

A Contextual Case Study Exploring Teacher Experiences of Collaborative Teaching and
Learning in an Irish Primary School

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ABSTRACT

Emanating from a commitment to investigate improved student engagement opportunities and inclusive frameworks for collaborative teaching and learning in an Irish primary school context, the following case study research has evolved. The purpose of the research was to simultaneously explore the perspectives of primary school teachers on collaborative teaching and learning in an Irish primary school while probing the intersection of collaborative teaching and learning and student engagement. A critique of the literature delineates collaborative teaching, collaborative learning, collaborative assessment and student engagement. An embedded, cross-sectional, mixed method case study was devised which had the potential to interpret the research questions posed at the commencement of the research project. Data collection implemented included a back-ground data gathering predominantly quantitative survey and qualitative semi-structured interviews and subsequently data were analysed thematically. Emergent themes from the research data propose that bespoke teacher learning occurs during collaborative teaching and learning, professional relationships are strengthened, teachers develop agency through collaborative practice and that diverse student engagement experiences are realised through collaborative teaching and learning. The study also suggests that candour is a characteristic of teachers who engage in collaborative teaching and learning. The research also details antecedents to collaborative teaching and learning and the impact of insufficient resources and support in the development of collaborative teaching and learning frameworks, in an Irish primary school context. The findings presented provide an insight into the perspectives of Irish primary school teachers on collaborative teaching and learning in County Donegal and future research could focus on the development of possible specific solution trajectories to identified disincentives.

DEDICATION

This dissertation is dedicated to my precious family and to all who aspire to inspire.

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SECTION ONE: RATIONALE AND INTRODUCTION

1.1 RATIONALE AND INTRODUCTION

Highly effective teaching practice statements offered by the Department of Education state that exemplary teachers view collaboration as fundamental to improving student engagement and that teachers value, engage and review collaborative teaching in schools on an ongoing basis (Inspectorate 2016). The purpose of the following research project is to explore teacher and student perspectives on teacher collaboration in a primary school. The research comprises a small-scale, mixed-method, predominantly qualitative, case study (Ritchie *et al.* 2013). The proposed case study sought to investigate one over-arching, primary question and five follow up questions (Creswell 2012; Savin-Baden and Howell-Major 2013). Using a case study sought to advance beyond descriptive analysis of collaboration, to developing an understanding of collaboration in the context of a single case study in one primary school. The disadvantage is that it assumed a prevailing causal nexus that can be explained through the evaluation (Yin 2009).

Having taught for almost 20 years as a primary school teacher, the researcher has observed children in schools who are unable to fully engage with the curriculum. This inability to access the curriculum, leads to increased anxiety around learning and lower levels of engagement. The urgent need to improve student engagement and an investigation into methodologies that promote student engagement, led to articles on the benefit of collaborative teaching and learning. The research will focus on collaborative teaching and learning from teacher perspectives. Gaining insight into collaborative practices in the school, evaluating and reviewing practice and enhancing the strategies currently in use, further motivated the research project (Pratt 2014).

An exploratory, cross-sectional, mixed-method case study was devised which had the potential to interpret the research questions and fulfil the aims and objectives posed at the commencement of the research study, see Figure 1.1. Data collection implemented included a background data gathering survey implemented in four local primary schools in County Donegal followed by three semi-structured interviews with primary teachers in the researcher's school. Subsequently data were analysed thematically. The limitations of the research and the

size and potential of bias of the research will be discussed in later sections, however, an exploratory case study that would enable the researcher to understand the current situation in relation to their own school justified embarking on the research study. Collaborative action research was considered as a viable methodology, as the researcher’s professional development as a collaborative practitioner was also viewed as a high priority. However, including action research with an implementation time frame of six to eight weeks, would have detracted from the chosen methodologies of survey and semi-structured interviews (Savin-Baden and Howell-Major 2013).

The unexpected closure of all schools in Ireland in March 2020, due to the Coronavirus pandemic posed difficulties for the implementation of the initial proposed research in relation to on-site research and student reflective logs. Supervisor approved amendments were required to allow the research to progress without affecting the authenticity and integrity of the research project. The impact of the Coronavirus pandemic on the research will be discussed in later sections.

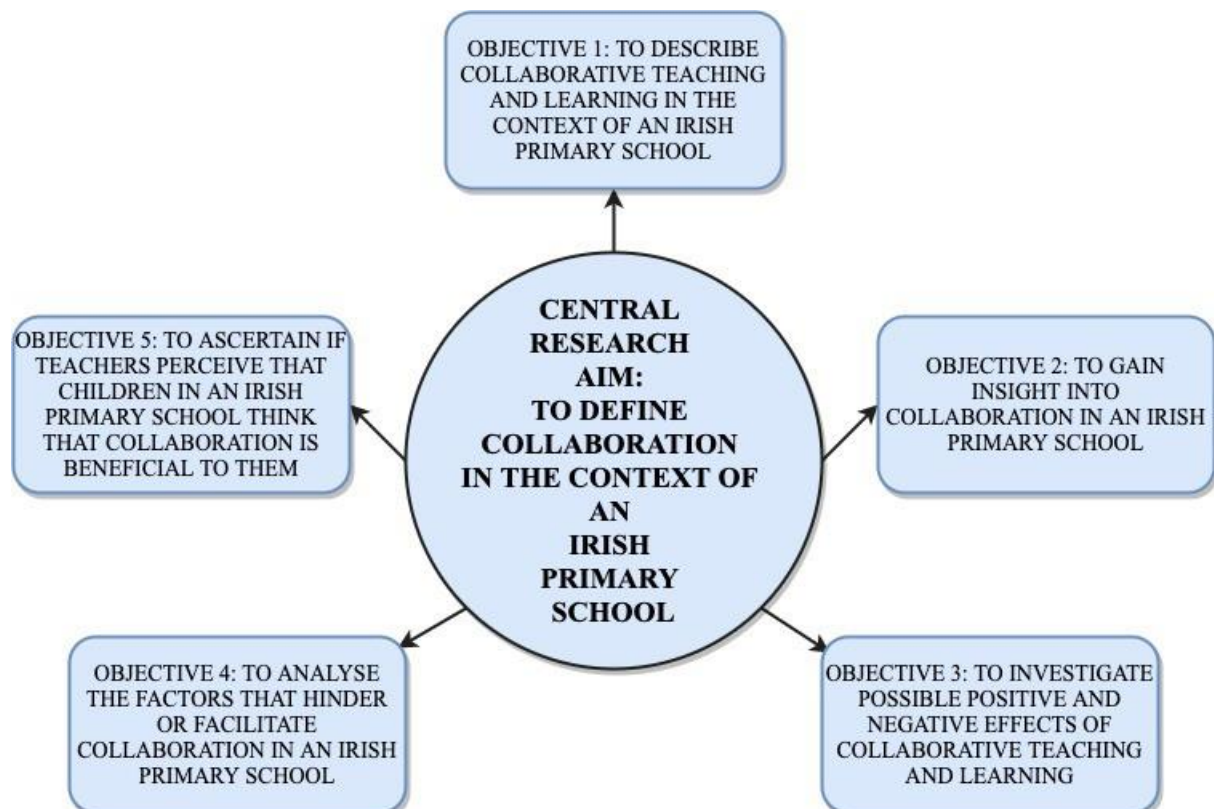


Figure 1.1 Aims and Objectives of the Research Project

1.2 RESEARCH SITE

The primary research site is a rural DEIS (Delivering Equality of Opportunity in Schools) primary school in County Donegal. The school is a mainstream, mixed gender school with 203 children, aged between four and 13 years of age. Each class level has one teacher with class sizes averaging 25 pupils. The teaching staff include eight mainstream class teachers, three Special Education Teachers and five Special Needs Assistants.

SECTION TWO: LITERATURE REVIEW AND CRITIQUE

2.1 INTRODUCTION

As noted in the background to the research, the need to improve student engagement provided a stimulus for investigating and improving current practice to develop enhanced classroom methods, leading to discussion on the benefits of collaborative teaching and learning and engagement with a large body of research in the area. A thorough review of the literature aimed to establish a definition of collaboration in the context of the research, examine the literature on collaboration in schools and investigate literature that suggested that collaborative learning leads to improved student engagement (Beuermann *et al.* 2013). The interwoven, yet separate entities, complexities and nuances of developing a teaching strategy in schools and the assessment of teacher perspectives on the impact of collaborative learning and related limitations will conclude the literature review (Le *et al.* 2018).

Investigating teacher and student perspectives on collaboration is a priority concern of the research. Collaboration is recommended by the Department of Education and Science curriculum guidelines as effective provision for all pupils within an inclusive school framework (Inspectorate 2016). Collaboration is an expected part of the role of teaching in schools, however teachers can only teach collaborative skills to their pupils when they engage in collaborative skills themselves (Coke 2005). Exploring the relevant literature on collaboration in schools, and examining supports for successful collaborative practice, drives the research (Slavit *et al.* 2011).

2.1.1 Conceptual Framework

Miles and Huberman in 1994 defined a conceptual framework as initial explanations of the links and natural development of the phenomenon under research that provides a possible illustration of the key variables and the interwoven elements to be studied. A conceptual framework for the research emanates from the researcher's prior teaching knowledge and conceptualising questions that are pertinent to the research aims and objectives. Savin-Baden and Howell-Major's (2013) 'search string', coupled with Boolean logic and key words, 'collaboration', 'co-teaching', 'collaborative teaching and learning', and 'primary schools' was used to focus the research on relevant educational databases. Systematic reviewing and synthesising the extensive body of peer reviewed work on collaboration provided a diverse backdrop for developing a conceptual framework that aided structure and supported rigour in the research. A conceptual framework, although not commonly used with a pragmatic stance, was justified, as it aided the initial research development process of a novice researcher and Figure 2.1 illustrates the intended conceptual framework for the research cycle (Savin-Baden and Howell-Major 2013).

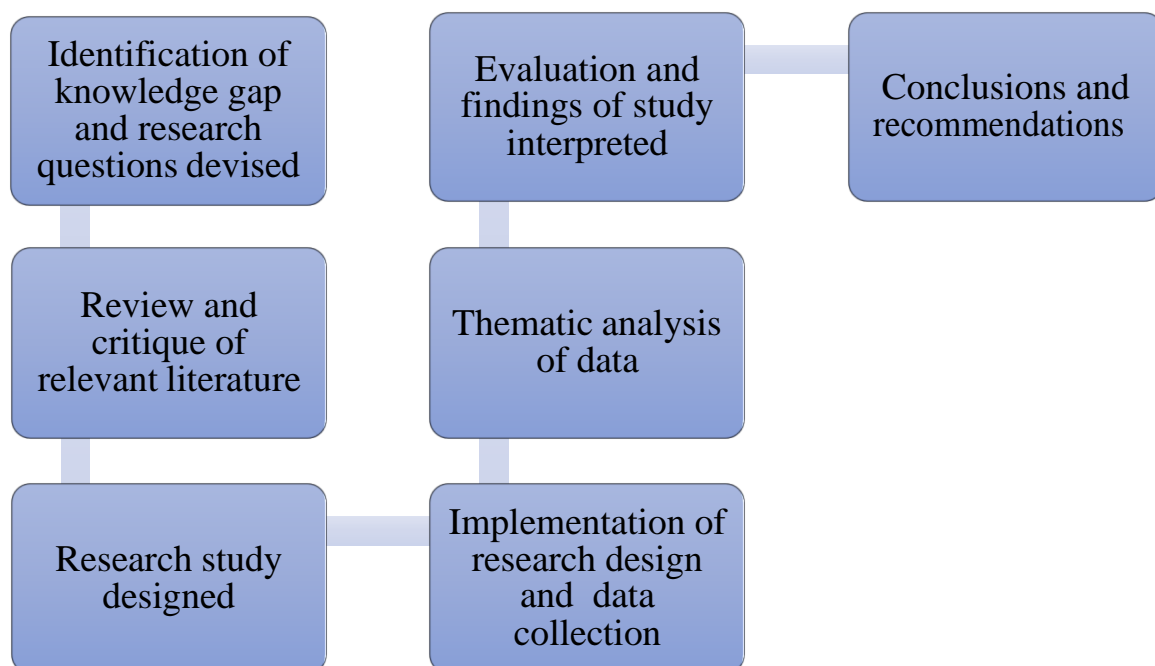


Figure 2.1 Conceptual Framework Map adapted from Odom et al 2018

2.1.2 Theoretical Framework

A theoretical framework is a guide for research which is based on the specific theories to be investigated and which will include collaborative teaching and learning in the context of primary school education in the research project (Adom *et al.* 2018). When evaluating the process that teachers experience in developing effective collaborative practice, researchers generally cite Tuckman's (1965) stages of group development (Friend *et al.* 2010). The four stages presented by Tuckman (1965) were forming, storming, norming and performing referring to initiation, conflict, cohesion and achievement. However the lack of testing of the model in educational settings rendered this framework unsuitable.

Research undertaken from a pragmatic stance focuses on the individual researcher identifying a problem, reviewing it from multiple perspectives in a broad context and implementing a suitable research inquiry to endeavour to understand and provide possible solutions to the problem (Salkind 2010). A pragmatic mixed method approach was deemed suitable for the research, as a descriptive account from an interpretive perspective was sought in the specific setting of one primary school (Creswell 2012). Other theories such as grounded theory approach and phenomenology approach were considered, however this was a single case, time-bound research case study which aimed to link theory and practice, consistent with the paradigm of pragmatism, and grounded theory and phenomenology would not have been realised within the proposed timeframe (Savin-Baden and Howell-Major 2013).

2.2 COLLABORATION

A review of the literature presents multiple, context-based definitions for collaboration, revealing that collaboration means different things to different teachers (Kelchtermans 2006). In the context of the proposed primary school based research, this is apt, as defining teacher and student perspectives of collaborative teaching and learning is a main aim of the research. Collaboration is an expected part of teaching in schools with the evidence suggesting that teachers are under increasing pressure to include proficient collaboration in their work (Vangrieken *et al.* 2015). In the literature review that follows collaboration, collaborative teaching and learning, collaborative assessment and student engagement will be considered in the context of the proposed case study research.

The concept of collaboration first featured in Dewey's (1916) collaborative educational theories based on authentic social constructivist philosophies, creating a strong base for current definitions of collaborative learning. According to Laal and Ghodsi in 2012, collaboration can be considered a philosophy where individuals work together in groups. Vangrieken *et al.* in 2015, cited the growing importance of teamwork in society as a whole, as a contributing factor to the growth in popularity of educational collaboration. Collaboration, co-operative teaching and collaborative learning are often presented as the same concept and will be considered in the context of collaboration in the proposed research study (Vangrieken *et al.* 2015) .

2.3 COLLABORATIVE TEACHING

Collaborative teaching and co-teaching are extensively used terms to describe an instructional model of teaching that has many benefits for both pupils and teachers (Pratt 2014). In a grounded theory study, Pratt in 2014, backed by an extensive review of previous research studies, identifies greater opportunities for assessment, greater latitude for peer mentoring and greater opportunities for inclusion for students with disabilities in collaborative instructional methods. Observation and considerations of the challenges of successful collaboration and co-teaching relationships provided a starting point for the research, and seeking to extend the literature on these relationships was the purpose of the study. Using Strauss and Corbin's (1990) grounded theory promised a 'fresh slant' and aimed to transform the educational field. Detailed information regarding the setting and the background of the co-teaching pairs was provided and the research was explicit about the potential bias of the method of choosing participant pairs. The study highlights gaps in the literature, such as reflection, however, while it adds to the literature, a fresh and new slant is not realised in the review.

Using a grounded theory approach to address the question of the influences of collaborative teacher inquiry teams in a five year longitudinal study, Slavit *et al.* in 2011, provide compelling evidence that teacher collaboration is becoming increasingly common, yet they note that the presentation of teacher collaboration varies greatly depending on the particular educational landscape that it inhabits. In a highly descriptive contextual presentation of the methods of data collection and analysis, a six person research team, endeavoured to define the specific development trajectory of a collaborative maths team in a middle school. A robust, iterative

procedure of data analysis was employed to counter the potential of bias. However the length of the study and the number of researchers involved in the study, renders the replication of this type of study with a single researcher impossible. Slavit *et al.* in 2011, note that teacher reflection and discussions that centre on problem solving issues concerning collaborative practice, will set a strong foundation for improved learning and motivates the current research.

2.4 COLLABORATIVE LEARNING

Le *et al.* in 2018 define collaborative learning as a combination of teaching and learning strategies that promotes student collaboration in small groups. The researchers identified that both teacher and student perspectives are necessary when the concept of collaborative teaching and learning is reviewed. A comprehensive grounded theory analysis revealed four common obstacles to collaboration including lack of group collaborative skills, ‘free-riding’, competence status and friendship. The research also revealed that teachers tended to focus more on the cognitive aspects of collaborative learning and neglected the collaborative element. The research was based on the experiences of preservice student teachers and third level teachers, however, only a small representative sample of eight percent of the total student cohort was concerned with primary school teachers. While it could be argued that the benefits and challenges of collaborative teaching and learning span all levels of teaching from first to third level, the particular challenges of first level students and teachers is of particular interest to this researcher. The research may also have benefited from the inclusion of the perspectives of a greater number of experienced primary teachers.

2.5 STUDENT ENGAGEMENT

Consensus building is noted as an integral part of collaboration, with the concept of grouping and pairing individuals for the purpose of achieving a learning goal being widely researched and advocated by Laal and Ghodsi in 2012. Underpinned by an extensive body of research, Laal and Ghodsi in 2012, concluded that collaborative learning provides many opportunities for incorporating proxy forms of student assessment, with classroom anxiety reduced and student engagement increased. The research clearly identifies the main benefits of collaborative learning for teachers, which was the aim of the review. However the paper fails to attribute any perceived advantage of collaborative learning for the teachers involved in the process nor any

possible negative outcome of collaborative learning thus leaving the argument one-sided and pointing to a gap in the literature that supported justification for the current research into collaborative teaching and learning.

The positive effects of collaborative learning have been documented by Slavin in 2015, with Kagan in 1994 proposing that positive interdependence, individual accountability, equal participation and simultaneous interaction as foundational cornerstones for successful collaborative learning in classrooms. The research suggests that improved student engagement can be achieved through concentrated efforts to promote structured group work (Gillies and Ashman 2000). However, the research also suggests that there are considerable variations in perspectives on collaborative learning and high levels of success with collaborative learning is largely supported or hindered by effective feedback, high levels of group accountability and the use of manipulatives (Emmer and Gerwels 2002). Barron in 2003 further deduced that disruptive behaviour may impede the success of group work. The absence of recent literature suggests that further research is needed to clarify the antecedents to student's collaborative problems, particularly at primary school level.

2.6 ASSESSMENT OF COLLABORATIVE TEACHING AND LEARNING

A Le *et al.* assessment of collaborative teaching and learning in 2018 seems to suggest that teachers focus on group productivity, with only a small number of teachers assessing student performance in the collaborative process. Large class sizes and an absence of official rubrics for teachers to assess collaborative learning was identified as a possible factor that hinders collaborative teaching and learning. Provision of a scoring rubric to facilitate teachers or students was suggested as a possible improvement for the research study but failed to identify a suitable framework for the development of the rubric. The current research study on collaborative teaching and learning could possibly enable the researcher to develop insight into current collaborative practices and potentially could provide a structure to inform a future developmental framework for collaborative teaching and learning. The analytical process of open and axial coding, where initial categories were generated and developed and subsequently assembled in an advanced format, used by Le *et al.*, provides interesting visual results displays, however the comprehensive tables of challenges reported during the data collection lacks clarity.

