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Meeting the Needs of Children with Special Educational Needs in Multi-grade Classrooms

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Introduction

In recent years, educational research has focused on access to the curriculum among pupils with special educational needs (SEN) in mainstream classes at primary school (Ware et al., 2011) in tandem with policy and legislative developments to protect the rights of children with SEN. International literature also reflects researchers' interest in issues relating to multi-grade classrooms (Perry et al., 2017; Raggl, 2015; Mulryan-Kyne, 2007). However, current research does not address issues specifically relating to the effective inclusion of pupils with SEN in multi-grade classrooms. In this context, the learning experience depends largely on the ability of teachers to differentiate the curriculum and to meet challenges posed in delivering a broad and balanced curriculum across a range of age groups while simultaneously meeting the often quite specific needs of pupils with SEN.

For this reason, it is timely to bridge the gap in knowledge with regard to the inclusion of pupils with SEN in multi-grade classrooms. The purpose of the study was to investigate how mainstream teachers meet the needs of pupils with SEN in multi-grade classrooms. The aim of the research was to identify good practice and challenges with regard to the inclusion of pupils with SEN in mainstream, multi-grade classrooms in primary schools, as well as identifying how teachers overcome these challenges.

There are a number of terms used to describe classroom settings where a combination of a number of grade levels are taught together. These include multi-grade class, composite class, multi-level class, multiple class, combination class, split class and vertical grouped class (Mulryan-Kyne, 2005). For the purpose of this research, the term multi-grade is adopted.

Context

Multi-grade settings are a significant feature of the educational systems in both the Republic of Ireland (ROI) and Northern Ireland (NI) at primary school levels. Multi-grade classes are traditionally associated with small rural schools where pupil numbers in each year are too small to be taught as separate classes. In the ROI, 1,295 schools are 2, 3 or 4 teacher schools, out of a total 3,124 schools in the educational system (Department of Education and Skills (DES), 2016). In 2015-16, 488 out of 827 NI primary schools (59%) had at least one composite

class and the majority of these had three composite classes (Department of Education (DENI), 2016). Although specific policies on multi-grade do not exist in either jurisdiction, there is evidence of a trend in NI towards single class schools or classes with no more than two year groups (Perry et al., 2017).

Following on from the introduction and context, section two situates the discussion regarding SEN and multi-grade settings. Section three describes the qualitative methodology employed in the study. The findings section is divided into three broad themes: Classroom Management and Organisation; Teaching Methodologies and Differentiation, and Planning and Collaboration. Section four discusses the study findings focusing on curricula demands; flexibility of grouping and teaching practices; differentiation, and finally planning. Good practices and challenges that emerged in the multi-grade setting underpin this discussion. The final section summarises the study findings.

Literature Review

This review addresses the wider international literature on SEN and multi-grade classes. The structured approach discusses two broad themes namely; the delivery of the curriculum, and teaching practices. It is important to note that the emerging issues do not always fit neatly into one of the themes as detailed above, and are interrelated to and interdependent on one another.

Special Educational Needs

Definitions and categories of SEN and disability vary across countries but taking all forms of SEN and learning difficulties, it is estimated in most countries that about 20 per cent of pupils of school age have some form of SEN (Department for Education (DfE), 2013). The current international trend is to develop policy towards inclusion of pupils with SEN into mainstream schools, providing teachers with varying degrees of support. Education systems in both ROI and NI, have embraced the concept of supporting pupils to learn in an inclusive environment (as appropriate) with the provision of resources to enable pupils to achieve their potential (Government of Ireland (GOI), 2004; 1998; DES, 2017a; 2012; 2003; DENI, 2011; 2009; 1998;

The Special Education Needs and Disability (NI) Order 2005; National Council for Special Education (NCSE), 2014; 2013; 2011).

In the United Kingdom (UK), the term SEN was introduced in the Warnock Report (DES, 1978) and the term still appears in the most recent legislation, *Children and Families Act* (2014). The meaning of SEN is defined in the Education Act, 1996, section 312. Accordingly, children have SEN if they have a 'learning difficulty' which calls for special educational provision to be made for them. A child has a 'learning difficulty' if

'(a) he has a significantly greater difficulty in learning than the majority of children his age, (b) he has a disability which either prevents or hinders him from making use of educational facilities of a kind generally provided for children of his age in schools within the area of the local authority, (c) he is under the age of five and is, or would be, if special educational provision were not made for him, likely to fall within paragraph (a) or (b) when of or over that age.' (GOUK, 1996, p.178)

In the Republic of Ireland, the Education for Persons with Special Educational Needs (EPSEN) Act (GOI, 2004) defines SEN as

'a restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition' (p.6).

Multi-grade Classes

Multi-grade class teaching is defined as two or more grade groups taught together by a teacher in the same classroom (Quail & Smyth, 2014; Mulryan-Kyne, 2007; Veenman, 1995). According to Mulryan-Kyne (2007) "the multi-grade teacher is usually required to teach several grade-specific programmes in a range of subject areas in the same time that is available to the single grade teacher to teach one set of programmes to one grade level" (p. 501).

According to Kvalsund and Hargreaves (2009), there is a dearth of research on teaching and learning in small rural schools. The little research that has taken place has focused on the issue of pupil learning (Little, 2001) and whether pupil achievement is better in single-grade classes or in multi-grade classes (Lindström & Lindahl, 2011) with research, to date not

generally finding significant differences between these two models (Lindström & Lindahl, 2011; Aberg-Bengtsson, 2009; Veenman, 1995). Tsiakkios and Pashiardis (2002) state that teaching or being educated in small schools has both benefits as well as difficulties for teachers and pupils. Leuven and Ronning (2012) state that classrooms are organised according to natural peer groups, and grouping pupils from different grades in a single classroom changes the peer group relative to a single grade classroom. This may lead to either negative and/or positive implications (Leuven et al., 2010).

The benefits documented in the literature vary. According to Hyry-Beihammer and Hascher (2015), multi-grade classes may reduce the difficulties associated with grade repetition for pupils who have not met achievement objectives. In Mulryan-Kyne's study (2004), she noted that multi-grade teaching facilitated a wide range of methodologies, and teachers got to know pupils better. Her study also determined that teachers perceived benefits, including gains for low-achieving pupils due to continuity, smaller class sizes and the potential for cross-grade grouping. The research data from that study also revealed gains for younger pupils through the exposure of more 'advanced' material, role models and social support from older peers. There were also perceived gains for older pupils as they had an opportunity to consolidate content and gained independent learning skills.

Little (2005) also reports on benefits, including the opportunity for 'cognitive stretching' of the younger, less able and lower achieving learners. Furthermore, Berry (2000) comments on the use of peer tutoring learning strategies which appear to work particularly well in the multi-grade class, benefiting all pupils, cognitively, socially and personally. Kucharz and Wagener (2009) note the social benefits and continuity of social relations particularly where pupils do not have to change classes according to age group. This is echoed in previous research where Berry (2000) reports that multi-grade classrooms, which allow for grouping pupils across grade and age, are beneficial for pupils socially.

