethical approval was approved from the Hibernia College Ethics Committee before the research was conducted. According to Cohen et al. (2013):

> The questionnaire will always be an intrusion into the life of the respondent, be it in terms of time taken to complete the instrument, the level of sensitivity or threat of the questions, or the possible invasion of privacy. Questionnaire respondents are not passive data providers for researchers. They are subjects, not objects of research. (p.377)

It is imperative that all participants are treated with the utmost respect and that they feel safe and appreciated for the time they spend completing the questionnaire. This adheres to the Ethical Guidelines for Educational Research (BERA, 2011).

Limitations

The lack of face-to-face contact with participants is a disadvantage of using questionnaires. Questionnaires 'do not allow the researcher to control the environment and are therefore less suited to answering questions of causality' (Muijs, 2004, p.45).

Results

The findings from the quantitative research methodologies are presented in this section. The pie chart in Figure 1 shows that 85 percent of participants (N=17) identified that they spend one hour each week teaching music.
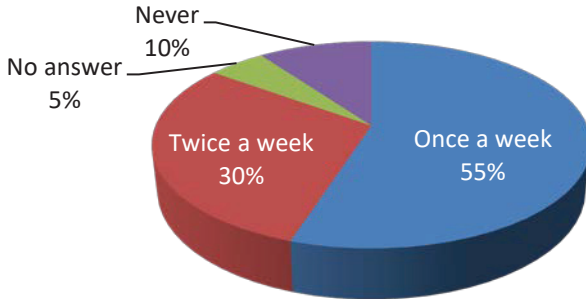
Fig. 1 How often participants teach music each week

Questions 6 and 7 required respondents to consider how often music is integrated with other subjects and, also, which particular subjects music is integrated with. English and Gaeilge were the most common subjects that music was integrated with, with 90 percent of participants (N=18) identifying these subjects. Sixty percent of respondents (N=12) identified that they integrated music with mathematics. Religious Education was the third most common subject that participants integrated music with. Of the SESE subjects, both geography and history were identified, while no participant identified science as a subject that they integrate music with (see Figure 2).
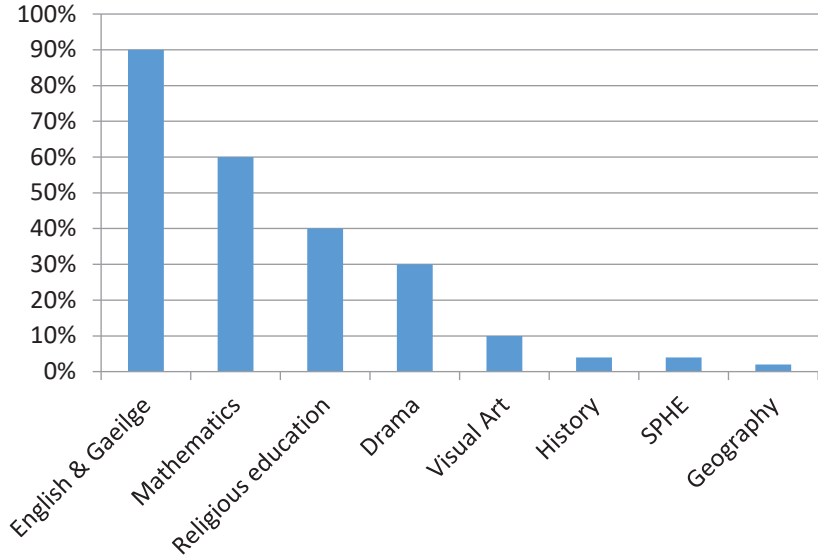
Fig. 2 Subjects integrated with music

Music and numeracy skills

The main focus of this section (Questions 8&9) was to identify if participants used music to support the development of children's numeracy skills. It was important to identify if participants were both aware of the fact that music could be integrated with mathematics and also if they used music to develop children's numeracy skills. The researcher decided that it was essential to research if any of the participants felt that music could not be integrated with mathematics. One respondent strongly agreed that music could be used to support the development of children's numeracy while 70 percent of participants (N=14) agreed that music could be used to support children's numeracy. Twenty five percent of respondents (N=5) were neutral in this regard.

