SUMMARY

While music has been a compulsory area of study in primary schools in the Republic of Ireland since the late 19th century, the successful implementation of the music curriculum has, for over a century, presented many challenges for the generalist primary teacher (Walsh, 2012). Persistent concerns and complaints from teachers include perceptions that the teaching of music requires specialist knowledge and skills which the majority of primary teachers profess to lack (Benson, 1979; Herron, 1985; Meany, 1986; Heneghan, 2002).

The aim of this exploratory study was to examine from the perspective of twenty teacher-participants, the influence of a school–university coteaching music partnership. ‘Coteaching involves two or more teachers learning from each other while sharing the responsibility for teaching the students’ (Murphy & Scantlebury, 2010, p. 1). While the findings from research on coteaching science present an optimistic outlook in terms of reciprocal professional development for both in-service and pre-service teachers (Murphy & Beggs, 2010; Gallo-Fox & Scantlebury, 2016), this study sought to better understand the practices, opportunities and challenges associated with coteaching music and to contribute to forming a more robust research base upon which further development might take place. The study also explored the affordances of coteaching in terms of professional development in music.

This coteaching music study took place, with the agreement of the school principal and Board of Management in a primary school, adjacent to the university and situated in an area of economic and social disadvantage. Every class teacher from Junior Infants (age 4-5) to Sixth class (age 12-13) volunteered annually to coteach music with a pre-service music teacher and to participate in the coteaching study. Six teachers (6/20) completed all three years, nine teachers (9/20) completed two years and twenty teachers (20/20) completed one year.

Drawing on socio-cultural theories of learning and adopting a mixed-methods design, data were obtained from a variety of sources during the three-year study. Annual teacher semi-structured interviews were conducted by the researcher at the end of each coteaching residency. Two months after the study was completed, a set of ten teacher interviews were conducted by two independent interviewers including a school principal from another school and a university lecturer, neither of whom were known to the interviewees. Researcher field notes compiled over three years, pre-and post-coteaching teacher confidence audits, teacher reflection journals, pre-service music teacher reflection journals and some artefacts complete the data-set. Analyses involved multi-readings, coding, thematic identification and triangulation.
Two significant findings emerged as central to participant experiences. The first was a development in teacher agency including perceptions of increased confidence in teaching music, an expanded vocabulary to describe and analyse music and a limited number of skills associated with the three strands, Composing, Listening and responding and Performing. The second involved a change in school culture such that a hitherto predominantly solo teaching culture yielded to a culture of collaborative practice. Additionally, all teachers indicated that they now possessed increased confidence in the value of their own expertise as pedagogues, a greater desire to collaborate professionally and an awareness of the learning opportunities afforded to children via coteaching.

Three particular perspectives were derived from the data: coteaching may facilitate teacher professional development and promote a collaborative culture in the primary school; primary curricular music is a subject of great richness and complexity which benefits greatly from the skills of a musician coteacher and the primary classroom teacher plays a central role in the coteaching partnership in ensuring development and integration of music across the curriculum. The school in which the study was situated subsequently sustained the music coteaching partnership and is currently hosting additional coteaching arrangements in mathematics, dance and science and a teacher–parent partnership.

This study has implications for how primary schools and the Department of Education and Skills might consider coteaching as a non-hierarchal, locally-based teacher professional development model (Kerr, 2010), as a means of creating meaningful local knowledge, supporting teacher agency, promoting collaborative practice and facilitating change. The findings have particular significance for national agencies such as providers of teacher education and for the Teaching Council of Ireland and the Department of Education and Skills in terms of establishing school–university partnerships based on reciprocal benefit and mutual learning.
I declare that this thesis has not been submitted as an exercise for a degree at this or any other university and it is entirely my own work. I agree to deposit this thesis in the University’s open access institutional repository or allow the library to do so on my behalf, subject to Irish Copyright Legislation and Trinity College Library conditions of use and acknowledgement.

Marita Kerin

Date

April, 2019
I would first like to express my very great appreciation to the School of Education at Trinity College Dublin and the Faculty of Arts for funding this research.

Collaboration is relevant to the subject matter of this study and to the context in which it was undertaken.

- I owe much to an extraordinary principal and spectacular primary school staff. Each one of you deserves special mention for agreeing to research with me every step of the way. Working with you was, and continues to be, an absolute joy.
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## GLOSSARY OF TERMS

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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>/1/2/3</td>
<td>Year 1/Year 2/Year 3</td>
</tr>
<tr>
<td>AERA</td>
<td>American Educational Research Association</td>
</tr>
<tr>
<td>TI Anon/3</td>
<td>Externally conducted anonymously recorded teacher interviews</td>
</tr>
<tr>
<td>BERA</td>
<td>British Educational Research Association</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuous Professional Development</td>
</tr>
<tr>
<td>CtDM</td>
<td>Coteaching Developmental Model</td>
</tr>
<tr>
<td>DEIS</td>
<td>Delivering Equality of Opportunity in Irish Schools</td>
</tr>
<tr>
<td>DES</td>
<td>Department of Education and Skills</td>
</tr>
<tr>
<td>ECER</td>
<td>European Educational Research Association Conference</td>
</tr>
<tr>
<td>INTO</td>
<td>Irish National Teachers’ Organisation</td>
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<tr>
<td>IST</td>
<td>In-service Teacher</td>
</tr>
<tr>
<td>ITE</td>
<td>Initial Teacher Education</td>
</tr>
<tr>
<td>MCt</td>
<td>Musician–coteacher</td>
</tr>
<tr>
<td>MCtRJ</td>
<td>Musician–coteacher Reflection Journal</td>
</tr>
<tr>
<td>PCK</td>
<td>Pedagogical Content Knowledge</td>
</tr>
<tr>
<td>PrCtCA</td>
<td>Pre-coteaching Confidence Audit</td>
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<tr>
<td>PST</td>
<td>Pre-service Teacher</td>
</tr>
<tr>
<td>RFN/PP</td>
<td>Researcher Field Notes. Pre-Participation</td>
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<tr>
<td>RFN/1</td>
<td>Researcher field note, 1st year, RFN/2 (2nd year), RFN/3 (third year)</td>
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<td>SMEI</td>
<td>Society for Music Education in Ireland</td>
</tr>
<tr>
<td>SPI</td>
<td>School Principal Interview</td>
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<tr>
<td>TCI</td>
<td>Teaching Council of Ireland</td>
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<td>TI</td>
<td>Teacher Interviews</td>
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<td>TRJ</td>
<td>Teacher Reflection Journal</td>
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<td>WSE</td>
<td>Whole School Evaluation</td>
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CHAPTER ONE - INTRODUCTION

The demanding task of building sustained collaborations is particularly worthwhile when we address large questions that cannot be resolved by solo efforts (John-Steiner, 2000, p. 204).

1.1 Overview

Primary teachers occupy a crucially important position on the continuum of music education in the Republic of Ireland (McCarthy, 1999; Heneghan, 2002; Stakelum, 2008; O’Callaghan, 2003; Murphy, 2012). However, many primary teachers believe that they lack the expertise and experience necessary to teach music (Herron, 1985; INTO, 1989; Heneghan, 2002; Murphy, 2012). Various solutions have been tried and tested over the years including exchanging expertise amongst staff members and forming partnerships with outside agencies (Flynn & Johnston, 2016; Kenny & Morrissey, 2016), however, research in relation to how such interventions were experienced by primary teachers is limited. Therefore, this study sought teacher perspectives on a coteaching music partnership between in-service primary teacher and pre-service music teacher.