The literature also provides various examples of the challenges encountered in multi-grade classrooms. Daniel (1988) and Russell, Rowe and Hill (1998) state that multi-grade teachers report a heavier workload and greater difficulties in addressing the needs of a diverse class. Quail and Smyth (2014) report that teachers find it difficult to find time to work with individuals, including pupils with lower levels of achievement; to keep all grade levels on task; to manage the curriculum overload, and lack of resources. In Mulryan-Kyne's study (2004) the

main disadvantage cited by teachers was insufficient time, with most feeling they did not have adequate time to spend with each grade level in each subject area. Lapuz (2015) also cites further challenges such as managing focused peer teaching, group work and self-directed learning, and developing less reliance on direct supervision by teachers. A research project on small village schools entitled *Schools in Alpine Regions* in Austria and Switzerland (Müller et al., 2011) indicated that few of the research schools utilised the possibilities of heterogeneous multi-grade classes and focused alternatively on teaching which was organised through each grade working independently (Raggl, 2011).

Delivery of the Curriculum in Multi-grade Settings

Joyce's research (2014) refers to the problematic nature of curriculum delivery for multi-grade teachers as a result of the curriculum encompassing learning competencies that are specifically designed for regular schools with single grades; hence, multi-grade teachers may find it difficult to make the content meaningful for pupils. Therefore, teachers must address these issues if they are to cover the curricula of various grades. Hyry Beihammer and Hascher (2015) highlight that multi-grade teachers need to structure their teaching in a practical way with different teaching and learning groups and the integration of various subjects. According to Broome (2009) and Hoffman (2002), activities in mixed-age learning settings should be selected so that pupils of varying ages can engage in activities that require different abilities within the same topic. By accommodating same, Wood, Bruner and Ross (1976) assert that a more able pupil can model a skill and perhaps provide scaffolding to a less able peer, thus supporting both Vygotskyan and Bruner perspectives.

The research literature refers to various models in delivering the curriculum to multi-grade classes and in addition, overcoming the issue of heterogeneity of pupils in these scenarios. Kalaoja (2006) and Cornish (2006) refer to five approaches namely, the parallel curriculum, curriculum rotation, spiral curriculum, subject stagger and whole class teaching. The parallel curriculum refers to pupils engaged in shared themes or subjects but studying the syllabus of their grade with each grade taught in turn. Curriculum rotation refers to an entire class (all grades taught together) engaging with the curriculum of one grade for one year and in the subsequent school year, following the syllabus of the other grade. The spiral curriculum

involves similar topics being identified in different grade curricula with pupils sharing the same themes or subjects, and the basic concepts or ideas that are taught in the lower grades expanded on in the upper grades. Bruner (1960) notes that the spiral curriculum is an opportunity to revisit topics, which is particularly useful in the mixed-age classroom, throughout the grades (Harden, 1999). Smit, Hyry-Beihammer and Raggi (2015) and Hyry Beihammer and Hascher (2015) also make reference to the spiral curriculum and how the content can be arranged in such a way that pupils of different ages and ability can work on the same content but at varying levels. In relation to subject stagger, the classes study different subjects and are taught in turn. Finally, whole-class teaching involves all grades taught the same subject at the same time with the same material.

Mulryan-Kyne (2005), in her research in Irish schools, states that while teaching approaches vary in multi-grade settings, teachers frequently teach all grades together for visual arts, drama, music and physical education (PE). However, core areas such as mathematics and language are taught separately according to grade. This finding is similar to those of Miguel and Basarga (1997) regarding teaching strategies among multi-grade teachers in the Philippines. They also identified that in some instances, the skill or core subjects are taught separately in each grade level, with art and music taught as a whole grade. Furthermore, Smit and Engeli (2015) in their study of *Schools in Alpine Regions 2* also found that teachers stated that mathematics and language were less often used in mixed-age learning contexts because the progressive content, the curriculum and the schoolbooks were more challenging to adapt for mixed-age teaching resulting in more didactical practices for these two subjects.

Teaching Practices in Multi-grade Settings

A wide range of practices in relation to teaching and learning have been reported in the literature in relation to multi-grade settings (Hyry Beihammer & Hascher, 2015; Lindström & Lindahl, 2011; Little, 2001). In particular, six key instructional dimensions, namely: classroom organisation; classroom management and discipline; instructional organisation and curriculum; instructional delivery and grouping; self-directed learning and peer tutoring which affect successful multi-grade teaching, have been identified (Miller 1991). These instructional dimensions underpin practice in relation to multi-grade settings, emphasising the importance of developing classroom systems and adapting instructional practices.

Significant elements highlighted include the creation of classroom schedules and routines that promote clear, predictable instructional patterns, and the adaption of the physical environment. Other important features include employing instructional strategies and routines for maximum co-operative and self-directed pupil learning based on diagnosed pupil need; utilising strategies for organising group learning activities across and within group levels, and sourcing appropriate instructional resources. Furthermore, the significance of developing pupil responsibility for his/her own learning; managing time effectively, and developing pupils' skills and strategies for a high level of independence and efficiency in learning individually or in combination with other pupils are recognised as crucial in multi-grade classrooms (Miller, 1991).

These dimensions are presented in Table 1.

Table 1: Key Instructional Dimensions Which Affect Successful Multi-grade Teaching

Instructional Dimension	Facilitating Learning in Multi-grade Classrooms
Classroom organisation	<ul style="list-style-type: none"> • Instructional resources • Physical environment
Classroom management and discipline	<ul style="list-style-type: none"> • Classroom schedules and routines that promote clear, predictable instructional patterns • Pupil responsibility for his/her own learning
Instructional organisation and curriculum	<ul style="list-style-type: none"> • Instructional strategies and routines for maximum co-operative and self-directed pupil learning, based on diagnosed pupil needs • Effective use of time
Instructional delivery and grouping	<ul style="list-style-type: none"> • Strategies for organising group learning activities across and within group levels
Self-directed learning	<ul style="list-style-type: none"> • Pupils' skills and strategies for a high level of independence and efficiency in learning individually or in combination with other pupils
Peer tutoring	<ul style="list-style-type: none"> • Classroom routines and pupils' skills in serving as 'teachers' to other pupils within and across the differing grade levels

(Adapted from Miller, 1991)

Smit and Engeli (2015) further identify several central elements of multi-grade settings which support the Miller's key instructional dimensions including: the role of the teacher as a facilitator; differentiated and individual learning; cooperative learning, and flexible and multi-age grouping. The importance of differentiation and instructional groupings for all pupils including those with SEN is acknowledged. In addition, the implications of collaboration (Supovitz, 2002) and co-teaching (Strogilos et al., 2016) and individualised planning (Hyry Beihammer & Hascher, 2015) when supporting pupils in multi-grade settings is accepted.