Regarding whether respondents used music to develop children's numeracy skills, 60 percent of participants (N=12) identified that they sometimes use music to develop children's numeracy skills while 35 percent of participants (N=7) identified that they use music to support the development of children's numeracy occasionally. It was noted that 5 percent of the participants (N=1) identified that they never use music to support numeracy development. See figure 3.
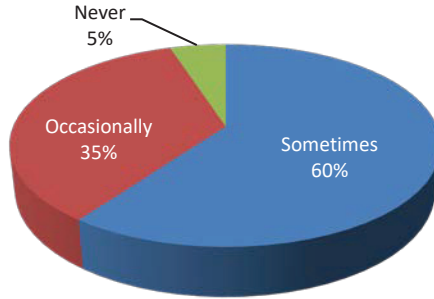
Fig. 3 How often music is used to support numeracy development.

Music and literacy skills

In this section (Questions 10&11) the main focus was on identifying if participants were aware that music could be integrated with languages and whether teachers used music to develop children's literacy skills. Similar to music being used to develop children's numeracy as outlined above, it was deemed important to identify if participants believed music could be integrated with languages and whether this was put into practice. The majority of participants, 80 percent (N=16), strongly agreed that music can easily be integrated with languages, while the remaining 20 percent (N=4) agreed that music can easily be integrated with languages. See figure 4.
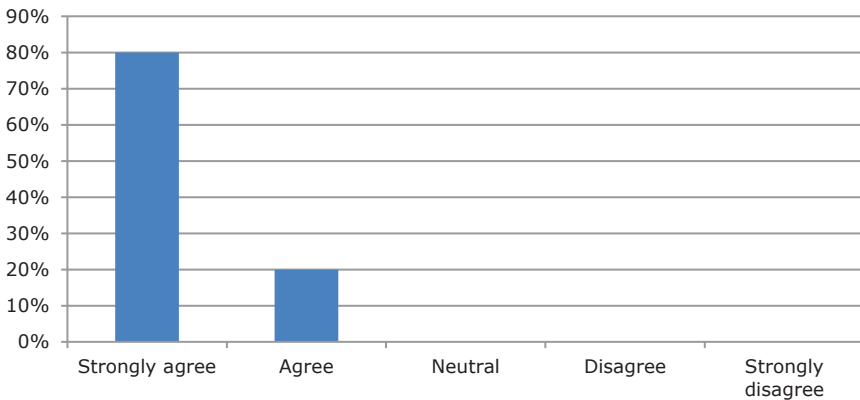
Fig. 4 Music integration with languages

In contrast to question 10 in which 80 percent of respondents (N=16) chose the top answer of 'strongly agree' that music can easily be integrated with music, it was noted that only 25 percent of respondents (N=5) chose the top answer of 'always' when asked about whether they actually use music to develop children's literacy skills, with 60 percent of respondents (N=12) choosing 'sometimes', and 20 percent (N=4) choosing 'occasionally'. See figure 5.
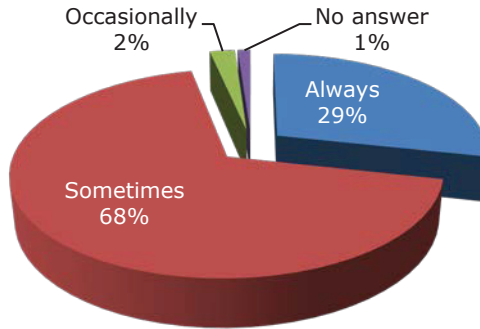
Fig. 5 How often music is used to support literacy development