Chapter one, presents the aim, the motivation and the particular set of circumstances which provided the stimulus for this study. The prospect of introducing a coteaching music affiliation is situated within the context of Initial Teacher Education (ITE) reform in Ireland (Teaching Council, 2013a; 2013; Hall et al., 2018) which includes a focus on developing meaningful collaborations between school and Higher Education Institutes (HEIs). The scholarship which evidences the potential within coteaching for reciprocal professional development is then introduced as are the broad, generative research questions which were posed at the commencement of the study. As primary teacher, music teacher educator and researcher, the author articulates her positionality, addressing issues in relation to preconceptions, presumptions and bias. Finally, the structure of the thesis is outlined, referencing the content of each of the seven chapters.
1.2 Aim and Motivation

The aim of this study was to explore, analyse and document the perspectives of twenty primary teachers, all from the same school, on their experiences of coteaching music. The study comprised of a three-year collaboration between in-service primary teachers (ISTs) and pre-service music education teachers (PSTs) during their first year of a four-year university course. A particular focus was on investigating the potential, inherent in coteaching for establishing a mutually beneficial, sustainable school–university partnership. In this study, the IST assumed the role of pedagogy expert while the PST presented as music expert.

The motivation for the study emanated from two separate educational concerns. The first related to a desire to address the ubiquitous problem of primary teachers’ perceived confidence deficits in relation to teaching music, evidence of which forms a large body of research from Great Britain (Mills, 1989; Hennessy, 2000; Holden & Button, 2006; Welsh & Henley, 2014), Australia (Gifford, 1993; Jeannerett, 1996; Russell-Bowie, 1993, 2009), the USA (Wiggins, 2008) and Ireland (Kelly, 1978; Carpendale, 1992; Herron, 1985; Heneghan, 2002; INTO, 2009; Murphy, 2012). Autobiographical submissions from incoming students to the Trinity College Bachelor in Music Education Degree programme confirm these findings annually since few if any of the undergraduate music education students testify to having received instrumental or vocal music tuition as part of the publicly funded education system in the Republic of Ireland. Furthermore, reports on the quality of music in primary schools in Ireland, (Benson, 1979; Herron, 1985; McCarthy, 1999; Heneghan, 2002, 2004) highlight the lack of resourcing of music in the primary school. Creativity and the Arts in the Primary School (2009), a discussion document produced by the Irish National Teachers’ Organisation (INTO) education committee indicates that, in line with Hennessy (2000) and McCullough (2005) most primary teachers in Ireland perceived their own lack of musical ability and/or training as barriers to teaching the music curriculum, this, almost twenty years after the same issue was first mooted in the U.K. by Mills (1989) as an urgent matter in need of attention. While the recently published research report Exploring Teacher-Artist Partnership as a Model of Continuous Professional Development for Supporting & Enhancing Arts Education in Ireland (Kenny & Morrissey, 2016) is indeed timely, primary teachers’ low self-esteem regarding their ability to teach music (INTO, 2009) might have seriously impacted ISTs willingness to participate in a music partnerships (Hallam et al., 2009; Seddon & Biasutti, 2008).
The second concern related to the need for providers of ITE programmes in Ireland to develop meaningful professional partnerships with schools to create restructured, extended and enhanced *practicums* or professional placement experiences for pre-service teachers (Coolahan, 2003; DES, 2006; Teaching Council, 2011b, 2013; Hall et al., 2018). According to Aigleis (2009), ‘systematic research opportunities for schools and ITE colleges to work closely together as a learning community in the area of teaching practice have been few’ (p. 84). Prompted by a commitment to researching the affordances of coteaching as a reciprocally–beneficial partnership model, this study sought the perspectives of teachers from a local inner-city primary school on coteaching music with a pre-service teacher, specifically inquiring into whether coteaching had the capacity to offer professional learning support for ISTs who volunteered to host music PSTs (Murphy, 2016; Gallo-Fox & Scantlebury, 2016).

Situated within a socio-cultural theoretical framework, this study aimed to provide opportunities to generate new understanding relating to the impact of coteaching music, providing a knowledge base on how a school–university coteaching music partnership was enacted, experienced, understood and implemented. Coteaching, once established, might have the potential to create occasions for building relational trust (Gergen, 2012) between schools and HEIs and present opportunities for developing more nuanced understandings of the professional learning of both PST and IST. If consistent with the published literature, coteaching music might provide an enhanced ITE model incorporating IST and subject specialist PST engaged with one another, learning with and from one another on-site, in an atmosphere of mutual self-development (Murphy & Scantlebury, 2010). This study attempted to:

- introduce coteaching as a means of supporting the primary teacher to teach music (Kerin & Murphy, 2015, 2018)
- explore, in a new context, potential opportunities for professional learning in a coteaching arrangement (Murphy, 2016; Gallo-Fox & Scantlebury, 2016; Kerin & Murphy, 2018)
- capture and harness co-evolutionary processes encountered by participants while learning to engage in sharing professional expertise (Stetsenko, 2005)
- cultivate and promote a culture of on-site reciprocal professional learning (Kerr, 2010; Murphy, 2016; Gallo-Fox & Scantlebury, 2016; Kerin & Murphy, 2015).
1.3 A Changing Context in Initial Teacher Education

While the notion of establishing school–university partnerships in the context of ITE was discussed in the United States in the 1980s (Sirotnik & Goodlad, 1988) and in Britain some years later (Booth et al., 1990; Alexander, 1990; Furlong et al., 2006), it was only recently that the topic gained momentum in Ireland (GOI, 2002; Coolahan, 2003; DES, 2006; Aingleis, 2009; O’Donoghue et al., 2017; Hall et al., 2018). Although the Guidelines on School Placement (Teaching Council, 2013(a)) recommend school–HEI partnerships that are mutually enriching for school communities, HEIs and student teachers, building good working partnerships is perceived as an extremely demanding challenge from the perspective of the HEI (Harford & O’Doherty, 2016; Hall et al., 2018). While positively inclined towards the cultural shift which sees PST on school placement as both learner and teacher, reports from HEI school placement tutors suggest that school personnel view the new model as ‘troublesome’, ‘inconvenient’ and ‘intrusive’ (Hall et al., 2018, p. 125). In particular, both concern and criticism in relation to the lack of detail around the roles and responsibilities of the individual institutions within these partnerships has been expressed (Harford & O’Doherty, 2016) while O’Grady (2017) concluded that school managers and ISTs claimed an increased workload as a consequence of partnership, urging HEIs to provide greater levels of support for the schools.

There were several challenges in establishing a school partnership for the Bachelor in Music Education Degree programme. These included the difficulty in securing school placements for PSTs of music education at a time of economic recession in Ireland; fiscal constraints had already resulted in curricular cutbacks (Irish Times, 8th October 2013). Furthermore, school principals reported negative parental perceptions regarding the teaching ability and teaching quality of pre-service teachers and they themselves, as school leaders, were also concerned about the absence of structured learning supports for undergraduate PSTs during school placement (personal correspondence, 2012). In seeking to re-conceptualise the traditional model of pre-service induction in the Bachelor in Music Education Degree programme with a view to maximising the potential and the opportunity that an extended school placement might afford PSTs, an opportunity was presented to consider how, as an ITE provider, the university might offer support in the form of professional development to ISTs in partner schools.

One such mechanism for collaborative engagement is coteaching as it brings two (or more) teachers together to expand their own learning opportunities and to enhance the learning opportunities for the pupil (Murphy & Beggs, 2005(a), (b); Roth & Tobin, 2005; Murphy & Scantlebury, 2010; Murphy, 2016). Research conducted on mutual professional learning between in-service and pre-service teachers while coteaching science (Murphy & Beggs, 2005(a); Carlisle, 2008; Kerr, 2010; Murphy &
Scantlebury, 2010; Gallo-Fox & Scantlebury, 2016) offers a template for the development of a model which might afford similar professional learning opportunities for primary music teaching.