Differentiation is a significant pedagogical approach that supports effective instruction for all pupils, including those with SEN, in multi-grade classrooms (Smit & Engeli, 2015; Valiandes & Koutselini, 2009; Koutselini, 2008; Broderick, Mehta-Parekh & Reid, 2005). Differentiation accepts that pupil diversity exists in all classroom settings, and highlights the need to change teaching procedures so as to accommodate different learning abilities, modalities, interests, pace, skills, knowledge and attitudes (Koutselini, 2008). Differentiation can occur through a number of processes: namely differentiation by content (including task, resource); process (including time, pace); product (including outcome), and classroom organisation and management (including model of delivery, grouping practices) (Renzulli & Reis, 1997; Stradling & Saunders, 1993). Ware et al. (2011) report that a common form of differentiation in ROI primary schools involves the use of special needs assistants¹ (SNA). Regardless of the process implemented, differentiated instruction is essential to ensure that all pupils are active participants in the learning process.

Utilisation of different forms of instructional grouping is clearly evident in multi-grade settings with the use of group and individual teacher-pupil sessions prevalent (Hyry Beihammer & Hascher, 2015; Smit & Engeli, 2015; Mulryan-Kyne 2005). Instructional groupings are important as it is recognised that it is not possible for teachers to do all the direct teaching in multi-grade classes. Therefore, it is necessary to teach strategies that allow pupils work independently of the teacher (Irish National Teachers' Organisation (INTO), 2003). Pupils in

¹ The SNA has a specific role in the Irish Educational system with the role described by the DES as a care role, including duties of a non-teaching nature only (DES, 2014). The role of the SNA differs significantly from that of the classroom assistant (CA) in NI or the teaching assistant (TA) role in England, where support staff provide instructional and teaching support to students with SEN, in addition to support for care needs.

multi-grade classrooms have to cultivate habits of responsibility for their own learning and to develop independence at an early age. The importance of routines and structures is evident here as pupils are trained in the classroom system and learn to work independently without the need for instruction (INTO, 2003). Grouping practices generally encompass a wide range of teaching approaches within and across subject areas, for example, grade levels together; grade levels separately (across and within subject areas); paired-group work; mentoring; flexible interest grouping; cross-age tutoring, and peer tutoring (INTO, 2003; Mason & Burns, 1996; Veenman, 1995; Stone 1995).

Supporting pupils with SEN in multi-grade classrooms is complex due to the multifaceted nature of demands made on teachers in such settings. Villa et al. (1996) state that a school climate that fosters collaboration is needed for a successful inclusion programme. Supovitz (2002) suggests that collaboration which focuses on instructional practices is necessary to make learning in smaller schools beneficial for all pupils. The use of co-teaching to support pupils with SEN in mainstream classes is reported (Strogilos et al., 2016). Co-teaching requires that class and support teachers² share responsibilities in order to respond and meet the diverse needs of their pupils (Weiss & Lloyd, 2002). Dieker (2001) argues that understanding of co-teachers' roles and responsibilities is essential in order to be effectively engaged in co-teaching. However, collaboration takes time and energy, which are perhaps scarce resources in schools (O'Hanlon, 2008).

Hyry Beihammer and Hascher (2015) advocate the professional use of individual work plans in multi-grade settings, where appropriate. They acknowledge that such practices demand optimal planning and instruction on the part of teachers. Individual work plans have been consistently lauded as pertinent for precise and accountable educational planning for pupils with SEN (Winter & O' Raw, 2010; National Council for Special Education (NCSE), 2006). Douglas et al. (2012) assert that individual planning is crucial in planning a broad curriculum for pupils with SEN.

Methodology

² For the purpose of this paper, the term support teacher refers to both the role of the SEN teacher in the ROI and the role of the SENCO in NI.

This research investigated how mainstream teachers meet the needs of pupils with SEN in multi-grade classrooms. The enquiry involved semi-structured interviews with 27 teachers who were teaching in multi-grade classes in nine primary schools. Borg and Gall (1989) suggest that by purposely selecting a range of subjects to interview, the researchers will have an opportunity to uncover the full range of 'multiple realities' relevant to the research questions, while also facilitating triangulation. The interview schedule included the following: introductory comments; list of topic headings and themes; key questions and sub-questions to ask under those headings, and a set of associated prompts and closing comments. The questions for the semi-structured interviews were developed by the research team and piloted in non-participating multi-grade schools. Interview schedules were amended according to the feedback received. The resultant interview schedule gave participants opportunities to discuss good practices and challenges with regard to the inclusion of pupils with SEN in multi-grade classes, exploring a range of topics.

The research sample included three primary schools in NI and six in ROI. The first stage in the selection process was to identify schools that had multi-grade classes and also had pupils identified with SEN. The two lists were then conveniently sampled, as logistical and practical factors such as time and travel constraints were considered. The schools selected included participants from a range of 2-teacher, 3-teacher and 4-teacher primary schools. All participants, including teaching principals and class teachers, were teaching a multi-grade class on a full-time basis. In one instance (the NI 4-teacher school), two of the teachers were jointly responsible for the P7 class. Each of the three researchers conducted interviews in three schools

Data collection was carried out over a four-month period. Participants were sent information ahead of the arranged interviews, outlining the purpose of the research and providing the key questions that would be discussed. Participants had the opportunity to use the interview schedule to prepare for the interview. Having key themes and sub-questions in advance also provided the researchers with a sense of order to deal with unplanned discussions (David & Sutton, 2011).

All interviews were recorded and subsequently transcribed. Interviews lasted between 30-40 minutes. Field notes were taken during the interviews and used as a memory aid. Interviews

took place in each of the nine schools and this helped to contextualise the data further, giving insights into the geographical location as well as the school environment.

Analysis of the data was guided by the phases of thematic analysis as outlined by Clarke and Braun (2013). This involved the researchers familiarising themselves with the data from the interviews conducted, generating initial codes, searching for themes, reviewing themes, and defining and naming themes. During the analysis, the researchers consulted with one another and conferred to make sense out of and compile the data into sections or groups of information, also known as themes or codes (Creswell, 2007, 2003).

The three researchers read and re-read all 27 transcripts in detail, exploring and generating connections and trends underlying the data. For logistical reasons, the data from NI and ROI schools was initially coded and organised independently by the researchers. However, the three researchers then merged the full data set for a common analysis and engaged in an inductive process whereby they discussed the emerging themes and patterns and reached a consensus. This iterative review process aimed to alleviate potential researcher bias and ensured dependability and credibility of the research (Patton, 2014). Thematic analysis was the approach used, analysing the qualitative data gleaned from the semi-structured interviews and identifying dominant themes and sequences.

As data gathered in this study was of a qualitative nature, it was necessary to have a consistent interpretation of data presented and terminology used in the report. Table 2 describes the terms used to quantify data gathered from interviews with multi-grade class teachers. The terms *all*, *most*, *many*, *some* and *few* are used consistently to present and discuss findings.

Table 2: Definition of Terms

	All	Most	Many	Some	Few
Teachers	27 teachers	20-26 teachers	13-19 teachers	6-12 teachers	0-5 teachers

Schools were coded according to a letter name and participants were coded according to the number, for example, A1 refers to one teacher in a two-teacher school; I4 refers to one teacher in four-teacher school. Table 3 outlines this coding.