Specialist music teachers

Question 12 asked respondents to identify if teachers believed it would be better if music was taught by specialist teachers. This was considered essential to identify if it was felt that they did not have the necessary skills to teach music and therefore felt that it was a subject that required an innate talent if it was to be taught successfully. 50 percent of participants (N=10) either 'agreed' or strongly agreed' with this issue while 15 percent (N=3) 'disagreed' or 'strongly disagreed' agreed that it would be better if there was a specialist teacher (see figure 6).
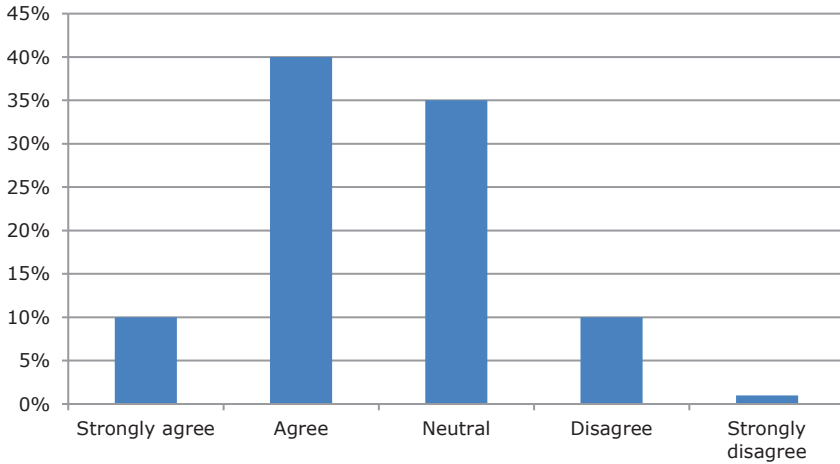
Fig. 6 Should a specialist teacher teach music?

A literacy and numeracy-based curriculum

Question 13 asked participants to identify how much they agreed or disagreed with the statement that a literacy and numeracy based curriculum meant that they had less time to teach music as they had to focus on mathematics and languages. It was essential to identify the percentage of respondents who agreed this was the case and to compare this percentage with the percentage of respondents who used music to support literacy and numeracy. If both percentages matched, then it would provide evidence that the literacy and numeracy strategy launched in 2011 was having an impact on how much time teachers could spend on the arts subjects including music.

Furthermore, if the percentages did not match, it could be inferred that teachers may have been more honest when answering this question rather than the questions directly related to their use of music to support literacy and numeracy as they may have been aware that they should have or could have been using more music to support the curriculum. 55 percent of respondents (N=11) 'strongly agreed' or 'agreed' that they had less time to teach music as a result of a literacy and numeracy based curriculum while 15 percent (N=3) were neutral on this issue. 25 percent of respondents (N=5) disagreed that they had less time to teach music (see figure 7).
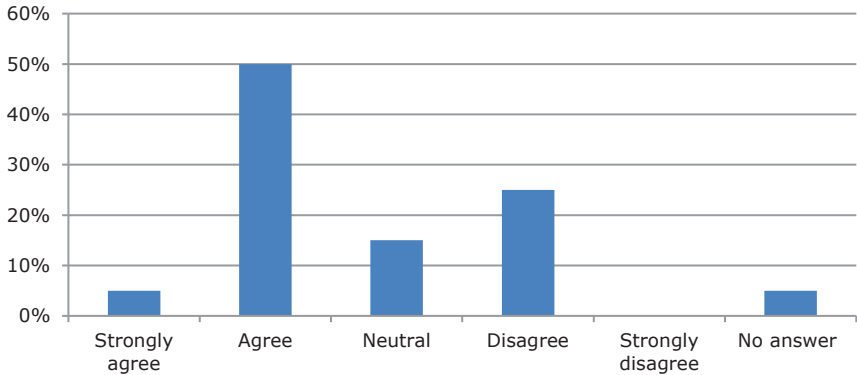
Fig. 7 Does a literacy and numeracy-based curriculum mean less time for music?

The music curriculum

The researcher also decided to include subject specific questions (Questions 14&15) to identify how well teachers knew the music curriculum and which strands of the music curriculum they placed most importance on. Question 14 asked the participants to rank from the most important (number 1) to the least important (number 5), the three strands in the music curriculum i.e. listening and responding to music, performing and composing. It was decided to divide the performing strand into two options, namely playing the tin whistle and singing as it was believed that these were the two distinct areas teachers may focus on. The rankings identified below of each music strand in the Irish curriculum (e.g., No. 1 = most important activity, No. 5 = least important activity).