1.3.1 Restructuring Teacher Professional Development

Teacher professional development in Ireland has been criticised for its ad-hoc and fragmented delivery (Loxley et al., 2007; Conway et al., 2009; Murchan et al., 2009). As experienced internationally, much of the provision is ‘skills-based, curriculum-focused and accessible during summer courses’ (Banks & Smyth, 2011, p. 4). Banks and Smyth (2011) recommend an ‘active and constructive process that is problem-oriented, grounded in social settings and circumstances and takes place throughout teachers’ lives’ (p. 5). While it is widely acknowledged that such learning is most effective when teachers are involved in its design and take ownership of their own learning (Burke, 2004), Banks and Smyth (2011) recognise ‘the persistence of top-down rather than teacher-led models of provision (p. 32). In Ireland, other forms of teacher professional development are offered through university postgraduate courses and outreach programmes (Buckley, 2005; Murphy, 2012). However, the attitude of teachers in Ireland according to Conway et al. (2009) is that there is little cohesion between the different programmes that are currently on offer. The aforementioned authors call for improvements in professional development provision to include a greater system of programme coherence; mentoring and assisted practice models; vibrant university and school partnerships and the promotion of teacher research and enquiry. This view is supported by a recent Education and Social Research Institute report (Banks & Smyth, 2011) commissioned by the Teaching Council of Ireland. Recommendations from this Report entitled Continuous Professional Development among Primary School Teachers in Ireland include the following:

- CPD should be aligned with the ‘day-to-day' work of the teachers
- CPD should be offered and accessed in informal settings and
- the Issue of lack of time, which was cited by teachers as an impediment to access, should be addressed.

This coteaching music study is premised on the idea that such a carefully developed professional learning partnership might have the potential to offer an alternative, relevant, on-site, accessible form of professional development.

1.3.2 Coteaching as Professional Development
Research into the teaching of science in Northern Ireland (Murphy & Beggs, 2005; Carlisle, 2010; Murphy, 2016) has shown the benefits of coteaching for ISTs, PSTs and school pupils. Primary teachers who struggled with the demands of specialised subjects such as science and mathematics reported an increased confidence in these curricular areas after coteaching with subject-specialist pre-service teachers. These findings are supported by a considerable body of international research also concluding that coteaching with a subject specialist positively impacted primary teacher confidence in teaching science and mathematics (Roth & Tobin, 2005; Bacharach et al., 2010; Gallo-Fox, 2008; Gallo-Fox & Scantlebury, 2016). Such results suggest that in the context of a reciprocally beneficial school–HEI partnership coteaching music might offer ISTs the opportunity to develop knowledge and skills in music thus addressing their perceived levels of low self-esteem in teaching primary music.

In the United States, the National Council for Accreditation of Teacher Education (NCATE) Blue Ribbon panel on teacher education and school partnership documented the significant role of school placement in the development of pre-service teachers and identified coteaching as a model for linking theory and practice (NCATE, 2010). In Ireland also, the Report of the Bachelor in Music Education Review Panel (2013) endorsed the research on coteaching (Murphy & Beggs, 2005; Carlisle, 2008; Murphy, 2010) recommending its introduction in the context of the school placement module within the Bachelor in Music Education Degree programme (Teaching Council, 2013(b), p. 10).

Unlike many pre-service school placement models, coteaching assumes that within a specific classroom there is a shared and equal responsibility for pupil learning amongst coteachers (Murphy, 2016). With coteaching, PSTs experience a teaching partnership that recognises and acknowledges the expertise they themselves bring to the school context. Coteaching promotes the notion of equal roles in the classroom ‘by assigning unique ‘expert roles’ to each coteacher’ (Carlisle, 2008, p. 1). This approach to placement involves teachers and PSTs working closely together during the placement period. IST and PST prepare, deliver and evaluate lessons together (Roth & Tobin, 2002; Guise et al., 2017). Coteaching, as it is enacted in this study, involved PSTs working alongside class teachers in coplanning, coteaching and coevaluating shared lessons (Kerin & Murphy, 2015; Murphy & Beggs, 2005; Carlisle, 2008; Murphy & Scantlebury, 2010; Gallo-Fox & Scantlebury Murphy, 2016; Nissim & Naifeld, 2018).
In developing a framework for the implementation of a partnership model of coteacher collaboration, the coteaching music study aimed to explore the possibilities which coteaching might afford for addressing primary teacher confidence deficits in music. The study sought to conduct a rigorous inquiry into the viability, reliability and validity of adopting a whole-school approach to coteaching as collaborative practice; to explore teacher perceptions of the organisational factors that supported the implementation and development of coteaching as well as the opportunities and challenges encountered.

A final reason to consider coteaching as the basis for a meaningful mutually beneficial school–HEI partnership was its potential to contribute to an emerging body of knowledge and research on teacher–musician collaboration. There are already several examples of coteaching as it is enacted in the classroom in Ireland (Carlisle, 2010; Kerr & Murphy, 2012; Murphy & Beggs, 2005; Murphy et al., 2014), the United States and Canada (Gallo-Fox, 2006; Gallo-Fox & Scantlebury, 2016; Roth & Tobin, 2005(a)); Sweden (Nilsson, 2010; Zimmerman Nilsson, 2016(a)) and Australia (Martin, 2009; Willis & Richie, 2010). This study proposed to build on and to extend existing scholarship by introducing coteaching into a new discipline, music.

1.3.3 A New Context for Coteaching

Coteaching as discussed in this study involved the full teaching staff from a small school in an economically disadvantaged area of Dublin, coteaching music with first-year university students from the Bachelor in Music Education Degree programme. The study took place over twelve weeks in each of three academic years, 2014, 2015 and 2016.

The study aimed to build on recent research on primary teachers’ perceived deficits in confidence levels regarding teaching music; the factors which effect ISTs’ perceptions of low self-esteem when teaching music; the connections between teacher confidence and pre-service teacher-education; the current support for music education in the school; primary teachers’ previous teaching experiences and personal music background. The fact that coteaching has been employed successfully (Murphy, 2016; Murphy et al., 2014) as a support for the teaching of primary school science in Northern Ireland augured well for a similar intervention in music.

As mentioned already (Section 1.2) and in summary, this study sought to contribute to existing research studies on coteaching in several ways including how coteaching may facilitate a sustainable model of teacher–musician partnership; school–university partnership; the alignment of theory with practice and the development of local (school) knowledge with teacher as co-
researcher. It hoped to address issues relating to meaningful professional development for teachers and to extend current research on coteaching into the realm of music education, thus addressing the age-old dilemma of how teachers claiming confidence deficits in teaching primary music might be supported.

1.4 Research Questions

In exploring primary teachers’ experiences of coteaching music the following broad research questions guided the initial direction of the inquiry:

- What are primary teacher perspectives on the impact of coteaching music?
- How do teachers report on their individual and collective experiences of coteaching?

Following a reflexive engagement with the literature on primary music and on coteaching, these initial questions, refined, extended and reformulated are presented in Chapter Two.

1.5 The Combined Role of Researcher and Teacher Educator

As a former primary teacher and current teacher educator–school placement organiser, the author, in investigating her own field of work must address the question of being both insider and outsider (Kvale, 1996) particularly in relation to methodology. While being an insider comes with the advantages of knowing the field, there is a fear that such a position might permit presumptions and bias to preclude an objective or outsider perspective. It is important therefore to state at the outset that the author has no particular agenda in relation to the study other than the aim presented above which is to seek primary teacher perspectives on their experiences of coteaching music within the context of a school-university partnership to better understand the practices, challenges and opportunities which were encountered by the school community over the three years during which the study took place and to contribute to form a robust research base upon which further research may be advanced. This exploratory study will be based on a thorough data collection and data analysis including periodic member checking, consciously avoiding preconceptions and presumptions.
1.6  Structure of Thesis

Chapter One presented both a background to and a rationale for the study. In outlining the challenges to securing professional placement settings for pre-service music teachers in Ireland, it led the reader to an awareness of the need for HEIs to establish school-university partnerships. Considering how coteaching might offer opportunities for reciprocal professional learning for both IST and PST, a proposal for the adoption of coteaching as a mechanism for establishing meaningful professional partnerships between schools and HEIs was advanced.

Chapter Two provides a review of the literature. This chapter contextualises the issues under scrutiny by tracing the concerns which relate to the teaching of primary music in Ireland since the 18th century. This is followed by a study of the literature on coteaching in the context of a reciprocally beneficial partnership. Allowing for contextual difference, the literature is useful in outlining significant studies as well as identifying areas where there are gaps in the research. This chapter concludes with a renewed argument for the consideration of coteaching as a model for the provision of simultaneous on-site professional support for both IST and PST. The concluding section presents a theoretical framework based on socio-cultural theories as a means of informing and directing the proposed study.