Table 3: Research Coding

School	Teacher	Number of Multi-grade teachers
A	A1	2
A	A2	
B	B1	3
B	B2	
B	B3	
C	C1	4
C	C2	
C	C3	
C	C4	
D	D1	2
D	D2	
E	E1	3
E	E2	
E	E3	
F	F1	4
F	F2	
F	F3	
F	F4	
G	G1	2
G	G2	
H	H1	3
H	H2	
H	H3	
I	I1	4
I	I2	
I	I3	
I	I4	

Ethical clearance and ethical guidelines from St Mary’s University College, Belfast, and St Angela’s College, Sligo, a recognised College of NUI-Galway were adhered to. Prior to the commencement of data collection, informed consent was received from all participants. School principals and teachers were given details about the study and assurances of

confidentiality and plans for the responsible management of all data were outlined. All participants were informed that their engagement was voluntary and that they could withdraw from the process at any stage.

Presentation of Findings

This research was undertaken to investigate how mainstream teachers meet the needs of pupils with SEN in multi-grade classrooms. The research findings are now presented identifying examples of good practice, challenges and potential solutions to overcoming these challenges. It is to be noted that many of the examples of good practice and the challenges presented are not specific to the multi-grade setting, in that, they are also evident in single-stream classroom settings. Three broad themes associated with delivering curricula for pupils with SEN are presented: Classroom Management and Organisation; Teaching Methodologies and Differentiation, and Planning and Collaboration. The codes used to reference comments by teachers protect the anonymity of the school while also revealing whether the observation relates to a 2, 3 or 4 teacher school.

Classroom Management and Organisation

Most teachers reported that the multi-grade classroom was an ideal setting for many pupils with SEN due to the fact that pupils were with the same class teacher for a number of years. In relation to the delivery of curricula, many teachers referred to the usefulness of having multiple classes in one room, where pupils could move seamlessly between grades and also had the benefit of being exposed to repetition, overlearning and consolidation of curriculum content over the course of a number of years.

The biggest benefit is that if you have a child in 6th on a 5th class curriculum, they can very easily slot in. I would do the first part of Maths together or the first part of Irish or English so they're getting it for two years. (C4)

The responsibility of teaching a number of different curricula in the one classroom was testified as a challenge and the resultant difficulty to find the time to teach pupils with SEN at

their appropriate level. Some teachers reported that pupils with SEN resulted in an additional class level that had to be catered for. One teacher stated that the need to cover the content of the different curricula impacted on the amount of time that could be spent on a topic, irrespective of whether or not the pupil with SEN had mastered the material. Curriculum overload was cited by many teachers as a concern. One teacher postulated that preparation for life and the development of necessary life-skills needed to be prioritised.

Coming into the classroom you already have 4 class levels and then you have a child that doesn't fit into any of those class levels, so really you have a fifth level going on in the classroom. That's what I would find a big challenge. (A1)

I'm struggling with the time that it takes to deliver [the curriculum] ..., I would love to do the content I'm teaching at the minute for 2 or 3 weeks longer but I can't because I won't fit in the rest of the stuff that's planned for the rest of the year. (I4)

Curriculum overload is also a problem. We have to look at what's important for these pupils in terms of their life skills as well and be specific in terms of what we pick and choose. (E2)

Many teachers also viewed the various class groups as being flexible to accommodate varying abilities subtly and an opportunity for pupils with SEN to learn from their peers.

There's a great opportunity to learn from peers and because you have the multi-age, it's not just all about ability. You might have a younger child who can work with an older group or an older child who would be working with the younger group ability wise but it's not so noticeable because everything is multi in a multi-class. (B2)

For example, there's a boy in P2 who has literacy difficulties. You can blend him in to work with the P1s and he doesn't realise he's being treated any differently so his confidence is being brought on all the time. (G2)

The findings demonstrated that there were many reasons for the various types of groupings within the multi-grade classroom. Many teachers indicated that the composition of groups sometimes depended on the nature and the specific needs of the SEN presented by pupils and their personalities. An issue specific to the multi-grade setting raised, was the nature of class groupings and the challenges these posed when meeting the needs of pupils with SEN.

The junior classes were highlighted as more challenging classes to deal with by some teachers.

Certainly depends on the child with SEN. It depends on their diagnosis and it depends on their personality. Each child is very different and their needs are very specific. (E2)

A challenge in some aspects is the different ages. You have a broad range there from 4 – 8. You're trying to teach 4 year olds and you're trying to teach 8 year olds. It's very wide. (D2)

Most teachers interviewed stated that pupils with SEN were always seated with their year-group peers to allow pupils to mix and to see their own progression. Teachers detailed a wide range of approaches for grouping pupils with SEN. Many teachers stated that they taught the full class irrespective of year grades together initially, before splitting up depending on the subject or task.

They are pretty much sitting in their individual class groupings. I think that's important for them so that they see a progression and that they are moving on. It keeps them with their peers. (A2)

Basic skills are taught at the beginning to the whole class. They do tend to split in the different groups for all the subjects. (I4)

Many teachers indicated that ability groups were particularly useful in terms of meeting the academic needs of pupils with SEN, while peer grouping was useful for meeting social needs. Ability groups were common in core areas such as literacy and mathematics where pupils with SEN had an opportunity to work at their ability level and to experience success.

Ability grouping works well for the academic needs of the child and peer grouping works well for the social needs of the child. (C2)

When they are grouped together for ability, I do think that is better for the core subjects... I think it's very good for the pupils with SEN that they are working at their level and succeeding at their level. (C1)

Most teachers also advocated the merit of having mixed ability groups for pupils with SEN. This depended on the topic being taught, the possibility of more able pupils helping and

motivating pupils with greater needs, and the importance of pupils feeling involved and included.

I will change them into mixed ability groups and mixed class groupings as well depending on what we're teaching and for topic work as well. (A1)

They [more able pupils] are able to organise things within their group because the two pupils I have with SEN wouldn't be good at that at all. They would need someone in their group to motivate and rally them and keep them on task. (C3)

Some teachers also commented on their preference for small groups when working with pupils with SEN as opposed to working with pupils individually. Pair work was also noted as an approach for pupils with SEN in terms of meeting their individualised learning needs by many teachers.

There are two natural groups [2 class groups] and after that, I would prefer to have a group rather than one isolated person...The most thing is to have them in a group that they feel part of. (E1)

When they can work side by side with somebody and know that their buddy is there with them, that leads to very good quality individualised learning. (E2)

Dealing with challenging behaviour and Emotional Disturbance/Behavioural Disorder (EBD) was identified as particularly demanding for teachers in the multi-grade setting. Most teachers discussed the impact of behaviour in relation to classroom grouping.

There can be lots of challenges. Perhaps the hardest one of all is sometimes the pupils who would be disruptive. That can be an exceptional challenge. (I2)

The more I see of EBD, that is having a huge impact in the classroom and certainly in a small school setting. (E2)

Groups which were devised for social reasons were referred to by some teachers. For some pupils, especially those with autism or EBD, groups based on relationships and personalities were particularly important.

