What are teachers' perspectives of teaching and learning in a multigrade setting in county Donegal?

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Dissertation in Partial Fulfilment of the Requirements for the Degree of Master of Arts in Learning and Teaching

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Declaration

I hereby certify that this material, which I now submit in Partial Fulfilment of the

requirements of the Degree Master of Arts in Learning and Teaching is entirely my own work

and has not been obtained from the work of any other, except any work that has been cited

and acknowledged within the text of my work.

Signed: Brenda-Lee McDaid

Dated: 6th July 2018

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Abstract

The objectives of the research were:

- 1. To identify, analyse and discuss teachers' perspectives of teaching in multigrade setting in Co. Donegal.
- 2. To identify, discuss and analyse teachers' perspectives of students' learning in multigrade settings in Co. Donegal.
- 3. To contribute to previous existing knowledge and research on multigrade teaching and learning by disseminating findings of the research

This research aimed to gather teachers' perspectives of teaching and learning in a multigrade setting in this county. Teachers discussed multigrade teaching in terms of teaching up to four classes within one classroom setting and also pupils' learning and how learning in a multigrade setting can impact their learning outcomes. Within this research, four semi-structured interviews with four multigrade teachers from different corners of the county are included. This qualitative data was then be analysed thematically to present the findings from the research interviews. The research concluded that although multigrade teachers feel there is a copious amount of workload in their setting, especially in terms of paperwork planning and preparation and also there are gaps in the training and continuous professional development of teachers specifically for multigrade classes. Also, it was concluded that the multigrade setting allows for strategies such as group and peer learning to have a beneficial impact on pupils' overall learning. Future policy and practice amendments are suggested such as revisions to teacher training programmes and provisions for specified and collaborative continuous professional development. Finally, opportunities for future research in the area of multigrade teaching and learning are provided.

This study has provided a viewpoint unique to Donegal whereby only the perspectives of multigrade teachers working in Donegal were used.

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Demographic information of interviewees

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Multigrade teachers' perspectives analysis in terms of teaching and learning

List of Abbreviations

D.E.S – Department of Education and Skills
NCCA – National Council for Curriculum and Assessment
BERA – British Educational Research Association
PDST – Professional Development Service for Teachers
CPD – Continuous Professional Development
GUI – Growing up in Ireland
LYIT – Letterkenny Institute of Technology
T.A – Teacher A
T.B – Teacher B
T.C – Teacher C

T.D – Teacher D

Chapter One: Introduction

1.1 Background

This research will focus on primary teachers' perspectives of teaching and learning in a multigrade classroom. Multigrade teaching refers to a system of a single teacher teaching pupils of different "standard or grade" (INTO 2003, p.9). This is common practice in one, two and three teacher schools in Donegal. The background of this research stems from the researcher's personal experience of primary school education, both as a student and teacher, and professional experience of researching statistical reports from the Department of Education and Skills (D.E.S).

The D.E.S release a statistical report each year which details numbers in relation to pupils, teachers, schools and school sizes. According to the 2016/2017 report (Appendix A) 36,330 pupils were taught in a multigrade setting with 16,992 of those in two teacher schools, where there are four class grades in one room. The figures from 2009/2010 (Inishowen News 2014) school year indicated that Donegal had sixty, one and two teacher schools.

The researcher's primary school education was from a multigrade school with two teachers. Since qualifying as a primary school teacher, the researcher has taught in similar settings. A substantial amount of schools in rural areas of Donegal, such as Ramelton, Fanad and Ardara are multigrade schools. This is because of lower population densities and declining enrolments due to the lack of young families present (Mulryan-Kyne 2004). As a result of this and the aforementioned statistics, the researcher feels that the majority of their teaching career in this county will be in a multigrade setting. Therefore, this study is necessary so that a thorough evaluation of both multigrade teaching and learning in Co. Donegal can be gathered, analysed and presented as an educational support for primary school teachers.

1.2 Reasons for undertaking

Motivation to pursue with this area of investigation arose from the personal experience of the researcher. Their initial primary education was in a small, rural two teacher school and the researcher is now currently teaching in multigrade setting. Although the researcher has also taught in larger schools with single grade classes, investigating the multigrade setting was

deemed more appropriate based on their experience to date. In comparing the two settings based on experience, the researcher noted that there was an obvious disparity between issues such as increased teacher workload and enhanced student independence in multigrade and differing uses of teaching strategies. As a result, curiosity towards teachers' perspectives of the multigrade setting arose and hence the foundations of the rationale for this research developed.

It was also found that there are limited published Irish studies on multigrade teaching. Mulryan-Kyne published three key pieces surrounding the topic of multigrade teaching in 2004, 2005 and 2007. More recently, Quail and Smyth (2014) published their research, which stemmed from the *Growing up in Ireland* (GUI) study, based on multigrade teaching and the influence it has on student academic outcomes. However, aside from these publications one has to focus on international studies such as Veenman (1995), Pridmore (2007) and Proehl et al (2013) as the basis of the background research.

It seems apt, therefore that an educator and researcher familiar with the area should explore further and gather teachers' perspectives of teaching and learning in a multigrade setting in Donegal. This will expand the researcher's knowledge of the area through reading literature and also enable one to identify if teachers in these settings have similar perspectives. By doing so, the researcher will be able to identify how teachers feel towards teaching in a multigrade setting, determine their views on students' learning in multigrade classes and also examine any major issues which need highlighting for higher educational authorities and educational policy makers.

With relation to professional development, this research may enhance current or future teaching for the researcher, multigrade teachers, trainee teachers and possibly other relevant education authorities such as the Teaching Council, teacher training colleges and the D.E.S. Additionally, the researcher envisages using the information gathered as an informative piece for parents considering schooling options for their children.

1.3 Purpose and aims of research and Design

The overall research question is

• What are teachers' perspectives of teaching and learning in a multigrade setting in county Donegal?

The objectives of the research are:

- 1. To identify, analyse and discuss teachers' perspectives of teaching in multigrade setting in Co. Donegal.
- 2. To identify, discuss and analyse teachers' perspectives of students' learning in multigrade settings in Co. Donegal.
- 3. To contribute to previous existing knowledge and research on multigrade teaching and learning by disseminating findings of the research

The purpose of the proposed research is to gather teachers' perspectives of teaching and learning in a multigrade setting in this county. Teachers will discuss multigrade teaching in terms of teaching up to four classes within one classroom setting and also pupils' learning and how learning in a multigrade setting can impact their learning outcomes. Within this research, four semi-structured interviews with four multigrade teachers from different corners of the county will participate. Inclusion criteria for interviews were a minimum of two years experience teaching in a multigrade class. The researcher is specifically aiming to interview two junior multigrade teachers, who teach junior infants, senior infants, first class and second class simultaneously, and also two senior multigrade teachers, who teach third, fourth fifth and sixth class simultaneously. To achieve a balance of gender perspectives, two interviewees will be male and two female. the four teachers will be from varying corners of the county. All teachers participating will be primary school teachers teaching in two teacher schools. One hopes to achieve a balanced portrayal of teaching perspectives from the junior end of the school to the senior, of gender perspectives and Donegal's geographical variants. The researcher hopes to listen to the voices and experiences of the interviewees and delve into their experiences and discuss these in relation to teaching multigrade classes and pupils learning when in a multigrade class. As semi-structured interviews will be used as the data collection tool, the researcher feels that the subtle and nonchalant tone (Powney and Watts 1987) of the interview process will allow for the participants to feel less interrogated and thus provide greater explanations, descriptions and perspectives of their experience in a multigrade setting.

A critical friend from the education field will also play a key role in the research process. This critical friend is a retired primary school principal who taught in multigrade settings for over twenty five years. Their roles will include the following; partaking in a pilot interview to test for suitability of questions and timing of interviews, clarifying transcripts, clarifying

themes analysed from the interviews and proofreading the final research piece. By using an academic friend, this will enhance the research validity (Bell 2005).

The data gathered will be thematically analysed for discussions using Braun and Clarke's (2006) method which will be further discussed and explained later in the research. Also, the researcher also hopes to disseminate findings and hopes that this will contribute to the body of knowledge and current practice on multigrade teaching and learning.

1.4 Contributions and Limitations

As this research is a small scale study, it will represent a small percentage of perceptions from multigrade teachers on the reality of teaching and learning in a multigrade setting. Such an investigation is unique because the teachers interviewed will be from various areas within Donegal with each teacher teaching in varying culture and socio-economic backgrounds. Limitations also include a lack of Irish research from which the researcher can investigate and compare their study with.

It is anticipated that this research will target two main audiences; teachers, both qualified and training, and the relevant educational authorities for primary schools such as the D.E.S, the National Council for Curriculum and Assessment (NCCA) and The Teaching Council. Teachers and trainee teachers may use the research to identify methodologies and strategies which are suited to a multigrade setting according to the findings presented. The research may provide a basis of knowledge from which teachers may organise and adapt for their placement needs. Similarly, a teacher acquiring a post in a multigrade may use the research for the same purposes. With regard to the educational authorities, this research may provide reasonable justification to adjust policy and procedures for multigrade settings depending on the findings presented.

1.5 Thesis structure

This thesis consists of six chapters. These include the Introduction, Literature Review and Critique, Research Methodology, Research findings, Analysis and Conclusions and Recommendations. The succeeding chapter will detail a review of the literature relating to multigrade teaching and learning, both from Ireland and international studies. The research methodology chapter will contain the ethical considerations surrounding the process, a clarification on the research instrument used and data collection and analysis procedures. The Research findings chapter will inspect the information gathered from the research instrument

and the analysis chapter will then discuss the findings in relation to prominent themes. The closing chapter will highlight conclusions drawn from data analysis and make recommendations for future research and amendments to policy and practice which is directly associated with the concluding findings presented.

Chapter Two: Literature Review and Critique

2.1 Introduction

The areas for examination and discussion from the literature include:

- 1. Definition of multigrade teaching
- 2. The advantages or opportunities (cognitive and non-cognitive) of multigrade teaching and learning for both pupils and teachers
- 3. The pedagogical disadvantages and challenges encountered by multigrade teachers
- 4. Methodologies and learning strategies
- 5. Assessment
- 6. Teacher Training and Continuous Professional Development

Each subheading will be examined in relation to relevant literature surrounding multigrade teaching and learning. An analysis of findings from both Irish and international studies will be examined to facilitate comparisons between each other. This chapter will conclude with a synopsis of the significant theories surrounding teaching and learning in a multigrade setting according to the literature.

2.2 Definition of multigrade

According to Veenman's comprehensive study (1995), multigrade teaching occurs when one teacher has the sole responsibility for teaching students from two or more grade levels in one classroom at the same time. This term can also be understood as 'multiclasses', 'multi-level' and 'mixed-age'. Recurring phrases and terms were found which would allow for a common definition of multigrade teaching. Such phrases include 'two or more grade levels' (Mulryan-Kyne 2004), "different standards or grades" (INTO 2003, p.9) and "one classroom with one instructor" (Proehl et al 2013, p.417). Veenman (1995) also explains the criteria by which multigrade classes differ from other terms presented. He establishes that multi-age and mixed-age classes are formed purposely in schools because of the perceived educational advantages. However, multigrade classes are a product of necessity due to administrative and financial reasons, for example, when numbers are decreasing and a school subsequently loses a teacher (INTO 2003).

2.3 The advantages or opportunities (cognitive and non-cognitive) of multigrade teaching and learning for both pupils and teachers

For the purpose of this research, multigrade teaching refers to the act of teaching up to four class levels within the one classroom setting. Multigrade learning is in relation to the methods and strategies for learning in a multigrade setting and also how having up to four classes in a room can impact on pupils' acquisitions of knowledge and skills.

The literature relating to multigrade teaching and learning is repeatedly divided into cognitive and non-cognitive advantages and opportunities. Cognitive advantages, for the purpose of this research, refer to academic achievements such as testing scores, reading, writing and arithmetic abilities, attentiveness, ability to focus and working memory abilities, while non-cognitive advantages outline the social development opportunities, such as ability to work in a group and independence and responsibility in learning, within such a setting.

2.3.1 Cognitive advantages and opportunities

Many of the academic authors studied for this literature review detailed similar cognitive benefits from teaching and learning in a multigrade class. Proehl et al (2013), Quail and Smyth (2014), Little (2001) and Veenman (1995) all identified that there were no substantial differences in cognitive development in students in multigrade classes compared with students in single grade classes. It is important to note that the authors used differing methodologies, both quantitative and qualitative, to assemble and analyse their data. Thus, their findings are enhanced and more creditable due to the similarities found across an international and national level and as a result of differing methodologies drawing the same conclusions. Proehl et al (2013) examined a pre and post study of a school which originally began as a single grade school and converted to a multigrade school. He also gathered data from pre and post test results and gathered perspectives of teachers and parents involved in the school. Quail and Smyth (2014) analysed data from the Growing up in Ireland study and thus drew their comparisons of nine year old multigrade and single grade pupils. Little (2001) examined previous research writings of international studies on the knowledge and practices in multigrade classes while Veenman (1995) synthesised the best evidence of research findings. One can argue that because varying data collection and analysis methods were used, this further justifies that multigrade students perform as well as single grade students when considering academic progress.