Chapter Three presents and defends the proposed methodological approach. The chapter explores how the theoretical framework influenced the rationale which underpins the choice of methodology employed, together with a discussion on how the fieldwork was conducted and the relevant data sourced and analysed. This chapter deals with ethical issues and limitations as they relate to the research.

Chapter Four focuses on the presentation of the findings from a systematic analysis of the data as they pertain to the first research question, the impact of coteaching on primary curricular music. The findings in this chapter are drawn from quantitative data including teacher pre and post-coteaching confidence audits and analyses of qualitative data sources including forty-five (20-30 minute) teacher interviews, ten of which were conducted by external assessors two months after the study was completed. Data also comprises researcher field notes compiled over three years and IST and PST reflection journals.
Chapter Five considers teacher perspectives on the impact of coteaching on the school in general, presenting an analysis and discussion of the qualitative data sources referred to above. The chapter systematically sets out to answer the second research question namely what are teacher opinions on the individual and collective influences of coteaching.

Chapter Six offers a synthesis of the main findings. The two significant findings, increased teacher agency and transformed school culture are conflated suggesting coteaching as a potential agent of change. The theoretical framework which underpinned this study (as outlined in Chapter Two) is re-visited, this time as a lens to explore the links between coteaching, teacher agency and cultural transformation.

The concluding chapter, Chapter Seven summarises the contribution that the study makes to the field and offers some suggestions for policy and future research. Discussing how the findings of this study may be useful for primary schools interested in introducing and developing collaborative practice via coteaching as a means of developing school improvement outcomes, the chapter also offers a postscript to the study, a reflection on the impact of the research in the context of the professional development of the author.
In collaborative endeavours we learn from each other. By teaching what we know, we engage in mutual appropriation. In partnerships we see ourselves through the eyes of others, and though their support we dare to explore new parts of ourselves (John-Steiner, 2000, p. 204).

2.1 Introduction
This chapter comprises three main areas of scholarship, each of which informed aspects of the study. These collections of literature, distinct but connected, serve to (i) clarify and refine the overarching research questions outlined in Chapter One, Section 1.4 (ii) position the intended study within the context of current research, both in music education and in coteaching and (iii) provide a sound basis for the discussion of the study’s findings. The following sections critique the research literature as it applies to the three key aspects of the study, firstly, the challenges reported by teachers in relation to teaching primary music, secondly, the potential of coteaching for in-situ professional development and thirdly, the sociocultural, developmental and neo-Vygotskian theories which offer interpretations regarding the pertinent aspects of study.

2.2 Section One: Music on the Primary Curriculum in the Republic of Ireland
This section presents the research literature relating to primary music in the Irish Republic. A rationale for the inclusion of music as a compulsory subject is presented leading to a discussion on the history of primary music in the Republic from the early nineteenth century to the present day, focusing in particular on the many reports which chronicle the impediments to teaching primary music and the various failed attempts to address these difficulties. The research literature as it relates to teacher perceptions of confidence deficits relating to music is then explored. This is followed by the pervasive debate concerning who should teach music, the primary teacher with exclusive knowledge of the child or the specialist with the unique skills needed to teach the subject. Following a critique of the literature on the central role of the classroom teacher in the context of the teaching of all subjects in the primary curriculum, this first section of the literature review concludes with a consideration of the arguments on teacher–specialist collaboration and the current research on teacher–musician partnership models.
2.2.1 Music on the Primary Curriculum; a Rationale

Since the mid-1800s two philosophical perspectives have informed the rationale for the inclusion of music in the primary school curriculum (Carpendale, 1992; Murphy, 2012). One perspective relates to the intrinsic value of music as an art form worthy of study for its own sake (Bresler, 1993; Department of Education, 1971(a)(b); Gol, 1999; Reimer, 1971/89; Swanwick, 1979; Heneghan, 2002; Stakelum, 2008; Mark, 2013). The other perspective is concerned with the extrinsic or utilitarian value of music as it contributes to various dimensions of the child’s development including the moral (Mark, 2013); political, (Mark, 2013); social (Green, 2005; Burland & Pitts, 2007; Sward, 1989), psychological (Hallam, 2010); cognitive (Oddleifson, 1989); emotional (Resnisow et al., 2004) and personal (Broh, 2002).

Arguing in defence of the study of music for its own sake, primary music curricula including the New Curriculum (Department of Education, 1971) and the Revised Curriculum (GoI, 1999) in line with Koopman (1996) embrace the notion that music as a means of promoting aesthetic engagement deserves its place in the curriculum. Since all children are capable of musical development, the school is the most natural place for such cultivation of musicality.

Arguments in support of the extrinsic or utilitarian value of music include the importance of music as a means of transmission of culture (McCarthy, 1999), as a contributor to social development (Green, 2005) and cognitive enhancement (Hallam, 2010). Contemporary research indicates positive links between the study of music and the development of literacy (Gardiner et al., 1996; Anvari et al., 2002), speech (Gardner et al., 1996) and second language acquisition (Dunbar, 2008). A study conducted in Canada by Schellenberg (2004) suggests that exposure to the Kodaly Method of teaching music in school positively impacts the development of intelligence. Researchers also found links between learning to play the piano and mathematical proficiency and these results were reaffirmed by Spelke (2008) who added however that music learning must be systematic and prolonged over time if these effects are to be observed (cited in Murphy, 2012). Fiske (1999) highlighted the importance of music in the education of young children, concluding that children from disadvantaged backgrounds benefit most from involvement in a school music programme as school may be their only opportunity for engagement with music education, a view shared by the INTO (2009). The links between music and learning are well established, particularly in relation to the junior classes (Hallam, 2005). Accordingly, music has been part of the primary school curriculum for well over a century and both the intrinsic and extrinsic value of music has been recognised in the various iterations the curricula down the years.

2.2.2 An Historical Overview of Music in Primary Schools in Ireland: One Hundred Years
of Problems and Solutions

A closer look at the history of education in Ireland reveals how music (referred to as *singing* for almost a century) came to occupy such a central position in the primary curriculum (Kelly, 1978). The challenges which present-day, in-service primary teachers report in relation to teaching primary curricular music are not new (Kelly, 1978; Carpendale, 1992; McCarthy, 1999; Stakelum, 2008). This historical overview focuses on the difficulties encountered by teachers as reported in various strands of documentation dating from the late 19th century as well as the various State solutions offered. Three discrete periods of curricular development are considered, the period before the introduction of the New Curriculum in 1971; the period between the introduction of the New Curriculum and the Revised Curriculum 1971–1999 and the period from the introduction of the Revised Curriculum 1999 to the present day.

**Music in the Primary School prior to 1971**

The National School system was established in Ireland in 1831 and although not listed in the first set of subjects, singing was introduced as an optional subject in the mid-1800s (Kelly, 1978; Stakelum, 2008). Following a report from the influential Belmore Commission (1889) which advocated a return to a child-centred curriculum after an extended payment-by-results period, singing was made compulsory (Hyland, 1986). However, as Carpendale (1992) astutely observed, according to the various school commissioner reports, the frequency with which teachers reported difficulty in teaching the subject is indicative of an ambitious rather than operational syllabus. In seeking to address this problem of implementation, competence in music subsequently became a requirement for entrance to Teacher Training Colleges and vigorous testing in music was introduced to ensure that pre-service teachers had the capacity to teach music. While this was proposed as the solution to the problems reported in relation to poor standards of music teaching, the situation did not improve. Reports from the Commissioners of the National Education in Ireland continued to indicate that the standard of music teaching was low (Appendix to the Sixty-Sixth Report of the Commissioners of National Education in Ireland, 1900; Appendix to the Seventy-Ninth Report of the Commissioners of National Education in Ireland, 1914). This was not helped by the strong recommendation from the president of the Irish National Teachers’ Organisation (1916) that teachers should focus on the three Rs, Reading, Writing and Arithmetic (Hyland, 1986). Consequently, primary school music came to be regarded by most teachers as optional (Kelly, 1978; Carpendale, 1992; Walsh, 2012).