Assessment of collaborative teaching practices and the impact of collaborative teaching for students and teachers was the focus of a recent study exploring teacher perspectives by Tichenor and Tichenor in 2019. The surprising results of this study showed that many teachers did not regularly participate in collaborative activities despite valuing collaboration as an effective use of their teaching time. In a clearly presented exploratory analysis of a survey, results clearly showed that while over eighty percent of teachers report regularly engaging in professional conversations to improve teaching, other collaborative activities receive much less attention. The alarming statistic that only seven percent of teachers report having strong models of collaboration in their schools, following meta-analysis of eighty-two studies by Vangrieken *et al.* in 2015 adds further justification to research the current state of collaborative practice in an Irish primary school context.

2.7 CONCLUSION OF LITERATURE REVIEW AND CRITIQUE

The compelling and extensive research that spans an educational timeline from Dewey in 1916 to Tichenor and Tichenor in 2019, clearly supports collaboration and collaborative practice as imperative in the classroom. What is also clear is that collaboration involves more than getting people to work together in groups and it should be deliberate and meaningful in order to fully benefit teachers and students. Exploring the perspectives of teachers in a rural primary school through the research study, will endeavour to uncover a definition of collaboration that is unique to the school but that may also translate to other primary school settings or educators interested in exploring perspectives of teachers and students in their own settings.

SECTION THREE: IMPLEMENTATION AND EVALUATION

3.1 INTRODUCTION

Braun and Clarke in 2013, argued that methods and methodology are distinct, with a method being a tool for collecting or analysing the data, and methodology the framework within which the research is to be conducted. The methodology section that follows provides an overview of the central research questions steering the research and identifies the focus and alignment of the research aims, objectives and questions restated in Table 3.1. The methodology and methods of investigative data research and analysis techniques will be described, outlined and justified.

Table 3.1 Research Aims, Objectives and Questions

CENTRAL RESEARCH AIM	CENTRAL RESEARCH QUESTION
To define collaboration in the context of an Irish primary school.	What are the perspectives of teachers and students on collaboration in Irish primary schools?
SUB RESEARCH AIMS	SUB RESEARCH QUESTIONS
1. To describe collaborative teaching and learning in Primary schools and to examine the literature and research in the area.	1. How is collaborative teaching and learning conducted in an Irish primary school?
2. To gain insight into collaboration in a primary school - to question if there is depth of prevailing teacher collaboration and to assess the importance of the teacher collaboration that exists.	2. How do teachers use collaboration in the primary school classroom?
3. To investigate possible positive and negative outcomes from teacher collaboration.	3. Why possible positive and negative outcomes from teacher and student collaboration occur in the primary school classroom?
4. To analyse the factors that may hinder or facilitate collaboration in a primary school.	4. How is collaboration hindered or facilitated in a primary school?
5. To ascertain if teachers perceive that children feel that collaborative teaching and learning is beneficial to them.	5. How do teachers perceive that children feel about collaboration in an Irish primary school?

3.2 IMPLEMENTATION

The implementation phase adopted for the case study approach to assess teacher perspectives of collaboration in the context of a primary school in Co. Donegal occurred during a ten week period in the second term of the school calendar. (March-May). A data-gathering survey

administered to teachers in four local schools in County Donegal via online survey distribution, aimed to provide a diverse background for the research and to elicit responses of teachers on their experiences of collaboration. The use of descriptive statistics to formulate a colourful backdrop for the research project was then utilised. Expression of interest from staff in the school where the researcher works were invited for participation in the interview section of the research, following the distribution of the survey. The information sheet for participants was distributed to all staff members at a staff meeting and the interview stage of the research process was explained to all potential participants. Potential participants were invited to forward their names via email to the principal researcher.

The second stage of the research, the semi-structured interview, invited staff from the researcher's school to participate in a voluntary interview that would endeavour to collect more detailed data on teacher and student collaboration within the researcher's own school. An initial proposed research plan had detailed that one interview pre and post a series of ten collaborative teaching lessons, conducted with one participant, would provide sufficient data for the research. Due to the Coronavirus pandemic and the unexpected closure of schools, the proposed series of lessons could not be conducted. An amended research plan, which was discussed and approved with the research supervisor, increased the number of interview participants to three teachers. A pilot interview was also implemented.

The third and final stage of the initial proposed research was the completion of student reflective logs, following each lesson in a series of ten collaborative lessons to elicit student reflections as a primary source of data in the research. However, as previously stated, this section of the research data collection was restricted as the student cohort primary source reflection data could not be collected. Increasing the number of teacher participants in the interview section aimed to counter the unavailability of data in this section.

3.3 RESEARCH METHODOLOGY

3.3.1 Introduction to research methodology

General approach qualitative case studies have long been established to present detailed analysis of context based phenomenon in schools at all levels (Merriam 1988). A case study

aims to clarify multiple perspectives and insights through a variety of data collection methods in order to present a robust account of the phenomenon being researched (Yin 2012) and may enable the researcher “to capture the essence” of collaboration in an Irish primary school and ‘illuminate’ the decisions as to how collaboration is implemented and with what result (Schramm, cited in Yin 2009 p.17).

The case study approach is further justified, as it is used to describe collaboration in a primary school and enables the researcher to develop insight in the real-life context in which it occurs (Yin 2009). Mixed methods were the most suitable choice to characterise and illustrate the research questions in a single case, small-scale, study using a survey and semi-structured interviews, as investigating teachers perspectives on the subject of collaborative teaching and learning was a high priority for the research. The design of the project followed a simple logic from Yin (2009), (Figure 3.1) for a linear but iterative organisational strategy for the research, which enabled the researcher to articulate theory about what was being studied and to be explicit about potential theories that developed throughout the case study.

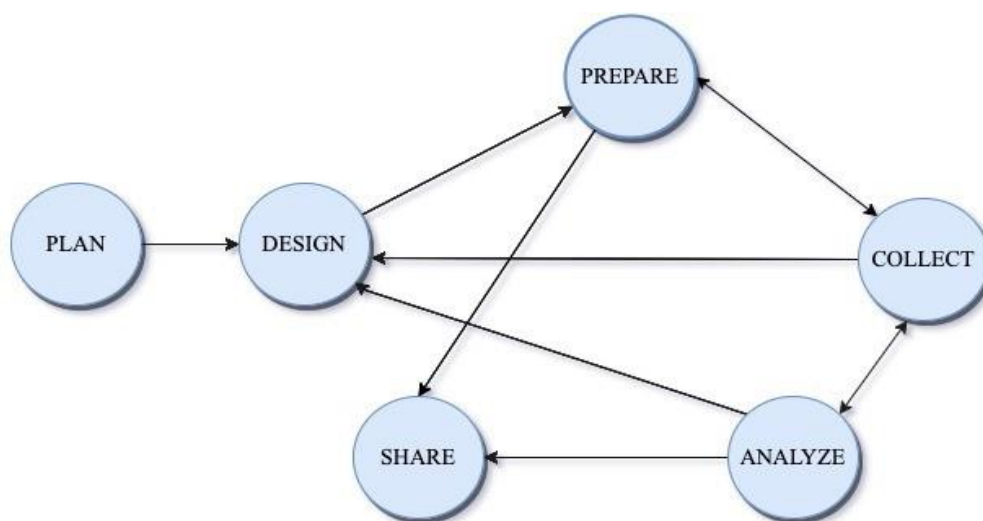


Figure 3.1 Organisational Strategy for performing a case study (Yin 2009)

3.3.2 Research Methodology

A combination of complex research lenses, philosophical, personal, theoretical and strategic, will deepen understanding and allow the research to be viewed from multiple perspectives. Savin-Baden and Howell-Major's (2013) “qualitative researcher’s wheel of research choices” (Appendix 1) and Saunders *et al.* (2015), “research onion” (Figure 3.2) were used to orientate the research methodology.

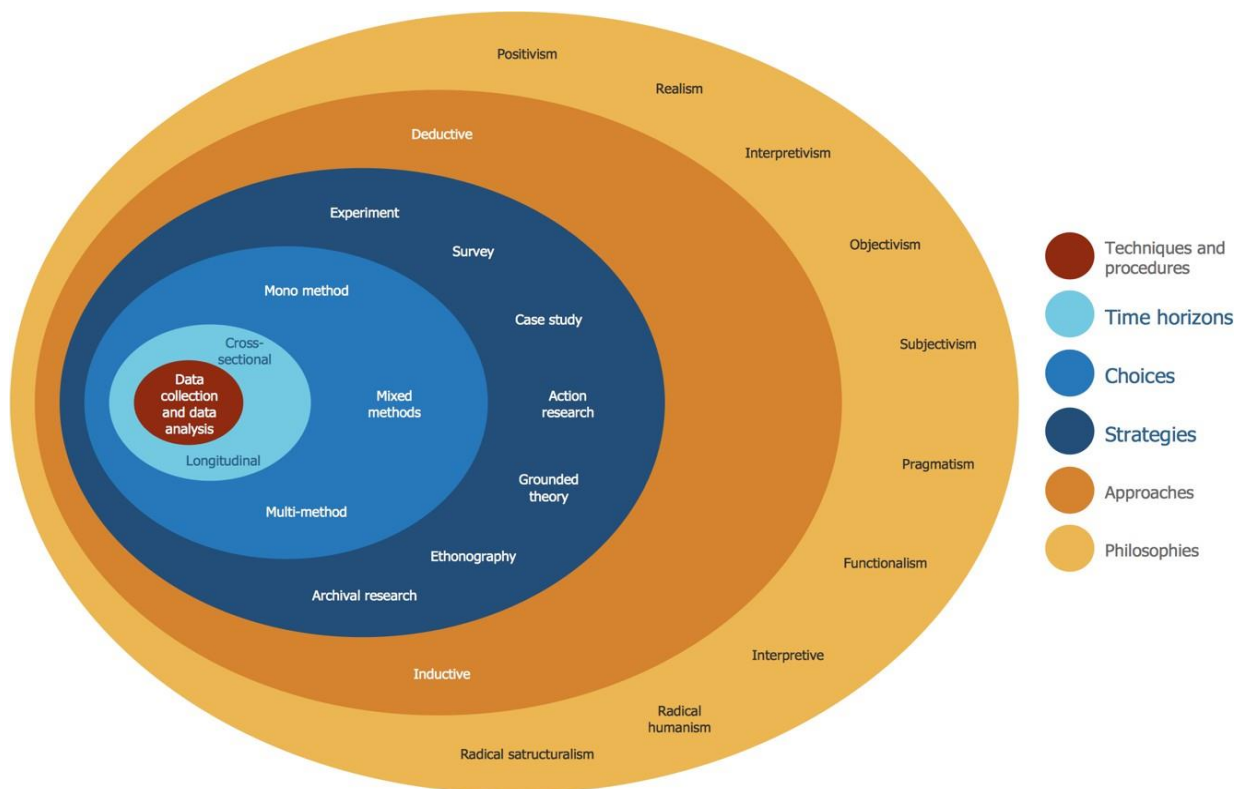


Figure 3.2 The Research Onion (Saunders *et al.* 2015)

A mixed methods, mainly qualitative, case study research using survey and semi-structured interviews was selected as the most practical methods and methodology to answer the research questions. Creswell in 2012, further defines qualitative research as an investigative process based on distinct methodological traditions that explore a social concern. Building a complex, holistic picture, reporting the emic detailed views and conducting the study in a natural setting

were all central to the proposed research (Savin-Baden and Howell-Major 2013). Other research states that mixing the methods can be advantageous, when the value of each is acknowledged (Cresswell and Plano Clark 2011). Grounded theory was initially considered as a possible reference lens, however the typical twenty to thirty interviews would not have been feasible in the time frame. Pragmatism and the idea that knowledge is contextually contingent, and examining theory in practice, was better aligned to this case study research (Tashakkori and Teddlie 2011).

3.3.3 Research Philosophy

The paradigm of pragmatism is a suitable choice for the research as pragmatism does not follow strict adherence to a particular philosophical position about the nature of reality but rather that the researcher will take a practical view when trying to link theory and practice (Savin-Baden and Howell-Major 2013). Unpacking the essence of the experiences within the classroom from a phenomenological perspective was first considered as a philosophical starting point, however phenomenology is concerned with the knowledge of the mind and the research sought to examine collaboration in the context of teacher collaboration in the classroom. Rooted in Dewey's (1916) concept of inquiry, the pragmatist approach proposed, aimed to incorporate inquiry and interpretation into current practice, with a view to enhancing practice (Morgan 2014).

3.3.4 Research Strategy and Approach - Case Study

In the search for a suitable research approach, a perplexing degree of what Sandelowski, 2000 cited in Savin-Baden and Howell-Major in 2013 described as “methodological acrobatics” was performed. Grounded theory and phenomenology were considered, and the appeal of generating new theories and eliciting the essence of collaboration was very alluring. However within the timeframe, a pragmatic approach that delineated the most practical methods at the researcher’s disposal in order to answer the research question was chosen as the most suitable and flexible option. In recognition of the researcher’s deeply held belief that student engagement may be improved through the analysis of collaborative practice, the researcher endeavoured to ensure that this did not intentionally bias the research, interactions with participants or data analysis using robust data collection and data analysis. As the research

progressed the concept of bias and acknowledgement of preconceptions was continuously addressed (Morrow 2005).

Denzin and Lincoln in 2008 define qualitative research as the study of phenomena in their natural settings followed by an endeavour to understand the subject being researched while Muijs in 2010 defines quantitative research as the interpretation and analysis of numerical data using mathematical statistics. Creswell in 2014 notes that mixing quantitative and qualitative methods is becoming more prevalent and suggests that mixed methods research gains greater insight and perspective. Tashakkori and Teddlie in 2011 argue that using many methods enables the researcher to understand research, with Greene and Caracelli in 2003 suggesting that mixed methods research has the capability of producing a diverse research project that may not otherwise have been possible. Mixed methods research builds on the strengths and qualities of qualitative and quantitative research and is the foremost research approach, as the researcher wishes to obtain more detailed specific information in relation to the researcher's own school. An embedded, sequential, mixed methods design was employed, where the background data gathering survey was completed first and the semi-structured interviews followed to refine and extend the data gathered from the survey (Creswell 2012).

3.3.5 Data Collection Methods

The research study is a mixed methods research study using an online survey, three semi-structured interviews, and teacher reflections on collaboration in the classroom. In the selection of a case study, a variety of choices are available for purposeful sampling (Yin 2009; Bryman 2016). A mainly quantitative survey was employed to collect data that would describe and explore teacher collaboration, with a combination of numerical and descriptive data collected, using closed and open ended questions. Teachers from four local schools including mixed gender, denominational, non-denominational schools, Delivering Equality of Opportunity in Schools (DEIS) and non-DEIS schools were invited to participate in the online survey with the participants selected to interpret teacher perspectives on collaboration (Fink 2000). The semi-structured interview participants were selected from the researcher's school. Due to the time frame and accessibility, it was not possible to select multiple cases that show different perspectives on collaboration in different primary schools. This is a school based, context

driven research study which proceeded with what may be perceived as an ordinary, accessible case.

3.3.5.1 Survey

Firstly, an online quantitative survey, on the platform www.surveymonkey.com, was distributed to teachers in the local area via school principals who had read the research information form (Appendix 2). Informed consent was sought and the principals returned signed consent to the researcher via digital signatures or via a print copy in the post, prior to distributing the survey to staff members (Appendix 3). The survey contained eight questions relating to collaborative teaching and learning and took five to ten minutes to complete. An information sheet was provided for each participant on commencement of the survey (see Appendix 4) and informed consent was sought from each participant teacher in the survey before they completed the survey (see Appendix 5), in accordance with LYIT's GDPR policy.

A five-point Likert scale (Vagias 2006) was utilised in six survey questions which made it easier for participants to answer and complete the survey, but provided a precise data response to questions (Appendix 6). A Likert scale was constructed to understand and measure attitudes, opinions and perceptions of survey participants who chose from a range of potential responses on a five point continuum from strongly agree to strongly disagree and enabled researcher clarity in interpretation of the results to be increased (Joshi *et al.* 2015). The survey also included two open ended questions that asked participants to indicate the factors that might influence engagement in collaborative teaching.

A return of forty-seven responses, from eighty-four teachers, (n=84), represented an acceptable response of 56 percent in an online educational survey (Nulty 2008). Saleh and Bista in 2017 reported that response rates for online surveys are higher when their length is shorter and when participants relate to the topic. Liu and Wronski in 2018 further suggest that online surveys have significantly higher response rates than paper surveys. Previous research by Silva and Duarte in 2014, suggested that low response rates in online surveys occurs as most people use the internet for recreation and there are often difficulties securing current email addresses. The researcher obtained current email addresses for local schools via school websites and school principals were requested to forward the survey to staff members using their email addresses to strengthen the response. The implementation of the survey was justified, in order to enable

the researcher to generate a detailed backdrop for this exploratory survey on teacher collaboration in a rural DEIS school. Relying on the relatively small number teachers in the researchers school to participate in the survey via a voluntary online survey may have produced too few results and so seeking to increase the number of participants, selected from teachers in similar primary school teaching settings, attempts to add to the bank of knowledge and increase methodological rigour.

3.3.5.2 Piloting the survey

Prior to survey dissemination, a pilot was conducted in order to address accessibility of the proposed survey and to determine if data gathered from responses could answer the research questions. The survey was completed by three primary school teachers working in schools in different parts of the country, with a similar context to the researcher's school. Participants in the pilot were advised to complete the survey from the perspective of a real participant. Following the pilot survey, some adjustments were made to aid clarity in relation to the Likert scale questions. A question was changed from 'Thinking about your experience with teacher and student collaboration, to what extent do you agree or disagree with the following statement' to 'Please indicate if you agree or disagree with the following statement'. Subsequently, the survey was distributed to teachers in four local primary schools, via a link to an online survey which was distributed by the school principals.

3.3.5.3 Semi-structured interview

Secondly, qualitative data were collected using semi-structured interviews with three participant teachers from the researcher's school. Self-selected volunteer participant teachers gave informed consent before participation, following notification of the request for volunteer participants to participate in the research at a staff meeting. Potential interview participants were provided with information sheets outlining the research (Appendix 4) and were asked to contact the researcher, if they wished to participate in the interview section of the research. A purposeful sampling strategy were employed in the researcher's school to ensure that the most current data relevant to the research aims and objectives was achieved (Fink 2000; Morrow 2005; Creswell 2012). Three participant teachers, teaching older and younger classes and with varying degrees of experience and years teaching, were chosen in order to to increase the researcher's ability to obtain in-depth knowledge of the understanding of the topic (Fink 2000).