Another frequent finding form the literature highlighted that individual differences in learning are recognised, heightened and differentiated far more so in multigrade classes (Little 2001; Hargreaves 2001; Veenman 1995). As pupils may spend up to four years with the one teacher, the literature argues that teachers of multigrade know their students' strengths and needs better than teachers of single grade classes (Proehl et al 2013). As a result of this, the individual needs

of pupils are recognised and teaching styles are tailored to accommodate their learning. Hargreaves (2001) adds that this type of teaching and learning enhances pupil motivation as they develop a sense of ownership of their work.

Multigrade classrooms were also regularly described as environments where scaffolding (Pridmore 2007; Feldman and Gray 1999), problem solving and collaboration are encouraged. Feldman and Gray (1999), in their empirical research, detailed how the younger pupils use the older pupils to develop their skills yet retain control over their learning by asking for assistance only when needed. One can argue that the observational method of studies of these researchers limit the conclusions merely to what was experienced during a fixed time and context as there is a lack of defined, measurable data to comment on. Such practices mentioned emulate Vygotsky's (1978) idea of learning from others of differing abilities. Cognitive growth is enhanced through learning (Vygotsky 1978) from others as younger children can learn from their older classmates and the high achieving students can tutor their classmates by disseminating information.

2.3.2 Non-cognitive advantages and opportunities

For the purpose of this study, non-cognitive advantages and opportunities refers to the social, emotional and behavioural development of the pupils. The main non-cognitive aspects in relation to this study include pupil independence levels, ownership and accountability for their learning and responsibility for the school environment.

Similar to the aforementioned advantages, many researchers found that there were no significant differences in non-cognitive development of pupils within a multigrade class in comparison with those in a single grade class (Proehl et al 2013; Quail and Smyth 2014; Litte 2001). However in Veenman's (1995) overview of the cognitive and non-cognitive developments in pupils in multigrade classroom, he noted that out of seventeen studies researched, there were significant non-cognitive differences that favoured children in multigrade who were from an upper or middle class background. One needs to highlight that even though this is quite a substantial piece of evidence from Veenman (1995), it is based on research and figures from over twenty years ago. Therefore, one must not assume that this is still the case in current multigrade settings.

The literature states that multigrade pupils assume responsibility for their learning (Proehl et al 2013) and assessment (Hargreaves 2001) more so than their single grade classmates in larger, more urbanised school. Hargreaves (2001) went on to state that because of the organisation and structure within multigrade classrooms, pupils who assume responsibility

can 'enhance their own learning process and so improve their own achievements' (Hargreaves 2001, p.559). What the literature fails to mention is that in order for pupils to develop accountability for their learning, the teacher must have a constructivist approach in place (Fisher and Frey 2013). Weimer (2013) notes how constructivism allows for more active student involvement and responsibility. Instead of being passive listeners in a teacher led environment, student centred learning allows the pupils to become active and responsible for their learning. By participating in reflection and assessment strategies, the pupils can identify what needs are developing and also engage in higher order thinking skills which promotes overall learning. This is something which needs to be explicitly taught and regularly structured in the multigrade classroom timetable in order for pupils to naturally assume responsibility for their learning (Fisher and Frey 2013).

Research has shown that pupils in multigrade settings also develop a sense of responsibility over their younger classmates and regularly influence their behaviour. Feldman and Gray (1999) state that pupils in mixed aged settings develop a sense of responsibility for the younger pupils in their class and thus, "develop a sophisticated understanding" (p.512) and awareness of their own behaviours. Older pupils in the class can develop leadership roles (Proehl et al 2013; Veenman 1995; Feldman and Gray 1999). Overall Mulryan Kyne (2004), Proehl et al (2013) and Veenman (1995) are in agreement that there is a family like atmosphere within the multigrade setting. Veenman (1995) states that by using appropriate teaching and learning methodologies and encouraging independence and responsibility in learning, multigrade schools thrive by "making a virtue out of necessity" (Veenman 1995, p.322).

2.4 The pedagogical disadvantages or challenges encountered by multigrade teachers

For the purpose of this research the pedagogical challenges discussed will include the need for explicit differentiation and extreme workload on the teachers in relation to planning and preparation. Issues such as time constraints and teacher attitudes and perceptions towards multigrade teaching will also be discussed.

One of the main challenges encountered by multigrade teachers is meeting the diverse needs of the pupils from all the grades in the classroom. This includes catering and differentiating for those with learning difficulties and special needs (INTO 2003). As a result, teaching can be challenging because of the necessity to differentiate learning activities for children at different ages and grades (Quail and Smyth 2014). On the other hand, although monograde

classes have pupils within similar age brackets, it will always contain children with varying degrees of learning abilities and needs (Mulryan Kyne 2007). Effectively, all teachers must practice thorough differentiation if their teachings are to meet the learning needs of their pupils.

Another pedagogical challenge of multigrade is the overloaded curriculum which teachers are expected to cover. Catherine Mulryan-Kyne (2004) found that 13% of the 150 Irish teachers surveyed agreed that the Irish curriculum was excessive for a multigrade classroom. In Ireland there are eleven subjects to cover and in small multigrade schools, teachers may have to cover all these subjects with up to four classes. Kivunja and Wood (2012) carried out interventions in multigrade schools in Zambia and found that there was too much of a curriculum overload as the multigrade teachers were doing the work of two or more monograde teachers. Pridmore (2007), who studied international research findings, concluded that multigrade teachers were expected to adapt the monograde curriculums in place and as a result experienced a "heavy burden" (Pridmore 2007, p.560) of additional workload. From this, one can construe that an overloaded curriculum for multigrade teachers is an international issue. Therefore this is an issue for the educational authorities, such as the D.E.S, the NCCA and the Teaching Council, to realise the prevalence of multigrade schools and the need to provide a manageable curriculum suitable to a multigrade classroom. When examining research on multigrade teaching and learning, there was one common theme which emerged; time. Multigrade teachers are under immense time constraints. Such constraints entails a lack of time to reflect on the teaching and learning (Mulryan-Kyne 2004), sharing time appropriately amongst the grade levels and subjects (Hargreaves et al 2001), lack of time for preparation of lessons, resources and corrections and lack of time to deal with parental issues (Veenman 1995). Therefore, multigrade teachers are constantly sacrificing either teaching time or pupils learning time in order to deal with the aforementioned issues. Hargreaves (2001) describes multigrade teaching as retrieving and imparting "maximum information in minimum time" (p.555).

According to Nunan (thejournal.ie 2014) two thirds of Irish primary school principals have full time teaching responsibilities in addition to maintaining the official school business. All of these additional duties erode time from teaching commitment (Hargreaves et al 2001). This argument is supported by Mulryan Kyne (2004) and Veenman (1995) who highlight that in order to deal with the additional pressures in multigrade schools, such as time constraints and management skills, multigrade teachers require an enhanced expression of the most demanding abilities a teacher develops.

Multigrade teachers' perspectives throughout the research studied revealed negative attitudes and less job satisfaction in comparison with their single grade colleagues (Mulryan-Kyne 2004). Such perspectives are a result of heavy planning and preparation required, heightened classroom organisation skills and a heavy workload (Quail and Smyth 2014) (Pridmore 2007) (Veenman 1995) (Mason and Burns 1996). Although researchers used both quantitative and qualitative methodologies in their writings to make such deductions, the fact that each contains these reoccurring themes would reinforce their prevalence in multigrade teaching internationally and this adds impact to the findings as both provide valuable insights to multigrade teachers' perspectives.

2.5 Teaching methodologies and learning strategies

The need for effective instruction and appropriate teaching strategies is repeatedly reiterated throughout the literature. Veenman (1995) stresses the "quality of instructional practices" (p.370) is a key ingredient to successful learning more so than the organisational strategies used. One must teach the pupils about working as teams and in groups before expecting pupils to participate in successful group and peer learning strategies. Little (2001) adds to this by claiming that successful teaching is a product of the will and commitment from the teacher. These are valuable insights with regards to this research because regardless of the strategies used, the commitment and drive must be there from the teacher, otherwise the quality of teaching and learning is compromised. Nonetheless, given the demanding nature of multigrade teaching, it would be extremely difficult for one individual teacher to constantly sustain the energy levels required for effective grouping arrangements. This is an issue which has been overlooked and ignored by the educational authorities.

According to the literature researched, the types of teaching and learning methodologies and strategies used are comparable across multigrade schools worldwide. Pridmore (2007) discusses methodologies and strategies in developing countries through a choice of four styles (Appendix B). These include quasi-monograde where each grade is taught in turn, differentiated curricula where the whole group is taught a topic with tasks differentiated, multiple year curriculum cycles where pupils work on common topics at a differentiated pace and learner and materials centred where pupils work on independent tasks using self-study materials. Hargreaves (2001) specifically focused on Peru, Sri Lanka and Vietnam, whilst Quail and Smyth (2014) and Mulryan-Kyne (2004) concentrated solely on Ireland. All academics were in agreement that grouping arrangements in the multigrade class is the most suitable methodology and learning strategy to utilise for the teaching of non-core subjects.

Basic subjects such as English and Mathematics were to be taught to each grade separately. Grouping compositions included the following styles; ability, paired, cross-age, peer tutoring, collaborative and cooperative (Appendix C). Veenman (1995) argued that using grouping enhanced learning by instructions being tailored to individual needs whilst simultaneously reducing instruction time. Peer tutoring was favoured by Pridmore (2007) and (Proehl et al 2013) because of the Vygotskian theory of problem solving through communication and interaction. Students are actively involved in their learning process and their learning is strengthened by teaching and communicating with their peers.

2.6 Assessment

Hargreaves (2001) published a paper specifically aimed at assessment for learning in the multigrade classroom. Hargreaves (2001) gives a detailed account of the methods utilised by multigrade teachers to enhance purposeful assessment using the resources available. These include the use of open ended tasks and using children as a valuable assessment resource for each other where a culture of feedback is created. Feedback can be between pupil to pupil or teacher to pupil.

As previously mentioned by Mulryan Kyne (2004), Veenman (1995) and Hargreaves et al (2001), time constraints are a huge factor impinging teaching and learning in the multigrade classroom. This is also an issue in relation to assessment. However, Hargreaves (2001) states that multigrade classrooms, and teachers, are the forerunners in promoting assessment that enriches learning and improving pupil achievements. The strategies that teachers use, suggested by Hargreaves (2001), include entrusting students to take responsibility for their learning by recognising success criteria, using other children as an assessment tool by creating an environment of peer feedback according to success criteria and training pupils in skills such as self-assessment and record keeping by using learning logs. By using a success criteria, pupils are aware of the purpose of their learning and therefore when assessed, the outcome of their assessment has validity (Black and Wiliam 2003).

Strategies which help students to take more responsibility for their learning, such as self-assessment and following a success criteria, is also positively reinforced by Pridmore (2007) as his work notes the importance of continuous feedback in a multigrade. However, Hargreaves (2001) does also state the inappropriateness of standardised tests for multigrade classrooms and suggests that pupils should be assessed based on milestone achievements instead of grade levels. It is important to note that although Hargreaves published this paper in 2001, this move is currently in the process of taking place in Ireland with the introduction

of the New Language Curriculum for both English and Gaeilge (NCCA 2016) whereby students' achievements are assessed and reported depending on milestone targets. The Maths Curriculum is also in the process of rolling out the same method over the next five years. This is significant because Hargreaves' (2001) theory is now being put into practice.

2.7 Teacher training and Continuous Professional Development

An issue relating to multigrade teaching and learning which many academic authors highlighted in their research (Veenman 1995; Mulryan-Kyne 2007; Little 2001; Hargreaves et al 2001) was the inadequacy of the teacher training programmes and institutions to prepare trainee teachers for multigrade settings and also the lack of continuous professional development (CPD) support specifically for multigrade teachers.