Similar ability but also good relationships, especially autistic pupils. They need pupils they get on with. (I1)

If it's a child with behaviour needs, then you would be thinking socially. (D1)

All teachers stated that lack of time in the school day to meet the needs of all pupils, including those with SEN was a challenge. They reported feeling stressed and overwhelmed at times. Many teachers indicated that pupils with SEN received more individual teacher time than other pupils in the class. Some teachers referred to teaching pupils with SEN for a short period at the end of a whole class lesson as a method of overcoming the challenges posed by curricula demands and academic levels of the multi-grade setting. However, the tension between meeting the needs of the class groups while ensuring that the pupil with SEN received an appropriate education was acknowledged by a few teachers.

There's little or no time. It's just go. Constant go...it is exceptionally stressful because there is little or no time. (I2)

When I was sure that everybody knew what they were doing, I would go to the pupils with SEN and spend 10 minutes with them at the end. (C1)

I found that pupils with SEN definitely got more attention. Sometimes they demanded that attention. (C2)

...I have to slot in extra time. In composite generally, it's year 6 and year 7 but he doesn't fit in for most things. It takes extra time and extra preparation. He's just as important as the rest of them so he has to get it. It's a matter of managing your time and the people power in the room. (H2)

Routine was perceived by most teachers to be especially important in overcoming the challenge of time. Routine was particularly crucial in meeting the needs of two groups of pupils, namely pupils experiencing Attention Deficit Hyperactivity Disorder (ADHD) and autism. Most teachers emphasised the need to acquire routines around organisational skills, forewarnings about changes in routine, and boundaries around time management to avoid behavioural issues and disruption of learning.

I have found with the Asperger's that the routine is so important. It's very important to him that things happen the way they usually do and that if they are not going to, I give him fair warning. Then with ADHD, I find that helping them to manage their time... it's not that they're not capable of the task but they've got distracted and their time is gone without getting much of anything done. (F3)

Routine and the implementation of same from a young age prevented problems manifesting, as classrooms became predictable settings for all pupils and not just those experiencing SEN. All teachers testified to the importance of explicit routine and structure for pupils with autism. Having systems in place allowed all pupils to become independent in terms of their learning and their transitioning from one task to another.

It's a very organised routine which of course, will help the pupils with SEN to realise there's a pattern and a routine and it's the same every day. To be able to follow a routine and follow a timetable, all those things are really important at a young age. (G1)

Because of the autistic pupils, my class needs a strict routine... They all know that routine. (I1)

You also have to have a system so the pupils know that if they're finished one thing, they go on to the next thing so they're not interrupting while you're dealing with one group or the other group. (H2)

The importance of pupils with SEN becoming independent in their learning in the multi-grade classroom was emphasised. Most teachers felt this was necessary to avoid becoming over-reliant on the teacher and to encourage pupils to work alongside their peers. However, most teachers acknowledged that this required much organisation on the teacher's part.

Especially for pupils with SEN. They become very independent learners. They have to become independent and that benefits all kids with speech and language, autism and all the rest. (D2)

It had to be very structured and very organised. With multi-grade, pupils are asked and expected to work independently more than if it was single stream. For that reason, the teacher needs to be very organised. (C2)

Timetables allowed pupils with SEN to function well in school and provided structure to their day. Visual methods in the form of visual timetables or rewards systems, and continuity and consistency in their use were perceived by many teachers as paramount in promoting routine, good behaviour and having homework completed.

There's a visual timetable up. Some of them would start the year when they come in P1 with an individual one. It depends on their need. (I1)

We have a chart with stars on it. The reason I have the star chart there in the first place is probably...the child I had with ADHD who was forever coming in without homework done. (D1)

Some teachers referred to the important role of paraprofessionals in supporting the learning of pupils with SEN in the multi-grade classroom. Paraprofessional supports available differed in the two jurisdictions with access to SNAs available in the ROI and classroom assistants³ (CAs) in NI. One teacher discussed the support a SNA provided around curriculum content and one-to-one attention where the teacher was unable to do this. A few teachers raised the issue of managing SNA support to avoid an over-reliance on the SNA by the pupil. One NI teacher referred to the importance of CA support in the multi-grade classroom particularly when additional support teachers were not available. One of the challenges highlighted was the lack of paraprofessional support throughout the school day. One ROI teacher stated that without the paraprofessional, the pupil with SEN was 'lost' in the classroom.

And the fact that I have a SNA as well. That's important for pupils with SEN because I wouldn't be able to give them the time that they need if I didn't have one. (C3)

You don't want the SNA sitting just with one child either... We tried to mix the abilities there as well so it wouldn't look as though the child was with one SNA. (A1)

Because we are a 3 teacher school, we don't have a special needs teacher so what we do is try and upskill our classroom assistants in order to provide a service that we can manage. (H1)

We have a part-time SNA. I would have one child on the autism spectrum and in a multi class like this, it is so difficult because she needs you beside her all the time to help her ...She is lost without the SNA beside her. (A2)

³ Pupils with statements of SEN may have a level of individual classroom assistance specified within their statement. In these situations, the classroom assistant may support the class teacher and specific child by: working closely with the identified pupil for example, 1:1; working in a small group with the pupil; working with another group to allow the class teacher to work with the identified pupil; under class teacher direction, supervising the pupil during a short time out, and having flexibility around break/lunch time arrangements in line with the child's needs. (North Eastern Education and Library Boards (NEELB), 2015)

Teaching Methodologies and Differentiation

Multi-grade teachers referred to various approaches in the teaching, learning and differentiation for pupils with SEN. In-class support was identified as an approach to overcome the challenge of meeting the needs of pupils with SEN in multi-grade settings. In the ROI, support teachers⁴ were reported as having a crucial role in the implementation of strategies and approaches throughout the school by many teachers.

It's very difficult when you have such big gaps. That's where the in-class learning support is brilliant. When it comes to English, there's myself and another teacher in the room ...It's very difficult to leave the SEN pupils because they will get stuck quicker and get lost and are looking around them. (C4)

Station teaching, team-teaching, parallel teaching and peer tutoring were perceived by teachers as alternative methods of delivery and some were seen as particularly suitable in the multi-grade class. Station teaching was seen as an alternative way to support pupils both academically and emotionally as opposed to withdrawal approaches. Many teachers commented on the usefulness of bringing learning support into the classroom. It overcame the problematic nature of individual pupils missing core content when withdrawn from class, and reduced the stigma particularly for older pupils. Because pupils were in small groups and grouped according to ability, active learning occurred. Some teachers also regarded independence and raising self-esteem as other benefits of station teaching. However, station teaching was deemed difficult for the junior classes in a multi-grade setting by one teacher.