The interview consisted of thirteen open ended questions on collaborative teaching and learning methodologies, experiences and reflections (Appendix 8), which covered a list of themes and questions generated from the emergent data collected in the survey. The development of questions was further aided by the addition of questions used in a previous semi-structured interview on teacher collaboration undertaken by Pathak and Intrat in 2016. Open ended questions and flexibility in the order of questioning, enabled the researcher to be reflexive and to further investigate latent emergent themes, typical of inductive qualitative research of this nature. A mobile phone, with a recording capacity was used to record the semi-structured interviews and informed consent was gained from the teacher prior to the recording being made (Silverman 2018) (Appendix 7). To increase trustworthiness of the semi-structured interviews, summary data of the interviews were related to each participant throughout the interview and a post interview summary was also provided and participants were given the opportunity to clarify themes that were developed from the interviews through member checking (Creswell 2012; Loh 2013; Maguire and Delahunt 2017; Korstjens and Moser 2018).

3.3.6. Ethical Considerations

3.3.6.1 Introduction

Ethical issues exist and influence all research projects and the research process sets the stage for tension between the aims of the research and attempts to generalise and learn from and for others, while ensuring that participant rights are protected. Orb *et al.* in 2001 (p.93) describe ethics in essence as ‘doing good and avoiding harm’. The complexities of a critical analysis of the intricate web of ethics codes, reviews, informed consent, confidentiality, anonymity and vulnerability must be interpreted and addressed with clarity. Research ethics concerning vulnerability of the interview participants, children and researcher, formed an essential foundation for the research project (Roth and Unger 2018).

The key ethical considerations for the research project are considered using the LYIT ethical procedures application form for ethical approval, the British Educational Research Association guidelines for educational research (BERA 2018), LYIT dissertation and ethics blackboard webpage (LYIT 2019), General Data Protection Regulations (GDPR), and research ethics from the school of business in Trinity College Dublin (Trinity College Dublin 2019).

3.3.6.2 Priority ethical considerations in the research

The ethical considerations of the research concerned the primary research site which is a primary school with children under 18 years of age. All analysis was undertaken sensitively to ensure that the students and teachers were not ill affected in any way through participation in the project (Creswell 2012; BERA 2018). Ethical approval for the research project was granted by the School of Business Ethics Committee of LYIT in November 2019 and the priority ethical considerations listed in the application are included in Appendix 9.

3.3.6.3 Impact of ethical considerations on the research project

3.3.6.3.1 *Survey*

Cohen *et al.* in 2007 advise that informed consent, the right to withdraw at any stage and the right not to complete all or chosen items on a survey, is best practice. Guarantees of beneficence, non-maleficence, confidentiality, anonymity and non-traceability are pertinent to the research design (Aluwihare-Samaranayake 2012). No identifying features or markers were collected in the survey data collection. Avoiding bias, assuring validity and reliability in the research, and insisting on methodological rigour was a priority ethical concern (BERA 2018). A pilot of the survey was carried out prior to the launch of the survey and no further ethical issues were raised in relation to the survey.

3.3.6.3.2 *Semi structured interview*

An awareness of the avoidance of bias and the ability to capture the participants perspectives rather than promoting the research agenda was identified as an ethical issue that needed to be considered. A pilot of the proposed interview questions before the commencement of the research project was used to counter any potential weakness in the schedule (Creswell 2012). A teacher in a local primary school, not that of the researcher, was interviewed using the questions and possible weaknesses in the interview layout and questions were noted. The researcher noted during the pilot that it may be helpful to group questions by general subject areas of teacher collaboration, student engagement and assessment.

Semi-structured interview participants were invited to indicate their willingness to participate by forwarding their names by email to the researcher, following a staff meeting, in the researcher's own school, where the research study was outlined to all potential participants.

When potential participants were identified, information regarding the research, was provided both orally and in a written information sheet and they were made fully aware of what they were consenting to in the research study in order to give prior informed consent (Appendix 7). It is common practice in qualitative research studies that participant anonymity and guarantees of anonymity are honoured (Parry and Mauthner 2004). The participant information sheet and participant consent form are explicit in defining these boundaries. The right to withdraw consent up to the point of data analysis was explained to the interview participants. Confidentiality and anonymity was protected, while also adhering to protocol and measures concerning child protection guidelines.

Three teachers volunteered to be interviewed, pre and post sessions involving collaborative teaching and learning and to participate in the collaborative teaching lessons. Initially, within the timeframe for the research study it was decided that working with one teacher and completing one set of interviews pre and post collaborative teaching, would provide sufficient data for the research study. However, due to the Coronavirus pandemic, the proposed classroom lessons were unable to take place. To enhance the research and to increase the data for collection and analysis, it was decided on consultation with the research supervisor, that the research should be amended. Interviews with the three staff members who had initially volunteered would provide sufficient data to proceed with the research. Increasing the number of teachers participating in the interview process was advantageous and would provide greater insight into teacher perspectives in the school.

3.3.6.3.3 Reflective Logs

In relation to the students in the school, who are under 18 years of age, precise age appropriate information was to be provided to both children and to their parents/guardians (Appendix 10-13). Informed consent was to be sought from both children and their parents/guardians and the information and consent document clearly outlined the ethical issues pertinent (Shamoo and Resnik 2009). To aid students with reading comprehension difficulties the information and consent forms were to be presented orally and in a written format. (Cohen *et al.* 2007; BERA 2018). Following ethical approval and amendments, the dissemination and request for consent from both parents and children was due to commence in March 2020 and was postponed due the Coronavirus pandemic. In May 2020, due to the ongoing school closure and notification

that schools would remain closed for the remainder of the school year, the consent process was cancelled as this section of research was not viable.

3.3.7 Quality and Trustworthiness in Qualitative Research.

With the emergence of naturalistic inquiry, the need to ensure quality and trustworthiness in qualitative research has led to ethical requirements that parallel the rigorous criteria for standard methods of quantitative research to be developed (Lincoln and Guba 1986). Trustworthiness and authenticity applied to all elements of the research study and attempts to counter potential ethical issues. Probing the perspectives of others (Merriam 1988) coupled with investigating motives and causes (Fink 2000) aids trustworthiness in qualitative research. The stages of qualitative research used in the thematic analysis are underpinned by Straus and Corbin (1990), Kvale (1996) and McCracken (1998), researchers in the field of social science. Table 3.2 displays a comparison between qualitative and quantitative terms based on Lincoln and Guba's (1985) trustworthiness criteria explored by Loh in 2013.

Table 3.2 Comparison between Qualitative and Quantitative Terms

Aspect	Scientific Term (Quantitative)	Naturalistic (Qualitative)
Truth Value	Internal validity	Credibility
Applicability	External validity or generalisability	Transferability
Consistency	Reliability	Dependability
Neutrality	Objectivity	Confirmability

3.3.7.1 Establishing Rigour

Guba's (1981) model for assessment of trustworthiness in qualitative research described by Krefting in 1991, has been used extensively to enhance rigour in qualitative and quantitative research design. Four general criteria for evaluation in both qualitative and quantitative research perspectives make up this model of assessment and for the purposes of the current research study on teacher collaboration. Krefting in 1991 noted that when evaluated and

compared to quantitative research, qualitative research can be deemed incomplete or ineffective, however Agar in 1986 also suggests that due to the distinct differences between qualitative and quantitative research, traditional terms of reliability and validity do not strictly adhere to qualitative research. The importance of the application of Guba's (1981) truth value, applicability, consistency and neutrality must be highlighted and addressed at every stage of the research process and the criteria should influence and guide the research over repeated iterations of the data collection and analysis of the data collected. As advised by Krefting in 1991, establishing the trustworthiness of the research study from the outset and engaging with trustworthiness throughout the project is essential. However, Krefting in 1991 also noted that the erroneous employment of trustworthiness to qualitative research can be as questionable as the use of inappropriate quantitative criteria.

3.3.7.2 Truth Value

Truth value established in the findings of the research and ensuring that the research context is truthful and describes credible human experiences, is a key priority (Lincoln and Guba 1986; Krefting 1991). Research into multiple realities as experienced by participants in diverse contexts creates a unique research experience that should be revealed as explicitly as possible. Accurate 'thick' descriptions, using participant quotations are beneficial to further reduce accusations of bias, and will enable an immediately recognisable situation, thereby crafting a credible research study, which is a high priority for the research study (Krefting 1991; Morrow 2005; Loh 2013).

Member checking, where the data obtained with the interview participants was summarised and verified by the participants was also used as means to strengthen the credibility of the data, as the researcher and the participants view experiences through varied lenses (Loh 2013; Korstjens and Moser 2018). Lincoln and Guba in 1986 have noted previously, that this extra step of checking findings with interview participants can hinder the progress of research, however in this research study presented, the benefits of member checking far outweighed any potential issues. Without adequate attention to triangulation strategies, the final interpretations of the research and concluding analysis could have been jeopardised (Morrow 2005). In triangulation, the researcher uses multiple sources, methods or theories to investigate topics and to provide corroborating evidence (Creswell 2012; Polit and Beck 2012; Carter *et al.* 2014).

3.3.7.3 Applicability

At the very essence of credibility is Miles and Huberman's (1984) 'I was there' factor, and they identify four fundamental characteristics of trustworthiness that are vital to research success. Familiarity with the proposed research context and content, strong interest in the conceptual and theoretical knowledge, a multidisciplinary approach from diverse perspectives and developing investigative skills in literature review and course work. Allowing transferability judgements to be made by others by providing enough background information about the participants, is a recommendation to be considered in research that endeavours to be upheld to the highest standards of ethical criteria, however in such a small scale case study where rich background information may identify the participants the background information will be kept to a minimum to protect anonymity (Lincoln and Guba 1986).

Generalisability and transferability cannot be implied in the traditional sense in small scale qualitative studies and findings will not imply that they can be generalised to other settings. However, sufficient evidence will be supplied by the researcher about the context, process, participants, and survey responses from teachers in other schools, that may enable the reader to decide how the findings may be of interest to future research studies on the topic of teacher collaboration (Morrow 2005). Supplying sufficient descriptive data to allow tentative comparison with the research in other projects has been identified by Krefting in 1991 as addressing the issue of applicability. Conversely, instead of interpreting generalisability as a limitation, it is important to remain cognisant that qualitative research seeks to illuminate the singular rather than attempt to understand the experiences of many (Merriam 1995).

3.3.7.4 Consistency

In considering the consistency of the data, it would be interesting to replicate the research in a similar context to improve consistency. Due to the timeframe of the research study repeatability is not possible in the survey or interview sections. Multiple interviews, repeated listening to the taped interviews and repeated readings of transcripts will increase consistency in the thematic analysis of the data (Atkinson 1998). Silverman in 2018 advises pre-testing open and closed ended questions in a pilot, the importance of revealing as much as possible to the research audience and corroborating the evidence of the procedures that lead to conclusions, in order to increase reliability in the research. Clearly identifying the steps taken in data collection, data analysis and thematic analysis and comparing the results will further aid dependability (Guba 1981).

3.3.7.5 Neutrality

Data collection methods and data analysis free from bias, neutrality, is the fourth criterion of trustworthiness that is achieved through rigorous methodology that observes clear ethical guidelines and distance between researcher and participants. Anonymisation and randomisation procedures, will ensure that the research is not unduly influenced (Lincoln and Guba 1986). With the survey this is possible, as the survey will be distributed via gatekeepers and the researcher will not have direct influence over distribution. However, as the researcher is a teacher in the school where the interview participants work, there may be some perceived influence or bias. The researcher has noted the possibility of bias and acknowledges preconceived ideas and will endeavour to challenge bias at every stage during data collection and data analysis in order to increase neutrality in the research. The use of a field journal, to detail the logistics of the study and describe and question the methods and the motivations behind the methods will be used to audit the research process, an abbreviated version of which has been included in Appendix 13. (Krefting 1991; Moon 2004; Morrow 2005; Korstjens and Moser 2018).

3.3.7.6 Reflexivity

Reflexivity and understanding how the researcher's personal world view and experiences shape understanding and affects the research process is the final critical component of trustworthy qualitative research. Acknowledgement of researcher reflexivity provides further opportunities to engage with new dialogue on the research topic (Morrow 2005). An active reflexive process, as advised by Patnaik in 2013, was essential for justifying the credibility of any potential findings through awareness and sustained assessment, ensuring critical analysis of the researcher and the research are both kept to the same rigorous standards.

As gaining insight to improve professionalism as a teacher was considered a possibility of a successful research study, self-reflection was central to the research study. Situated in the research process and carrying out interviews in the researcher's school, facilitates greater understanding of the personal perspectives that inevitably led to the analyses and findings in the research study (Patnaik 2013). In considering introspective reflexivity and how the researcher's own experiential location affects the research as a co-creator of reality, it is acknowledged that the researcher will determine the reader's perspective through the analysis and framing of the findings and conclusions. Introspective reflexivity, using a common bracketing approach of a reflective journal, (Appendix 13), was used in order to minimise bias

on the research process and enhance methodological reflexivity (Patnaik 2013; Bashan and Holsblat 2017).

3.3.8 Copyright

The participants have complied with LYIT GDPR and copyright arrangements, and agreed before participation that the interview data would be used for educational purposes and to answer the research aims and questions on the subject of teacher collaboration (Parry and Mauthner 2004). Ethical principles guide the research and address ongoing issues that may arise, while also maintaining the integrity of the research and the rights of the research participants (Orb *et al.* 2001).

3.3.9 Conclusion to research methodology

The ethical research critically analysed prior to embarking on the research study provides a critical base for an authentic and trustworthy research study on teacher collaboration to be developed and serves as a reminder that the ethics question in research is never fully completed and requires engagement throughout a research process (Roth and Unger 2018). As a qualitative researcher in an educational setting, the researcher acknowledges the unique frame of reference held by the researcher and the lens through which the researcher interprets the findings, the limitations of same and the implications for the research (Morrow 2005).

3.4 DATA ANALYSIS AND EVALUATION

3.4.1 Introduction

Plausible data analysis is essential in qualitative research and successful data analysis hinges on the appropriate application of a suitable framework to systematically guide the analysis (Maguire and Delahunt 2017). In qualitative research, the researcher describes and interprets the experiences of participants and can be described as the research instrument. Interpreting perceptions is the key to unveiling understanding in diverse contexts and is the lens with which the current research study has been undertaken. The following section justifies the selection of thematic analysis as the selected data analysis method and explains the six steps taken in analysing the qualitative data gathered (Figure 3.3).

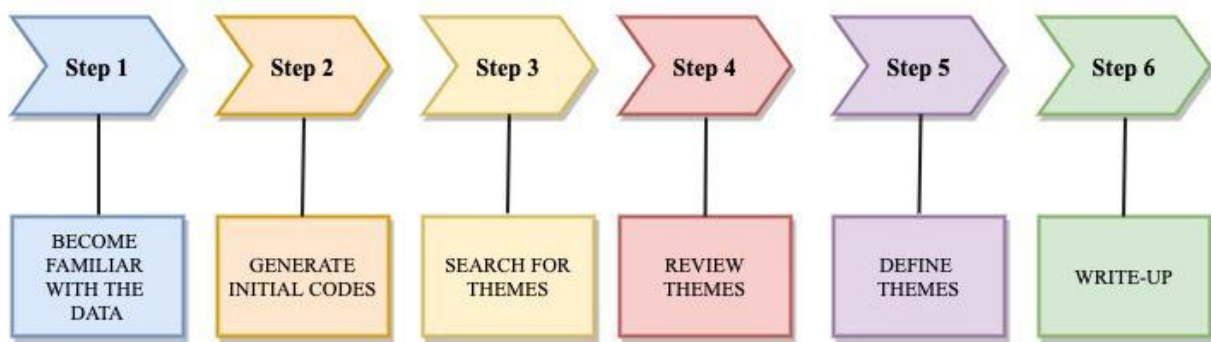


Figure 3.3 Braun and Clarke Six-Step Framework

3.4.2 Thematic analysis

Braun and Clarke in 2006 describe data analysis as a method of identifying, analysing, reporting and interpreting themes in qualitative research with Denzin and Lincoln in 2008 identifying that it can be a way of bridging different fields of research and data. Other methods of data analysis were considered including grounded theory and phenomenology, but due to the novice researcher's lack of sufficient theoretical knowledge and experience of using grounded theory and phenomenology, thematic analysis was chosen as the most flexible means of completing the data analysis. As thematic analysis is described as a method rather than a methodology, it is not limited by theoretical frames of reference, thus allowing for multiple applications in teaching and learning research studies (Braun and Clarke 2006).

A theme encapsulates a crucial reference for the research question and flexibility and researcher reflexivity are required to determine the inclusion of themes in the research (Braun and Clarke 2006). The prevalence of themes throughout a piece of research are not necessarily commensurate with the importance attributed to them in a qualitative research study, with research questions and research context guiding the analysis to ensure that the findings reveal answers to the research questions (Braun and Clarke 2006).

Data collected were analysed sequentially with the quantitative survey being analysed first followed by the transcripts from the qualitative semi-structured interviews and data analysis were conducted thematically employing the Braun and Clarke in 2006 framework, as it is a theoretically flexible method, suitable for a novice case study researcher. The advantage of the

framework is that it enables the researcher to advance and retreat between steps and provides a framework to analyse the survey results and interview transcripts (Braun and Clarke 2006).

Thematic analysis is often carried out on either semantic or latent levels. Semantic thematic analysis will code the data to answer explicit questions and apply the codes to the actual written words. Latent thematic analysis looks to respond further than semantic themes and challenge the underlying assumptions of the data and the research. In latent themes there is an attempt to theorise the research based on the literature and to interpret the broader meanings and understandings of the research (Braun and Clarke 2006). In determining the most suitable type of data analysis, thematic analysis is used to provide a more detailed approach to the themes and subtleties within the data in order to answer the research questions (Braun and Clarke 2006).

Inductive analysis requires the researcher to process and code data without trying to conform to a pre-existing frame or researcher's analytical assumptions and is distinct from theoretical thematic analysis. Theoretical thematic analysis is influenced by the researcher's theoretical or analytic interest in the area, providing a more detailed account of some aspects of the data rather than a rich description of the entire data set, making it an ideal choice for the current research on teacher collaboration (Braun and Clarke 2006).

In outlining possible drawbacks of thematic analysis, Braun and Clarke in 2006 identify a number of issues regarding the successful implementation of thematic analysis including the researcher failing to analyse all of the data set, implausible data analysis and conclusions, and inconsistencies between theory, data and claims. As the research progresses these potential pitfalls will be addressed using Braun and Clarke's (2006) p.36, "checklist of criteria for good Thematic Analysis". Reflection will be central to the research at every stage and will seek to progress along a continuum, from basic reflection to conceptual and theoretical reflection as outlined in Figure 3.4 by Gibbs (1988) reflective cycle, and the experiential, reflective writing of Moon (2004).