Veenman (1995) carried out a study of international literature on teaching and learning in a multigrade setting. The research analysed by Veenman (1995) include those from countries such as England, Germany, Switzerland, the United States, Canada, New Zealand and Australia. Notably, those researchers previously mentioned, highlighted that the teacher training of the participants involved, did not prepare them for multigrade teaching. Little (2001) reinforces this point as her international study also highlighted the insufficient training of teachers for teaching in a multigrade. Insufficiencies included lack of specialised training for the multigrade pedagogy, focusing on teaching strategies for monograde classes and lack of teaching practice placement opportunities in multigrade settings. This forces one to question the ethos of teacher training colleges in an international level. As evident from the literature, multigrade schools are frequent on an international level with 53% of pupils at primary school level in Europe being educated in multigrade classes (Mulryan Kyne 2004), and especially common in Ireland with 48% of primary school pupils in multigrade schools. Therefore, Veenman (1995) argues that the colleges of education need to recognise that multigrade schools are a current form of schooling and will also be a future reality and therefore need to adapt the training system to suit this reality. Kivunja and Wood (2012) state in their article that multigrade teaching is a specific type of pedagogy and therefore teacher training colleges need to accept that and create specialised and focused tutoring, with practical experience and supervised training (Hargreaves 2001) on the topic.

Additionally, once qualified, literature suggests that there are little opportunities for teachers to engage in CPD specifically related to multigrade teaching and learning (Proehl et al 2013; Hargreaves et al 2001). Combining this with the earlier noted issue surrounding inadequate training for multigrade teachers, both add strength to the concept of invisibility (Little 2001)

associated with multigrade schooling, teaching and learning. In order for teachers to keep up with the constant changes in teaching and learning styles, methodologies and strategies, it is necessary that opportunities are available for teachers to meet these demands. Additionally, there is an absence of specific professional development courses focusing on the multigrade pedagogy. Mulryan Kyne (2007), Proehl et al (2013) and Hargreaves (2001) all reinforce the instance that constant support, mentoring, and professional development opportunities are essential for multigrade teachers in order to develop their selection of teaching strategies and to communicate with other teachers in similar situations to discover what works well for their situation, to share advice and offer guidance to one another. In order for progression to happen, the NCCA, the Teaching Council, the D.E.S and the Professional Development Services for Teachers (PDST) need to be made aware of the requirement of specific professional development courses for multigrade teaching and learning. Pridmore (2007) suggests that experienced multigrade teachers should work in conjunction with curriculum planners and to adapt the curriculum and prepare and provide materials for effective professional development opportunities of multigrade teachers in order to sustain a high quality standard of teaching and learning in their multigrade classrooms.

2.8 Conclusion

Indeed the research on multigrade teaching and learning does portray it to be a somewhat more challenging situation as opposed to that of a single grade class. It does not necessarily mean that its effectiveness is less superior. Multigrade pupils appear to perform as well as their counterparts in single grade whilst simultaneously developing leadership and responsibility in their learning. On the other hand, multigrade teachers face challenges such as an overloaded curriculum and extreme time constraints for preparation and planning. In order to combat such time and organisational issues in the multigrade classroom, grouping pupils as a teaching and learning methodology is suggested from the literature. Academic writings in the area of assessment in multigrade settings repeatedly highlight the need for students to take responsibility for their learning. This is because of teacher time constraints and the need to encourage independent learning strategies. Standardised tests have been reported to be outdated and inappropriate for multigrade classes due to the grade level method of assessment rather than assessing achievement milestones. Inadequacy of teacher training programmes from colleges of education was emphasised from numerous academic studies, both at a national and international level. Academic writers reported how there was a lack of commitment to this specialised form of instruction. Similarly, there is an air of

invisibility around multigrade teaching and CPD courses. As with teaching training colleges, the majority of courses provided are specifically aimed at the idealistic single grade class and teacher. It is proposed that to solve this issue, experienced multigrade teachers should work collaboratively with curriculum planners, such as the NCCA, to support, mentor and provide professional development opportunities for those teachers in a multigrade setting.

Chapter Three: Methodology

3.1 Introduction

In this section, the researcher will discuss the qualitative methodology used. The research design will be explained and justified before the explanation of the data collection instrument. Other methodologies considered will also be explained and justified in relation to the researcher's choice of selection. A description of the pilot study will be presented before sampling of participants and the inclusion criteria will then be highlighted. The validity and reliability of the research will be investigated in advance of the ethical considerations and possible limitations of the study being identified.

3.2 Research Question and Objectives

The overarching question surrounding this research is:

What are teachers' perspectives of teaching and learning in a multigrade setting in county Donegal?

The objectives of the research are:

- 1. To identify, analyse and discuss teachers' perspectives of teaching in multigrade setting in Co. Donegal.
- 2. To identify, analyse and discuss teachers' perspectives of students' learning in multigrade settings in Co. Donegal.
- 3. To contribute to previous existing knowledge and research on multigrade teaching and learning by disseminating findings of the research.

3.3 Research Design

The chosen research design is that of qualitative study in order to gain access to the true perspectives of participants as it provides an invaluable investigation of internal issues within the area (Cohen et al 2000). Hitchcock and Hughes (1995) state that qualitative research in education allows for attention to be paid to everyday classroom and school life. As a result, a qualitative approach was chosen to gather perspectives of multigrade teachers in relation to the everyday teaching and learning in their settings. This research involved four semi-structured interviews with multigrade teachers. From this, one hoped to retrieve the "richness, depth and multi-dimensional" (Mason 2002, p.1) perspectives as Mason (2002) suggests that

qualitative research methodologies provide. This approach, also considered as a subjectivist approach, was favoured by the researcher as it enabled an understanding to be derived from the individuals and their experiences within the multigrade setting. Cohen and Manion (1989) described this as acquiring understanding based on how the individual "creates, modifies and interprets the world in which he or she finds himself or herself" (Cohen and Manion 1989, p.8). With a subjectivist approach, there is an emphasis on the issues which are exclusive and personal to an individual, rather than focusing on larger, more generalised and universal matters (Cohen and Manion 1989). The researcher favoured this type of approach as the aim was to conduct a small scale study that gathered perspectives of multigrade teachers in varying locations across Donegal. In doing so, the researcher is aware and acknowledges that the findings, although may resonate to an extent with other counties, are primarily centred on multigrade teaching and learning in Donegal.

3.4 Other Methodologies Considered

At the beginning of this study a quantitative methodology was taken into consideration through the use of online and postal surveys. After consulting sources and accepting guidance from a critical friend, the researcher deemed these data sources an inappropriate methodology for many reasons. Firstly, surveys both online and by post would not allow for the personal experiences and perceptions of multigrade teachers to be as profound in comparison with semi-structured interviews. Based on the research question and aims of this study, the researcher felt that the purpose of gauging Donegal teachers' perceptions on multigrade teaching and learning would be inappropriate for a survey type methodology.

Also, action research was a methodology style initially contemplated as it involves situational interventions (Cohen and Manion 1989). According to *Research Methods in Education* by Cohen and Manion (1989), action research is primarily focuses on a specific problem in a specific setting. This type of methodology would enable the researcher to specifically focus in on the settings and gain insights in how to enhance their skills in teaching and learning in a multigrade (Hopkins 2008). McNiff (2002) describes action research as a "self-reflective practice" (p.6) and therefore classrooms would provide for an enriching learning opportunity in the researcher's own classroom. On the other hand, it would fail to provide the reflective thoughts, practices, experiences and perceptions of the multigrade teachers in this county, as sought through the research question. Additionally, after further reading in the area, the researcher discovered that the emphasis of action research is to obtain "precise knowledge for

a particular situation and purpose" (Cohen and Manion 1989, p.218) which would be contrary to the purpose of this study.

3.5 Data Collection

Firstly, the researcher ensured to pilot the interview process with a fellow academic as there was the possibility of certain questions or aspects needing refining or adjusting for interviews when collecting data. Piloting enabled the researcher to justify if the interview is realistic in relation to time and participants ability to answer questions (Castillo-Montoya 2016). After the piloting process, the researcher decided to amend the interview questions slightly to allow for richer experiences and perspectives of the teachers to come to the forefront. Some questions were removed entirely as they were seen to be insignificant to the interview process and irrelevant for data collection.

The research instrument is four semi-structured interviews that were conducted by the researcher. These were semi-structured by using questions relating to areas focused on teaching and learning in a multigrade setting such as assessment, planning, peer learning, social skills, teacher training and recommended actions (Appendix D). Semi-structured interviews were selected because of their ability to provide a more profound depth of data collection from participants' attitudes and perceptions while also alleviating as much interview bias as possible (Cohen and Manion 1989). This style of interview allowed the teachers to share and describe their perspectives with teaching and learning in a multigrade setting. This assisted the researcher as it provided a probing guide when asking questions about a particular area (Hitchcock and Hughes 1995) while also being open-ended to allow for personal response. With semi-structured style interviews, questions are more open which will enable the diversity and flexibility of responses from participants (Merriam 2009). Also, the researcher wanted to allow for the participants to feel comfortable during the process and not to feel any sense of interrogation. Cohen and Manion (1989, p.307) state that this "less formal" approach enables the interviewer to adapt the running order of the questions depending on responses given, modify the wording to yield further valuable data or to add supplementary questions if suitable.

Interviews took place in a hired room in a community hall which was a neutral location for all participants. To ensure privacy, a sign was placed on the door detailing that interviews were taking place and to withhold from interruption unless necessary. Water was provided for all participants. Interviews were recorded using a Dictaphone and a tablet device

simultaneously. Field notes will also be taken during interviews in relation to body language and promptness of responses in order to assist the research when analysing data.

This research project began in September 2017 with intended completion on June 2018. The data collection element of the interview process was implemented over a three week period from the 8th to the 27th of January 2018 (Appendix E). Participants were asked four questions which engaged with aspects of teaching in multigrade, aspects of learning in a multigrade, teacher training and actions for change. Question one and two had different aspects of teaching and learning which participants could chose to discuss relevant to their experience

3.5.1 Semi-structured Interview Participants

As displayed in Table 1, the participants of the interviews all had a vast amount of teaching experience in multigrade classes. Inclusion criteria for participation in the study included teachers who had two or more years teaching experience in a multigrade setting. By selecting such participants, the researcher ensured that the relevant data could be highlighted (Patton 2002). To provide a balance of gender, class based and geographical considerations, the researcher selected four participants with an even balance of male and females, junior and senior class teachers and from four varying areas of the county in contrasting environments.

Table 1. Demographic information of interviewees					
No.	Code	Work Place	Academic	Years Teaching	Current Classes
			Degree		
Pilot	Pilot	Carndonagh	Master of	34 years / 30 in MG	3 rd , 4 th , 5 th and 6 th class (senior
	Teacher		Education		classes)
1	Teacher	Ramelton	Bachelor of	28 years / 21 years	3rd, 4th, 5th and 6th class (senior
	A		Education	in MG	classes)
	(T.A)				
2	Teacher	Donegal	Master of	30 years all in MG	Junior infants, senior infants, 1st
	B (T.B)	Town	Education		class and 2 nd class (junior classes)
3	Teacher	Buncrana	Master of	15 years / 10 in MG	Junior infants, senior infants, 1st
	C (T.C)		Education		class and 2nd class (junior
					classes)

4	Teacher	Portsalon	Bachelor of	30 years / 29 in MG	3rd, 4th, 5th and 6th class (senior
	D		Education		classes)
	(T.D)				

The aim of the semi-structured interviews was to acquire an understanding of the perspectives of the four multigrade teachers in Donegal on teaching and learning in such a setting. The researcher asked open ended questions which required the interviewees to evaluate, explain and discuss their experiences of teaching in the multigrade and pupils learning.

3.5.2 Pilot Study

Prior to initiating any formal research, including sourcing participants for interviews, the researcher drafted a set of interview questions and conducted a pilot interview using these questions with a critical friend from the field of multigrade education. The researcher had to ensure the questions were open ended to allow for personal experiences to prevail (Cohen and Manion 1989). This involved researching appropriate questioning techniques and studying literature based on semi-structured interviews to gauge appropriate use of vocabulary. Afterwards, the researcher was able to adapt and amend the questions asked depending on their suitability and appropriateness for valuable data collection. A pilot interview allowed for feedback on questions and confirmation the reliability of the research instrument. Sarantakos (2013) details how piloting a study enables the researcher to identify possible flaws or problems in order for them to be rectified before the main data collection process. The researcher also used the pilot interview to assess timing and to practice taking field notes during the interview process. Afterwards, a critical friend was given the chance to provide feedback, both positive and negative, to the researcher about any recommendations they had for the interview process. Their suggestions were recorded and as a result the researcher followed through on the amendments. Such amendments included selecting five questions to shorten the length of the interview to sustain interest and relevance and also allowing the future participants the opportunities to suggest recommendations for change based on their own experiences and perspectives.