In 1922, following the establishment of the Free State, the *National Programme of Primary Instruction* listed singing as an obligatory subject. Again, with the revision of the primary school
programme in 1925, singing retained a compulsory status and was designated as *music* for the first time (Kelly, 1978). However, Carpendale (1992) argues that the ambitious syllabus, ‘…that included song-singing, vocal training, rhythm, staff notation and musical appreciation where teachers were encouraged to use methodologies which included hand signs and time-names’ continued to present significant challenges for teachers (p. 73).

In 1939, a Revised Programme of Instruction, which clearly articulated a plan for music ‘in the form of curricular aims, curricular content and curricular design’ (Carpendale, 1992 p. 97) was introduced. In response to a plea for State support for music from the then music education activist and professor of music at University College Cork, Aloys Fleischman, the Department of Education, published a resource for teachers entitled the *Revised Programme of Instruction in Music for National Schools* (DoE, 1939). This was an extremely popular resource which lucidly outlined curricular content and proposed several approaches to teaching music. Its positive impact, which included a renewal of interest in music amongst teachers, was recorded soon after by the then schools’ inspector, Ua Braoin (1939) who claimed that further support including summer music in-service courses and regular schools’ inspection contributed to increases in teacher commitment to teaching music. Such was the resurgence of interest in curricular music that an INTO Report entitled *A Plan for Education* (INTO, 1947) requested additional State resourcing of music and advocated for the teaching of instrumental music in school. However, no additional support for the teaching of music was offered until the publication of the New Curriculum in 1971.

**Music in the New Curriculum 1971**

After over one hundred years of volatility in terms of economic and political upheaval, the Primary School Curriculum (Department of Education, 1971(a)(b)) reflected a radical shift of ideology and methodology (Coolahan, 1981), with a child-centred approach and a focus on celebrating the individuality and uniqueness of each child. Music as a subject retained its compulsory status and was furnished with a syllabus which concentrated on *Songs and Vocal Technique, Ear-Training* and *Creative Work*. The syllabus comprised four levels; Junior and Senior Infants (ages 4-6); 1st and 2nd classes (ages 6-8); 3rd and 4th classes (ages 8-10) and 5th and 6th classes (ages 10-12) (Department of Education, 1971(a)(b)). During the consultation process the music syllabus was widely welcomed. However, concerns in relation to the challenges it presented to the generalist primary teacher were expressed by the Teacher Training Colleges and strong arguments for support from specialist music teachers were advanced in the initial response document from the Teachers’ Study Group, a body formed in 1961 to monitor educational issues and policies. In their response to the initial draft of the New Curriculum (1971) the group astutely posited that:
No matter what steps are taken, however, there will always be some teachers, as there will always be some inspectors, who have neither taste nor talent for this sort of work. And since the Department of Education has seen the need for a specialist inspectorate to look after music, perhaps they will agree there is also a need for specialist music teachers.

The Teachers’ Study Group, 1969, p. 39

A further proposal was submitted by the Teachers’ Study Group (1969) that teachers with a talent in music be trained as specialist teachers to support the generalist teacher. This proposition, had it been implemented, would have gone a long way in supporting music. However, it was not, and the music opportunities afforded by the new syllabus (Department of Education, 1971(a), (b)) were for the most part unrealised (Carpendale, 1992; Kelly, 1978; McCarthy, 1999; Stakelum, 2008).

Following the publication of the New Curriculum (1971) three major reviews were conducted. Supporting the recommendation from the Teachers’ Study Group (1969) the Conference of Convent Primary Schools in Ireland (1975) and two INTO reports, 1976 and later in 1989, strongly recommended that the generalist primary teacher be supported in their teaching of music. The first review, conducted by the Conference of Convent Primary Schools in Ireland and published as An Evaluation of the New Curriculum for Primary School (1975), heralded the generalist–specialist debate in relation to primary music, a discourse that would continue not only in Ireland (Buckley, 2005; Murphy, 2012) but internationally (Hallam et al., 2009; de Vries, 2011) until the present day.

A majority (76%) of teacher respondents in the first review opined that the implementation of the music syllabus as outlined in the New Curriculum would require the assistance of a subject-specialist, while 72% recommended that the specialist should be a member of staff proficient in music and willing to take on the role. While these recommendations were apposite and appropriate, no suggestion was offered as to how the specialist teacher would work within the school structure or, if the specialist were to come from the staff, how that member of staff might be facilitated to operate as music specialist throughout the entire school.
In 1976, five years after the introduction of the New Curriculum, a second Review of the New Curriculum was undertaken by the INTO. It revealed that although the teaching of music for one hour each week was an obligatory requirement, a significant minority of teachers admitted not teaching music at all. Such avoidance continued to characterise the implementation of the music syllabus not only in Ireland but internationally (Partington, 2017).

A review entitled New Primary School Curriculum: Its Implementation and Effects (DoE, 1977), revealed challenges in subject-knowledge as reported by teachers, particularly in smaller schools and particularly regarding music. Technical aspects of the music syllabus, music notation in particular, were mentioned as challenging for the generalist primary teacher undermining confidence and leading ultimately to avoidance.

Three years later, the Arts Council published The Place of the Arts in Irish Education (Benson, 1979) which compared provision for arts education in Northern Ireland and in the Republic. The report urged the Department of Education in the Republic to again consider the appointment of peripatetic music teachers, particularly in instrumental music, thus repeating the recommendations of previous reviews. The proposal to employ specialist support for music was raised again in 1980, this time by the Department of Education. In publishing the White Paper on Educational Development (Department of Education, 1980), the Department acknowledged the difficulties encountered by primary teachers regarding the implementation of the music syllabus. A survey of certain subjects, including music by the inspectorate was initiated and concluded that teachers had difficulty with all aspects of the music syllabus with the exception of song-singing (Carpendale, 1992; Department of Education, 1980). The report made several recommendations including once again that the question of deploying teachers with special expertise in music should be examined. How and when this deployment was to be enacted remained unarticulated.

Focusing on the impact of the New Curriculum (1971), the Arts Council further commissioned an investigation into primary school music education the result of which was the seminal publication “Deaf Ears? A report on the provision of music education in Irish schools” (Herron, 1985). The findings concluded that since a child’s music education is dependent on teacher motivation and school support, most children in Ireland leave school musically illiterate. This report was influential insofar as it clarified the impact of the challenges experienced by primary teachers in teaching music. Reporting perceptions of low confidence in music and the consequential lack of motivation to teach music amongst primary teachers, Herron (1985) highlighted teacher claims of lack of subject knowledge commensurate with the demands of the syllabus, lack of skill in terms of music literacy and vocal and instrumental expertise and lack of confidence in teaching music. The author
also noted the difficulties encountered by the Teacher Training Colleges in trying to teach pre-service teachers both subject knowledge and subject pedagogical knowledge while also trying to provide remedial support for those who had little, if any, education in music prior to teacher-training. The report decried the lack of State support and once again, recommended the urgent deployment of teachers with music specialism. However, there were no recommendations as to how such an arrangement might be supported or enacted.

In conclusion, although the New Curriculum (1971) conveyed confidence in both the philosophical and practical aspects of music as a subject worthy of study during primary school, because of the lack of support offered the music syllabus remained aspirational for the most part.

**Music in the revised music curriculum (1999-present)**

In advance of the introduction of the Revised Primary Curriculum (1999) the *Report of the Review Body on the Primary Curriculum* (Department of Education, 1990), commissioned by the then Minister for Education, once again called for support for the generalist primary teacher for the teaching of music. This report reiterated previous suggestions, including the expansion of in-service programmes for teachers and that the teachers with confidence in music be deployed to improve the expertise of other staff members. While these recommendations were consistent with those published in the various reports on music education from the late 1960s, the mechanism for offering such assistance continued to receive little attention. Additionally, although the *Report of the Primary Education Review Body* (Department of Education, 1990) accepted that music was one of the subjects which teachers found difficult to teach, the section entitled *Specialist Teachers* clearly articulated the Department’s stance on the provision of specialist teachers, noting ‘we do not recommend the appointment of subject specialist teachers but rather that the particular aptitudes of ordinary teachers be developed through well organised and systematic training’ (p. 2). However, as already mentioned the report did not define how this option could be supported and integrated into the school time-table.