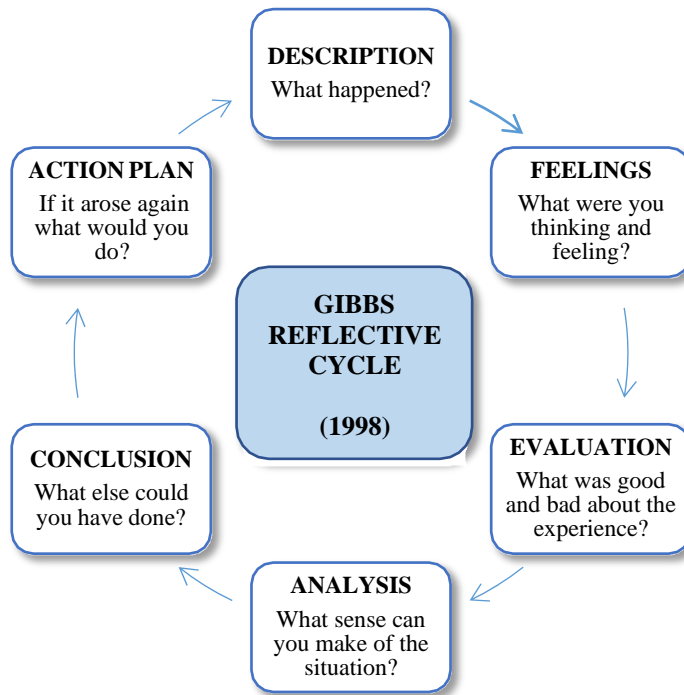


Figure 3.4 Gibbs Reflective Cycle (1998)

As this is a relatively small research study, line by line coding will be used to identify and capture the themes (Maguire and Delahunt 2017). Bree and Gallagher in 2016, recommend Microsoft Excel for coding and identification of themes and this will suffice in the context of the proposed research. Computer assisted qualitative data analysis software (CAQDAS) has advantages, as it could handle large amounts of data, improve rigour and facilitate team research, however, as this is a single case study with a single researcher, CAQDAS, is considered unnecessary (Creswell 2012; Bryman 2016). Rigour could be improved in the data analysis method by counting the number of times collaborative activities occur, however, this is a small scale context based study and counting the number of times a certain word occurs may not be appropriate. Rigour will be reinforced by the researcher searching for negative or unusual responses from the entire data set and presenting contrary findings as part of the evaluation process, thereby improving transparency (Krefting 1991; Aluwihare-Samaranayake 2012).

3.4.2.1 Become familiar with the data

Total immersion in the data was the first step in the data analysis and this involved reading and re-reading the data from the survey and from the interview. Becoming very familiar with the data is required in qualitative data analysis before any further steps are taken to use and

interpret the data (Braun and Clarke; Maguire and Delahunt). Early rough notes were taken and noted in a journal (Appendix 13).

The data were transcribed verbatim from a voice recording made on a handheld device using Microsoft Word, and was as reflective of the original interview as possible. Attention to punctuation and potentially meaning changing details was strictly interpreted in order to present an authentic transcription of the conversation and interview to ensure a fair reflection of the participants experiences. Following transcription the recording was replayed and verified for accuracy (Braun and Clarke 2006). To further validate the transcription, a participant review of the transcription was completed prior to commencement of further data analysis (Edwards 2014).

3.4.2.2 Generate Initial Codes

According to Miles and Huberman in 1994 the process of coding and organising your data into groups, is the initial part of thematic analysis. Organising the data in an efficient, precise and purposeful way, and coding the data using theoretical thematic analysis was the appropriate approach to address the specific research questions. Each section of data which held relevant information about the research questions was coded using open-coding and the codes were developed and modified as the research progressed (Maguire and Delahunt 2017).

Some initial ideas codes following Stage 1, suggested that teachers feel that they needed more planning time to organise collaborative teaching and learning in the classroom and that the relationship with the collaborative teacher played a significant role in the success or failure of collaborative teaching and learning. These initial codes were analysed and preliminary ideas about the codes were developed by the researcher. After this, each section of the interview transcripts was worked through separately coding any segments of text that appeared to be answering the research questions. Following this, the codes from the survey and the individual interviews were compared. Working through the survey and interviews, further codes were generated and modified. As modelled by Maguire and Delahunt in 2017, the initial coding was completed by hand, using pens and highlighters working through hardcopies. A Bree and Gallagher in 2016 example of using Microsoft Excel was then used to further aid the identification of themes. In Table 3.3 an extract from one of the interviews with codes in the margins has been included (Braun and Clarke 2006; Creswell 2012).

As has been noted previously by Bryman in 2016, a common criticism of coding is that some of the context is lost so as many of the surrounding words as were deemed necessary in order to preserve the context and integrity of the research was retained during coding process, to reduce the potential for inaccuracies to occur. Tensions and inconsistencies will inevitably exist across a data set and are highlighted throughout the research as it is always important to acknowledge the opposing argument in any analysis (Braun and Clarke 2006).

Table 3.3 Interview Transcript

Interview Transcript	Semantic Codes	Latent Codes
<p>Researcher: How would you describe the experience of working collaboratively with another staff member?</p> <p>Very good definitely myself and X work very well in a classroom situation together, X is just a very easy-going person. You do have to have the right type of person with you, not only is X very easy going he is very supportive in that X'll give you any kind of information you need. I think that would be a classroom teachers biggest concern as regards collaborative teaching sometimes is that .. well I certainly thought that it would be up to me to prepare four sets of work for my class and that wasn't the case, it was definitely shared. In fact X did a lot of the heavy lifting when it came to selecting the groups. X had the books, X had the graded readers, X had the comprehension cards so X was very comfortable with those resources and knew what would suit the grades in my class because X had more experience of collaborative teaching than I would have had, so that was definitely a very happy surprise happy revelation for me. I wasn't expecting it to be so be easily done but that's definitely down to X. 100 percent, because X is supportive in that way, so that's probably why my experiences of collaborative teaching has been so positive is because of the person I was working with.</p>	<p>CT very good Work very well together Easy going Easy going Supportive</p> <p>Concern that it would be up to me</p> <p>X did a lot of the heavy lifting</p> <p>X had more experience</p> <p>Happy surprise Wasn't expecting it to be so easily done</p> <p>Positive because of person</p>	<p>Value of CT Importance of positive professional relationship in CT</p> <p>Shared practice Concern/anxiety with CT planning and that class teacher would have to prepare all classwork when reflecting on CT</p> <p>Importance of support for CT to be successful</p> <p>Wasn't expecting it (CT) to be easy</p> <p>Positive relationships a strong influence</p>

3.4.2.3 Search for Themes

Refocusing the codes into themes, sorting the codes into potential themes, and collating the data extracts within the relevant themes was the next step in the analysis process, thereby identifying distinguishing features of a theme that are relevant and important (Maguire and Delahunt 2017). The research collected showed that some of the codes integrated seamlessly. For example, several of the codes relating to perceptions that teachers have about working with other teachers and the individual experiences that teachers have when utilising collaboration in the classroom. This was collated into an initial theme of *Responses to collaborative teaching and learning*.

As this step was completed, the codes were organised into broader descriptive themes that specifically related to the research questions and were identified as *Reasons for collaborative teaching and learning*, *The purpose of collaborative teaching and learning*, *Teacher attributes*, *Reasons for engaging in collaborative teaching and learning*, *How is collaborative teaching and learning used in the classroom*, *Responses to collaborative teaching and learning* and *What do students feel about collaborative teaching and learning*. Appendix 14 displays the prominent themes and codes in the exploration of themes and the codes were housed in relevant themes.

3.4.2.4 Reviewing Themes

Further refinement of the data relevant to each theme ensues at this stage of data analysis and data collection was aided using cut and paste and Microsoft Excel (Bree and Gallagher 2016). Data associated with each theme was then identified and the data associated with each theme was colour-coded. In the next step, the researcher considered the themes generated in the context of the entire data set, including both the survey results and interview transcripts. Maguire and Delahunt in 2017 advise that themes should be logical and clearly identified and that critical analysis and justification for inclusion should be explicitly defined in this stage of the research.

The following themes of *Bespoke learning through teacher collaboration*, *Candour as characteristic of collaborative practice*, *Collaboration strengthens professional relationships between colleagues* and *Developing Teacher agency* emerged (Maguire and Delahunt 2017).

A final theme relating to student perceptions of collaborative teaching and learning also emerged when reviewing themes and this theme was renamed *Student engagement in collaborative teaching and learning*.

Refinement of themes takes place during this stage of the research and it was decided to incorporate the *Purpose of teacher collaboration* and *how is teacher collaboration used*, as they were aligned and could be collapsed to a single theme *Bespoke learning in teacher collaboration* (Braun and Clarke 2006). Dual criteria of internal homogeneity and external heterogeneity were carefully considered, with data falling within the same theme doing so coherently and separate themes clearly demarcated (Patton, cited in Maguire and Delahunt 2017).

It was identified while reviewing the theme *Teacher characteristics* that this theme would suggest that the data supports a finding that only teachers with the characteristics listed in the initial coding process were involved or befitting teacher collaboration and the theme was refined to *Candour as a teacher characteristic in collaborative practice* and included a subtheme *The value of feedback*. Finally the theme *Reasons for engaging in teacher collaboration* was renamed *Developing Agency in teacher collaboration* and with reference to the entire data set, the subtheme *Teacher endorsement* was added as separate subsidiary of the theme.

At the end of this stage of data analysis, the overall picture that the research data tells is gaining precision and although research is an ongoing process and further refinements may occur, it was deemed by the researcher that further refinements were not adding substantial new information to the analysis. The reciprocal yet distinct themes of *Bespoke learning through teacher collaboration*, *Candour as a teacher characteristic in collaborative teaching and learning*, *Developing agency in teacher collaboration*, *Collaboration strengthens professional relationship between colleagues* and *Student engagement experiences of collaborative teaching and learning* were particularly significant and add insight to the research questions (Maguire and Delahunt 2017).

3.4.2.5 Defining Themes

Final clarification of themes occurs in this penultimate stage of the research process, where the researcher aimed to clearly identify the theme in order to explain the interconnected themes

and subthemes to the research audience (Braun and Clarke 2006). As themes were suitably convincing and allocated in the preceding stage of the research, delineating the essence of the themes and the correlation of codes and data extracts, outlined in Appendix 15, to give further structure and clarity to the research was the purpose of this section of the data analysis. Further validation, as recommended by Gibson and O'Connor in 2003, through peer-examination has merit, however as a single researcher and within the timeframe of the research study this layer of definition was not imperative.

A concept map (Figure 3.5) was developed in the subsequent stage of the definition of themes, to illustrate the inherent yet individual characteristics of the themes and subthemes (Maguire and Delahunt 2017).

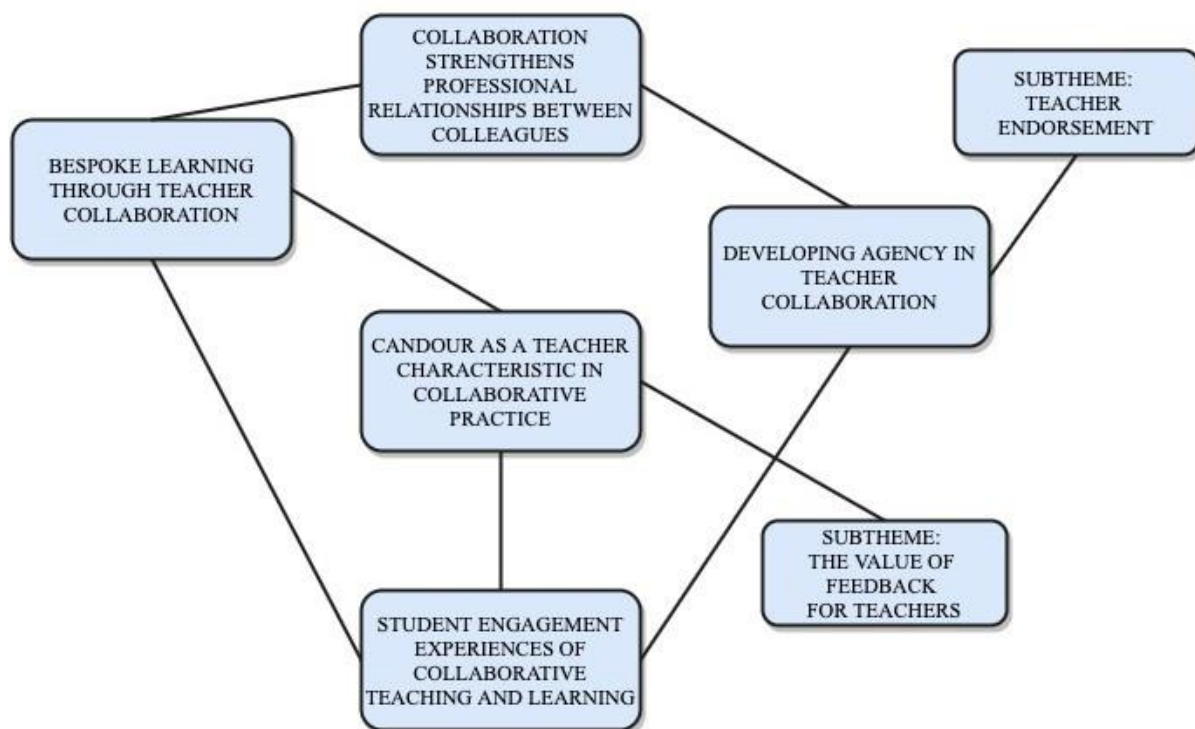


Figure 3.5 Concept Map of Developed Themes

3.4.2.6 Writing Themes

This final part of data analysis is presented in a concise evaluation in findings supported by convincing data to support the claims to an authentic research. An analytical narrative, which includes argument in relation to the research questions supported by requisite data excerpts is presented to the reader in subsequent sections of this research paper (Section 3.7) (Braun and Clarke 2006).

3.5 LIMITATIONS OF THE RESEARCH STRATEGY

Braun and Clarke in 2013 identify a common risk of thematic analysis is using the interview questions as themes. As the data analysis progressed, both the semantic and latent themes were examined to address the potential risk of this occurring. Analytical issues can arise with perceptions elicited from interviews, and a consideration to the meaning or multiple meanings that can be derived from experiences must be examined (Braun and Clarke 2006). The position taken by the researcher is that the interview gave direct access to the experience of the teachers involved in the research study, and this was justified, as the perspectives of the participants and not those of the researcher, were sought in the research. Observations were considered as a means of examining what teachers and students actually do, however, it is hoped that semi-structured interviews will enable more in depth questioning and clarification of thoughts.

Case study research has challenges concerning the possible intrusion into participants lives, possible over simplistic world view, the dependence on a single case and the boundedness of the case (Creswell 2012). A lack of anonymity between the researcher and the interview participants is certain and this may strengthen the researcher's loyalty towards the participants, leading to the researcher not wishing to portray the participants in an unfavourable light. Methods to preserve the anonymity of the participants were taken at every stage with identifying characteristics removed from the individual transcripts (Fink 2000). The research is dependent on a limited number of participants revealing information about teacher collaboration and the experience of it in Irish primary schools and parts of the data in interview transcriptions, coding and analysis have limited existence and meaning independent of the research and the researcher interpretation (Fink 2000).

3.6 CONCLUSION TO METHODOLOGY

“The essence of a case study is that it tries to illuminate a decision, why they were taken, how they were implemented, and with what result” (Schramm, cited in Yin 2009 p.17). In concluding this methodology section of the research into collaboration in an Irish primary school, the truly flexible case study approach described, outlined and justified has fulfilled the aims and objectives of the research and the data analysis employed comprehensively explored the experiences of collaborative teaching and learning in the context of an Irish primary school.

3.7 EVALUATION

3.7.1 Findings and Discussion

Educational settings have seen exponential growth in collaborative teaching and learning over the past number of years with emphasis on collaboration cited as one of the greatest indicators for increased student engagement achievable in the context of diverse educational contexts (Beuermann *et al.* 2013; Vangrieken *et al.* 2015). However, in reality the details and extent of collaborative teaching is rarely measured and the experiences of teachers and students who experience collaborative teaching and learning is rarely explored (Vangrieken *et al.* 2015). It has been valuable to seek insight into teacher experiences of collaborative teaching and learning and how these experiences affect student engagement in a rural primary school in County Donegal.

The previous sections explicitly elucidate the design and justification of the research methodology, ethical procedures and the qualitative data analysis implemented within the research. The study aimed to explore the perspectives of teachers on collaboration in an Irish primary school context, addressing gaps in the current literature, specifically relating to primary school teachers. Following a thorough examination of the data, the following results and findings have emerged and are presented in this section. The central research question and sub-research questions that guided the research and analysis are restated in Figure 3.6.

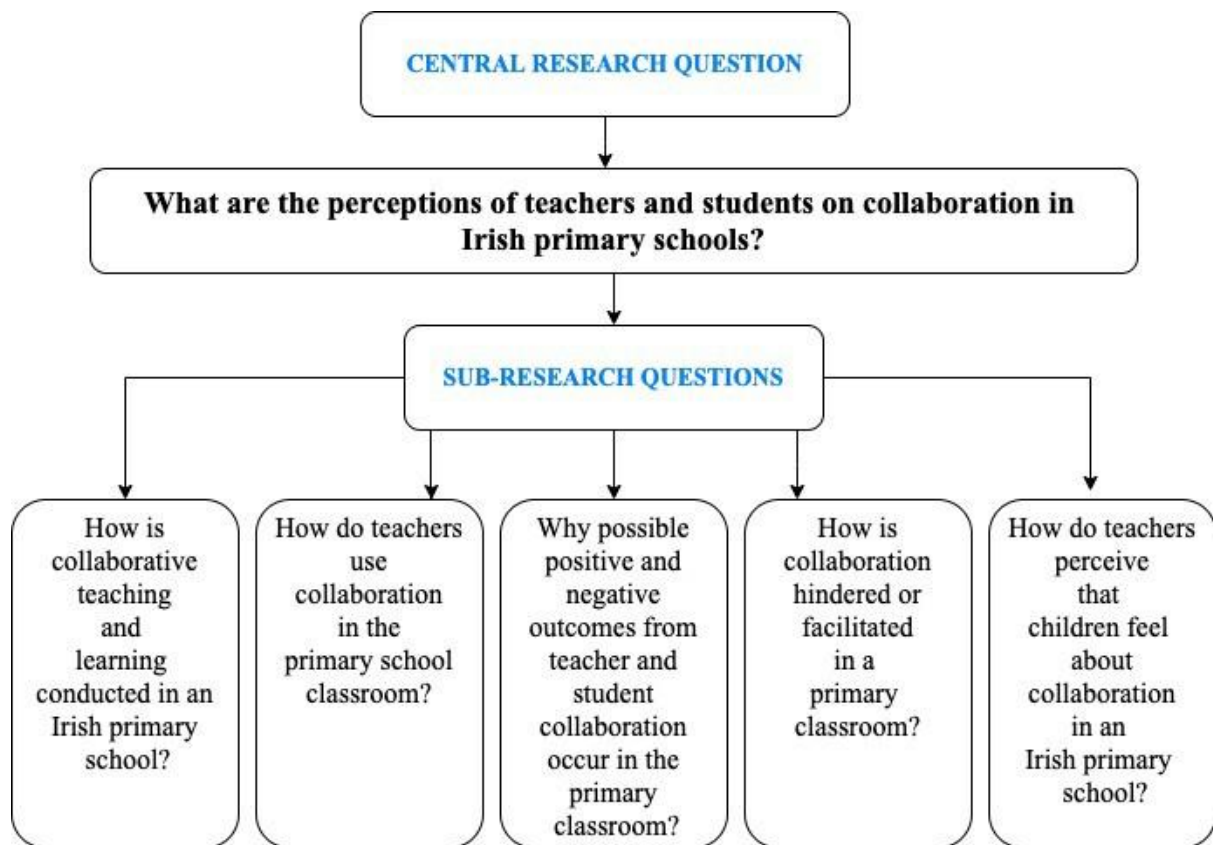


Figure 3.6 Central Research Questions and Sub-Research Questions

The data collected in the research was derived from a background data-gathering survey, interview transcripts and reflective journal of the researcher. The results and findings that emerged from the data collection methods and data set are not discussed singly but are discussed together thematically in the following sections. The five themes that have been formulated from the data are *Bespoke learning through teacher collaboration*, *Collaboration strengthens professional relationships between colleagues*, *Candour as a characteristic of successful collaborative practice*, *Developing agency in teacher collaboration* and *Student engagement experiences in collaborative teaching and learning*.