The analysis of the data gathered during the pilot interview enabled the researcher to determine the appropriateness of some questions whilst also giving an indication of the time it would take to fully transcribe and analyse each interview.

3.6 Data Analysis

During analysis, the researcher read and re-read data in order to gain a greater understanding of the information received and also to highlight any themes within the findings. Thematic analysis of data allowed for a comparison between similarities and differences within each interview by assembling this information under specific themes. Braun and Clarke (2006) highlight how thematic analysis allows for flexibility whilst also potentially providing rich and detailed data. The Braun and Clarke (2006) methodology of thematic analysis was used to analyse the data. This procedure involved transcription of interviews verbatim, generating initial codes followed by emerging themes. Next the themes were reviewed and the final step was to name the themes. Once themes were identified within the data, the researcher isolated the themes and sorted them for comparing and contrasting amongst each other. Extracts of interview transcripts can be found at appendix F.

Following analysis, the researcher will seek assistance of a fellow academic to analyse the data from their perspective, to ensure all important information is included and to validate findings.

3.7 Sampling, Validity and Reliability

The researcher used purposive sampling to select four teachers based on the researcher's knowledge about their experience in multigrade. Merriam (2009) highlights that one must clearly identify the inclusion criteria required within a purposeful sample in order to seek out appropriate participants. The sample was taken from two junior and two senior multigrade teachers who have two or more years' experience in a multigrade setting. By selecting such participants, the researcher ensured that relevant data appropriate to the study could be highlighted (Patton 2002). The research participants included two male and two female teachers to interview to balance any gender considerations.

Also, by seeking the assistance of a fellow academic within the field to listen to and read interview transcripts, the researcher was verifying the content of the interviews and validating the findings. According to Bell (2005), the act of conferring with other is a key element in ensuring validity of any research.

3.8 Ethical Considerations

All work conducted in this research project will ensure to uphold the highest standard of ethical behaviour in order to protect those involved. In doing so, the researcher has submitted an 'Ethical Approval Application form' (Appendix G) to Letterkenny Institute of Technology and also consulted and complied with the *Ethical Guidelines for Educational Research* (BERA 2011). The researcher will aim to ensure that the research will be conducted in an honest, unbiased and objective manner in adherence with the British Educational Research Association (BERA) guidelines (2011) and the responsibilities to the participants, community of educational researchers, educational professionals, policy makers and the general public.

The ethical process involved in this research includes contacting and obtaining consent to participate from participants, the interview stage and data retention. The researcher first made an initial phone call to multigrade teachers who met the inclusion criteria to explain the research purpose and to gauge their interest. Once four suitable participants were sourced, the researcher obtained their informed consent to contribute to the study. Participants for interview were then provided with a participation information leaflet (Appendix H) detailing the research and the responsibilities to participants and educational professionals (BERA 2011). This was done through an informative letter (Appendix H) and leaflet. Participants also received a consent form where they could sign their acceptance to participate with the research (Appendix H). The researcher is aware of the importance of confidentiality and anonymity within the research and as such pseudonyms will be used within the research writings and data analysis. Participants were also made aware in the initial documents that data gathered for the purpose of the research may have the possibility of being used in future for publications or future research studies. Participants were made aware through the information leaflet and consent letter that they hold the right to withdraw from the study up until data has been analysed.

Data was stored in a password protected electronic file. All data was collected, processed and stored in compliance with relevant data protection legislation and in compliance with the Letterkenny Institute of Technology's guidelines for electronic data storage

Possible ethical considerations may include raising false expectations with the participants about improving the current teaching and learning situation in a multigrade setting.

Therefore, the researcher will have to make clear from the outset that this is a research based on teachers' perspectives and therefore may not inform further curriculum or policy changes.

There is also the possibility that participants may disclose events or practices that are unprofessional or conflict with code of conduct within primary schools. If so, it is the duty of the researcher a professional teacher to report disclosures of any kind to the relevant authorities in accordance with the fitness to teach program from Section 42(1) of the Teaching Council (Amendment) Act (2015) (Appendix I). Participants will be aware of this as a statement will be included in their consent and information letter detailing the procedures the researcher must follow in the event of a disclosure.

The researcher submitted an ethical approval form to the Letterkenny Institute of Technology including the sample information letter and leaflet for possible participants and also possible interview questions. On the 16th November 2017, the researcher received ethical approval from the board subject to minor adjustments which have been rectified and verified with the researcher's supervisor.

3.9 Limitations

One must acknowledge that there are limitations within this research. The semi-structured approach to the interviews enabled the researcher to lead the questioning which can direct the sharing of the participants' experiences. The researcher aimed to exclude any prior bias the participants may have on the topic before the interview questions are composed. The researcher also had to be aware of and aim to dismiss any own bias or prejudicial concerns having previously taught in multigrade settings. One must ensure to avoid letting previous experiences or personal opinions impact on the data collection process (Cohen and Manion 1989)

This will be a small-scale study due to the time and word-count constraints allocated. As this is a small qualitative study, interviewing four participants within a certain geographical area may limit the data received and also place restrictions on applying the results to a larger scale in comparison with statistical data from quantitative research (Atieno 2009).

Also, as this is a small-scale qualitative study, the researcher was challenged to apply the data findings to a larger scale in comparison with a quantitative study which would provide factual, statistical evidence (Atieno, 2009). Subsequently, depending on the use of a qualitative methodology may act as a limitation for this research in contrast to applying a quantitative methodology such as surveys or action research.

3.10 Conclusion

To conclude, a qualitative research design was selected in order to provide the research with valuable perspectives of multigrade teachers which responds to the research question. Several types of methodologies were considered for this research however semi-structured interviews were selected as the research instrument to allow for the teachers' perspectives to be explained openly and provide great insights of their experiences. A pilot interview was carried out to test the suitability of the interview questions and the structure and overall timing of the interview. This pilot interview was analysed for the purpose of determining what questions provided suitable and relevant data to the research. Thematic analysis was used to analyse the data received in the hope of providing rich and detailed data. Participants for interview were selected based on purposive sampling and a balance of male, female, junior teachers and senior teachers was sought. An ethical approval application, explaining the ethical considerations involved with this research, was drawn up and submitted to the ethics board at the Letterkenny Institute of Technology. The ethical issues addressed were in compliance with the Ethical Guidelines for Educational Research (BERA 2011). Ethics approval was granted on the 16th of November 2017 subject to minor modifications which were overseen and permitted by the researcher's supervisor. The limitations of the study were then addressed including the small scale nature of the study, limited geographical considerations, time and word constraints, and also the inability to provide statistical evidence in comparison with a quantitative research methodology.

The following chapter, research findings, will present the information findings gathered from carrying out the four semi-structured interviews with multigrade teachers in Donegal.

Chapter Four: Research Findings

4.1 Introduction

The aim of this study was to investigate the predominant perspectives of primary school teachers in Donegal around the topic of teaching and learning in multigrade classrooms. This chapter presents the results of the research data collected from semi-structured interviews through the use of Braun and Clarke's (2006) method of thematic analysis. The dominant themes found within the interviews will also be explored in this chapter. These themes include planning and preparation, group work and peer learning, benefits and challenges of assessment; non-cognitive advantages and the flexible nature of the multigrade, lack of training.

4.2 Semi-structured Interview Participants

Table 2 below lists the details of the participants used within this research. Reasons for selecting such participants and details of the inclusion criteria can be found within chapter three of this paper. Participants were asked open ended questions in order to gather their perspectives on teaching and learning in a multigrade setting in Donegal.

Table 2. Demographic information of interviewees					
No.	Code	Work Place	Academic	Years Teaching	Current Classes
			Degree		
Pilot	Pilot	Carndonagh	Master of	34 years / 30 in MG	3 rd , 4 th , 5 th and 6 th class (senior
	Teacher		Education		classes)
1	Teacher	Ramelton	Bachelor of	28 years / 21 years	3rd, 4th, 5th and 6th class (senior
	A		Education	in MG	classes)
	(T.A)				
2	Teacher	Donegal	Master of	30 years all in MG	Junior infants, senior infants, 1st
	B (T.B)	Town	Education		class and 2 nd class (junior classes)
3	Teacher	Buncrana	Master of	15 years / 10 in MG	Junior infants, senior infants, 1st
	C (T.C)		Education		class and 2nd class (junior
					classes)
4	Teacher	Portsalon	Bachelor of	30 years / 29 in MG	3rd, 4th, 5th and 6th class (senior
	D		Education		classes)
	(T.D)				

4.3 Semi-Structured Interview thematic results

In order to extract themes from the semi-structured interviews, the Braun and Clarke (2006) methodology of thematic analysis was employed. This involved the researcher becoming familiar with the data through transcription of verbal interviews. Next, initial codes were generated followed by initial emerging themes, reviewing of themes and lastly, naming of themes. The succeeding findings presented are the final step of the Braun and Clarke thematic analysis process.

The similar themes that emerged across the four interviews relating to multigrade teaching and learning include; planning and preparation, group work and peer learning, benefits and challenges of assessment; non-cognitive advantages, the flexible nature of the multigrade, lack of training, and, actions recommended for change. In the context of this study planning refers to the paperwork teachers must complete in terms of long term yearly plans, monthly plans and fortnightly plans. Preparation involves duties such as printing, photocopying, laminating and assembling materials and resources to be used in the classroom.

4.3.1 Planning and preparation

Across the four interviews there was a disgruntled atmosphere towards the planning and preparation necessary for the teacher within the multigrade class. As each teacher interviewed teaches four classes, there was a unanimous agreement that the planning process is "extremely challenging" (T.A) and "difficult" (T.D) as there is a "great deal of planning needed" (T.C). This was enhanced with the argument that because a multigrade teacher can have up to four classes, they have "so much extra planning" (T.B) in contrast with a single grade teacher so therefore one has "four times as much" (T.C) workload. Additionally, teachers were frustrated at the fact that each plan requires an "overwhelming amount of detail" (T.C) because of the need "to tailor the plans to each class" and "to focus on the individual learning" (T.C) taking place.

However all four teachers interviewed provided methods in which they use to "simplify" (T.D) the process. Instead of planning each subject for four classes, it was repeatedly suggested to group classes together, for example third and fourth class together and fifth and

sixth class together, in order to reduce the planning for "two distinct groups" (T.A). This method was suggested for the arts and social environmental and scientific educational (SESE) subjects whereas the core subjects of English, Gaeilge and Maths required "step by step individual class" (T.B) plans.

Another suggestion which was repeated throughout the four interviews was the idea of using a topic, project and/or monthly approach to the planning process. T.A thought that using a project approach was better because "the children get more out of it as it allows for cross-curricular learning" to take place. T.D added that teachers naturally teach topically as it "links learning together" and is a "more realistic approach" for both teaching and learning. T.B noted that monthly planning was better suited to their classroom as it allowed for a theme to be covered each month whereas with fortnightly planning, as suggested by the D.E.S, there was "far too much repetition".

There was an overall consensus that plans for a multigrade class need to be treated "like a working document" (T.B) in order to add in learning objectives and activities as the children progress. Multigrade teachers wanted plans to allow for "flexibility" in order to prevent "ticking boxes on for the sake of it to impress some inspector" (T.A). Teachers interviewed felt engulfed by this "paperwork exercise" and felt that in order to move forward there should be "much less emphasis on notes and planning and more emphasis on the practical teaching" (T.C).

4.3.2 Group work and peer-learning

Another prevalent theme that was evident from the interviews was that the use of group work and peer learning is an "essential element of the multigrade" (T.C) class, for both teaching and learning purposes. All of the teachers stated their preferences for the use of group work and peer-learning and it was clear that multigrade classes "lends naturally" (T.D) to using such strategies.

The most frequent use of these strategies was for paired or shared reading, music, art and project work within the SESE subjects of history, geography and science. When grouping children, teachers frequently referred to the use of mixed ability groups as the favoured choice. In addition, pupils were grouped "strategically" (T.D) to allow for diversity in ability and skills. The reasoning for this was highlighted when T.B stated that the pupils who required further support can be "pulled along with the rest of the group", whilst T.D

emphasised the fact that the brighter children could "rise to the occasion". This is due to the fact that within group work in the multigrade class, someone is constantly "modelling a high standard" (T.A) and the younger or those pupils who require mentoring are "exposed to the positive role model" (T.A). On the other hand, the older and brighter pupils can develop "understanding and responsibility" (T.C) from their mentoring role.

All teachers interviewed stressed the benefits of using group work and peer learning in their multigrade classrooms. The primary reason found for using these strategies, which was continually repeated across the interviews, was because the children "learn from each other" (T.A) and "really enjoy" (T.C) working together. Other frequently mentioned benefits included that the children have learning experiences in a variety of settings, such as small group and whole school settings, and find this much more engaging rather than "just listening to the teacher" (T.D). In conjunction, it was noted that group work and peer learning are a much less formal teaching and learning strategy to use and therefore, some children can be "more comfortable" (T.D) discussing learning with their fellow classmates rather than the adult.