It [station teaching] does promote inclusion rather than withdrawing these pupils. Withdrawal is necessary in certain cases and I wouldn't disagree with it but the older the child gets, the more difficult they find withdrawal and the more stigmatised they feel... Where station teaching is good, is they get the chance to stay within the group... it builds their self-esteem and their level of independence. (E2)

Station teaching with younger pupils can be more difficult. The younger pupils find it more difficult to work independently and for stations, you would need a 10 minute block. Some pupils in the junior class wouldn't be able to concentrate for that long. (C1)

⁴ Many children require additional teaching support in schools. In such circumstances, the classroom teacher will be supported by Special Education Teachers, who will have access to additional training in the area of special education, and who will work closely with the class teacher to provide additional teaching support for children with special educational needs. (DES, 2017b)

Team-teaching was also mentioned as an approach but in some instances it was perceived by some teachers to be difficult to implement in multi-grade classrooms. There were varying reasons for this, including noise levels and too many year groups in the room. To overcome this issue, full grade groups were withdrawn by the ROI support teachers to teach a curriculum area. This worked in both junior and senior classes and allowed for a smaller pupil-teacher ratio benefitting pupils with SEN.

That [team teaching] didn't work because if she is teaching 3rd and I am teaching the others in the one classroom, it just wasn't working with noise levels...The resource teacher last year took my 4th class where my child with EBD was, on the basis that he doesn't stay on task and he needed to share his time with others and learn how to work in a group. The teacher in the junior room does the same thing so that you have got the child with the speech and language disorder and have him out with his class group doing phonics so they're all working together and it's something that's particular to him as well. (D1)

Peer tutoring was utilised as an approach by all teachers in the research. Depending on the instruction, older more able pupils helped younger pupils with SEN. However, a few teachers reported that peer tutoring was not suitable for certain class groupings.

The SEN child, you can do more peer tutoring which I would do where I would get an older child to check in with her or sit beside her when she's doing something difficult. (A2)

Yes. There wouldn't have been a huge amount of it [peer tutoring] ... I would have tried to match up first with second or even within their own class groups...but formal peer tutoring, it was difficult with first and second class. (C2)

The nearest I go to peer tutoring is my reading buddies. I don't use peer tutoring because I think it's more for 3rd and 4th. I don't do it in 5th and 6th because I think they would be too conscious of the fact. (C4)

Many teachers referred to using a thematic approach in their everyday delivery of the curriculum and this was perceived as being particularly useful for pupils with SEN in consolidating and generalising learning.

I feel a thematic approach is massively important when you're delivering these types of content, especially for SEN pupils. They just love the cross curricular links that it ties into and I've just recently done a project [with the pupils]. (I4)

Sourcing and developing resources to ensure inclusion of pupils with SEN in the multi-grade setting was raised by a few teachers as a challenge. Multi-grade teachers stated that there were limited materials specifically designed for the multi-grade context. As a result, teachers had gathered their own resources, and adapted same to ensure inclusion of pupils with SEN in the multi-grade setting.

I would have gathered resources and sourced out as much as I can myself. I found that there wasn't one set thing that you could go to or one set place that you could go to. (C2)

I take what's there and adapt it to suit me and to suit the multi-grade and the SEN child. (D1)

Teachers provided an illuminating picture of the differentiation methods used in the multi-grade classroom. Different methods were used depending on the SEN of the pupil. Differentiation was mainly operationalised through content, process and outcome.

Many teachers indicated that the multi-grade classroom facilitated differentiation very easily and that it occurred naturally in this setting. Due to the varying numbers of grades in the room, teachers felt that they had many opportunities for differentiation and that pupils could be moved between groups in a subtle manner.

There's a lot of opportunities for me to plan for differentiation because of all these different levels. You're not drawing attention to any one child because the whole idea in a multi-class is that everyone is different anyway and pupils don't take so much notice. (B2)

Many teachers referred to differentiation according to inputs and content. In particular, many pupils had different texts at their own ability to facilitate access to the curriculum. Teachers discussed adapting material so that pupils could access same. Teachers also made reference to varying the pitch of lessons.

The main differentiation occurred with English and Maths. With that, they were working on completely separate texts and reading material. (C2)

Naturally enough, it would affect how you pitch the lesson. You would be aware that there is somebody there who can't take as much in so you have to differentiate. (E1)

Differentiation by process was also mentioned by some teachers. In a few instances, pupils were doing a different task which may or may not have been related to the task the other pupils were engaged in. Differentiating by pace was reported to be important in terms of maintaining self-esteem.

Because of the multiclass, the pace can be differentiated for the pupils with SEN. The child with the physical disability in my room can be given more time. I can vary that or I can move on to something else and still allow him time to complete activities and tasks. You're trying to maintain self-esteem as well. It works well for them. (E2)

Differentiation according to outputs was stated by some teachers. Teachers indicated that they had different expectations for pupils with SEN.

You will differentiate for them through the work and their workbooks. You mightn't have the same outcomes and you would have to be very aware of that and they are working at a level for their needs. (A1)

Depending on what you're teaching, you obviously set higher expectations for the more able pupils and you'll lower the expectation for the child with SEN. It's about knowing your students and knowing where they are at with it or how far they can go. (E2)

Planning and Collaboration

Many multi-grade teachers indicated that they collaborated with the support teacher when planning for pupils with SEN. This resulted in multi-grade teachers making adjustments in their own personal planning and at other times liaising closely in regard to the content of individual education plans (IEPs). This collaboration facilitated discussion around the needs of pupils with SEN, with some teachers reporting close liaison with the support teacher in

devising targets. However, time to collaborate with support teachers was noted as an issue when meeting the needs of pupils with SEN in the multi-grade setting.

Talking with the resource teacher and collaborating on what would be good for the pupils with SEN and sometimes that impacts on my planning. (C3)

You would be working with the learning support and resource [teacher] and through their IEPs. You would have to have a common goal or objective for that child. (A1)

Finding the time to collaborate with the support teachers is very difficult as well. I have done a lot of it after school or you squeeze it in when the pupils are eating their lunch. (C1)

All multi-grade teachers discussed their own personal planning for pupils with SEN. Reference was made to the fact that designing targets in multi-grade settings was similar to doing same in a single-stream classroom and depended on the needs of the pupil. For some pupils, planning was in academic areas and for other pupils, planning in relation to behaviour was the priority. All teachers acknowledged that more time was required when planning for SEN.

It's all down to your planning. When you're planning and deciding what you're going to be teaching, you do have to cater for that child for whatever problem they have. (H1)

You have to have a lot of planning done to be ready for your day for the child with SEN and for the classroom in general. (A1)

To me, making the targets for the child is no different if I had a straight class than in a multi-grade class...The girl in P1, because hers [target] is autism, her literacy and numeracy would all feed into her plan as well whereas in P3 there would just be straight behaviour targets. (G2)

Teachers also referred to the process of implementing the targets, where sometimes this happened in small groups or in the whole class group. Many teachers stated targets could get lost in the reality of a multi-grade classroom.

To implement the targets, sometimes they are done within a smaller group and sometimes within the whole class group. (B2)

In terms of the implementation of the IEP targets, I think sometimes they get lost [in multi-grade classroom]. (F3)

In some instances, the support teacher had taken responsibility for the design of the IEP, as well as implementing the targets set.