3.7.2 Theme one: Bespoke learning through teacher collaboration

The importance of teacher collaboration and the inclusion of collective collaborative practice as a domain in the quality framework for primary schools, provides stimulus for considering the value and engagement of teachers in professional development and collaboration (Inspectorate 2016). The data extracts from the current research argues in support of the paradigms of research focusing on the importance of context and peer observation when

engaging in collaborative teaching and learning. The data also clearly indicates that while every learning environment is unique, a learning community of practice that supports teacher learning and teacher judgement will result in high levels of teacher learning (Hendry *et al.* 2014; Lowrie 2014; Svendsen 2017). However, previous studies have lacked specific details on the potential for discrete learning for individual teachers involved in collaborative teaching and learning.

As teachers with varying levels of teaching experience and varying degrees of participation in collaborative teaching and learning, the volunteer semi-structured interview participants in the research study, were representative of the diversity of teachers in the school. Teachers who participated in the interview indicated that they learned new skills from the experience of collaborative teaching and learning.

“You get insight into other ways of teaching and learning when you get involved in teacher collaboration. I often learn something new when I go to another class or if another teacher comes to my class. It’s hard to get the time to go to professional development courses and improve yourself that way, but in collaboration you can learn new ways without even maybe realising it.”

This teacher appears to be saying that teaching is a busy profession and that although there is an emphasis on teacher professional development, availing of opportunities to complete professional development can be difficult. However, when a teacher engages in collaborative teaching and learning their personal learning can be advanced.

During another collaborative teaching class a teacher reflected that they had observed the other teacher’s method of discipline in the class.

“I noticed that the teacher I was working with used a different method of classroom discipline in the classroom and it was very effective with the group. I think sometimes maybe I don’t create enough opportunities for positive encouragement in the classroom. There was great benefits for the children but also great benefits for me as I could see the value of it for use some other time in my classroom.”

Practitioners of collaborative teaching practice have advocated for increased development of situated learning to increase professional learning opportunities (Pratt 2014), however it would

appear from the interviews with the participants, that the necessary supports and training required to do this has not been made readily accessible to all teachers in all schools, requiring further investigation as to why these measures and supports have not been put in place.

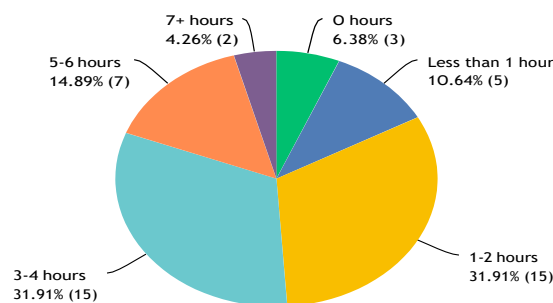
“You always learn something new when you work well collaboratively with another teacher, but you need the provision of allocated time to collaborate more effectively and productively. I have learned so many things from other teachers, who have the experience of doing it themselves. It is better when you learn from someone in the school.”

Individualised learning that is relevant to the teacher appears to be the salient feature of this comment on teacher learning achieved during collaborative teaching. The teacher also appears to be referring to the need for adequate time to plan and that support is required from management in order to successfully collaborate in teaching and learning. Contrary to previous research by Le *et al.* in 2018, suggesting that teachers tended to focus more on academic details rather than collaborative aspects of collaboration, interview participants reported they are cognisant of the individual learning growth potential realised through collaboration and restrict excessive focus on cognitive elements of collaborative learning. This value that teachers place in relation to their own personal, academic and professional development has been highlighted previously by Goddard *et al.* in 2014 and the current research study further compounds the findings that teacher collaboration has a high influence on improved practice for teachers.

3.7.3 Theme two: Teacher collaboration that builds professional relationships between colleagues

Descriptive statistics gathered from an authentic, localised survey administered to primary school teachers in the area, provide a valuable initial insight into teacher collaboration and the depth of genuine collaborative teaching and learning experiences that are realised in schools. In question two of the survey (Figure 3.7), participants were asked to indicate on a five-point Likert scale from strongly agree to strongly disagree, from your experience, you engage or have engaged in collaborative teaching practice, where all participants in the survey agreed that they had participated in collaborative teaching practice in the classroom. However, there was great variation in the number of hours that teachers typically spend on collaborative teaching every week, with 48.93 percent of teachers indicating that they spend approximately

less than two hours per week on collaborative teaching. Only four percent of the teachers surveyed indicated that they spend more than seven hours per week participating in collaborative teaching. The research data is consistent with previous findings of Slavitt *et al.* in 2011, which noted that teacher collaboration varies according to individual educational settings. Furthermore, the research data appears to expand the findings of the previous research to indicate that considerable variations exist within individual schools. It is beyond the scope of the current research to identify why there is such a wide variation and the reasons for these inconsistencies could be explored in further research, although it is noted that the challenges of collaborative teaching and learning presented in the research paper may attribute to the discrepancies.



ANSWER CHOICES	RESPONSES	
0 hours	6.38%	3
1-2 hours	31.91%	15
3-4 hours	31.91%	15
5-6 hours	14.89%	7
7+ hours	4.26%	2
TOTAL		47

Figure 3.7 Sample Survey Result

Teachers surveyed strongly agreed that collaborative teaching and learning is a good instructional approach. However, just 57.45 percent indicated that they agreed they had been trained to use collaborative teaching methods in the classroom, and with only 12.77 percent of those who agreed, strongly agreeing that this was the case. This may suggest that teachers are being asked to implement a strategy in the classroom that they do not feel that they have had sufficient training to do so effectively (Figure 3.8). The interview participants also indicated that they felt that training and continuing professional development in the area was largely

inaccessible. The results also indicate that while 93.61 percent of teachers agreed that collaborative teaching is good instructional practice, the level of participation in collaborative teaching is much lower for those surveyed, which is also consistent with previous findings of Slavitt *et al.* in 2011.

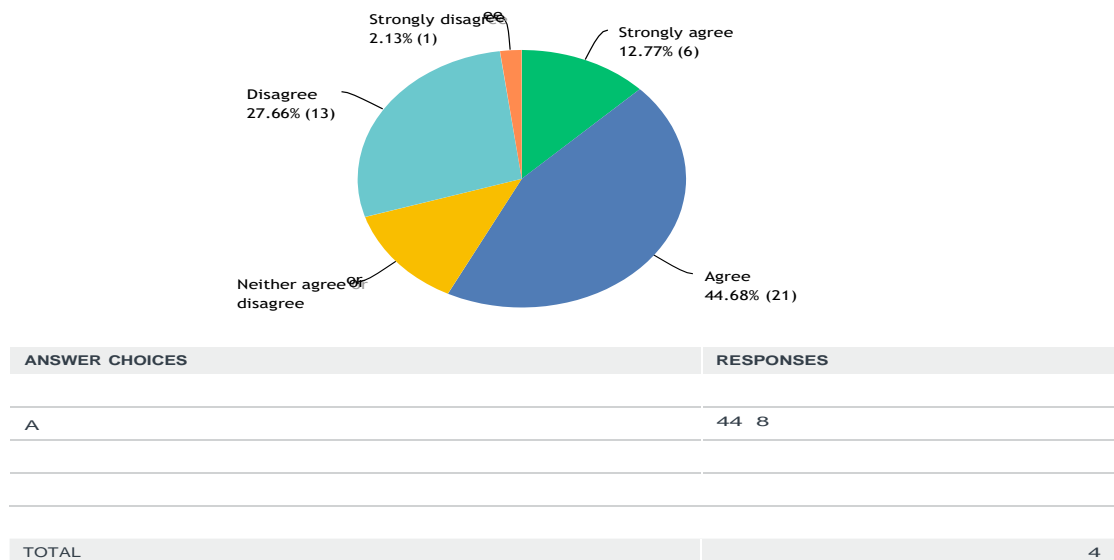


Figure 3.8 Sample Survey Result

In the following extracts from teacher interview participants, teachers outline and describe their previous experiences of teacher collaboration, where their perceptions of teacher collaboration appear to corroborate previous interpretations that engaging in group work is integral to collaborative teaching and learning by Laal and Ghodsi in 2012. However these findings would also appear to indicate that the professional relationships involved in collaboration are crucial to effective implementation, and when these relationships are found to be lacking, thus can have a negative effect. This is an area that is not often explored in research on collaboration in primary schools but appears to be of great importance in this small scale study.

“When we were collaborating on the lesson, I felt really supported and we had a really good relationship. We just got on well together and that really made the lessons work. I know it’s not always like that but that’s just the way it has been for me.”

“I was lucky in that the teacher I was working with was co-operative and there’s no doubt that when you have a teacher that is easy to work with the whole area of teacher collaboration gets so much easier. It aids staff relations a great deal when it works well.”

The data extracts appear to suggest that working collaboratively with another teacher is not an indicator of the successful implementation of collaborative teaching and learning but rather that the development of secure professional relationships are conducive to productive collaborative teaching and learning. The interview participants further indicated that due to lack of training and knowledge in teacher collaboration they suffered from varying degrees of self-awareness about another teacher being in the room.

“I was a bit worried about it all at the start, and maybe because I haven’t had that much training, I didn’t know if it would work, but I’m glad that I did it and X had so much experience, that s/he made it easy. I learned a lot myself by doing it.”

“I didn’t feel confident at all but X reassured me and was really positive. It felt good to be supported and know you are not on your own.”

The latent meaning expressed by the teachers who were involved in collaborative teaching and learning is that positive, supportive professional relationships may develop in collaborative teaching although there also appears a level of risk or worry that a lack of confidence or insufficient training may impede collaborative association.

The open ended survey questions, question six and question seven, asked participants to list three factors that might encourage participation in collaborative teaching and to list three factors that might discourage participation in collaborative teaching. Again, the responses of the survey participants seemed to suggest that developing positive relationships with colleagues would have an impact on collaborative teaching and learning, with teamwork, cooperative colleagues and good relationships with proposed co-teacher, a sample of the reasons that might encourage collaborative teaching (Appendix 5).

Building professional relationships with colleagues is regularly cited in research as being a major influence on the success of collaborative teaching and in improving teaching and

learning in schools (Pratt 2014). Teaching is a profession which is often considered to be isolating with teachers often saying that they have huge workloads with little if any support with planning or assessment (Fullan and Hargreaves 1992). Collaborating is an effective way of managing and organising classrooms and leads to teachers feeling less isolated and building good relationships with their colleagues, as evidenced in the data collected in the research. This research data supports previous research by Vangrieken *et al.* in 2015, that teachers feel under increasing pressure to include collaboration in their practice, but in doing so, teachers also experience the benefit of peer mentoring and the development of professional relationships (Pratt 2014).

Research evidence from the semi-structured interviews suggests that high levels of collegiality are present in the researcher's school and this has contributed to the success of collaborative teaching and learning. The evidence from the survey also supports collegiality as being a factor in successful teacher collaboration. Teachers were reticent to report negative experiences of teacher collaboration, especially perhaps as the researcher was a teacher in the school where the interview participants were from, however some responses on the survey cited conflict between teachers, difficult teacher, and inhospitable co-teachers as factors which may prevent teachers from participating in collaborative teaching. While the interview participants were positive in relating their experiences of teacher collaboration, latent themes in the transcripts would appear to indicate that the success of teacher collaboration largely hinges on teacher partnerships that are positive. "It worked well for me, but maybe I was just lucky that X was so supportive", and "it was really nice to get a good welcome from another teacher" are two examples. While some previous teaching narratives by Fullan and Hargreaves in 1992, have indicated that teaching is an isolated profession the evidence from the interview participants in this school suggests that teachers are very open to welcoming another teacher into their classroom and that they experience great benefits for themselves and their students.

3.7.4 Theme three: Candour as a teacher characteristic of collaborative practice

Three classroom teachers from a teaching staff of eleven, in a rural primary school volunteered to participate in the interview stage of the research on teacher collaboration, representing 27.3 percent of the core teaching body in the school. Openly volunteering to participate in an elective, school based, research study and to relate their experiences for the purposes of

research on teacher collaboration, indicates a high level of teacher leadership within the school (Hunzicker 2011; Wenner and Campbell 2017). Teachers who wish to engage in ongoing professional development have clear goals, ambition and a motivation to create greater clarity from prior experiences (Hunzicker 2012). The development of teacher leaders hinges on school structures and collaborative support that empowers teacher leadership development, ultimately influencing student engagement and learning (Wenner and Campbell 2017).

Previously published research by Leithwood *et al.* in 2007, reports that teacher leaders frequently emanate from middle leadership in schools or those with formal leadership roles. In the current research study, the teachers who volunteered had diverse leadership experience and diverse positions of leadership, ranging from formal leadership roles to teachers with no formal leadership roles. It could be argued that a certain level of volunteer bias exists, however, during the interview process the interview participants gave insight into their reasons for participating with a desire to overcome the challenges surrounding the implementation of collaborative teaching and learning a dominant theme in responses.

“I know everyone needs help from one another to hear everybody else’s perspective and advice. I know it was difficult for myself last year to do this type of thing.”

“Hopefully it will be beneficial and will give some kind of new information that other people haven’t thought of or haven’t recalled in their experiences. The more people you have the more opinions you have, the more rounded view you get of how a thing works. I’m open to trying anything that could help.”

“I hope that people will see that there is a real need for it. Hopefully the more resources and more courses in the future. It means that you are not isolated on your own too with a class you know is difficult. It’s going to benefit everyone.”

Teacher participants provided ample responses to the open ended survey questions that asked participants to list three factors that would discourage teachers to participate in teacher collaboration, with planning challenges, time constraints, lack of self-confidence and negative teacher traits that would lead to a personality clash cited as deterrents to engaging in teacher collaboration. An interesting element of the interview data was that the teacher participants when questioned about challenges in relation to teacher collaboration around specific areas

such as assessment, were unable to identify any major challenges or disadvantages to teacher collaboration and while reflecting also appeared to have been able to resolve challenges.

“So it wasn’t so much that X was a bad choice, I think it was a really good choice, the kids loved it, but I feel like that with hindsight it would have needed another teacher or adult there to offer a bit of scaffolding”.

However, it was noted that maybe luck or a successful collaboration with an exemplary teacher was the reason that challenges had not arisen, which suggests that this may not always be the case with teacher collaboration.

The data analysis appears to reveal that candour is commonly associated with teachers who collaborate successfully and regularly and echoes previous research on the formation of productive forms of distributive leadership by Leithwood *et al.* in 2007. Throughout the data, the willingness to share responsibility for learning and collaboration, acceptance of feedback regarding teaching and learning, and a prevailing desire to improve and innovate in relation to classroom practice was evident in teacher responses.

“I think teacher collaboration just works in my context, I really don’t mind anyone coming into my classroom. Even if I don’t agree with them all the time or they have a different way of doing things. It’s great to get feedback from someone else who isn’t the inspector. Your co-teacher can give you feedback on things that you might not have had the time to notice.”

The data extract illuminates teacher perspectives on teacher collaboration and the knowledge and growth opportunities afforded to teachers who embrace collaborative teaching and learning. The interview participants consistently used affirming language such as ‘love’ and ‘really look forward to’ when describing how they felt that collaborative teaching and learning impacted both teachers and students, which appears to indicate that teachers in the Irish context view teacher collaboration and its benefits in a similar way to teachers in other geographical contexts and educational settings (Vangrieken *et al.* 2015).

3.7.4.1 Subtheme: The value of feedback

Interview participants detailed how collaborative teaching and learning greatly improved their opportunities for learning from others and participation in collaborative practice had greatly enhanced future practice and this led to the inclusion of the subtheme, *the value of feedback*, in this theme, as honesty and trust relating to teacher characteristics of collaborative practice appear to have had an impact on the delivery and acceptance of feedback.

The risk of negative feedback and being open to a certain amount of constructive criticism or perceived criticism during collaborative teaching and learning sessions is a challenge associated with in-class collaboration that was noted both in the survey and the interviews and it has been previously noted as a common reason for the failure of attempts to implement collaborative teaching and learning by Bell and Cooper in 2013. However, participants in this research indicated that while negative criticism was difficult to hear, the benefits of teacher and student collaboration counterbalanced any potential perceived negativity.

3.7.5 Theme four: Collaboration to develop agency

Implications of the current research data holds that teacher collaboration can generate positive effects for teachers who engage in the practice and students who experience collaborative practice in the classroom, consistent with well documented prior research of Slavin in 1991 and Kagan in 1994, with each of the interview participants noting that working with other teachers and students greatly enhanced student learning and engagement with greater opportunities to explore new strategies and the advancement of structured group work (Gillies and Ashman 2000). The analysis of the data also advanced the research concerning the variations on perspectives of collaborative teaching and learning and how the success or failure of collaborative learning can hinge on effective timely feedback and group accountability (Emmer and Gerwels 2002). It is worth noting that teachers who participated in the study observed that while the benefits of feedback for students are widely acknowledged, the teachers who were interviewed expressed an opinion that in their experience, participating in collaborative teaching practice presented some issues with the realisation of effective timely feedback in the structure of the collaborative feedback and assessment utilised in their classrooms.

“I would have liked to have been able to assess all the children during the lesson. That’s the thing with collaborative teaching, while it is good, you don’t always get to check everyone’s work. You might be correcting it that evening and it’s not as effective then. It would be better if you could just do it at the time.”

“We had to use ways to assess the children during the lessons, so that they could be self-sufficient and more independent. That gave us more freedom to be more ‘hands-on’ with students who needed more support.”

The extract suggests that teachers involved in collaborative work, create meaningful learning activities for their students and actively pursue solutions to challenges in the pursuit of learning opportunities for their students. Previous research by Le *et al.* in 2018, suggests that teachers tend to focus on group productivity and with only a small number of teachers assessing student performances. In overcoming the challenges associated with assessment during collaborative teaching and learning, the participant teachers in this research, demonstrated their propensity for developing agency while also attributing importance to assessment of student performance.

3.7.5.1 Subtheme: Teacher endorsement

The data reveals compelling evidence that teachers participating in collaborative teaching and learning practices are motivated by the collaborative learning that occurs when they are observing another teacher’s lesson. Two of the interview participants noted the positive affirmations that they experienced when working collaboratively with another teacher and indicated that this positive self-assurance validated their practice.