It was also noted that group work and peer learning allows each pupil to "work at their own individual level" (T.B). This was supported by the fact that these strategies allow for Vygotsky's theory of scaffolding of learning to take place. Peer learning, such as paired reading, was found to be especially beneficial for the younger and more challenged pupils because when they are listening to and working alongside an older or high ability child, their learning is "supported, scaffolded and enhanced" (T.A). Overall, teachers were in unison in stating that these strategies "work really well" (T.B) in a multigrade classroom, and has been seen to "boost confidence levels" (T.C) and "develop nice, unexpected, friendships" (T.D) amongst pupils in varying classes.

4.3.3 Assessment in the multigrade: Strategies, opportunities and challenges

Whilst reviewing the interviews it was discovered that all teachers reiterated the same assessment strategies used in their multigrade classes. Those methods of assessment referred to include a mixture of formal, assessment of learning, and informal, assessment for learning, strategies. Formal methods favoured by the teachers interviewed were the standardised tests such as the MICRA-T, the SIGMA-T, the Drumcondra Reading, Spelling and Gaeilge tests, and also the "usual" (T.A) spellings, tables and end of topic tests. Checklists, teacher observation, self-assessment and peer-assessment were understood as the preferred

approaches to informal assessment in the multigrade classes and the most frequently used methods.

Opportunities and challenges to assessment in the multigrade class, was also stated by the teachers interviewed. Checklists were seen to be one of the main sources of assessment in the multigrade class because of their accessibility. One can "tick them off nice and quickly" instead of having to "waste time" by writing out paragraphs after every lesson (T.B). Keeping an assessment folder was seen as a "necessary evil" (T.A) in order to make life easier for the teachers during parent teacher meetings. All four teachers emphasised the importance of tracking and recording pupils' learning because as a professional, one does have "an accountability for what you're doing" (T.A) with the pupils. Teacher observation was seen to be as an "essential" (T.C) strategy for multigrade teachers to use on a daily basis. It allows one to "know where each child is at" (T.D) whilst simultaneously enabling opportunities to ask pupils about ways of improving by using questions such as "what can we do better? and "how can we improve this work" (T.C). Peer and self-assessment strategies, such as two stars and a wish and traffic lights, were highly praised by the teachers interviewed. With selfassessment, it was repeatedly stated that "pupils learn a lot from that" (T.C) because of the informal nature of the strategy. With the use of peer-assessment, there was a noticeable enhancement of pupils' confidence as a result of the "sense of responsibility" (T.C) gained from partaking in this approach.

It was discovered that assessment in multigrade classes was not without challenges. Each interviewee detailed the difficulties of administering the standardised test in multigrade settings with it being described as a "nightmare situation" (T.B). With the standardised assessments, the guidelines suggest certain days and times to administer to the different classes. However, when there are up to four different classes in the room, multigrade teachers have no option but to give the tests outside of the recommended times. Teachers were frustrated at the lack of flexibility with the standardised assessments for multigrade classes adding that "whoever wrote the guidelines clearly didn't teach in a multigrade" (T.B). Interviewees also added grievances over the fact that the standardised tests, particularly the MICRA and SIGMA maths and English assessments, one focus on "one facet of learning" and pupils aren't given any "marks for workings" (T.D).

All teachers emphasised the need to "find a balance of formal assessment, testing and actually knowing where the child is at" (T.D). Two teachers concluded their interview with

similar statements regarding the importance of finding that balance. T.D concluded by explaining that teaching and learning could suffer at the expense of being "too hung up on assessment", while T.B added "You don't fatten a pig by weighing it, so you can spend as much time as you want assessing the children, but if you haven't the teaching done, there will be no fat pig!".

4.3.4 Non-cognitive advantages

Findings from the interviews showed participants' perceptions of teaching and learning in a multigrade classroom has non-cognitive advantages. These included enhanced pupil independence, social skills and heightened responsibility in learning as a result.

In relation to pupils' level of independence in a multigrade classroom, all of the teachers interviewed stated that pupils learn to work more independently because it is "encouraged" (T.D) and they are "trained" (T.A) to do so. All teachers agreed that if skills such as "finding and tidying resources and equipment for themselves" (T.B) were explicitly taught, then independence in learning "becomes a natural element of the multigrade class" (T.D). As a result of this, pupils in a multigrade "are not, and cannot be, spoon fed" (T.C)

Pupils heightened levels of social skills in a multigrade was another recurring non-cognitive advantage recorded at interviews. Each participant stated that the "nature and environment" (T.A) of a multigrade school gives rise to a more profound development of pupil social skills. Activities such as group work, peer learning, buddy work and whole school projects were seen as catalytic agents in pupil social skills development. The main contributing factor to this was that "pupils in a multigrade are constantly dealing with and mixing all age groups, both those older and younger than themselves" (T.C). Subsequently, this was seen to be advantageous in the development of "nurturing relationships in the school environment" (T.B). Both principal teachers interviewed also highlighted the fact that pupils moving onto secondary school, where there are much more pupils and teachers to interact with, are "less daunted" (T.D) by the experience as the multigrade environment provides the social skills to "cope with the change" (T.A).

Most participants regarded multigrade pupils as having "more ownership and responsibility for what is going on in the school" (T.A). All teachers interviewed mentioned non-curricular duties that their pupils are responsible for at school such as compost bins, labelling and

putting out the waste and recycling bins and distributing the lunch packs. Teachers agreed that by "bestowing a sense of ownership and responsibility of school life" then pupils take pride in their roles. Teachers reiterated that those who work well in class are rewarded with such roles, and therefore, the pupils are "in some ways put in charge of their own learning" (T.D).

4.3.5 Flexible nature of the multigrade

A frequent finding within the interviews was that multigrade classes allow for flexibility in learning and teaching, and was deemed to be "very important" (T.C). Based on those interviewed, flexibility in the multigrade could be divided in two ways. Firstly, it was found that overlearning and pre-learning allows for flexibility for both teachers and pupils in teaching and learning. Secondly, level and/or ability appropriate learning can take place.

Overlearning, re-teaching, pre-learning and pre-teaching were repeated by each participant. As a multigrade teacher can have a class for up to four years, the teachers interviewed found that overlearning is a certainty and "hearing things taught multiple times obviously helps with pupils' learning" (T.D). All interviewees stated that this element, although unique to the multigrade class, is beneficial for both high achievers and those of lower ability levels. Those interviewed revealed that with high achievers, the multigrade is an ideal learning environment where they can "stretch themselves" (T.A) and work with a grade level above them. The idea of "children constantly absorbing, both intentionally and unintentionally" (T.C) was repeated amongst the interviewees. For the child who required further support, all of the interviewees stressed how the multigrade can assist their learning through constant repetition and revision. Those pupils have opportunities to listen and watch the teacher teach the class levels below them thus they are "rehearing and picking it up all again" (T.B).

Flexibility with regard to pupil ability levels in the multigrade was also highlighted in the interviews. The multigrade classroom was described as "not static or rigid" (T.B), thus, one has the opportunity to move pupils between groups where they can "work at their own level" (T.A). One may have a pupil in first class who is bright at maths and therefore can be slotted in to work with second class maths. Overall teachers found it beneficial as the "flexibility of being able to move pupils' across groups is an added advantage to the multigrade" (T.B).

4.3.6 Lack of training

The teachers interviewed provided an overwhelming perspective that there is a lack of specific teacher training for multigrade situations. Each teacher participating in this study expressed their frustration over the inadequacy of their teacher training experiences to provide them with relevant strategies and theories for teaching in a multigrade class. When asked if they felt adequately trained and prepared by their teacher training college for teaching in such a setting phrases such as "absolutely not" (T.A), "I didn't get any multigrade training" (T.C) and "well I definitely didn't learn much for multigrade teaching from college" (T.D) were consistently repeated. The outcome of the interviews suggested that multigrade teachers "learn on your feet" (T.B). For all participants, once they began employment in a multigrade, it was a case of "being thrown in at the deep end" (T.D). Although each teacher interviewed had their teacher training with different colleges and institutions, they were all in agreement that they were trained for the "perfect, single class grade" (T.A) with all their college modules modelled on one class group. One interviewee discussed how when asking lecturers about multigrade teaching, they were told "oh it would obviously be different but you'll learn" (T.B). Overall, the interviews convey frustrations because there was "no practical experience at all" (T.B) during teacher training and having to "think on your feet (T.C) instead of practice and theory accumulated from college years.

4.4 Conclusion

Based on the perspectives of those interviewed, teachers recognise both challenges and opportunities associated with multigrade teaching and learning. Opportunities which were found to be unique and beneficial to the multigrade situation included the heightened use of group work and peer learning which subsequently supports peer assessment as pupils in a classroom with up to four classes "constantly learn from each other" (T.C). The flexible nature of the multigrade was seen as extremely advantageous for both pupils and teachers depending on the ability levels of the pupils. Teachers interviewed were in unison that pupils in a multigrade setting have enhanced independence, responsibility and social skills due to a "high expectations of maturity" (T.A) and a "sense of ownership" (T.D) over their school and their learning.

Interviewees were clear that multigrade teaching and learning bears equally demanding challenges. The extreme levels of planning, preparation and paperwork required was found to be a laborious task by all, especially as there are up to four classes to prepare for. The

interviews uncovered multigrade teachers' frustrations regarding standardised tests and their unsuitable administration policies for multigrade classes. The level of initial teacher training and CPD offered to multigrade teachers was found to be completely inadequate and "an insult to our professionalism" (T.A) as educators.

Those interviewed then recommended actions for change such as reforming the teacher training system, the inclusion of a classroom assistant or secretary for every multigrade school and having a uniform template for planning notes which every multigrade teacher could employ.

The following chapter will analyse these findings in relation to the previously discussed literature.

Chapter Five: Research Analysis

5.1 Introduction

The integral aim of this research study was to investigate teachers' perceptions of teaching and learning in a multigrade setting in Donegal. This was done by carrying out semi-structured interviews and the findings were thematically analysed and compared with literature on the topic.

The research question surrounding this study was:

What are teachers' perspectives of teaching and learning in a multigrade setting in county Donegal?

The research methodology of using semi-structured interviews allowed for the participants to provide detailed accounts of their perspectives of teaching and learning in the multigrade setting. By using this type of methodology, the focus was on the level of detail and valuable insights of each of the participants' outlooks (Powney and Watts 1987). The researcher feels that this method was most suitable as the participants were able to disclose further detail through the "subtle, nonchalant and informal tone" of the semi-structured interview (Powney and Watts 1987, p.19).

Additionally, the researcher views this research study as a vital element of their own CPD where they can enhance and inform their current and future practice as well as disseminating the information gathered to those of interest. This may include fellow multigrade teachers, trainee teachers, teacher training colleges and educational authorities such as the Teaching Council and the D.E.S.

The purpose of this chapter is to critically analyse, present and discuss the results of the qualitative data retrieved whilst simultaneously linking the findings to the literature.

The following chapter will analyse the findings in terms of both teaching and learning in multigrade settings. Teaching and learning will be the main topics for analysis in this chapter. These topics will be divided into smaller sections which will be discussed in subsections. Subsections within these headings are displayed below in Table 3.

Table 3. Multigrade teachers' perspectives analysis in terms of teaching and learning		
Teaching subsections	Learning Subsections	

Planning and preparation	Group and Peer-Learning
The flexible nature of the multigrade	Assessment as a learning tool
Lack of explicit training	

5.2 Analysis of teachers' perspectives of teaching in a multigrade setting

This section will focus on the analysis of the perspectives of the teachers interviewed in terms of teaching in a multigrade setting. Analysis of planning and preparation, flexibility in a multigrade and teacher training will be discussed.

In terms of planning and preparation, teachers interviewed were unanimous in their view that planning, paperwork and general classroom organisation is extremely challenging for multigrade teachers. This was due to the overwhelming level of detail needed within their planning documents, including yearly plans, termly plans, monthly plans and fortnightly plans, and the fact that multigrade teachers can have up to four times the workload in comparison with their single grade counterparts. Mulryan-Kyne (2007) noted that multigrade teachers portrayed a more negative outlook of their position due to the heightened paperwork requirements. Teachers interviewed spoke of a sense of duty to plan appropriately and individually for each class group in order to meet the needs of the children and develop their learning. In Miller's (1991) multigrade study, principals believed that in order for a multigrade classroom to be a success, teachers needed to have an enhanced ability to plan and organise their work. T.C noted that if there was less emphasis on the "paperwork exercise that is planning" and more importance placed on the act of teaching then they would come to school with "a more positive and upbeat attitude". All four teachers also spoke strongly about the need for the D.E.S placing more of an emphasis on the actual teaching rather than producing large volumes of paperwork. Aligned with this, Veenman (1995) highlighted how multigrade teachers do not have sufficient time to plan and prepare to a satisfactory level and as a result, the act of teaching suffers. T.A spoke about how they felt that the heavy levels of planning in a multigrade can sometimes be compared to "ticking boxes for the sake of pleasing an inspector".