The IEPs, the learning support/resource teacher takes control of that. She looks at their programme of work in particular and she would write an IEP for each one of them so they are all following their own progressive programme.
(A2)

Discussion of Findings

The presentation of findings section highlighted Classroom Management and Organisation; Teaching Methodologies and Differentiation, and Planning and Collaboration as key themes. This section discusses the main issues arising from the findings. Underpinning the discussion is the recognition that many of the concerns in relation to meeting the needs of pupils with SEN in multi-grade classrooms are also common to single-grade classrooms. In addition, the individualised nature of SEN impacts on every aspect of classroom life and it is difficult to generalise due to this lack of homogeneity.

It is agreed that multi-grade teaching requires more organisation and management than single-grade teaching (Mulryan-Kyne, 2005). Mulkeen and Higgins (2009) assert that teaching in multi-grade settings requires greater effort in planning, adapting instruction and managing the different class groups. Furthermore, organising the teaching of multi-grade classes incorporates elements such as the grouping of pupils, the selection of contents for different groups, and the preparation of activities and teaching materials (Cornish 2006; Kalaoja 2006). Four areas of classroom practice relating specifically to multi-grade and SEN are discussed here. These include (1) curricula demands (2) flexibility of grouping and teaching practices (3) differentiation and finally (4) planning.

The curriculum and how it is implemented in multi-grade classrooms was a strong theme which emerged from the findings. Teachers commented on the challenges posed by curriculum overload in conjunction with teaching several curricula to different grades in the multi-grade classroom when meeting the needs of pupils with SEN. Quail and Smyth (2014) note the issues regarding curriculum overload as a serious concern in Irish multi-grade classrooms. The finding regarding the teaching of several curricula to different grades is replicated in Joyce's research (2014) which acknowledges the difficulties in curriculum

delivery for multi-grade teachers. As referred to previously, Kalaoja (2006) and Cornish (2006) outline five approaches in delivering curricula to multi-grade classes to overcome the issue of heterogeneity of pupils as much as possible.

The findings of this current study demonstrate that the demands on teachers in delivering the curricula were exacerbated when attempting to meet the needs of pupils with SEN. Most teachers indicated that core curriculum areas such as mathematics and literacy were generally taught according to grade level using the parallel curriculum model. Teachers found teaching using the parallel curriculum model particularly useful in catering for pupils with SEN, where pupils could learn the same subject but study the syllabus at their ability level. Mulryan-Kyne (2005) in her research in Irish schools states that while teaching approaches vary in multi-grade settings, teachers are more likely to teach core areas such as mathematics and language separately according to grade.

The other approach frequently used by multi-grade teachers in this study was the spiral curriculum where similar topics and themes were used to meet the needs of the individual pupil. Teachers reported that teaching subjects such as Art, PE etc. could be taught with a full group irrespective of grade using the spiral curriculum. Mulryan-Kyne (2005) also reported that teachers are more likely to teach all the grades together for visual arts, drama, music and PE. Many teachers referred to using a thematic approach in their everyday delivery of the curriculum and this was perceived as being particularly useful for pupils with SEN in consolidating and generalising learning. Broome (2009) postulates that tasks in mixed-age learning settings should be selected based on pupils of different ages and abilities being able to participate in activities that require different abilities within the same topic or theme. Smit, Hyry-Belhammer and Raggi (2015) refer to the spiral curriculum and how the content can be arranged in such a way that students of different ages can work on the same content but at various levels.

Another approach cited as a method of overcoming the challenge posed by the curricula demands of the multi-grade setting was to teach pupils with SEN individually for a short period at the end of a lesson. However, teachers stated that the need to cover the content of the different curricula impacted on the amount of time that could be spent on a topic, irrespective of whether or not the pupil with SEN had mastered the material. Quail and Smyth (2014) also found that multi-grade teachers are challenged to find time to work with

individual pupils with some feeling that pupils especially those with lower levels of achievement lose out.

Teachers indicated that multi-grade classes were ideal for pupils with SEN due to the fact that pupils could move seamlessly between grades in the one classroom, according to their needs. Pupils benefitted from being exposed to the repetition and overlearning of curriculum content over a number of years which helped to consolidate learning. According to Hyry-Beihammer and Hascher (2015), multi-grade classes may lessen the problems associated with grade repetition for pupils who have not met curriculum outcomes.

Sourcing and developing resources to ensure inclusion of pupils with SEN in the multi-grade setting was raised by teachers as a challenge. This is also documented as being a challenge in several studies (Hyra Beihammer & Hascher, 2015; Smit & Engeli, 2015; Quail & Smyth, 2014; Little, 2001). Lindstrom and Lindahl (2011) refer to the minimal multi-grade teaching options in textbooks and curricula, while Marland (2004) asserts that multi-grade classrooms require a larger quantity, selection and use of materials for a wider diverse group of pupils. Joyce (2014) notes that most researchers and practitioners agree that successful strategies for multi-grade teaching are dependent on sufficient supplies of learning materials to support individual and group-based learning.

The teachers in this study reported that the ability to easily regroup pupils with SEN out of their class grades in the multi-grade classroom was beneficial academically and socially, and also in terms of avoiding the stigma of being treated differently. Use of a wide variety of flexible groupings, that were very deliberately chosen, was apparent in the research, and the importance of this is attested to in the research literature (Cornish 2006; Flood et al., 1992).

Research regarding flexible grouping indicates positive effects for all pupils including those with SEN (Castle et al., 2005; Gentry & Owens, 1999). The teachers in the current study used various grouping practices as part of their classroom management strategies. They organised their instruction as cross-grade groups, same-grade groups, small groups and one-to-one support according to curricula, specific goals and activities. Such various groupings facilitated teachers to manage and to individualise teaching and learning.

The findings in this current study indicate that peer tutoring, was an important means by which teachers met the needs of pupils with SEN. Peer tutoring is common in multi-grade

classrooms (Cornish 2006; Little 2005) and can promote social inclusion, and foster academic and social development (Hyry-Beihammer & Hascher, 2015). However, some issues in relation to peer tutoring as a strategy to meet the needs of pupils with SEN in the multi-grade classroom were highlighted. The junior classes were identified as unsuitable in relation to implementing peer tutoring. Generally, peer tutoring appeared to be most beneficial in the middle section of the school. This is supported in the literature where it is stated that for peer tutoring to be effective and meaningful for both the tutee and the tutor, the age-gap should be modest (2–4 years) and, if appropriate, the roles can be switched (Smit, Hyry-Beihammer & Raggi, 2015).