It was also deemed important to investigate how much importance teachers placed on performance versus composing and listening and responding to music as this may provide insight into how teachers use music to support literacy and numeracy and why they may or may not use it. It was also decided to divide the listening and responding strand into two options, namely listening to music and responding to music as the researcher felt that it was important to identify if the children were passive listeners or were given a task before, during and after they listened to a piece of music. Regarding the most important activity in music, 40 percent of participants (N=8) identified singing as the most important activity while 50 percent of respondents (N=10) identified listening to music as the most important activity (see figures 8-12).
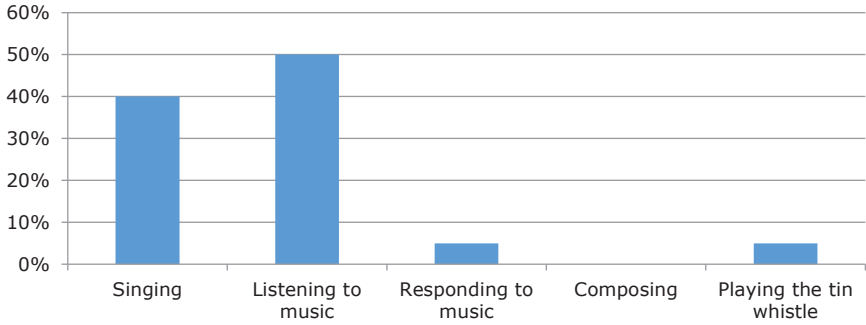
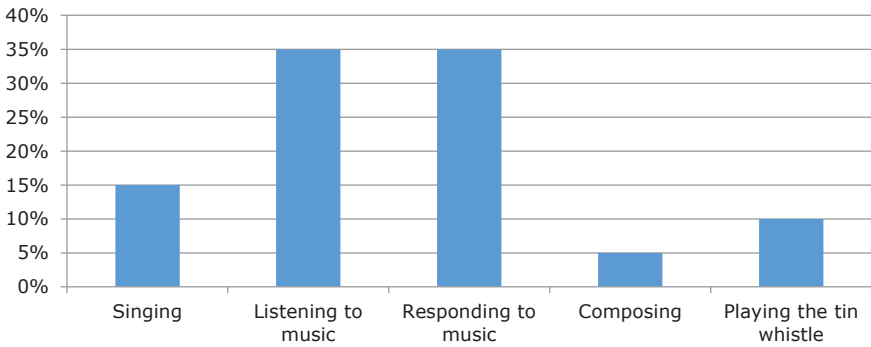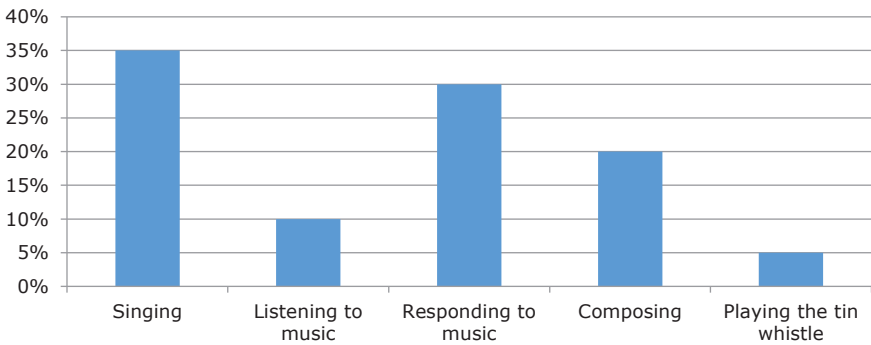*Fig. 8 No. 1 ranking (Most important activity)*