All multigrade teachers interviewed also discussed the importance of allowing for flexibility in their teaching when there are up to four classes in one room. Those teachers highlighted how flexibility in multigrade settings was extremely important in two ways; overlearning and

pre-learning along with grouping arrangements. Firstly, it enables over learning for pupils requiring additional support and also some pre-learning for those pupils of higher abilities. According to the participants of this study being in a multigrade was beneficial for all pupils because the flexible nature of the room allowed for constant repetition for those pupils who need revision whereas the high achievers could extend their abilities and work with the next grade up. Proehl et al (2013) spoke convincingly in their study regarding multigrade classrooms enabling learning at a "developmentally appropriate" (p.423) level. Therefore, children in a multigrade can progress at their own rate, whether that is a grade below or above their own. According to those interviewed, this is a common feature in the multigrade classroom and as a result the pupils learn to accept and accommodate differences in their classmates learning abilities and behaviours (Hoffman 2002). In conjunction to this, the flexibility in teaching in a multigrade was seen as an advantage because of the ease in which pupils can interchange between groupings. Those interviewed spoke of how reading groupings in the class could be arranged in a way in which some pupils are working above or below their grade, yet by naming the groups by colour or animals, the pupils are oblivious to the reasoning behind the arrangements and all pupils are in a group appropriate to their ability. As multigrade teaching allows for the flexibility in curriculum coverage and differentiated grouping arrangements, this increases the possibilities for teachers to tailor their teaching to individual learning needs (Veenman 1995). Overall, in multigrade situations, the pupils are not restricted to the curriculum set for their class level and are provided with opportunities to extend their knowledge or revise previous content. As a result, the classroom is a student centred environment where students receive a sense of ownership and accountability in their learning and subsequently understand their onus for self-improvement (Petty 2004). T.B described this pupils being "put in charge of their own learning and being given a sense of ownership" about their own improvement. In terms of policy and practice, this may also highlight the need for amendments to be made to the curriculum by the NCCA to allow for some flexibility of choice within the multigrade setting. By doing so, pupils would be less restricted by a class level and be able to work at an ability appropriate level.

Veenman's (1995) study of multigrade issues was extremely critical of teacher training courses and stated that 80% of those who participated in his study received no specific training in multigrade teaching. This issue was reflected in the multigrade teachers who participated in this study as they were unanimous in voicing their frustrations over inadequate teacher training and CPD opportunities for multigrade teachers. Such frustrations included

"not being adequately prepared for multigrade situations" (T.B), "a lack of teaching practice placement opportunities and lectures modelled on single stream classes" (T.C) and an overwhelming feeling of "being thrown into the deep end" (T.D) after graduating from college. Although the teachers interviewed studied with different teacher training institutions, they all stated that they had no specific training for a multigrade situation. One interviewee commented that their multigrade teaching experience was gained in the classroom through learning by doing however concerns were raised over their first group of students. The interviewee displayed a sense of anxiousness with regard to their learning and stated that now she knows she could have taught them better. These findings are consistent with Walser's (1998) study where he stated that this lack of initial training and teaching experience for multigrade teachers may possibly be responsible for shortcomings in pupils' learning. Participants of this study also were critical of the fact that their teacher training programmes were all modelled on the ideal single grade class group. There is a lack of awareness of the issues in a multigrade situation and a lack of understanding of its existence and needs from the policymakers (Little 2001). Consequently, due to the lack of specific training and CPD opportunities available, those interviewed spoke of feelings of professional isolation, neglect (Mulryan-Kyne 2004) and a lack of empathy from their single-grade teaching colleagues, the D.E.S and the Teaching Council. Proehl et al (2013) emphasised the importance of ongoing support and training for multigrade teachers in order for both pupils and teachers to "reap the true multigrade pedagogical benefits" (p.438). Based on the views of the participants and the literature, this suggests that there need for an improved teacher training programme where multigrade teaching is included as a component of the course and delivered by experienced teaching professionals. However, this critical variable of teacher training is being overlooked due to the policymakers overlooking and ignoring the multigrade situation. (Smit and Humpert 2012)

5.3 Analysis of teachers' perspectives of learning in a multigrade setting

Elements of learning in a multigrade setting will be discussed in this section of the research. These include group and peer learning and why it is so frequently used by multigrade teachers as a learning strategy. Also, using assessment as a learning tool by including pupils in the assessment process will also be discussed.

All teachers interviewed for this research spoke of group and peer-learning as being an essential element of learning in the multigrade because the setting lends itself naturally to this

learning strategy. The participants openly discussed their use of various grouping methodologies, such as collaborative and cooperative groupings, and more specifically the use of strategic grouping, such paired and cross-age groupings, which included variations of abilities to allow for peer-learning to take place. Mixed ability groups are complimented in literature for enabling each pupil an opportunity to reveal their own strengths and use for the benefit of their group (Dudley 2016). For example, some children who are confident and speaking out can be the presenters of the group whereas a child with an artistic talent can be the artist for the group. Those interviewed in this research repeatedly noted that the use of group work for group and peer-learning ignited discussions and debates amongst pupils surrounding the topic they were learning about and thus pupils were unconsciously communication, explaining, justifying and engaging in higher level thinking skills. This finding in particular is consistent with Piaget's (1959) theory surrounding peer interaction. Piaget (1959) stated that with peer interaction, such as that with group and peer-learning, activates critical thinking and problem solving abilities. However, in order for the communication during group and peer-learning to be effective and for learning to be successful, the teachers interviewed for this research emphasised the importance of teaching communicative skills as a pre-requisite to group and peer-work. T.A commented in their interview that group work does not happen automatically in class without "having previously learned the skills of cooperation, communication and collaboration". Fawcett and Garton (2005) agreed in their paper as they stated that peer-learning requires valuable communication skills to allow for a cognitive change to take place. Additionally, perspectives of interviewees put emphasis on the social aspect of group and peer-work as a beneficial element of their learning. According to Revell and Wainwright (2009), pupil motivation for engagement in such strategies arises from pupils adopting the roles of the teacher during group and peer-work. Being more comfortable engaging in learning conversations with their peers as opposed to an adult and a boost in pupil confidence levels were cited by as key benefits of group and peer learning. From this, teachers can identify that group and peer learning can assist the development of the pupils both educationally and socially.

The use of assessment as a learning tool was a matter which was met with mixed reactions by all teachers interviewed. Participants were united by their criticisms for standardised testing and their favour for peer and self-assessments and teacher observations. The main perspective gathered from multigrade teachers interviewed was that it is critical to have a balance of assessment for learning (informal assessment) and assessment of learning (formal

assessment) in the multigrade classroom. Teachers spoke mostly in favour of the informal methods because of their accessibility. There was a general consensus that due to time constraints in the multigrade setting, it is essential for multigrade pupils to play an active role in their learning and assessment and thus take more responsibility for their learning in comparison with their single grade counterparts (Pridmore 2007). This in turn emphasises the reasoning behind the teachers using children as an "assessment resource" (Hargreaves 2001, p.553). T.C from this research spoke about the importance of self and peer-assessment in their classroom. T.C noted that "pupils are trained in self-and peer assessment from the minute they enter the school through the use of strategies such as two stars and a wish". T.C added that by using self-assessment "pupils can say where they could do better and they learn a lot from having the responsibility of self-improvement". Therefore, if implemented correctly, time spent on individual feedback to pupils can be significantly reduced

Participants in this research spoke of the use of checklists, teacher observation and peer and self-assessment as the preferred methods of informal assessment of learning. All teachers agreed that the use of teacher observation, although underestimated by inspectorate and policy makers, is essential in a multigrade class to know where each child is at. Emphasis was placed on the importance of tracking and recording pupils learning in order for teachers to have accountability for pupil progress. In Hargreaves' (2001) Assessment for Learning in the Multigrade Classroom study, there was a convincing argument that teachers need specific training in record keeping due to the fact that some multigrade teachers will have the same pupils for four years consecutively. In relation to the findings of this research, those interviewed highlighted how even though the use of teacher observations was a frequently used assessment tool, noting down observations is something which they felt they needed to improve on.

Peer and self-assessment was viewed as a favourable form of assessment in the multigrade because of the informal nature and teachers believed that it imparted pupils with a sense of responsibility for their own learning. Those interviewed spoke of the opportunities for rich communication and engaging dialogues that can take place during peer-assessment and how pupils accept ownership of their learning, thus they consequentially understand the onus for self-improvement (Petty 2004). According to Hargreaves (2001), because of the nature of the multigrade setting, with varying age groups and abilities, peer-assessment can be easily facilitated and taught. T.D highlights this in their interview by stating that "the multigrade setting lends itself naturally" to peer-assessment. Hargreaves (2001) added that when pupils

are provided with responsibility for learning and assessment, then the "power relationships are redressed" (p.556). This may be due to the fact that using peer and self-assessment can be much "less formal" (T.A) and thus the pupils do not see the teacher as a "Miss Trunchbull, type character who would ridicule every wrong move" (T.C). One can conclude that self and peer assessment are natural elements of the multigrade setting where pupils use their independence and responsibility in learning for their individual improvement and the improvement of their classmates.

Alternatively, all teachers in this study were highly critical of the standardised testing system as a form of measuring learning in the multigrade setting. Objections were aired regarding their unsuitability for administering in a multigrade setting with up to four classes. Participants discussed how the lack of flexibility regarding curriculum coverage and the fact that the tests only account for one facet of learning to be a cause for concern. T.D was frustrated that the standardised tests, especially in Mathematics, "gives no marks for workings whereas when pupils move to secondary school every attempt is marked accordingly". The perspectives of these teachers aligns with Hargreaves' (2001) study as it was recommended that an emphasis switch is required from comparing pupils to each other based on a percentile system to comparing a pupils achievements to a specified learning criteria. This suggestion by Hargreaves (2001), almost twenty years ago, is currently taking place in Ireland as the New Language Curriculum for English, Gaeilge and Mathematics are phasing in a system where pupils abilities are placed on a milestone from A to F rather than comparing abilities with the norm for the grade levels (NCCA 2016).

5.4 Conclusion

To conclude, many of the findings that arose from the perspectives of the multigrade teachers interviewed were consistent and aligned with the literature. While analysing the findings, it was clear that the perspectives of the teachers on teaching and learning in a multigrade setting were common to each teacher, regardless of class level or geographical setting. This was also evident based on the literature used to compare with the findings as the sources were of a national and international level. Group and peer learning was seen to be a methodology used by multigrade teachers worldwide because of its suitability to the setting. Planning and preparation was a cause for irritation in each interview and also in the majority of academic sources used alongside this research. Lastly, all the teachers interviewed for this research in

addition to the academic authors studied, stated that the lack of explicit training for the multigrade setting significantly impacted on their ability to teach up to four class levels.

The final chapter will present recommendations based on the researcher's perspective and the recommendations suggested by the participants of this study. Conclusions drawn from the research will also be presented in this chapter.

Chapter Six: Recommendations and Conclusion

6.1 Introduction

This research study has uncovered the perspectives of Donegal multigrade teachers on the aspects of teaching and learning in the multigrade setting. The following chapter will detail suggested recommendations based on the researchers' perspective combined with the contributions of the interviewees. Opportunities for further research will be discussed in relation to the findings presented within this study. Conclusions will then be drawn linking the research objectives with support from the literature.

6.2 Recommendations

With over forty thousand pupils being taught in an Irish multigrade system last year (D.E.S 2017) (Appendix A) and the lack of specific literature on multigrade settings in Ireland, there are opportunities for further research in the area which can be developed. Multigrade schools in rural areas of Ireland are fighting to keep their doors open as a result of declining rural populations and lack of employment opportunities. Simultaneously, multigrade teachers in this study report on feelings of professional isolation and negligence from higher educational authorities. Consequently, there are several recommendations which can be provided for future adjustments to policy and practice development for the D.E.S, teacher training colleges, The Teaching Council and other educational authorities, as a result from this study. Such recommendations gathered from the participants' perspectives include amendment of teacher training courses to include compulsory multigrade training, the delivery of specific CPD alongside fellow multigrade teachers and the authorisation of each multigrade school with a classroom assistant and/or secretary.