“When I was co-teaching with X, s/he would encourage me to try out new things and even when things didn’t work out as planned, s/he would be very encouraging and help me to think of other ways to do it so that it would be different next time.”

“It is always nice to hear when you are doing well and when the other teacher makes positive comments about the learning environment or about how happy the kids are or how much they are learning.”

“It’s good when things work out well and your co-teacher is impressed with the session.”

Another teacher working in a collaborative teaching session reported the following reflection following a lesson.

“As I don’t have as much experience as X, it was lovely to see that my efforts in the class were being recognised. You don’t get to hear that very often and usually the only person who would comment on your work is the inspector.”

These examples attest to the needs of teachers to feel affirmed in their practice and would appear to reduce feelings of isolation that may develop in the classroom, reflecting the results of prior research on the benefits for both teachers and students of collaborative teaching by Pratt in 2014. However, while participants in this limited small scale research study would appear to indicate that collaborative teaching and learning is affirming, it is noted that the teachers in this study appear to assert that this is not always the case. Latent themes suggest experiences of collaborative teaching scenarios with uncooperative teachers that do not produce positive effects, which is contrary to the findings of previous research of Pratt in 2014.

3.7.6 Theme five: Student engagement in collaborative teaching and learning

The analysis in the final theme centres on the details of student engagement and the specific perceived benefit of collaborative teaching and learning experiences for students in primary schools. The analysis and interpretation of the survey and interview participants, noted that working with other teachers and students greatly enhanced student learning and engagement, with greater opportunities to explore new strategies and the advancement of structured group work, as has been previously identified by Gillies and Ashman in 2000. The underlying principle of the primary school curriculum is that children should be active agents in their own learning (Department of Education and Science 1999) with the prominent discussion on student experiences in the current research study being that students are largely engaged and have increased enjoyment in lessons when collaborative teaching and learning is utilised, consistent with previous research on student engagement by Beuermann *et al.* in 2013.

Responding to the open ended survey question regarding factors that might encourage collaborative teaching, teachers repeatedly reported that increased opportunities for improved benefits for students was an influence when implementing collaborative teaching. Survey participants reported that children will benefit from the experience, children will feel more confident about speaking to the teacher and engaging in discussion, and pupils who would never be brave enough to participate in whole class discussion feel free to express themselves and seek help when they are struggling. Furthermore, survey participants identified that different needs of individual students were served, and that children were more likely to stay engaged in learning when involved in collaborative tasks, as collaboration appears to help with managing behaviour. While the data is very encouraging and supports the theme that student engagement is enhanced in collaborative teaching and learning, it appears that a latent theme of behaviour management issues may be an antecedent to the implementation of collaborative teaching and learning. Teachers have reported that managing class sizes and sharing resources is a benefit of teacher collaboration and it could be argued that while teachers appreciate the benefits of collaboration, these benefits are secondary to the management and organisational issues. Through teacher collaboration, the perceived benefit is that the group numbers are small and the behaviour is better as a result, with student engagement a consequence of collaboration but not the main reason for implementation in the classroom. This latent theme also appears to emerge in the interview data.

“We were able to take two stations each all the time and you know it was just the small numbers and it was just brilliant.”

“You are working in smaller groups and the children are definitely benefiting from it and getting more out of the class. They have to be more actively involved in the group when there is only a small number. Everyone has a part to play.”

The data extracts illustrate that ensuring the crucial foundations for successful collaborative learning, of constructive relationships and individual responsibility, are applied in the classroom, has positive effects on learning, consistent with previous research on collaborative learning reported by Kagan in 1994. What is less clear from the data extracted from the interview transcripts, is the existence of equipoise and interactions between children in collaborative groups, with teachers noting that although they feel that collaborative teaching

and learning improves engagement, when conflict exists between groups it can cause students to disengage.

“You might have a bit of conflict, certain children might not get on. Part of getting the collaboration going well is to reduce the conflict. You have to encourage turn-taking. It can take time to get it right sometimes. It is worth the effort though.”

What the extract appears to suggest is that in collaborative learning it is inevitable that certain levels of conflict will exist, that measures must be implemented to reduce conflict in groups and that efficient group work does not emerge in a vacuum. Sustained efforts on the part of teachers to reduce conflict is required to ensure the most productive learning environment and to help students to remain committed to group work. Consequently, this supports prior research that collaborative learning and student engagement success can be supported or hindered by timely feedback (Emmer and Gerwels 2002).

Student experiences of teacher collaboration are also improved when group accountability is at a sufficiently high level and when adequate manipulatives and resources are available (Emmer and Gerwels 2002). When adequate resources are unavailable to support collaborative practice, students may be more likely to become disengaged and unable to complete assignments efficiently. Survey participants identified many challenges of collaborative learning relating to insufficient resources, ranging from lack of space, insufficient teacher numbers to scant manipulatives. Student experiences of collaborative teaching and learning are predominantly positive, however, a lack of resources has been identified as a challenge for students as evidenced in the following extract from an interview participant, where a teacher had questioned a student about their experiences of collaborative learning.

“S/he said that s/he loved it, but sometimes s/he thought that the classroom was so small. Sometimes s/he couldn’t concentrate on the teacher beside them, at their group, because the other teacher at another group, was too loud.”

The reflection of the student experience of collaborative learning supports the previous findings of Beuermann *et al.* in 2013 that students enjoy collaborative learning, however, it also indicates that antecedents to successful collaborative practice exist in Irish primary school classrooms and that both teacher and students are affected by these challenges. Existing

measures and supports may need to be investigated and improved in further research, in order to minimise the effect of insufficient manipulatives and resources, however a note of caution is urged due to the fact that this is a single case study in one school and the evidence is not intended to be reviewed as indicative of the situation in all Irish primary schools.

In summary, the prevailing sentiment of the theme *Student engagement experiences in collaborative teaching and learning*, is that students are engaged when participating in collaborative learning and that their experiences, while diverse and dependent on the educational context, are largely positive and provide beneficial learning experiences. The thematic analysis corroborates the previous research on the benefits of working in groups for student engagement and also provides insight to the varied experiences of students in an Irish primary school.

SECTION FOUR: CONCLUSION

4.1 CONCLUSIONS AND RECOMMENDATIONS

The research study was undertaken to explore the experiences of teacher collaboration in the context of a primary school in Ireland. The findings of the research and thematic data analysis identified five themes emerging from the data and illustrated the predominantly positive experiences of teachers and students engaging in collaborative teaching and learning, which complements previous research in the area (Slavin 1991; Pratt 2014; Le *et al.* 2018).

The findings suggest that teacher collaboration enhances student engagement, provides valuable opportunities for assessment and has positive impacts on students and teachers which corroborates prior research spanning from Slavin in 1991 to the more recent research of Tichenor and Tichenor in 2019. Teachers who displayed attributes of candour and trust in developing collaborative practice while developing as teacher leaders, is also consistent with prior research in the area by Leithwood *et al.* in 2007. The findings also provide important local insight into collaborative teaching and learning, the development of teacher agency and the effective use of teaching time for those teachers who engage in the practice in primary schools, which had been noted in previous research of Tichenor and Tichenor in 2019.

A surprising finding that emerged from the data was the positive effect of feedback that teachers noted from their experiences of feedback garnered in teacher collaboration and the impact that the feedback had on their learning and professional development as teachers. Recent departmental moves appear to be leading away from more traditional routes of teacher evaluation towards school self-evaluation and teacher autonomy and there is a lack of structure to support teacher collaboration and peer mentoring for teachers beyond an initial induction period. It is worth noting that professional learning for teachers and the national framework for teacher development has not attached significant importance to this element of collaborative teaching that appears to have such a positive impact on teaching and learning (The Teaching Council 2016). Further large scale research may support the findings of this research study and pursue possible solutions to support the implementation of support frameworks for viable collaborative practice which prioritises feedback for teachers in primary schools. In line with the development phase of the Cosán framework for teacher's learning by The Teaching Council in 2016, which aims to explore how teachers can be supported in ongoing engagement with

professional development, a possible alignment for teacher collaboration frameworks could be developed.

Additionally, these findings, uncover the challenges for teachers to assess and reflect on teacher collaboration in the context of an Irish primary school. This poses a query for teacher professional development and the current approaches which do not require teachers to formally reflect on professional development experiences. Further research would be useful to gain a better understanding of assessment and reflection in the Irish primary school context to better understand the possible dependent relationship between assessment, reflection and collaborative teaching and learning.

It is evident from the research study that the school at the centre of this context-based study is committed to the development of collaborative teaching and learning and has taken progressive steps towards the meaningful integration of collaborative teaching and learning within the school. The research is consistent with Tichenor and Tichenor in 2019, to the effect that the interview participants valued collaborative teaching and learning, yet were not always afforded the opportunity to integrate collaborative teaching and learning methods in their practice. Another possible area of future research would be to investigate further why this appears to be the case in a longitudinal research study that could investigate the reasons over a longer period of time.

As a small sample case study conducted by a single researcher, focused on teacher experiences and perspectives of collaborative teaching and learning in one primary school in Ireland, the findings are limited and the generalisability and transferability of the findings may not be applicable in alternate contexts. The study may be of interest to educators seeking to develop insight into rarely explored aspects of teacher collaboration within the Irish context. Information collected in the research may be useful to educators in primary school settings when considering how to maximise the effect of collaborative teaching and learning and provide impetus for further research in the area.

The research was designed to improve and understand current perceptions of collaborative teaching and learning in the researcher's school, which added impetus to the research and enabled a unique definition of collaborative teaching and learning in the context of one Irish primary school to be realised.

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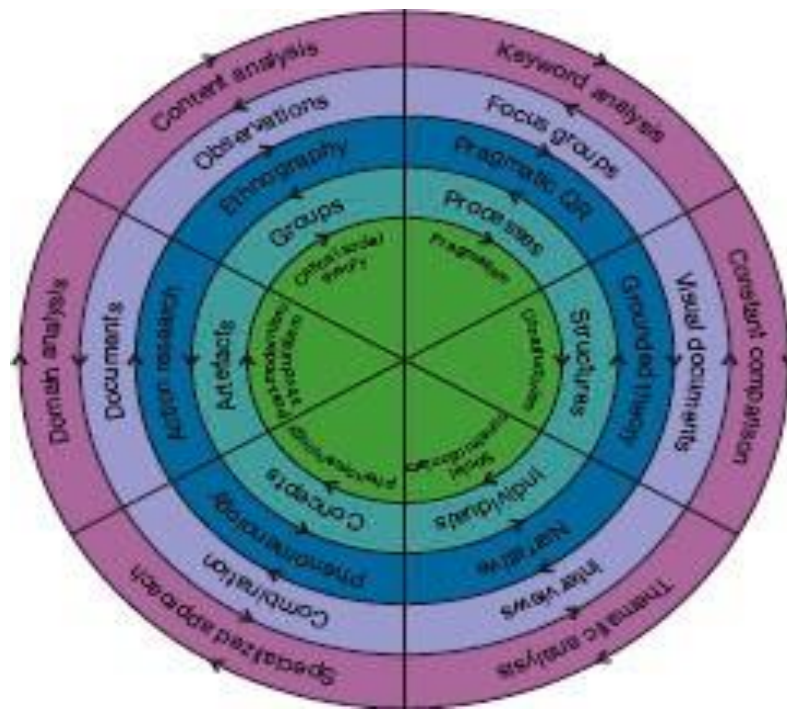
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APPENDICES

APPENDIX 1 THE QUALITATIVE RESEARCHER'S WHEEL OF RESEARCH CHOICES (SAVIN - BADEN AND HOWELL-MAJOR 2013, P.46)



APPENDIX 2 INFORMATION LEAFLET FOR THE RESEARCH STUDY FOR GATEKEEPERS AND PARTICIPANTS

Information Leaflet for the research study for Gatekeepers and participants

Participant Information

Title: Defining collaboration in the context of an Irish primary school

Name of Researcher: Roisin Horkan Mc Walters

Name of Supervisor: Julia Wilson

Introduction and aims:

Collaborative teaching, (also known as co-operative teaching or team-teaching) involves teachers working together to teach a group of students. Collaboration can be used in a variety of different instructional levels and subject areas. A statement of highly effective practice for teachers, according to the quality framework for schools “Looking at our schools 2016” is that “Teachers view collaboration as a means to improve pupil learning and to enhance their own professional development. They engage in constructive collaborative practice, and in collaborative review of practice” p.20.

You are invited to participate in the research, as the researcher seeks to investigate teacher and student perspectives on collaborative teaching and learning in primary schools. Your perspective could offer valuable insight to collaborative teaching and learning and improve collaborative teaching and learning for teachers and students in the future.

The aim of the research project is to investigate teacher and student perspectives on collaborative teaching and learning in primary schools and the data collected will be used to inform collaborative teaching and learning in the future.

The objectives of the research are:

1. To describe collaborative teaching and learning in Primary schools and to examine the literature and research in the area.
2. To gain insight into collaboration in a primary school- to question if there is depth of prevailing teacher collaboration and to assess the importance of the teacher collaboration that exists.
3. To investigate possible positive and negative outcomes from teacher collaboration
4. Analyse the factors that may hinder or facilitate collaboration in a primary school
5. To ascertain if children feel that collaborative teaching and learning is beneficial to them

Procedures

1. The researcher will distribute a consent form and a link for a short survey, (5-10 mins long) on the topic of collaboration to the gatekeepers, ie. Principals of local schools in the area. The Principal will then distribute the link to staff members. Participants should remain anonymous and participants are reminded not to add any identifying information to the survey

2. The researcher will meet with teachers who are willing to participate in the semi-structured interviews and provide them with the information sheet and consent form to sign. They will sign the consent form and return it to the researcher by 15th March 2020
3. The researcher will send a personalised information sheet and consent form to the parents of the children in the class who may offer consent to participate in the research. The parents of those who consent to their children's participation will return the signed consent form to the school by 15th March 2020
4. The researcher will explain the research to the 28 children who may participate in the research and request that they complete a consent form

Exclusion from the project

If parental or student consent is withheld the student will not be affected in any way. The reflections from their learning logs will not be used in the research

Confidentiality and data protection

Your identity will remain confidential, and anonymity is guaranteed as names are not requested and completed surveys will have no identifying information. Names will not be used in the semi-structured interview and all recording of the interviews will be stored securely and only available to the researcher and the supervisor. Following the presentation of the research thesis the audio recordings will be destroyed (no later than five years after the end of the research project). All data will be collected, processed, and stored in compliance with relevant data protection legislation and in compliance with LYIT's Guidelines for Electronic Data Storage.

Voluntary Participation

You have volunteered to participate in this research project and signed a consent form. If you wish to withdraw from the project this may be achieved by not submitting your survey. There will be no penalty encountered if participants do not choose to participate or withdraw from the project.

Discontinuation of the study

You understand that the researcher may discontinue the project at any time without your permission.

Permission

This project has Research Ethics Approval from LYIT.

Further Information

The results of the data collection will be collected and following analysis will be presented as part of a research thesis to LYIT. The findings of the research will be stated in the thesis and will be available in the LYIT library. Anonymised findings may be used for dissemination and publications.

You may find more information about the research project or answers to any questions or queries you may have by emailing XXXXXX or XXXXXX

APPENDIX 3 GATEKEEPER CONSENT FORM

Gatekeeper Consent Form

Title of Project: Defining Collaboration in the context of an Irish primary school

Name of Chief Investigator: Roisin Horkan Mc Walters

Name of Investigators:

I, _____ agree to take part in the above study and consent to my data being used for the purpose of this research study as outlined in the information sheet.

- I confirm that I have been given and have read and understood the information sheet for the above study and have asked and received answers to any questions raised
- I understand that I will pass on a link to an online survey on collaborative teaching and learning, as outlined in the information sheet, to the teaching staff in my school
- I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without my rights being affected in any way
- I understand that the researchers will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that I cannot be identified as a participant in the study (except as might be required by law) and I give permission for the researchers to hold relevant personal data on me.
- If I withdraw from the study, there will be no negative consequences
- I can request a copy of the thesis from the researcher, following final presentation and grading
- All information will be confidential and used only for the purposes of the research study
- I understand that ID codes will be used to protect my anonymity and confidentiality and names of people and places will be changed
- I agree that quotations from the anonymous online survey may be used for the research

I agree to take part in the above study and consent to my data being used for the purpose of this research study as outlined in the information sheet.

Signature of participant: _____ **Date:** _____

Researcher signature: _____ **Date** _____

APPENDIX 4 ONLINE SURVEY CONSENT FILE

Online survey consent file

IMPORTANT: By starting the survey/clicking on the "next" [>>] button you agree to and understand the below Data Privacy Statement according to the latest EU General Data Protection Regulation (GDPR).

Survey Title: Defining Collaboration in an Irish primary school
Data Privacy Statement and Consent Form:

This is a LYIT research project, a study in which we are hoping you will participate in this year. LYIT is the data controller for this research project. This survey's aim is to investigate teacher perspectives on collaboration in Primary schools. The research will run for 6 months.

To participate, you are asked to complete the online questionnaire supplied, which should take approximately 5-8 minutes to complete. In the survey we will ask a number of the questions around the following area of teacher collaboration. You have been asked to participate as you are a teacher in a primary school and the research is concerned with teacher perspectives on collaboration.

You will be asked to provide the following item of personal data- the number of years you have been a teacher. The survey will ask about your experiences of teacher collaboration, but these will not be of a sensitive nature. The survey will be anonymous, and the provision of your name will not be required.

If you have questions or issues about this survey, please contact roisinhorkanmcwalters@gmail.com. By clicking I agree to the privacy statement and consent form you have indicated your consent to taking part in the survey. You may withdraw from the research study at any point in the survey and do not have to complete and send the response if you choose. You can obtain more information on the research project by emailing: XXXXXX or XXXXXX The method of data collection is via online survey.

There are no serious potential risks to you. It is important to note that your involvement/non-involvement in the survey has no bearing on your work as a teacher. However, by taking part in the survey, your perspective could help to develop greater insight into collaborative teaching and learning in primary schools.

Data Sharing

The data collected will only be used within by LYIT for academic purposes and will not be transferred to third parties.

Sharing of Data and Data Collection Mechanism

Participating in the survey is possible without indicating your name and without registration. All information is thus anonymous and highly confidential. It must be noted that protection of this data is subject to legal limitations. It is possible for data to be subject to subpoena, freedom of information claim or mandated reporting by some professions. The data collected will be saved on the servers of our software provider at LYIT until the end of the data collection period, which is the 31st of March at the latest; they will be encrypted and secured. The LYIT software fully complies with the latest General Data Protection Regulation (GDPR) requirements.

Rights of the Data Subject

While responding, your answers can be changed anytime. In addition, you have the rights of access, rectification, erasure (right to be forgotten), restriction of processing, data portability, to object, and not to be subject to a decision based solely on automated processing, including profiling. In addition, you can revoke your agreement with this data privacy statement anytime. For these matters and for all other related questions, please contact the researcher at XXXXXX

If participants have concerns about this study and wish to contact an independent person, please contact: The Head of Department Siobhan Cullen or the Data Protection Officer, LYIT, Port Road, Letterkenny, Co. Donegal.