The Revised Curriculum (GoI, 1999a) was introduced as an attempt to offer all children the opportunity to engage in music learning during their primary school years. It was developed by the Department of Education and Science (DES) and the National Council for Curriculum and Assessment (NCCA) in consultation with parents, teachers and principals. Music in the current curriculum is presented as a component within Arts Education together with visual arts and drama. Although the curriculum guidelines (GOI, 1999b) are administered centrally, the philosophies which inform the curriculum, the methodologies which are recommended to teach music and the contents of the curriculum are to be agreed, interpreted and implemented locally at the discretion
of school principals and staff, ultimately forming part of the whole school plan (Flynn, 2013). The curriculum encompasses the broad philosophical thrust of its predecessor, endorsing the centrality of activity-based discovery learning and the importance of an integrated relevant teaching and learning strategy (GoI, 1999a). Nine music elements are to be explored and experienced actively, incrementally and progressively throughout eight years of primary school. The units of study or elements include timbre, pulse, duration, pitch, dynamics, tempo, texture, structure and style, these to be experienced through the three main strands of music activity; listening & responding, composing and performing. All three strands are considered equally important and as such receive equal weighting. In common with its predecessor, curriculum content is organised in four progressive levels with each level comprising two years of study (GoI, 1999a). Content is not prescribed; the curriculum merely suggests the type of music engagement at each level. Learning is dependent on the teacher developing a participatory culture which encourages pupils to interact with the teacher and with other pupils and with the environment. It recommends that the musical elements should be developed progressively through the strands ‘enabling the children to gradually develop deeper understanding of music and so cultivating a life-long engagement with and appreciation of musical activity’ (GoI, 1999b p. 54).

Music as a course of study outlined in the curriculum is envisaged as a process that is essentially practical in nature where the strand activities of Listening and Responding, Performing and Composing are not viewed as ends or products but as processes, as means of self-expression (O’Callaghan, 2003). The curriculum is focused on the development of skills, understanding and knowledge acquired through active engagement with music (Flynn, 2013). While offering broad suggestions and exemplars, the curriculum does not prescribe materials or approaches for teaching music (O’Callaghan, 2003). The teacher is encouraged to choose music resources and materials which are appropriate, relevant to and stimulating for the child and the teacher has the freedom to co-construct the curriculum with the students. This approach to learning school music ‘is about participation, ownership of knowledge, self-expression and identity construction’ and is similar to other international music programmes (Rikandi, 2010, p. 21).

This historical overview which serves to contextualise the position of music education in Ireland indicates the centrality of music as a school subject. With the introduction of the Revised Curriculum (GOI, 1999a) and legislation such as the UNESCO Road Map for Arts Education (2006) and the Seoul Agenda: Goals for the Development of Arts Education (UNESCO, 2010), principals and teachers have become more aware of the importance of ensuring that each child is offered a music education (Murphy, 2012). However, literature on music education in Ireland highlights the lack of access, particularly in relation to instrumental music (Herron, 1985; Heneghan, 2004; McCarthy,
1999). This prompts the questions who should be responsible for teaching music in school and what can be offered, if the responsibility for music provision still rests with the primary teacher.

The views of the public in a national survey carried out in conjunction with the Your Education System (YES) process in 2004 indicate that nine out of ten respondents thought that the training of teachers needed to be improved, both during pre-service and during their professional lives (Kelleghan et al., 2004). While the music curriculum (1999) claims to offer a course ‘for all teachers and all children’, a report published by the Department of Education and Science Inspectorate, (2005) indicated that forty-five per cent of newly qualified teachers claim that they were not prepared to teach music during pre-service.

2.2.3 Primary Teacher Confidence to Teach Music

Since the primary teacher has a central role in relation to teaching primary music, it is useful to consider the issue of teacher confidence with regard to music. Despite the widely held belief that all teachers are capable of teaching music in the primary school (Mills, 1991; Hennessey, 2000), there is substantial evidence indicating that most primary teachers lack the confidence to teach music. This includes research from Australia, (Russell-Bowie, 1993, 2002, 2009; de Vries, 2011; Gifford, 1991, 1993), Great Britain (Hennessey, 2000; Holden and Button, 2006), Canada (Brown, 1993) and the United States (Perrott, 1985; Vandenburg, 1993; Temmerman, 1997). In her study, Mills (1989) discovered that the pre-service teachers were considerably less confident to teach music than a variety of other subjects in the primary curriculum. This dilemma was also highlighted in England in the 1990s, where pre-service primary teachers reported being overwhelmed at having to teach music (Hallam et al., 2009).

As already noted, primary school teachers in Ireland have long expressed similar opinions (Carpendale, 1992). Findings from an INTO survey (1986) of primary teachers’ confidence to teach music are consistent with international results. These indicate that music is the subject for which teachers feel the greatest need for support with over 14% receiving support from another member of staff and 5% receiving support from a subject specialist outside of the school. Deficits in teacher confidence in relation to teaching music may also explain the decrease in record keeping in music assessment, a point noted in the same survey which indicates a decrease in teacher record keeping in music since the 1976 INTO survey, a decade before.
Teachers cite many reasons for their consequent reluctance to teach music. These include a belief that the subject requires skills which they don’t possess (Holden & Button, 2006; Russell–Bowie, 2002; Wiggins & Wiggins, 2008), a lack adequate training to teach music during pre-service (de Vries, 2011; Hallam et al., 2009; Holden & Button, 2006), beliefs that they themselves are unmusical (Holden & Button, 2006; Wiggins & Wiggins, 2008), with many teachers believing that music should be taught by a specialist teacher (de Vries, 2011).

Research in Ireland by McLoughlin (2012) supports the evidence from earlier studies (Buckley, 2005; INTO, 2009) relating to teachers’ lack of confidence to teach the composing strand of the Revised Music Curriculum. This, concludes McLoughlin, may be related to failure to acquire the necessary skills during pre-service education. While teachers reported that they had been given the opportunity to develop their own creative skill during teacher training, the INTO reported that teachers felt they were not shown how to develop those skills in their students (2009). Issues arising from teacher education that could impede the delivery of the music composing strand include teacher lack of understanding of their role in facilitating a music composition lesson (Wiggins & Wiggins, 1999), their poor understanding of the key messages of the music composition strand (Durrant & Welch, 1995) and the value teachers place on music composition. Holden and Button (2006) conclude that ‘developing teachers’ practical musical skills and increasing access to support from music specialists seems crucial if teachers and children are to fulfil their musical potential’ (p. 37). McCarthy (1999) dismisses the excuses regarding the limited amount of time devoted to curricular music in teacher education courses or whether music education should be taught by a specialist or the classroom teacher, pragmatically suggesting that while music education should be the responsibility of the class teacher, the teacher could be supported by a specialist music educator either from the staff or from an outside agency. McCarthy (1999) however, does not suggest how such a partnership might be implemented. While partnerships between teachers or even between specialists and teachers are rare in Ireland, national and international evidence in support of the positive outcomes from such arrangements is growing (Bamford, 2006; Burnaford, et al., 2001; Colley et al., 2012; Deasy & Stevenson, 2005; Downing et al., 2007; Fiske, 1999; Varvarigou et al., 2012; Kind et al., 2007; Kenny, 2010, 2011; Kenny & Morrissy, 2016; Kerin & Murphy, 2018).
2.2.4 The Teacher-Specialist Debate

Although the place of music in the primary school curriculum has been secure for over a century what is not so clear is who could or should teach music. Should the responsibility for music education rest solely with the classroom teacher or should music teaching be handed over to the expertise of a specialist music teacher? Should that expert be another member of staff who is released from classroom duties to support teachers who are less confident in teaching music or should the expertise come from outside the school community? (Heneghan, 2004). If the expertise comes from outside the school, what is the role of the classroom teacher in relation to the visiting expert? How does the outside teacher ensure that the lessons are progressive and integrated with the Whole School Plan? Should there be a liaison staff member with responsibility for co-ordinating the work done by the specialist teacher? These questions continue to play a central role in the persistent debate regarding primary school music provision, both nationally and internationally (Murphy, 2012; Heneghan, 2004; Wiggins & Wiggins, 2008; de Vries, 2015). Whatever the solution, the problem associated with teacher lack of confidence in teaching music is well documented and in need of reconciliation if the aspirations of the curriculum are to be realised and children in primary schools in Ireland are to be offered a progressive developmental music education (Herron, 1985; McCarthy, 1999; Stakelum, 2005).