Fig. 9 No.2 ranking
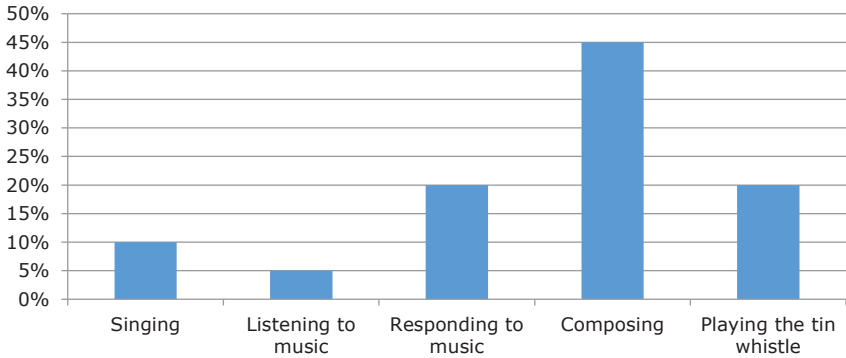

Fig. 10 No. 3 ranking
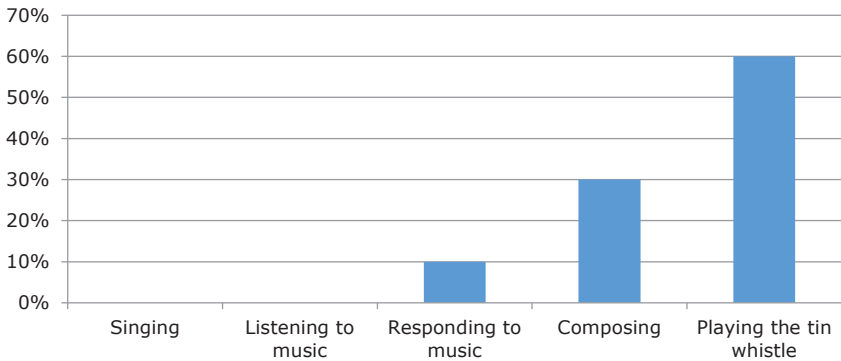
Fig. 11 No. 4 ranking

Fig. 12 No. 5 ranking (Least important activity)

Discussion

This research set out to ascertain if a literacy and numeracy-based curriculum has meant that teachers have less time to teach music in an Irish context. It also explored the extent to which teachers have identified the differentiation of music and how this applied in practice. Results indicate that 65% of teachers (N=13) thought it would be beneficial if they spent more time teaching music while 55% of respondents (N=11) 'agreed' or 'strongly agreed' that a literacy and numeracy-based curriculum has meant they have less time to teach music as they have to focus more on maths and languages.

Findings focused on whether participants used music with mathematics and how this is applied in practice. When respondents were asked to list the subjects they integrated music with, 60 percent of respondents (N=12) listed mathematics. The majority of participants were aware that music could be

integrated with mathematics, with 75% 'strongly agreeing' or 'agreeing' that this was possible. A high percentage of respondents listed that they integrate music with either English or Gaeilge (90%, n=18). In contrast to numeracy, no participants chose 'always' when questioned about how often they integrate music with languages. 25% of participants chose 'always' (n=5) while 60% chose 'sometimes' (n=12). It is noteworthy that composing was not high in the rankings with no participant ranking it at number one. This is an interesting finding as this is an area of music in which it is essential to have some form of written music, whether it is rhythmic or melodic notation to enable composition to be evaluated. Therefore, more research is needed to establish what forms of music notation are being used.

There is a lot of research that suggests it is not necessary to have an innate talent when teaching music. Despite this, 50% of participants (n=10) 'agreed' or 'strongly agreed' that it would be better if music was taught by specialist music teachers with only 10% of participants (n=2) disagreeing with this statement. Most teachers identified that students would benefit if more time was spent on music and noted that there is a benefit to using music to develop pupil literacy and numeracy skills. More research needs to be conducted to establish how much music is being used to support literacy and numeracy so as to identify why there is a mismatch in this area.

Conclusion

This research has shown that most teachers see the value of teaching music in primary schools. A high percentage of teachers integrate music with other subjects and use it to develop literacy and numeracy skills. As this was a small-scale dissertation, further research is needed with a larger sample of teachers to identify if the findings are consistent throughout Ireland. Regarding the specific strands of the music curriculum, this research has identified that composing is not highly ranked. It is recommended that schools review how music is taught. Support and training needs to be provided to teachers along with an emphasis on the importance of composing. Extra help is needed to support the literacy and numeracy strategy through the differentiation of music. Findings are insightful for the researcher as it has created more critical awareness on how teachers situate music in Irish primary schools.

References

Bell, J. (2010) *Doing your Research project: A guide for first-time researchers in education, health and social science*, 6th edn. Berkshire UK: Open University Press, McGraw Hill.

Benton, C.W. (2013) 'Promoting Metacognition in Music Classes', *Music Educators Journal,* 100(2), 52-59.