The current focus of support teaching in the ROI directs practice towards supporting the whole class through the implementation of in-class support (DES 2014; NCSE, 2013) and facilitates teachers in multi-grade settings to meet the needs of pupils with SEN more effectively. Station-teaching was reported by many teachers as being particularly useful in the multi-grade setting. The benefits accrued were reported in terms of developing independence, raising self-esteem, and lessening the stigma that, heretofore, was attached to withdrawal models of SEN support. Furthermore, the presence of a number of teachers in the classroom during station teaching potentially negated some of the criticisms levied at multi-grade settings in the past, for example, time spent off-task and waiting for the teacher's attention (Galton, Simon & Croll, 1980) and proportion of time working on seatwork tasks without the direct attention of the teacher (Mulryan-Kyne, 2005).

However, team-teaching in the form of parallel teaching was perceived to be difficult to implement in the multi-grade classroom. Teachers reported overcoming this by engaging in an alternative practice where the support teacher withdrew full class groups and took responsibility for a curriculum area. This resulted in smaller numbers in both groups, thus facilitating teachers to meet the needs of pupils with SEN to a greater degree. Mulryan-Kyne (2005) asserts that 'when teachers work with fewer learners they will be able to correct learners' tasks, provide timely feedback, be able to cover the curriculum and give individual attention to learners, more than in a large multi-grade class' (p.23).

The findings identified that time restrictions were one of the greatest challenges that teachers face in the multi-grade setting. Teachers in Mulryan-Kyne's (2004) multi-grade research also

reported that they were concerned about the lack of time available, especially in the junior grades to work with individuals. Providing support for low achieving pupils presented considerable difficulty for many teachers in that study. In the current study, teachers highlighted the importance of classroom management and organisation as a means of overcoming this challenge.

The findings referred to the importance of differentiation in meeting the needs of pupils with SEN in heterogeneous multi-grade-classrooms. Broderick, Mehta-Parekh and Reid (2005) argue that differentiating the curriculum allows the inclusion of all pupils including those with SEN in mainstream classrooms. Differentiated instruction is necessary if pupils with SEN are to become active participants in the learning process in heterogeneous mainstream classrooms. Teachers indicated that the multi-grade classroom facilitated differentiation very easily and that it occurred naturally in this setting. Due to the varying numbers of grades in the room, teachers felt that they had many opportunities for differentiation and that pupils could be moved between groups in a subtle manner.

The data indicated that multi-grade teachers used different methods of differentiation depending on the needs of the pupil with SEN. This is similar to findings of Rose et al. (2015) who assert that differentiated instruction involves adapting teaching and curriculum content to meet the learning needs of pupils with SEN. Differentiation techniques alluded to by teachers in this current study included adaptations to content, process, outcome, and pace depending on the needs of the pupil which are similar to the differentiation categories of Stradling and Saunders (1993). Teachers referred to pupils engaging in a different task completely to their peers as a form of differentiation or using different texts based on the pupil's ability. These findings are similar to those found in a model of differentiated instruction by Smit and Humpert (2012) in their study of small multi-grade schools and differentiated instruction.

Many teachers in this current study reported having different expectations for pupils with SEN which then impacted on their differentiation practices. However, caution regarding the risks associated with differentiated instruction which include lowered teacher expectations are highlighted (O'Brien & Guiney, 2001). These include the oversimplification of material, thereby avoiding more demanding academic tasks (George, 2005) or pupils with SEN engaging in a narrow curriculum (Tomlinson, 2001).

The support of paraprofessionals in differentiation was reported by some teachers as crucial in enabling them overcome the challenge of meeting the needs of pupils with SEN in the multi-grade class. Ware et al.'s (2011) study of facilitating curricular access for pupils with SEN in primary schools reported that the most common form of differentiation observed, involved SNA use with little evidence of collaboration between classroom teachers and resource/learning support teachers in designing and implementing modified instruction and curriculum content. Blatchford et al. (2009) also raise concerns in their longitudinal study of schools in England and Wales about the effectiveness of teaching assistant (TA) support provided to pupils particularly those who were low-attaining or with SEN. These concerns relate to the issue of pupils having more contact with TAs than their teachers, or where TAs are used as providers of alternative rather than additional support for pupils with SEN.

In the current study, many multi-grade teachers indicated that they collaborated with the support teacher when planning for pupils with SEN which resulted in multi-grade teachers making adjustments in their own personal curriculum planning, and at other times liaising closely in regard to IEP targets. Reference was made to the fact that designing targets for pupils was no different to doing it in a single-grade classroom and depended on the needs of the pupil. Smit, Hyry-Beihammer and Raggi (2015) also note the importance of individualised planning by multi-grade teachers where plans, which create opportunities for pupil learning, are individualised according to the pupil's needs and interests. However, multi-grade teachers in this current study commented that curriculum planning for pupils with SEN took considerable extra planning time. Furthermore, many teachers reported that difficulties emerged around the implementation of targets and the possibility of some getting lost in the busy multi-grade classroom. Smit and Engeli (2015) in their research reiterate these points and acknowledge that teaching in multi-grade classrooms requires greater commitment by teachers to planning, instruction adaption and classroom management.

Conclusions

The purpose of this study was to investigate how mainstream teachers meet the needs of pupils with SEN in multi-grade classrooms. The findings indicated that many of the concerns in relation to meeting the needs of pupils with SEN in multi-grade classrooms are also

common to single-grade classrooms. In addition, the individualised nature of SEN impacts on every aspect of classroom life and it is difficult to generalise due to this lack of homogeneity.

In conclusion, the data supports the claim that multi-grade teaching requires more organisation and management than single-grade teaching, as well as greater efforts when planning and adapting instruction for the different grade groups in order to meet the needs of pupils with SEN. Time restrictions are another issue that teachers face in the multi-grade setting.

In meeting the needs of pupils with SEN, teachers are challenged by curriculum overload especially when teaching several curricula to different grades in the multi-grade classroom. The data demonstrated that the core subjects of English and Mathematics in particular were generally taught separately according to grade and this was more appropriate for pupils with SEN. Despite the difficulties of covering the various curricula, teachers indicated that multi-grade classes were ideal for these pupils due to the fact that pupils could move seamlessly between grades according to their needs in one classroom. In order to meet the needs of pupils with SEN, flexible grouping practices are very important. Teachers reported that the ability to easily regroup pupils with SEN out of their class grades in the multi-grade classroom was academically and socially beneficial, and avoided stigma. Pupils benefitted from exposure to the repetition and overlearning of curriculum content over a number of years which helped to consolidate learning.

Two strategies which teachers reported to work well for pupils with SEN in multi-grade classrooms were station-teaching and peer tutoring. The benefits reported for pupils included academic and social development, independence, raised self-esteem, and social inclusion. However, peer tutoring as a strategy to meet the needs of pupils with SEN in the multi-grade classroom was deemed unsuitable in junior classes. Other methods for meeting the needs of pupils with SEN in multi-grade classrooms included teaching pupils individually for a short period at the end of a lesson, differentiation and the use of paraprofessionals.

Finally, as stated at the outset, previous research has focused on access to the curriculum among pupils with SEN in mainstream classes at primary school but has not highlighted the complexities of same in multi-grade classrooms. This research has helped to illuminate the

practices of multi-grade teachers in meeting the curricular, social and organisational needs of pupils with SEN.

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