There are still diverse opinions in relation to who should teach music in primary school (Stakelum, 2005; Mills, 1991; Hennessey, 2000). Fletcher (1987) suggests that primary music be taught by secondary school music teachers since 'it is much easier to train a teacher lacking knowledge of primary education in current primary practice than it is to impart to non-specialists in music the skills required for teaching music' (p. 191). Plummeridge (1991) also shares this opinion insisting that ‘the knowledge and skills required to teach music authentically are beyond the scope of most primary teachers’ (p. 70). Several influential reports on the state of music education in Ireland, including those which have already been alluded to, support the need for specialist teaching in music. The following extract from the Provision and Instrumental Arrangements Now for Orchestras and Ensembles (PIANO) Report (Department of Arts, Culture and the Gaeltacht, 1996) seems to support the notion of a partnership where the specialist works with the teacher rather than assuming sole responsibility and consequently diminishing the primary teacher role:

At present there are teachers who have studied academic music and who have specialised in music education employed in Primary Schools around the country. As long as these teachers are confined to their own classrooms their expertise is not being used to the maximum. There is a need for the Department of Education to make use of this existing resource by sanctioning the employment of these teachers as specialist music teachers (p. 51).
The findings from the *Music Education National Debate* (Heneghan, 2004) concur with this suggestion, advocating the need for a specialist music education service to schools, a solution also expressed twenty years previously by Carlton (1987) and later by Woulfe (1998), both of whom support the notion of a partnership between the generalist and the specialist in music education. There are however strong arguments for continuing to place the responsibility for the music programme with the class teacher, the person who is most aware of the individual needs of the children, who has the knowledge and ability to ensure cross-curricular connections and who is in a position to dissipate any notion that music education is elite and suitable for gifted students only (Mills, 1991; Glover & Ward, 1993; Spruce, 1996). Engaging a specialist teacher may also have a detrimental effect on staff morale according to Nelson, cited in Glover and Ward (1993), undermining and diminishing 'the possibility of other colleagues taking the musical plunge in their own classrooms, at worst it renders teachers musically helpless' (p. 184).

### 2.2.5 The Central Role of the Primary Teacher

Childhood experiences in music significantly influence attitudes to, and involvement with, music in adult life (Bowles, 1991; Kritzmire, 1991; Price & Swanson, 1990). This places the primary teacher in a powerful position in terms of school music (Kritzmire, 1991). However, a primary school teacher's prior musical experiences, particularly during pre-service, impacts their subsequent confidence and shapes their attitudes towards teaching music (Kritzmire, 1991; de Vries, 2015). The experience of pre-service teachers has been the subject of considerable research in countries where music is taught by the generalist class teacher, (Mills, 1989; Mans, 1997; Jeanneret, 1997; Russell-Bowie, 1997, 2009). Jeanneret, (1997) also found a meaningful relationship between primary teachers' current confidence to teach music and their confidence level at the end of their pre-service training. As noted already (Section 2.2.2), 45% of newly qualified primary teachers in Ireland claimed that they perceived themselves to be inadequately prepared to teach music during their pre-service training (DES, 2005). Buckley (2005) reported a similar finding, indicating that teachers believed that their pre-service education had not equipped them to teach music as described in the *Revised Curriculum* (1999). The solution, according to McCarthy (1999), is the development of a pre-service course which would address:

Attitudinal change, reflection on teachers' own musical background and experience, confidence building in music, consistent engagement with music at a fundamental level, the development of musical skills that are directly applicable to primary school pupils and reflections on the music-making process (p. 56).
McCarthy's suggestions concur with those of Jeannerett (1997) who asserts that a well-structured *music fundamentals* pre-service course can develop teacher confidence. This type of course could be provided during pre-service education or as part of a teacher professional development plan. Flynn (2013) argues in support of the primary teacher claiming that as pedagogy expert the teacher is well capable of handling the curriculum. However, Shulman (1986) asserts that there should be more to teacher education than simply understanding the subject and how people learn; that prospective teachers must also understand the ways these two fields interact. Shulman (1986) claims that teachers need to understand how people learn the particular subject; he called this form of specialised knowledge, pedagogical content knowledge, (PCK). This suggests that to become competent and confident to teach children music, teachers must reach at least a basic understanding of music, and of music learning and teaching (Hennessey, 2000).

Wiggins and Wiggins (2008) claim that excellent teacher education programmes provide students with experiences from which they can construct their own understandings of the subject. Contemporary ideas of best practice are rooted in a constructivist vision that learning involves people constructing their own understanding of experiences (Wiggins & Wiggins, 2008). Professional development in music education needs to encompass the five key characteristics of social constructivism, *appropriate learning environment; engagement with music; opportunity for social interaction and making meaningful connections; the assessment should be embedded in the learning context, and student voice* (Wiggins & Wiggins, 2008). Coteaching, as endorsed by the Teaching Council (2013), involving primary teacher and subject specialist may offer opportunities for such professional development in music.

**2.2.6 Teacher–Specialist Collaboration**

According to an INTO Report, *Change in the Primary School* (2004), collaborative teaching is not uncommon schools in Ireland, particularly in relation to the specialist disciplines like music education. However, very little is understood about how such arrangements are enacted, teachers’ attitudes to collaboration, their preparation for the task and what they do in the classroom (Stakelum, 2008; Wiggins & Wiggins, 2008). The literature on primary music offers several recommendations on how to facilitate collaborative music teaching (Mills, 1991; Holden & Button, 2006). Perhaps the most common form of collaboration is between the class teacher and a member of staff who has musical expertise. This staff member acts as a consultant (Glover & Ward, 1998; Holden & Button, 2006) and also models lessons in the teachers’ classrooms (Hallam et al., 2009; Holden & Button, 2006; INTO, 2009; Mills, 1991). In this way a teacher with music expertise can share their knowledge and ‘support those who may not feel as confident in delivering aspects of
the music curriculum’ (Glover & Ward, 1998, p. 10). Mills (1991) suggests that a specialist could assume the role of music consultant, encouraging the development of the skills of musically-less-confident members of staff. Glover & Ward (1998) also discussed such an arrangement, proposing that the consultant might help class teachers draw up plans and schemes of work, helping with the facilitation of music teaching in the school. Regular support from an on-site consultant would prepare primary teachers to teach music on their own and to receive advice in areas they found challenging (Holden & Button, 2006). This consultancy role would ensure that the individual needs of teachers are addressed, as well as facilitating the development of plans suitable for particular class groups. Research in Ireland (INTO, 2009) and abroad (Hallam et al., 2009; Holden & Button, 2006) suggests that teachers favour classroom support from consultant teachers over other forms of professional development.

Holden and Button (2006) support the findings of Mills (1991) and recommend that to develop music skills, generalist teachers need opportunities to engage with music and to see the modelling of teaching strategies and the demonstration of skills (Holden & Button, 2006; Mills, 1991). This, rather than handing the lesson over to a specialist would, the authors argue, increase teacher musical confidence and show children that that music is for everyone, not for the talented few (Mills, 1991). The author suggests that teachers working with a music consultant, take part in lessons alongside the children during which they experience both subject knowledge and pedagogical content knowledge (p.6). In this way the two problematic areas, teachers claiming to have received inadequate training to teach music during their Teacher Education courses (INTO, 2009; Buckley, 2005; Hallam et al., 2009) and teacher perceptions of their own innate ability to teach music (Tillman, 1976; Seddon & Biasutti, 2008) are addressed. Through observing music lessons modelled by confident music teachers, less confident others have the opportunity, over time, to develop the appropriate knowledge and skills required for the primary school.