6.2.1 Revision of teacher training programmes

In 2015 revisions were made to the Bachelor of Education degree at Irish colleges of education where the original three year course was modified to a four year course. Some of the more predominant features of the additional year were the inclusions of longer school placements, a more specified special education module and the compulsory placement in a special education setting. Although these were welcome changes, the implementation of this new programme still fails to "give adequate attention to implementation matters in multigrade settings" (INTO 2003, p.21). The participants of this study, and those in the INTO multi-class publication (2003) all report on their dissatisfaction with their initial teacher

training to adequately prepare them for teaching in a multigrade setting. The teachers of this study all trained at different colleges across Ireland during a period ranging from the mideighties to the early noughties. The variety in training institutions and ages of those interviewed indicates that the lack of specified multigrade training has been and will continue to be an ongoing issue in the primary education system. Veenman (1995) acknowledges in his comprehensive study that multigrade settings is, and will continue to be, a reality in our primary education system and therefore, training institutions need to recognise and cater for those in that reality.

Kivunja and Wood (2012) indicated in their study that there is an onus on colleges of education to recognise that multigrade is a "specialised pedagogy" (Kivunja and Wood 2012, p.29) which in turn requires specialised training. There was a consistency amongst the recommendations provided by the participants of this research as all frequently expressed the need for compulsory multigrade modules and placements at teacher training colleges, practical advice from experienced lecturers and sharing useful strategies for multigrade teaching and learning. Subsequently, if these recommendations were recognised and acted upon in the training colleges, further multigrade issues highlighted by the participants may also be enhanced. These include the need for a standardised template for notes and planning to lessen the workload when teaching up to four classes and the need for the school cigirí (inspectors) to be trained in and have some form of experience in the multigrade setting in order to provide valuable and constructive feedback. Little's (2001) international research on multigrade teaching and policies acknowledges that on a global level, inspectors of multigrade schools do not have sufficient training or experience for the position.

This research found that all the multigrade teachers interviewed expressed widespread dissatisfaction about their initial teacher training preparation for multigrade settings. The actions for change suggested were of a similar nature whereby the introduction of specified training for the multigrade pedagogy would positively impact on teachers and pupils.

6.2.2 Provisions for specified and collaborative, continuous professional development

Starkey et al (2009) describes CPD as a process where teachers expand on their existing experiences and understandings to allow for the acquisition of relevant and current knowledge in order for one to teach as effectively as possible. This highlights the need for all teachers, both multi and monograde, to partake in CPD relevant to their practice. Banks and Smyth (2011), who compiled a report based on CPD amongst Irish Primary teachers,

elaborate the necessity for CPD further by addressing the need for "collegial rather than autonomous professionalism" (p.10). The multigrade teachers who participated in this study expressed their dissatisfaction regarding the lack of CPD services and support relating to the development of multigrade teaching skills and practices. Each teacher expressed unanimous favour of The Teaching Council and the Professional Development Services for Teachers (PDST) establishing CPD meetings and courses which would resemble an informal group meeting with the purpose of collaborating, sharing ideas and supporting each other. If multigrade teachers were provided with such opportunities to meet with those in a similar situation, it allows for teachers to communicate, seek help, offer advice and guidance about a certain circumstance and exchange ideas together. Furthermore, feelings of professional invisibility and neglect could be reduced as the informal CPD groupings may act predominately as a source of "emotional and psychological support" (INTO 2003, p.10). Collaborative CPD is a feasible and valuable recommendation suggested from this research. One teacher in her interview added that the most valuable form of information or advice she ever got from any CPD course was from those she was sitting around the table with. It is strongly recommended that provisions be put in place to allow for specified and collaborative CPD amongst multigrade teachers in order to reap the full educational benefits of multigrade teaching and learning (Proehl et al 2013).

6.2.3 Provide financing for classroom assistant and/or secretary

Angela Little (2001) wrote in her research that the commitment, drive and will of the teacher are key ingredients in the recipe for successful instruction. Those who participated in this research repeatedly emphasised that the heavy workload of teaching in a multigrade setting can have a deteriorating effect on commitment and dedication levels. From analysing the perspectives of the multigrade teachers interviewed and the literature included in the INTO Report (2003), it is suggested that each multigrade school should have funding available in order to employ a secretary and/or classroom assistant. One multigrade teacher in this research recommended that one person could act in a split role of both secretary and classroom assistant in order to be cost effective and to lessen the workload of the teachers. Another teacher added that when one teaches up to four classes then a classroom assistant should be a standard as the "extra set of eyes and hands are essential" (T.C). If funding was in place for a split role as mentioned, this would significantly support multigrade teachers in a number of ways. Levels of interruptions to the school day from visitors and parents could be managed through contact with a secretary. The administrative workload for both the teaching

principal and the special duties holder, which is the second teacher in a two teacher school, would be minimised and allow for more focus on teaching, learning, planning and preparation. Also, a classroom assistant could provide improved access for both teaching support, by assistant the teacher with auxiliary work, such as photocopying and laminating, whilst also affording learning assistance in the classroom under the direction of the class teacher. The INTO Report (2003) recommends that infant teachers in multigrade settings should "automatically get a classroom assistant" (p.40) as the learning experiences of the infant pupils could be enhanced through additional supervision of learning activities. This report also described the lack of secretarial services to multigrade schools as a "continuing disgrace" (p.58).

6.3 Opportunities for Further Research

The findings of this study have unlocked many laudable possibilities which would be deserving of further research. The researcher identified two key areas which would are feasible and relevant to current practice. Firstly, as multigrade settings cater for a variety of age groups and learning abilities, there are infinite possibilities for group work and peer learning. There is a niche in Irish research surrounding this strategy in relation to the benefits for student learning. Secondly, the researcher predicts that future policy within teacher training institutions and CPD agencies will have to amend their programmes in order to specifically cater for multigrade settings and teachers. Subsequently, an intervention examining student teachers perspectives of multigrade teaching both before and after taking part in a specialised module on multigrade teaching and learning.

6.3.1 Develop a case study to investigate the effects of group work and peer learning multigrade settings in Ireland

Whilst reviewing the literature for this study it was noted that researchers repeatedly emphasises the use of group work and peer learning as a beneficial teaching and learning strategy in the multigrade setting. Mulryan-Kyne (2007) described it as a necessary practice when one has to teach up to four classes. It was found that group work and peer learning in a multigrade can enhance productivity (Veenman 1995) when taught effectively whilst also supporting and extending the learning of the students (Pridmore 2007). Nevertheless there is an absence of literature specifically focusing on group work and peer learning in an Irish multigrade setting. The researcher feels that it would be of benefit to teachers, schools and

teacher training institutions, if these strategies were to be examined further in Irish multigrade settings through the means of a case study or action research.

6.3.2 Examine the effects of a specific multigrade teaching module on student teachers

Each teacher who participated in this study expressed their frustrations with their lack of specialised training on multigrade teaching. Similarly, both national and international research reviewed for this study expressed concerns regarding the lack of specialised training for multigrade teaching (Hargreaves et al 2001). The adaption of teacher training programmes to include a module focusing on multigrade teaching and learning strategies may enhance the quality of practice and students' learning. This could be explored further through an intervention with student teachers where their perspectives on multigrade teaching are examined pre and post studying the module and subsequently, pre and post school placement in a multigrade setting.

6.4 Conclusions

The purpose of this research was to gather Donegal primary school teachers' perspectives surrounding teaching and learning in a multigrade setting. Despite being a small-scale study, teachers from different corners of the county willingly and openly discussed their experiences and perspectives of the multigrade setting. Teachers participated in a semi-structured interview which was then transcribed and thematically analysed to provide the findings for this research. The researcher hopes that the recommendations presented would offer some clarity on life in a multigrade from those within the setting and some guidance for policy makers to refer to when making future amendments.

The findings of the study showed that teachers were in agreement that a multigrade setting can have a beneficial impact on pupils learning with regard to group and peer learning, being able to constantly pre-learn and revise learning and also the enriched development of pupil social skills and independence. However, there was a general consensus that the multigrade setting does entail certain challenges from a teaching point of view. Such challenges included extreme levels of planning, paperwork and preparation and the lack of specific training or support for the sector. Participants were also in agreement of the need for supportive measures to be taken such as provisions and funding for classroom assistants and secretaries, additional planning time and more adequate and relevant preservice and in-service CPD

courses. This lack of specific training for this specialised pedagogy can vastly impact on a teachers teaching ability for the setting and subsequently on student learning.

It would be apparent that there has been a lack of progression or developments globally, if research carried out today in 2018 is concurring with research existing from over twenty years ago. As stated by the INTO report (2003) and highlighted within the recommendations section of this research, those challenged faced in relation to teaching and learning in a multigrade setting can be addressed through the policy decisions to provide for the shortcomings.

Not only does the research convey the issues around multigrade teaching and learning that require attention but it also enhances the understanding of the opportunities, achievements, difficulties and pressures experienced by both teachers and students within the multigrade setting.

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Appendices

Appendix A – Department of Education and Skills 2016/2017 Statistical Report

Appendix B – Pridmore (2007) Teaching Methodologies

Appendix C – Grouping compositions explanation

Appendix D – Sample questions for semi-structured interviews

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Appendix I – Section 42(1) of the Teaching Council (Amendment) Act, 2015

Appendix A - Department of Education and Skills 2016/2017 Statistical Report

Table 2.7 of Department of Education and Skills 2016/2017 statistical report detailing primary school pupils numbers classified by grade structure and the teacher size of the schools.

TABLE 2.7 — National school pupils (mainstream classes) classified by grade structure and teacher size of school

		Number of Teaching Teachers in School						•			
									_		
Grade Structure	1	2	3	4	5	6	7	8	9	10 & over	Total
Single Grade Class	68	83	751	1,300	7,295	10,055	18,830	51,919	27,067	285,046	402,414
Consecutive Grade Class*	9	395	7,376	38,304	25,004	13,625	8,469	1,357	1,548	10,533	106,620
Multi-Grade Class	246	16,992	17,733	974	291	34	0	21	16	23	36,330
TOTAL	323	17,470	25,860	40,578	32,590	23,714	27,299	53,297	28,631	295,602	545,364

Note: Junior Infants and Senior Infants are classified as two separate grades

Please note that the withdrawal of the Resource Teachers for Travellers in 2011 resulted in a change in the way pupils who are members of the Travelling community are counted in the annual Census of Primary Schools.

This has led to a once-off discontinuity in the count of Pupils in Mainstream Classes in Mainstream Schools, and that of Pupils with Special Needs in Mainstream Schools.

DES (Department of Education and Science) (2017) Tuarascáil staitistiúil / Statistical report 2016/2017. Dublin: Stationery Office.

^{* &}quot;Consecutive Grade" for the purposes of these tables refers to two consecutive grades only, e.g. 1st - 2nd etc.

Appendix B – Pridmore (2007) Teaching Methodologies

Teaching Methodology	Explanation
Quasi-Monograde	The teacher instructs each grade group in turn.
	When it is not a grade groups turn, they work unattended
	on a set activity from the teacher.
Differentiated curricula	The teacher teaches a same topic or theme to the whole
	group with differentiated tasks appropriate to the grade
	and pupil levels.
Multiple year curriculum cycles	Students in two or more consecutive groups work on
	common topics and activities together but begin and
	finish the curriculum cycle at different times.
Learner and materials centred	Students work on independent tasks and work through
	interactive, self-study materials.

Pridmore, P. (2007) 'Adapting the primary-school curriculum for multigrade classes in developing countries: a five-step plan and an agenda for change', *Journal of Curriculum Studies*, 39(5), 559-576.

Appendix C – Grouping compositions explanation

Grouping style	Explanation
Ability groups	Children are seated and instructed in groups of similar ability. This
	allows for effective use of time as material can be pitched at the
	appropriate and specific level.
Paired groups	This strategy involves two children working together to complete
	tasks, achieve goals or correct work.
Cross-age groups /	Children are seated in groups of mixed ages and follow an
Multi-age groups	integrated curriculum. This approach lends itself to a type of
	mentoring or peer-tutoring system where the older children in the
	group can assist the younger children.
Peer-tutoring	Very similar to paired groups with the addition of a mentoring
	system being adopted by pairing older children with a younger
	member of the group.
Collaborative	When students work together to help each other search for
	understanding, meaning and answers to a problem within their
	learning.
Cooperative	A strategy used to address academic and social skill learning
	outcomes simultaneously.

Veenman, S. (1995) 'Cognitive and Noncognitive Effects of Multigrade and Multi-Age Classes: A Best-Evidence Synthesis', *Review of Educational Research*, 65(4), 319-381.