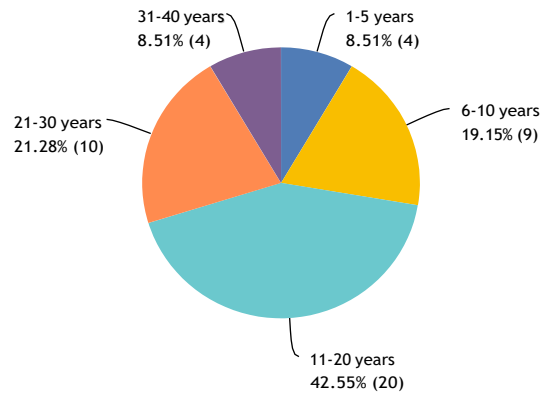
Thank you for your participation,
Roisin Horkan McWalters

APPENDIX 5 SURVEY QUESTIONS AND RESPONSES

Survey Questions and Responses

Q1 How many years have you been teaching?

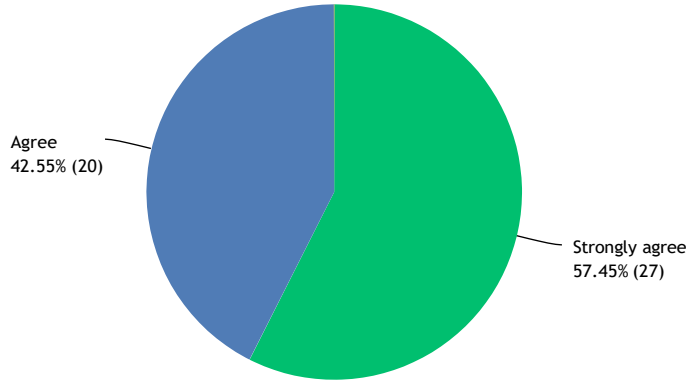
Answered: 47 Skipped:



ANSWER CHOICES	RESPONSES
less than 1 year	
1- years	8 1 4
6-1 years	19 1 9
11- years	4
1-3 years	1 8 1
31-4 years	8 1 4
TOTA	47

Q2 Please indicate if you agree or disagree with the following statement.. "From your own experience, you engage or have engaged in collaborative teaching practice."

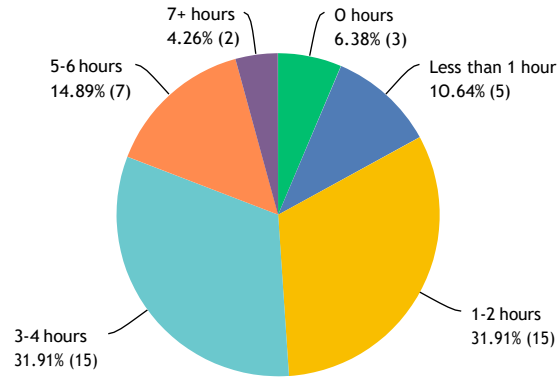
Answered: 47 kipped:



ANSWER CHOICES	RESPONSES	
trongly agree	7.4	27
Agree	42.	2
either agree nor disagree	-	
isagree	-	
trongly disagree	-	
TOTAL		47

Q3 Approximately how many hours per week, do you participate in collaborating with colleagues in your classroom?

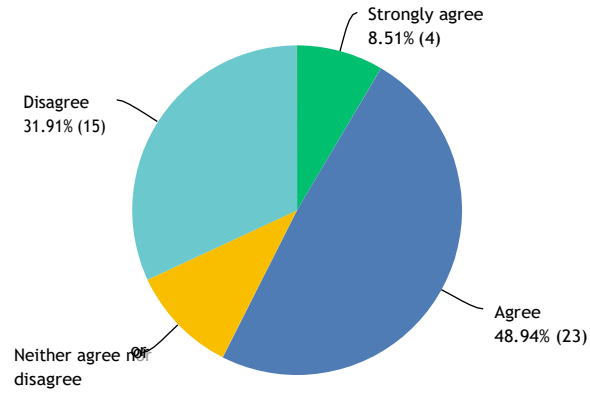
Answered: 47 Skipped: 0



ANSWER CHOICES	RESPONSES	
0 hours	6.38%	3
less than 1 hour	10.64%	
1-2 hours	31.91%	
3-4 hours	31.91%	
5-6 hours	14.89%	7
7+ hours	4.26%	2
TOTAL		47

Q4 Please indicate if you agree or disagree with the following statement.. "From your own experience, teachers share all elements of collaboration -planning , implementation, assessment and instruction."

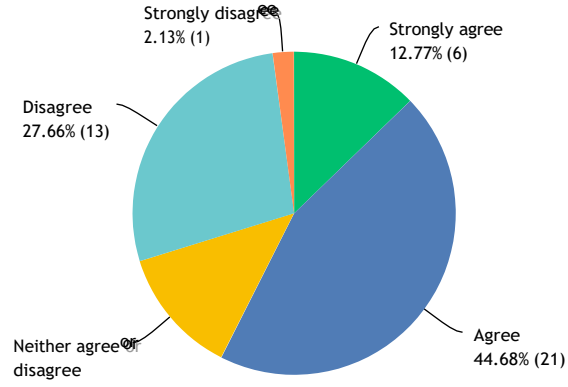
Answered: 47 Skipped:



ANSWER CHOICES	RESPONSES	
Strongly agree	-	4
Agree	48.94	23
Neither agree nor disagree	0	0
Disagree	31.91	15
Strongly disagree	-	0
TOTAL		47

Q5 P "I v b c f u u c b v w f w m m c m "

A w : 4 k pp : 0



ANSWER CHOICES	RESPONSES
A	44 8
TOTAL	4

Q6 List 3 factors that might encourage you to engage in collaborative teaching and learning

Each box represents a response from a survey participant

Good relationship with proposed co-teacher, being invited to participate, being confident in own teaching skills and admin and wouldn't mind someone else being in the classroom	I think the main factor is to serve the different needs of individual students. Secondly, it's better for the children not to be withdrawn from the classroom and thirdly it helps with managing behaviour by keeping kids on task.	Share strengths / Helps with large class size/Learning opportunities in small groups
staff training, watching collaborative teaching being modelled,	Learning from other teachers, Other classes seem to like the idea of different teachers getting involved, allows you to become more familiar to other students	Lessen the paperwork, technology and useful resources
Welcome from a teacher/good relationship with teacher, time to plan, small class sizes	Time to plan, better resources for team teaching, buy-in from leadership	Support from SET team members, benefits to pupils, shared resources and ideas
Adequate preparation time, resources that would aid collaborative practice in school, creation of a shared vision by the whole school to develop collaborative practise eg. A target in whole school plan or examine it as part of School self-evaluation.	*The ability of the children, * if a child has a particular need * If there was a whole school policy	Willingness of other teachers to participate and plan together. Also, more resources to use while station teaching, for example
appropriate group size, clear instruction, sufficient teachers	Good teamwork with other teachers, careful planning, organisation	1. Clearly setting out shared goals from the onset, so collaboration is consistent and transparent; everyone involved is on the 'same page'. 2. Provision of allocated time to collaborate more effectively and productively. 3. Mentoring role within the school to provide opportunities to team teach for those less willing/unsure; demonstrate lessons/station teaching within different class settings. Could also seek more facilitation from external services, e.g., PDST to support this.
Agreed group targets. good communication between teachers.. flexible ways of working.. if I needed to help groups of children to work together	Share visions and goals, identify group norms and help solve though conflict	1) Variety of experience for the children in Station Teaching 2) Grouping the children according to ability levels 3) Efficient use of time
1) Other teacher might have expertise in an area you don't. 2) Pupils may respond better to a	Increased ability to differentiate to pupil's needs, two heads are better	All pupils targeted

'fresh-face' 3) Station teaching can be carried out more efficiently	than one, smaller possible pupil ratio	
Training, systems for effective practice, collaborative planning	variety for the children, can target both lower and higher ability, share ideas with other staff members	Small groups for the children, for teacher to work with a smaller group. varied teaching approach
Class level appropriate Resources, Planning Time given, timetabling	Receptiveness of teacher, availability of resources, work content	Allows for smaller groups; sharing ideas and expertise; teaching more curriculum content
More training, beneficial to students, smaller groups that enable all kids to have equal opportunities to engage in learning.	Teaching partner, shared planning/assessment etc, feedback from another professional	Discussion with other teachers on how best to implement it, training course for ideas on how best to implement, observe examples either through videos or visiting a classroom
Time allocated to do planning together; physical space to do so without having to move chairs, tables etc.- (for example working with groups at stations), a partner that you are comfortable working with who is aware of the lesson objectives etc.	Pupils benefit from shared expertise, extra support for pupils, Other teacher can observe pupils and their level of attention or engagement	Enhanced learning opportunity, reduced pupil teacher ratio, offering variety.
My colleagues, time and benefits to teaching and learning	More training, more time to plan, more resources	Extra time, resources and support from the principal
Timetabling reliefs, fun active activities, cooperative colleagues	Time for shared planning, planning online, training in good idea	Needs of the class, willingness of other teacher to collaborate, class size
Shared vision and ideas, extra attention for the children, aids staff relations	Differentiation, more support for children, can learn from other teacher	Smaller pupil teacher ratio means children feel more confident about speaking to the teacher and engaging in discussion. Pupils who would never be brave enough to participate in whole class discussion feel free to express themselves and seek help when they are struggling
Training, teamwork, resources	Consistency in school, provide feedback, support morale	More training, teachers who have a special area of expertise, children who will benefit from the experience
Training	additional training, sharing of ideas, increased creativity	

Q7 List 3 factors that might discourage you from engaging in collaborative teaching and learning

Each box represents a response from a survey participant

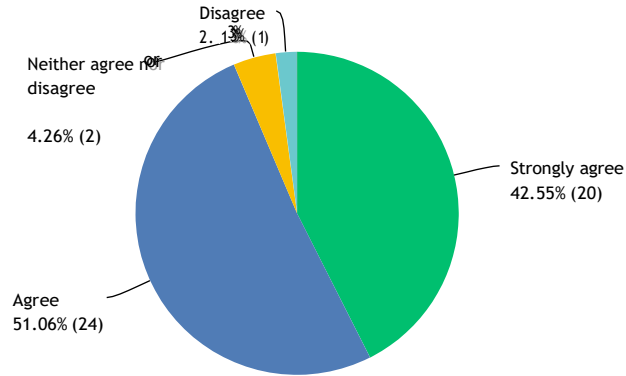
<p>Poor relationships with proposed co-teacher, being paired with a teacher who doesn't pull his/her weight with planning, insufficient resources to carry it out effectively</p>	<p>If the time available ie SEN teacher is only available at a particular time to teach collaboratively and that doesn't suit class teacher or children.</p>	<p>Time limitations / staffing / preparation time</p>
<p>being ill prepared for lessons, being self-conscious</p>	<p>Lack of time due to size of curriculum, Resources not always readily available, Load not always shared equally</p>	<p>Personality clash, poor resources , poor classroom management and structure</p>
<p>Inhospitable co-teacher, some teachers not wanting to share expertise (make you feel stupid for asking a question, traditional teaching methods more valued.</p>	<p>Difficult teaching partner, large class sizes, inadequate planning time</p>	<p>Lack of time for collaborative planning, number of pupils in classes, lack of resources</p>
<p>Being forced to collaborate with a teacher with different mindset or vision of teaching and learning outcomes, personality differences between co-teachers, lack of planning/preparation time</p>	<p>Depending on the class/The Teacher</p>	<p>Lack of willingness from other staff members, lack of resources</p>
<p>insufficient adult/teacher participation, poor preparation, lack of resources depending on task.</p>	<p>Lack of organisation, lack of commitment of team member, unforeseen changes to timetable</p>	<p>1. Unwillingness of teachers to share the collaborative roles involved, all or most of planning, implementation and assessment rests on one teacher. 2.Lack of confidence/unwillingness of some teachers to invite other professionals into their room, you can only ask so many times!. 3. Different styles of teaching may lead to conflict in how to conduct</p>

		a lesson, resulting in one or other party becoming disinterested in the practice.
No trust or lack of communication between teachers ...no clear targets... group sizes too big.. lack of preparation of children	Some not pulling weight whilst some try to take over	1) Sometimes the time allotted is insufficient 2)There can be a lot of noise/distraction 3)It can be difficult to timetable
1) Teacher may not work well in your class 2) clash of ideas/appropriate lessons 3) lack of resources available for lesson	Unequal workload- one person not pulling their weight in terms of prep and deliverance	All pupils differentiated for teachers learn from one another. Pupils learning styles are better catered for
Working from another teachers plans, not being involved in planning/ideas	Space, noise, the need to plan and lack of time to do so	Planning, organisation, timetable schedule
Lack of resources, apathy of teacher, poor class management	Time restraints for planning; limited resources; disrupting schedule	Not enough preparation time, not enough time to sit down with other teachers to discuss particular needs of children, not properly trained in co teaching
Teaching partner, lack of planning/ help with planning from other teacher, no cooperation by other participant	Having one person doing planning and wasting time explaining to the other teacher what needs to be done taking up party of the lesson, being unaware of assessment of Pupils due to another teacher having responsibility for some or all of group; a partner that you were not comfortable working with	Inadequate time to plan and discuss, If there was unequal sharing of work load , Poor relationship with other teachers
Staff reluctance, discipline issues with a particular group, timetabling	Time, been evaluated by my colleague and lack of personnel	Lack of time, lack of resources, lack of planning

Over reliant staff, size of rooms, lack of resources	Difficult to share the work with some teachers, some teacher not wanting to share planning or resources online,	Difficult teacher or class, lack of planning prior to teaching, time restrictions
Time constraints, staff relations	Time, planning	I've come across instances where teachers have watched other teachers and kept a file of 'failures' of their workmates and went on to bully the teachers using their file. They complained to the principal and the board and made life hell for the teachers they bullied and the whole school community
Timetabling, lack of support and guidance, other teacher not fully engaged	Poor time management, a lack of commitment from others, lack of training	One teacher leaving the other to do all the work, lack of time for planning of the collaboration, time constraints in the school setting-sometimes it just easier to plough on yourself!
Unsure if I was doing it effectively	co-ordination/planning time if outside of school hours, perhaps personality clash with co-teacher-a teacher that is overpowering or competitive co-teacher	Lack of time and resources, not a whole school approach
Lack of time, lack of resources, lack of planning	None	

QB Please indicate if you agree or disagree with the following statement.. "Collaborative teaching is a good instructional approach in the classroom."

Answered: 47 Skipped:



ANSWER CHOICES	RESPONSES
Strongly agree	42.55% (20)
Agree	51.06% (24)
Neither agree nor disagree	4.26% (2)
Disagree	2.13% (1)
TOTAL	47

APPENDIX 6 PARTICIPANT CONSENT FORM

Participant Consent Form

Title of Project: Defining Collaboration in the context of an Irish primary school

Name of Chief Investigator: Roisin Horkan Mc Walters

Name of Investigators:

I, _____ agree to take part in the above study and consent to my data being used for the purpose of this research study as outlined in the information sheet.

- I confirm that I have been given and have read and understood the information sheet for the above study and have asked and received answers to any questions raised.
- I understand that I will participate in collaborative teaching in my classroom, complete a reflective learning log and participate in an audio recorded semi-structured interview.
- I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without my rights being affected in any way.
- I understand that the researchers will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that I cannot be identified as a participant in the study (except as might be required by law) and I give permission for the researchers to hold relevant personal data on me.
- If I withdraw from the study, there will be no negative consequences
- I am aware that should I at any time I feel uncomfortable with being recorded, I can request that the recording equipment be turned off.
- I am aware that I am permitted to view all research and transcripts that have taken place concerning my involvement. I can request a copy of the thesis from the researcher
- All information will be confidential and used only for the purposes of the research study
- I understand that ID codes will be used to protect my anonymity and confidentiality and names of people and places will be changed
- I agree that quotations may be used for the research.

I agree to take part in the above study and consent to my data being used for the purpose of this research study as outlined in the information sheet.

Signature of participant: _____ **Date:** _____

Researcher signature: _____ **Date:** _____

APPENDIX 7 SEMI-STRUCTURED INTERVIEW QUESTIONS

Semi-structured Interview Questions

Interview schedule

Background

1. Can you give me a brief description of this school?
2. Can you briefly outline your teaching career to date?
3. How long have you been teaching here? Have you had any experience of collaboration and team teaching in the past? Where did you first hear about it or try it out?
4. Who do you team teach with? Who decided when you would team teach? What does team teaching look like in your school?

Perspectives/Experiences

1. Describe your experience of collaborative teaching and learning that you have engaged in previously
2. Do you see collaborative teaching and learning in the Primary classroom as having intrinsic value?
3. In light of your experience(s) of collaborative teaching and learning, do you think that collaborative teaching and learning is important in Primary schools?
4. Have you had any experience of professional development that had an emphasis on collaborative teaching and learning
5. Describe any challenges you have experienced in implementing collaborative teaching and learning in the classroom.
6. Why are you interested in participating in research on collaborative teaching and learning.
7. If you were to design and implement collaborative teaching practices throughout a school, what would it look like?
8. What assessment issues do you face in collaborative work?
9. Have you ever reflected on your experiences of teacher collaboration? If so, how did you do this?
10. When you have used collaborative teaching and learning practices is there anything that you found wasn't beneficial? Why?
11. How do you find the experience of working collaboratively with another staff member?
12. How do you find that students react/engage with collaborative teaching and learning practices. Do you think your students see collaborative teaching and learning work as valuable?
13. Have you ever invited children to reflect on their experiences of collaborative teaching and learning. If so, how?

APPENDIX 8 PRIORITY ETHICAL CONSIDERATIONS OF THE RESEARCH

Priority Ethical Considerations of the Research

Priority ethical considerations listed in the ethics application for this project to LYIT.

1. Gaining informed consent from the gatekeepers in the school
2. Gaining informed consent from the parents of the students in the class
3. Gaining informed consent from the students in the class who are completing the learning logs and being observed- a very clear explanation of the information sheet will be provided to the whole class and the information sheet will be read aloud in the class to support children with reading difficulties or other disabilities that may affect their comprehension
4. Gaining informed consent from the teachers in the survey and for the semi-structured interviews
5. Relevant consideration to GDPR and retention of data, audio recordings etc. Data and recordings will only be reviewed by the researcher and supervisor (if requested). Research and audio recordings will be kept securely on a password protected device and stored in accordance of LYITs Data Retention Policy for a period of 5 years.
6. Participants should be advised that they can withdraw permission up to data anonymisation.
7. Parents will be made aware that If they do not wish to allow their child to participate in the research their observations and comments will not be used. They will participate in the Social Personal and Health Education lessons (SPHE), as usual, as SPHE is a compulsory subject. However, their observations and comments from the reflective log will not be included in the research. There is no penalty for non-participation and the child will not be affected in any way if they choose not to allow their child to participate in the research.