Burke, H. (2015) 'Once more around the parade ground: Re-envisioning standards-based music education in England, the USA and Australia', *Australian Journal of Music Education*, 23(2), 49-65.

Burton, N., Brundrett, M., and Jones, M. (2008) *Doing Your Education Research Project*, London: SAGE Publications Ltd.

Butzlaff, R. (2000) 'Can music be used to teach reading?', *Journal of Aesthetic Education*, 34(3-4), 167-178.

Cohen, L., Manion, L., and Morrison, K. (2013) *Research Methods in Education*, 7th edn. New York US: Routledge.

Coyle, D. (2009) *The talent code: Greatness isn't born. It's grown. Here's how*, New York US: Bantam Dell.

Department of Education and Skills (DES) (2011) *Initial Steps in the Implementation of the national literacy and numeracy strategy*, [online], Available at: https://www.education.ie/en/Circulars-and-Forms/Active-Circulars/cl0056_2011.pdf [Accessed: 04 March 2017].

Department of Education and Skills (DES) (2011) *Literacy and numeracy for learning and life: The national strategy to improve literacy and numeracy*, [online], Available at: https://www.education.ie/en/Publications/Policy-Reports/lit_num_strategy_full.pdf [Accessed: 05 October 2016].

Department of Education and Skills (DES) (2010) *The National Strategy to Improve Literacy and Numeracy among children and young people*, [online], Available at: https://www.education.ie/en/Schools-Colleges/Information/Literacy-and-Numeracy/Better-Literacy-and-Numeracy-for-Children-and-Young-People-A-Draft-National-Plan-to-Improve-Literacy-and-Numeracy-in-Schools-November-2010-.pdf [Accessed: 14 July 2016].

De Vries, P. and Albon, N. (2012) 'Taking responsibility for music education in the primary school: A case study', *Victorian Journal of Music Education*, 15(1), 3-11.

Garvis, S. (2012) 'What is going on in early years music planning? A study of early years teachers' weekly plans', *Australasian Journal of Early Childhood*, 37(2), 122-126.

Goopy, J. (2013) 'Extra-musical effects and benefits of programs founded on the Kodály philosophy', *Australian Journal of Music Education*, 2, 71-78.

Habegger, L. (2010) 'Number concept and rhythmic response in early childhood', *Music Education Research*, 12(3), 269-280.

Hartwig, K.A. (2014) *Research Methodologies in Music Education (1)*, UK: Cambridge Scholars Publishing.

INTO (2009) *Creativity and the Arts in the Primary School*, [online], Available at: https://www.into.ie/ROI/Publications/CreativityArtsinthePS.pdf [Accessed: 12 December 2016].

INTO (2011) *Time on each subject*, [online], Available at: https://www.into.ie/
ROI/InformationforMedia/InformationforJournalists/TimeSpentonEachSub
ject.pdf [Accessed: 04 February 2017].

Jones, P. and Robson, C. (2008) *Teaching Music in Primary* School, Exeter: Sage
Publications.

Muijs D. (2004) *Doing Quantitative Research in Education: with SPSS*, London:
SAGE Publications Ltd.

NCCA (2012) *Assessment in the primary school curriculum Guidelines for school*,
[online], Available:http://www.ncca.ie/uploadedfiles/publications/assess
%20%20guide.pdf [Accessed: 01 March 2017].

NCCA (1999) MUSIC Arts Education Teacher Guidelines, [online], Available at:
http://www.ncca.ie/uploadedfiles/Curriculum/Music_Gline.pdf [Accessed:
24 November 2016].

Paquette, K. (2008) 'Using Music to Support the Literacy Development of Young
English Language Learners', *Early Childhood Education Journal*, 36(3),
227-232.

Pickering, M. (2009) *Auguste Comte Intellectual Biography: Auguste Comte:
Volume 2: An Intellectual Biography*, New York, US: Cambridge
University Press.

Scripp, L., Ulibarri, D., and Flax, R. (2013) 'Thinking Beyond the Myths and
Misconceptions of Talent: Creating Music Education Policy that Advances
Music's Essential Contribution to Twenty-First-Century Teaching and
Learning', *Arts Education Policy Review*, 114(2), 54-102.

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