Appendix D – Sample questions for semi-structured interviews

(Sample) Questions for Semi-Structured Interviews

Interviews will begin with an introduction to the research and its purpose.

The researcher/interviewer will give a breakdown of the research background and their own personal and professional background.

Interviewees will be invited to give a brief outline of their own professional background and specifically asked about their history in teaching multigrade classes.

- 1. Can you tell me about teaching in a multigrade setting with relation: to assessment / planning / teaching strategies/ discipline?
- 2. Can you tell me about students' learning in a multigrade class in relation to: cognitive outcomes /peer learning / social skills?
- 3. Do you think that you were adequately prepared for multigrade teaching during your teacher training? Why?
- 4. What changes would you like to see for multigrade classrooms?
- 5. Have you any other comments to add with regard to teaching and learning in a multigrade class?

${\bf Appendix} \; {\bf E} - {\bf Timetable} \; {\bf of} \; {\bf Participant} \; {\bf Interviews}$

Week	Participant
1. Monday 8 th January	Pilot interview
2. Thursday 11 th January	Teacher A
3. Tuesday 16 th January	Teacher B
4. Friday 19th January	Teacher C
5. Wednesday 24 th January	Teacher D

Appendix F – Participant Interview Extracts

Teacher A, Interview transcript extract

Interviewer: Can you tell me about teaching in a multigrade setting with relation to planning, teaching strategies and/or discipline?

Participant: Ok well teaching in a multigrade setting is a very unique situation in that you have to be juggling the whole time. You have to be always one step ahead because you have so many age groups, you have so many abilities within the class levels, you know, that there are multiple layers of need there. It is extremely challenging from a planning point of view. As I say, my particular situation I am planning for 4 classes all of the time but within those classes you also have varying needs as well ranging from the very capable child to a child who is struggling and that might be in multiple subjects.

I: And maybe not working at their class level?

P: Yeah, and there can be other social issues and you know concentration issues and thing like that. I find from a planning point of view, I can plan on paper for everything but getting the work covered is another challenge altogether. And even when you do a whole classroom activity, you will have children in 5th and 6th who will be finished before 3rd and 4th. Again, it depends on the personal ability of the child but in terms of planning and getting work covered it is really really challenging. Even in subjects like History and Geography, I think it is better to use a project approach and do topics as opposed to trying to follow a book scheme. Because it may look absolutely fine on paper and you're doing this that and the other for one month but it is impossible whereas I think if you pick a topic for example and maybe make it cross curricular, you mightn't tick all the objectives but at the same time I think the child will get more out of it and they will be working at their own level while also being supported by the children in younger and older classes in the room doing the same topic so they're learning from each other.

Teacher B, Interview transcript extract

I: Our last one then, have you any other comments to add with regard to teaching and learning in a multigrade class? Or anything you feel you haven't said?

P: Em, I think I've said most things! I loved the family atmosphere of the small school. I loved the fact that you built a relationship with the children. You had 4 years of getting to know them, now, on the other hand, there would have been children you might have been happier to have for just a year or two years, but they were a minority. It's lovely that you can then follow them as they go up the school. And in the school, you knew every child by name and you knew all the parents by name. So it's much more personal and I think maybe for

children who are very shy, I think that maybe a small school is like a buffer for them. They can get introduced into school like nice and gently and it's not as daunting for them. On the other hand, then to go from a small school to a large secondary school is a big change, but they're 12, they're older, they're able to handle it better. I always said that if you done your job properly, children should be ready to move on in 6th class. Parents always used to come in and say "Aw they can't wait to get out of here", and I always used to say 2then my job is done"

For assessment, one time at an INTO talk, John Carr who was the general secretary of the INTO at the time said: "You don't fatten a pig by weighing it", so you can spend as much time as you want assessing the children, but if you haven't the teaching done, there will be no fat pig!

Teacher C, Interview transcript extract

I: Do you think then, back to your teacher training days, do you think that you were well enough prepared for multigrade teaching or do you think that you had enough training on it?

P: No, we didn't get any multigrade training at all at Mary I. We didn't... we just....it was all modelled on just one, single stream class and all of the lessons were...there was no practical experience in it. No you could choose to go out into a multigrade for TP but none of us ever did because we knew....well we didn't know what to do but we wanted an easier life at the time. It would have been such a challenge to do teaching practice in multigrade but I know some people did. That was because their mammies were maybe the principal in some of the schools. Then it was easier for them in those kind of cases to get notes and help from their families

I: Do you feel then when you started teaching, that you picked things up as you went along for multigrade teaching?

P: Well I do feel yeah...yeah. But then it's kind of.... you do have to just have to get your own system, I mean, whatever works for you. And it is the same in a mainstream single grade situation too but at the same time you know...it is way harder, there's no denying that. I know some people who would never ever want to do it and would say that they just aren't able for teaching in a multigrade. Unfortunately with the way things are now, you take a job regardless of what type of class you're in.

Teacher D, Interview transcript extract

I: Do you think then, say that strategic grouping or pairing, is that something that happens nearly naturally in a multigrade class or is it planned for?

P: I suppose sometimes it just happens, if you're doing a particular lesson then it can lend itself to that. But I think, a good teacher who wants to get the most out of children and maybe challenge brighter children, will group strategically. The brighter children then rise to the occasion. I remember someone mentioning...say in Irish in a lesson; we as the teacher ask all the questions in Irish, so the children only get good at answering questions in Irish. So it's important to break them into pairs and into groups, so that they get a chance to practice and so that they get the chance to have the question skills as well. It's different roles within the group.

I: Our next question, well you've mentioned peer learning here already but can you think of anything regarding students learning in a multigrade class in relation to their social skills, which you've touched on as well actually, or their cognitive outcomes? Do you feel that they are learning as much as they should say in comparison to a single grade?

P: Well studies, in regard to smaller schools, have shown that the children will perform better, or at the very least as well as children in larger schools with single grades. And I think that probably comes to the fact that the teacher might have the pupils for more than one year. Say a brighter child in 3rd class....children hear it maybe two or three times or four times depending on the multigrade, so say for a brighter child in 3rd class. They have an ear as to what is going on in the 5th and 6th class so that's good.

Appendix G – LYIT Ethical Approval Form

Appendix H – Sample Information Letter, Sample Information Leaflet and Consent

form for semi-structured interviews

XXXX,

Co.Donegal

Date: XXXXXXXX

Dear: XXXX

My name is Brenda-Lee McDaid, and I am a student of the Master of Arts in Learning and Teaching

programme at the Letterkenny Institute of Technology. I am researching multigrade teaching for my

masters dissertation, and therefore I am inviting you to take part in my research project. However it

is important that you understand what this study entails before you decide whether or not to

participate. Should you be interested you may read the information sheet included with this letter

and feel free to contact me via phone or email with any questions in relation to the project.

I am asking you to participate in a semi-structured interview on the following themes: Teaching and

Learning in mutigrade classrooms in Donegal.

You can contact me by email at XXXX or by phone at XXXXXXXXX. My supervisors contact details are:

Majella McBride, Department of Nursing, LYIT, Letterkenny, Co. Donegal, phone +353 (0)74 918

6380, and email at majellamcbride@lyit.ie.

Thank you for taking time to consider participating.

If you are satisfied with the information provided, and willing to participate, please tick the boxes on

the consent form attached, sign it, and return it to me in the SAE provided.

Many Thanks, Yours Sincerely,

Brenda-Lee McDaid

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Information sheet for semi-structured interview

A description of the study and why it is being conducted

The project will be carried out with a maximum for four primary school teachers who teach a multigrade setting. Two participants will be teachers in the junior classroom of junior infants to second class and two participants will be teachers in the senior classroom of third to sixth class. The research is being conducted to explore teachers' perspectives of multigrade teaching in Donegal. More specifically, the key areas I will explore are teachers' perspectives of the challenges and opportunities of teaching in a multigrade setting and the teachers' perspectives of the challenges and opportunities of pupils learning in a multigrade setting.

Each year, the Department of Education and Science release a statistical report which details numbers in relations to pupils, teachers, schools, school sizes and so on. According to the latest report (2016/2017) 36,330 pupils were taught in a multigrade setting with 16,992 of those in two teacher schools, where there are four class grades in one room.

The reason I am conducting this research is because in four years teaching experience, I have had three contracts in a multigrade setting. I feel that the majority of my teaching career in Donegal will be in a multigrade setting due to lower population densities in rural areas and declining enrolments due to the lack of young families in these areas. With the demands of an overloaded curriculum and the declining enrolments in these small multigrade schools, I want this research to gauge teachers' opinions on the topic of opportunities and challenges to teaching in such a setting.

Why have you been chosen?

You have been chosen as you are a primary school teacher in a small rural Donegal school with a minimum of two years experience teaching in a multigrade setting. I feel that your experience in such a setting will effectively contribute to the research.

The chosen research design is that of qualitative study in order to gain access to the true perspectives of participants as it provides an invaluable investigation of internal issues within an area (Cohen et al 2000). This qualitative approach will provide the researcher will the experiences and perspectives of multigrade teachers on teaching and students' learning in a multigrade setting. Hitchcock and Hughes (1995) state that qualitative research in education allows for attention to be paid to the everyday classroom and school life. A thematic approach to analysing the interviews will also be employed by the researcher.

What will happen and what will you be required to do?

Firstly, your participation is entirely voluntary. This means that it is your decision to take part or not within the research. There will be no monetary compensation offered for participation.

In fact, even if you consent now, but change your mind, you can withdraw from the study at any time without any explanation until the data are analysed and about to be transcribed.

I am asking you to participate in an interview on the following themes: Teaching and Learning in mutigrade classrooms in Donegal. I will meet with you in a neutral venue which suits both you and me. For the purpose of data collection and analysing, I must record the interview using a Dictaphone. If you are satisfied with this process you may be asked to sign a consent form detailing your permission to be recorded. The interview will be approximately half an hour to forty five minutes long, and will be carried out in a sensitive and non-stressful manner. Remember, you have the right to cease participation at any time and without the need to provide a reason.

Confidentiality

All data generated electronically on a laptop will be stored on a password protected computer which is used exclusively by the researcher but also available to the supervisor of the research. All individual documents will be password protected and encrypted. All data generated in hardcopy will be held securely in a locked cabinet and no names or identities will be used. The data will be kept securely for 5 years after the completion of the project. Any hardcopies will be shredded after this time.

In relation to the interview, it will be anonymised and transcribed, and an interview transcript will be sent to you. This is to make sure that you are comfortable with its content before the researcher proceeds to use it for the purpose of the overall project. You can request deletions or amendments to the transcripts.

I must point out that this is a very small scale study and therefore for the purpose of confidentiality and the written dissertation, pseudonyms will be used when referring to the interviewees and their opinions.

Use of data and dissemination of results

The content of the interview will be used for my Master of Arts in Learning and Teaching dissertation. The research may be used for publication in future in academic or professional education journals.

This project has been submitted to the Letterkenny Institute of Technology, School of Business, Ethics Committee, and has been approved in order to request interviews from a number of primary school teachers across Donegal.

Consent Form for semi-structured interview

Signature:	Date:
Contact Details:	

You can contact me by email at XXXXXX or by phone at XXXXX.

My supervisors contact details are: Majella McBride, Department of Nursing, LYIT, Letterkenny, Co. Donegal, phone +353 (0)74 918 6380, and email at majellamcbride@lyit.ie.

Thank you for taking time to consider participating. It is greatly appreciated.

Appendix I – Section 42(1) of the Teaching Council (Amendment) Act, 2015

A person (including the Council) may make a complaint to the Investigating Committee in relation to a registered teacher, and the Committee may consider the complaint, where that complaint concerns any of the following matters in relation to the registered teacher:

- a) that he or she has failed to comply with, or has contravened, any provision of this Act, the Act of 1998, the Education (Welfare) Act 2000, the Education for Persons with Special Educational Needs Act 2004, the Education and Training Boards Act 2013 or any regulations, rules or orders made under those Acts;
- b) that his or her behaviour constitutes professional misconduct;
- c) poor professional performance;
- d) that he or she has engaged in conduct contrary to a code of professional conduct established by the Council under section 7(2)(b);
- e) that his or her registration is erroneous due to a false or fraudulent declaration or misrepresentation;
- f) that he or she is medically unfit to teach;
- g) that he or she has been convicted in the State of an offence triable on indictment or convicted outside the State of an offence consisting of acts or omissions that, if done or made in the State, would constitute an offence triable on indictment;
- h) that he or she has failed to comply with an undertaking or to take any action specified in a consent given in response to a request under section 43(6).