APPENDIX 9 INFORMATION SHEET FOR PARENTS/GUARDIANS

Information sheet for parents/guardians

Participant Information

Title: Defining collaboration in the context of an Irish primary school

Name of Researcher: Roisin Horkan Mc Walters

Name of Supervisor: Julia Wilson

Introduction and aims:

Collaborative teaching, (also known as co-operative teaching or team-teaching) involves teachers working together to teach a group of students. Collaboration can be used in a variety of different instructional levels and subject areas. A statement of highly effective practice for teachers, according to the quality framework for schools “Looking at our schools 2016” is that “Teachers view collaboration as a means to improve pupil learning and to enhance their own professional development. They engage in constructive collaborative practice, and in collaborative review of practice” p.20.

Your child has been invited to participate in the research, as the researcher seeks to investigate teacher and student perspectives on collaborative teaching and learning in primary schools. Your child’s perspective could offer valuable insight into collaborative teaching and learning and improve collaborative teaching and learning for teachers and students in the future. For 10 lessons, Social Personal and Health Education lessons will be taught using team-teaching. This means that 2 teachers will work together to teach the lessons. The teachers will plan, teach and reflect on the lessons together.

The aim of the research project is to investigate teacher and student perspectives on collaborative teaching and learning in primary schools and the data collected will be used to inform collaborative teaching and learning in the future.

Following each of 10 lessons on Social Personal and Health Education (SPHE), where teachers and students have worked together in groups, your child will be asked to complete a reflective learning log on the lesson (see sample attached). This will take 3-5 minutes at the end of each lesson. If you choose to allow your child to participate in the research, their observations or comments may be included in the research. Their names or any identifying features will not be used.

If you do not wish to allow your child to participate in the research their observations and comments will not be used. They will participate in the Social Personal and Health Education lessons (SPHE), as usual, as SPHE is a compulsory subject. However, their observations and comments from the reflective log will not be included in the research. There is no penalty for non-participation and your child will not be affected in any way if you choose not to allow your child to participate in the research.

The objectives of the research are:

1. To describe collaborative teaching and learning in Primary schools and to examine the literature and research in the area.
2. To gain insight into collaboration in a primary school- to question if there is depth of prevailing teacher collaboration and to assess the importance of the teacher collaboration that exists.
3. To investigate possible positive and negative outcomes from teacher collaboration
4. Analyse the factors that may hinder or facilitate collaboration in a primary school
5. To ascertain if children feel that collaborative teaching and learning is beneficial to them

Procedures for parents

1. The researcher will send a personalised information sheet and consent form to the parents of the children in the class who may offer consent to participate in the research. The parents of those who consent to their children's participation will return the signed consent form to the school by the 15th March 2020
2. The researcher will explain the research to the 28 children who may participate in the research and request that they complete an age appropriate consent form by the 15th March 2020.

Exclusion from the project

If parental or student consent is withheld the student will not be affected in any way. They will participate in the Social Personal and Health Education lessons as it is a compulsory curriculum subject, however, the observations and reflections from their learning logs will not be used in the research.

Confidentiality and data protection

Your child's identity will remain confidential, and complete anonymity is guaranteed as names are not requested and completed reflected logs used in the research will have no identifying information. All data will be collected, processed, and stored in compliance with relevant data protection legislation and in compliance with LYIT's Data Retention Policy.

Voluntary Participation

You will have consented for your child to participate in this research project and signed a consent form. If you wish to withdraw your child from the project, this may be achieved by

contacting the researcher, up to the point of data analysis for the reflective logs (2nd April 2020). There will be no penalty encountered if you do not choose to allow your child's reflective log to become part of the research.

Discontinuation of the study

You understand that the researcher may discontinue the project at any time without your permission.

Permission

This project has Research Ethics Approval from LYIT.

Further Information

The results of the data collection will be collected and following analysis will be presented as part of a research thesis to LYIT. The findings of the research will be stated in the thesis and will be available in the LYIT library. Anonymised findings may be used for dissemination and publications.

You may find more information about the research project or answers to any questions or queries you may have by emailing XXXXXX or XXXXXX

APPENDIX 10 INFORMATION SHEET FOR CHILDREN

Information Sheet for children

Participant Information

Title: Defining collaboration in the context of an Irish primary school

Name of Researcher: Roisin Horkan McWalters

Introduction and aims: What is the research about? Why is the research taking place?

Collaborative teaching, (also known as co-operative teaching or team-teaching) involves teachers working together to teach a group of students. Collaboration can be used in a variety of different instructional levels and subject areas. Group work is an example of collaborative learning.

You have been invited to participate in the research, as XXXXXX wants to investigate teacher and student views on collaborative teaching and learning in your school. You could help XXXXXX to understand how group work and teachers working together in your classroom affects you. XXXXXX would like to know what you think about team teaching and group work. This is an aim of the research project.

The data collected will be used for planning team teaching and group work in the future.

The main reason that the researcher is asking you to take part in the research is because one of the objectives of the research is to find out if students think that 'team teaching' or 'group work' is good for them.

Procedures- What will you have to do?

1. Following informed consent from your parent/guardian and from you, and after each one of 10 Social Personal and Health Education (SPHE) lessons, you will be asked to fill in a reflective learning log about the lesson. This will only take a few minutes at the end of the lesson.

Exclusion from the project- What if I don't want to do it?

If you do not want to participate in the research your reflections from the learning logs will not be used in the research. You will still take part in your SPHE lessons, as usual, as SPHE is a compulsory curriculum subject.

Confidentiality and data protection- Who will know about this?

Your will remain anonymous in the research and I will not use your name. No-one will be able to identify you.

Voluntary Participation- Do I have to take part?

No, you do not have to take part in this research, but if you want to take part you will sign a consent form. If you wish to withdraw from the project, you may do so by contacting XXXXXX, up to the point of data analysis for the reflective logs (2nd April 2020). There will be no penalty for you if you do not choose to allow your reflective log to become part of the research.

It is your choice to participate in the research. If your parent/guardian gives consent for you to take part and you do not want to, then that is fine. You have can change your mind at any stage and this will not affect you in any way.

Discontinuation of the study- Can the research be stopped at any time?

You understand that the researcher may discontinue the project at any time without your permission.

Permission

This project has Research Ethics Approval from LYIT.

Further Information

The results of the data collection will be collected and following analysis will be presented as part of a research thesis to LYIT. The findings of the research will be stated in the thesis and will be available in the LYIT library. Anonymised findings may be used for dissemination and publications.

You may find more information about the research project or answers to any questions or queries you may have by asking XXXXXX.

APPENDIX 11 PARENT/GUARDIAN CONSENT FORM

Parent/Guardian Consent Form

Title of Project: Defining Collaboration in the context of an Irish primary school

Name of Chief Investigator: Róisín Horkan Mc Walters

Name of Investigators:

I, _____ agree to take to allow my child _____ to take part in the above study and consent to his/her data being used for the purpose of this research study as outlined in the information sheet.

- I confirm that I have been given and have read and understood the information sheet for the above study and have asked and received answers to any questions raised
- I understand that my child will participate in collaborative teaching and learning in his/her classroom and complete a reflective learning log following lessons
- I understand that my child's participation is voluntary and that I am free to withdraw her participation at any time, without giving a reason and without my rights or my child's rights being affected in any way
- I understand that the researchers will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that my child cannot be identified as a participant in the study (except as might be required by law) and I give permission for the researchers to hold relevant personal data on my child
- If I withdraw permission for my child to participate in the study, there will be no negative consequences
- I am aware that I am permitted to view all research and transcripts that have taken place concerning my child's involvement. I can request a copy of the research from the researcher
- All information will be confidential and used only for the purposes of the research study
- I understand that ID codes will be used to protect my child's anonymity and confidentiality and names of people and places will be changed
- I agree that quotations may be used for the research.

I agree that my child may take part in the above study and consent to my child's reflective log and observations being used for the purpose of this research study as outlined in the information sheet.

Signature of parent/guardian: _____ **Date:** _____

Researcher signature: _____ **Date:** _____

APPENDIX 12 ASSENT FORM FOR CHILDREN

Assent form for children

Research Participant Student Consent Form

Title of Project: Defining Collaboration in an Irish primary school

Name of Chief Researcher: Roisin Horkan Mc Walters

I, _____ agree to take part in the above study and consent to my data being used for the purpose of this research study as outlined in the information sheet.

- I confirm that I have been given and have read and understood the information sheet for the above study and have asked and received answers to any questions raised.
- I understand that I will complete a reflective learning log after a lesson where I have worked in a group and that this data will be read XXXXXX who is researching how teachers and students work in groups. I understand that my thoughts in the reflective learning log may be used in the research about teaching and learning in groups
- I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without my rights being affected in any way.
- I understand that the researchers will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that I cannot be identified as a participant in the study (except as might be required by law) and I give permission for the researchers to hold relevant personal data on me.
- If I withdraw from the study, nothing bad will happen to me
- I am aware that I am permitted to view all research and logs that I have completed. I can request a copy of the report from the researcher
- All information will be confidential and used only for the purposes of the research study
- I understand that ID codes will be used to protect my anonymity and confidentiality and names of people and places will be changed
- I agree that quotations may be used for the research.

I agree to take part in the above study and consent to my reflective log and observations being used for the purpose of this research study as outlined in the information sheet.

Signature of participant: _____ **Date:** _____

Researcher signature: _____ **Date:** _____

APPENDIX 13 ABBREVIATED FIELD JOURNAL EXTRACT

Sample of researcher journal from Step 1- Become familiar with data ((Braun and Clarke 2006)

Teachers do seem to think that collaboration is a good idea and that it is an important part of teaching and learning but they so seem to think that there are some difficulties with it too and that it is not always useful. Teachers also seem to think that there are huge benefits when effective teacher and student collaboration is utilised. However, there also seems to be clear issues that can affect the successful implementation of collaborative teaching and learning and despite an overwhelming number of teachers believing that teacher collaboration is a good instructional approach in the classroom, many are unable to implement it effectively due to reasons beyond their control. The emotional response to teacher collaboration is important.

APPENDIX 14 CODES-SEARCH FOR THEMES

Theme : The purpose of collaborative teaching and learning collaboration Codes	Theme : Teachers Attributes Codes	Theme: (Reasons for engaging in collaborative teaching and learning (or not) Codes
Different strategies for collaborative learning	Draw support from each other	Collaboration is very common at the moment
Collaboration caters for all abilities	Look forward to it	Multitude of brilliant ideas and brilliant theories and practical applications
Collaboration increases student engagement	Work well together	Visual immediate feedback in collaborative lessons
Fun engaging activities in collaborative work	Trust the other teacher	Immediate response to see how they are doing
Collaboration improves teacher skills	Honest expectations	More positive than negative when it comes to assessment
See and use teacher skills in collaborative teaching and learning	Good advice	If you don't have the resources available collaboration is difficult
Get far more teaching done	Open to feedback	Not very confident at collaboration
To hear everybody else's perspective and advice	Like feedback	Not enough courses on collaboration
Reflect on collaborative teaching and learning	Nice to hear it is going well	Not doing enough collaborating being done
Take out the benefits from it and get my own personal views on it	Plenty of people who are positive in their outlook on teacher collaboration	Bit all over the place at the start of collaborative lessons
Reflect on collaborative teaching and learning afterwards	Teachers who are willing to try new things and change things	Use your skills and knowledge for the best in collaborative teaching and learning
Had not expected it to be so easily done	Very easy-going person	Certain aspects need more resources
Oral reflections No formal reflections	Right type of person	More finances needed to push forward with collaborative teaching and learning
Learned from the other teacher and vice versa	Very supportive and gives you any information you need	Not practical every day every week
Need more professional development	Experiences of collaborative teaching has been so positive because of the person I was working with	Could be expanded
Good feedback from the inspector	Have to be able to work together	Based on needs of the class
Asked students for their opinions on collaborative teaching and learning	Fair	Small numbers
	Need to get on well with the other teacher	Lack of space, resources and time
	Has to be give and take	

		Too much paper work, needs to be shared
<p>Theme: How is teacher and student collaboration used in the classroom (or not)</p> <p>Codes</p> <p>Working collaboratively with other teachers</p> <p>Working collaboratively with small groups</p> <p>Well planned, organised collaborative group</p> <p>Collaboration caters for all abilities</p> <p>Used for collaborative Maths station teaching</p> <p>Used for collaborative English station teaching</p> <p>6 week block, 1 hour 3 times a week- biannually</p> <p>Used for different collaborative assessments</p> <p>Need resources for collaboration</p> <p>Should reflect more on collaborative practice</p> <p>Need to make sure you have enough time to collaborate</p> <p>Need to reflect after collaboration</p> <p>Scope to use for more subjects</p> <p>Children organise own groups</p> <p>Unsupervised activities difficult to assess</p> <p>Take turns teaching</p> <p>Get to more students</p> <p>Good use of teacher resources in a big class</p>	<p>Theme : Responses to Collaboration</p> <p>Codes</p> <p>Not confident at the start of collaborative practice but another teacher gave me different strategies</p> <p>Not very confident at teacher collaboration</p> <p>Draw support from each other during teacher collaboration</p> <p>Draw from each other in teacher collaboration</p> <p>Work together when collaborating</p> <p>Kind of nervous in the beginning</p> <p>No experience of it</p> <p>Feel less isolated when engaged in collaborative teaching and learning</p> <p>Really bonded well with the other teacher</p>	<p>Theme : What do students feel about collaborative teaching and learning</p> <p>Codes</p> <p>Collaborating is good for self esteem</p> <p>Quiet child could speak more freely in collaborative group</p> <p>Think together, work together in collaborative work</p> <p>Group conflict, some students might not get on in a collaborative group</p> <p>Students not vocalising, need more encouragement in collaborative work</p> <p>Enjoy collaborative teaching and learning</p> <p>Get more attention during collaborative lessons</p> <p>Have a role in the collaborative group</p> <p>Self-esteem improves during collaborative teaching and learning</p> <p>Sense of achievement following collaborative teaching and learning</p> <p>All kinds of positives</p> <p>Not individual learners and can work together</p> <p>Getting a choice in own learning is a positive for collaborative learning</p> <p>Lead own learning in own group</p> <p>Love new people</p> <p>Love a change of pace</p> <p>React differently to a different teacher</p> <p>Have responsibility</p>

		<p>Sometimes hard to hear if a teacher speaks loudly</p> <p>Really look forward to collaborative teaching and learning</p> <p>See it as valuable</p> <p>Look forward to it</p> <p>Different to the norm</p>
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APPENDIX 15 DEFINITIONS OF THEMES AND CORRESPONDING DATA EXTRACTS

Theme	Definitions of Themes	Data Extracts Supporting Themes
Bespoke learning through teacher collaboration	<p>The diverse experiences of individual learning experienced by teachers who have engaged in collaborative teaching and learning, is at the crux of this theme. Teachers identified various avenues of reciprocal learning and professional learning growth opportunities throughout the collaborative teaching and learning process</p>	<p>“teachers will have special area of expertise that might encourage collaborative learning”</p> <p>“learning things from another teacher”</p> <p>“discussion on how best to implement it”</p> <p>“observe examples either through videos or visiting another classroom”</p>
Collaboration strengthens professional relationships between colleagues	<p>Teacher collaboration that augments professional teacher developments and practices, professional dialogue, contextual learning, and an increased sense of community, prevails in this theme relating to building professional relationships with colleagues that impacts on teaching and learning</p>	<p>“sharing of ideas”</p> <p>“supports morale”</p> <p>“aids staff relations”</p> <p>“shared vision and ideas”</p> <p>“cooperative colleagues”</p> <p>“being invited by another teacher to collaborate is a good thing”</p> <p>“welcome from a teacher”</p>
Candour as a teacher characteristic of successful collaborative practice	<p>The data analysis highlights that successful teacher collaborative practice, as identified by the volunteer participants, depends on collaborative teaching pairs or groups with high levels of trust between them, with candour and a willingness to be open to try new ideas to improve teaching and learning forming the basis of this theme.</p>	<p>“good relationship with the proposed co-teacher and being confident in own teaching skills and admin and wouldn’t mind someone else being in the classroom”</p> <p>“clearly setting our goals from the onset, so collaboration is consistent and</p>

<p>Subtheme: The value of feedback for teachers</p>	<p>Central to being able to engage in new practices, is a necessity to embrace reflection and feedback to support professional growth. Teachers emphasised the importance of collaborating with teachers who are open to feedback and learning from and with other teachers as highly indicative of successful collaborative practice.</p> <p>The data highlighted that teachers are acutely aware of perceived criticisms in collaborative teaching and learning settings (and are keen to avoid it).</p>	<p>transparent- everyone involved is on the 'same page' “.</p> <p>“co-teacher who is open to feedback”</p> <p>“other teacher who asks for feedback and who doesn't mind listening to perspectives contrary to their own”</p> <p>“learned so much from other teachers who pointed out things to me”</p> <p>“At times it can be a little overwhelming when teachers comment on things that happen in the class and you have to see it not as a criticism but as something constructive”</p> <p>“delighted to be asked to provide feedback to another co-teacher, especially as s/he has more experience than I have”</p>
<p>Developing agency in teacher collaboration</p> <p>Subtheme: Teacher endorsement</p>	<p>Teachers expressed greater levels of self-belief in their self-efficacy as teachers following collaborative teaching sessions when co-teachers and/or students appraise their teaching positively</p> <p>Teachers and students both expressed that they learned may inter and intra personal skills through collaborative teaching and</p>	<p>“can learn from another teacher”</p> <p>“because I wasn't really confident at the start, maybe teaching, with another adult in the classroom, and this gave me different strategies to use, so it was very beneficial too.</p> <p>“For me it's something that I am not very confident doing and I would love to maybe do more courses on it. I don't feel like I've done enough at the same</p>

	<p>learning that moved beyond academic learning</p>	<p>time. If it's something that is quite common at the minute. I feel myself that we aren't, in my class, doing enough of it"</p> <p>"increased creativity for teachers and students"</p> <p>"mentoring role within the school to provide opportunities to team teach for those less willing/unsure and demonstrating lessons/station teaching within different class setting"</p>
<p>Student engagement experiences of collaborative teaching and learning</p>	<p>The impact of effective collaborative teaching and learning and the experiences of collaborative teaching and learning and the affect that those experiences have on students in schools is encapsulated in this theme. The data appears to indicate that successful collaborative teaching and learning has the potential to improve student experiences and that the value of collaborative teaching and learning on student engagement is significant.</p>	<p>"pupils may respond better to a 'fresh face'.</p> <p>"The children really benefited from it and they really enjoyed it. It also provides for different learners, for their different abilities. Some might not speak out in a group, a larger group, but they would in a smaller group. So you would have the very quiet child that wouldn't speak out in class but in a smaller group would speak more freely, it is very good for their self-esteem"</p> <p>"smaller pupil teacher ratio means children (students in class) feel more confident about speaking to the teacher and engaging in discussion. Pupils who would never be brave enough to participate in whole class discussions feel free to express themselves and seek help even when they are struggling"</p> <p>"allows you to become more familiar to other students"</p>

APPENDIX 16 ACRONYMS AND ABBREVIATIONS

BERA	British Educational Research Association
CAQDAS	Computer Assisted Qualitative Data Analysis Software
DEIS	Delivering Equality of Opportunity in Schools
GDPR	General Data Protection Regulations
LYIT	Letterkenny Institute of Technology