2.2.7 Partnership in Music Education

If primary teacher perceptions of confidence deficits regarding teaching music dominated the discourse in music education research since the 1980s, partnership in the arts and music education is a pervasive topic of contemporary research (Kenny & Morrissey, 2016; Kenny & Christophersen, 2018). In their extensive review of teacher–musician collaboration, Kenny and Christophersen (2018) argue that musicians who are employed to support the school music programme have much to offer. The authors cite a wide body of research in support of the current popularity for collaboration and partnership as a means of delivering arts-in-education programmes (UNESCO, 2006, 2010; Bamford, 2006; Burnaford, Aprill & Weiss 2001; Colley, 2012; Deasy & Stevenson, 2005;
Downing, Lord, Jones, Martin & Springate, 2007; Fiske, 1999; Hallam et al., 2009; Irwin, Kind, Grauer & deCosson, 2005, 2010, 2011; Kenny & Morrissey, 2016; Woolf, 2004). Indeed, the mechanisms through which such partnerships are implemented in schools is the subject of much debate in music education (Christophersen, 2013, 2014; Egan, 2005; Eisner, 2002; Holdhus & Espeland, 2013; Russell-Bowie & Jeffery, 2005; Kenny, 2010; Wyse & Spendlove, 2007; Wolf, 2008). Partnership design or the collaborative mechanism through which partnership is enacted is considered seminal to the success of the project (Bamford & Wimmer, 2012; Bamford & Glinkowski, 2010; Kenny, 2010; Wolf, 2008; Kind & Kind, 2007). Wolf (2008, p. 93) asserts:

In the best of partnerships, teachers and artists become colleagues, collaborating on projects that will encourage creativity based on the expertise of all involved and focused on the children’s talents and needs.

Moran and John-Steiner (2004) and Greene (2001) argue for relational pedagogic spaces or what Bresler (2002, p. 33) refers to as ‘transformative practice zones’ in authentic partnerships. However, musician-teacher collaboration requires a mechanism (Laycock, 2008) to support relational skills such as openness to the other, commitment to shared planning and practice, flexibility and on-going cooperation (Abeles, 2004; Bamford & Glinkowski, 2010; Colley et al., 2012; Kenny, 2009; Myers & Brooks, 2002). Kenny et al. (2018) suggest that collaboration should position both musician and teacher as equal partners in the classroom and that collaboration should ideally facilitate professional learning as a reciprocal act between musician and teacher. As Wolf (2008) asserts, ‘for partnerships to be truly collaborative, the stream of learning must flow both ways’ (p. 93).

Finnerty (2009) reported positive outcomes from a visiting musician project in several schools in Cork city between 2001 and 2005. This community outreach programme, Bridging the Gap (Finnerty, 2009), which facilitated teachers working in collaboration with local musicians, had a successful outcome. Having experienced working with musicians from the community, principals and teachers alike expressed the need to formally engage specialist teachers in the primary school as the following comment from a school principal indicates:

Music is a tough subject for teachers, many don’t feel confident and through our involvement with the Bridging the Gap project, we have been able to hire a music specialist, which has in turn boosted our provision of music in the school …

(Finnerty, 2009, p. 47)
Another principal, participating in the same study, argued that schools would always need a combination of internal and external resources to deliver the primary school music curriculum as is envisaged in the *Revised Curriculum* (1999) document surmising that:

Schools will always need a combination of internal and external resources to implement music ... Through collaboration with external experts the skills of classroom teachers can be enhanced and essentially, the provision of music can be achieved throughout the system ...

(Finnerty, 2009 p. 48)

*Bridging the Gap* also revealed that collaboration between teacher and musician enhanced teacher professional practice and broadened the range of teaching and learning resources available within the school and local community environment (Finnerty, 2009). Reports on several similar ventures including those associated with *Music Generation* (Flynn & Johnston, 2016) provide evidence of the fruits of partnership and auger well for support for the generalist primary teacher (Kenny & Morrissey, 2016).

In the hope that the recommendations for support for teaching music for primary teacher and the various examples of teacher–musician partnership outlined by Kenny and Christophersen (2018) may address the barriers which impede some teachers in delivering the primary music programme, a case is now presented for adopting and adapting coteaching, a specific model of professional collaboration, and for investigating whether such a model of partnership might offer a structure or mechanism for promoting synergies between teacher and musician, resulting in,

...a music education programme, consisting of sequentially organised learning experiences that lead to clearly defined skills and knowledge learning that will allow young people to actively participate in their musical cultures for their entire lives, providing students with opportunities to experiment with musical improvisation and composition, thus building their creative skills and developing their problem-solving and higher-order thinking skills.

(GoI, 1999, p. 12)

It is contended that the optimal solution for addressing primary teacher confidence deficits in music is one in which there is collaboration between music specialists and classroom teachers (Barry, 1992; Coffman, 1987; Malin, 1988). Although this teamwork is difficult to achieve (Whitaker, 1996), collaboration can be accomplished in several ways. For example, music specialists may serve as consultants to classroom teachers (Hookey, 1994), or music teachers may integrate themes, skills, and concepts from other areas of the curriculum (Giles & Frego, 2004; Miller, 1996). Coteaching as a mechanism for reciprocal professional learning between in-service primary teacher and pre-service music education teacher is discussed in the following section.
2.3 Section Two: Coteaching

In this section the focus is on the international corpus of literature on coteaching as ‘a context for situated workplace professional development wherein cooperating and student teachers work ‘at each other’s elbow’ (Roth & Tobin, 2005) and ‘explicate practice within the ongoing context of teaching’ (Gallo-Fox & Scantlebury, 2016). Research on coteaching as enacted between in-service and pre-service subject-specialist teacher on continents including North America (Gallo-Fox, 2010; Scantlebury et al., 2008; Roth, 1998; Tobin, 2006), Australia (Willis & Ritchie, 2010) and Europe (Murphy & Beggs, 2006; Nilsson, 2010; Carlisle, 2008; Kerr, 2010; Martin, 2009) contribute almost two decades of scholarship on in-service and pre-service teacher coteaching partnerships in a number of disciplines including science, mathematics and literacy. While the intended focus of this present study, the first of its kind, is on coteaching music, the findings reported in this literature concerning the teaching of primary science provide a beacon for further exploration of the coteaching model in the new context.

Beginning with a consideration of the analogies between primary science and music, a consideration of the literature supporting coteaching as a mechanism for in situ professional development is presented. Coteaching is then situated within the various prototypes of teacher collaboration before the elements which are unique to the coteaching model are identified. The wealth of literature on the importance of facilitating professional dialogue and exchange between coteachers is then explored. Research studies as they relate to progressing coteaching beyond simple co-participation to transformative practice is discussed in advance of a thorough consideration of the scholarship on implementing the coteaching model within a traditionally solo-teaching culture including the barriers to successful coteaching implementation. The intention is that a robust review of the research on coteaching will provide a secure reference and a point of departure for an exploration of coteaching in a new context, primary music education.

2.3.1 Music and Science

Many of the challenges encountered by teachers in relation to primary science resemble those concerning primary music. Research identifies the main contributing issues including the poor standard of pre-service science education, self-perceptions of a lack of expertise in science knowledge and skills amongst teachers and deficits in self-confidence in the ability to teach science relative to other curricular subjects. Large scale studies in the U.S. have published data concerning the poor standards of science teaching in primary pre-service teacher education courses (Barufaldi & Reinhartz, 2001). In the UK, Harlen, Holroyd and Byrne (1995) reveal that many primary teachers confess to self-perceptions of personal limitations in relation to teaching science. Two years later,
Harlen (1997) exposed the restricted practices of primary teachers who report deficits in confidence teaching science. These include ‘subject avoidance’, use of a limited repertoire of science teaching skills, reliance on restricted resource packs, focusing on ‘process outcomes’ rather than on conceptual development and employing expository techniques as opposed to inquiry methodologies’ (p. 335). These findings are supported by Murphy and Beggs (2005a; b) who on completing a study on primary teacher confidence in teaching science across the UK and Northern Ireland discovered that a high proportion of primary teachers felt they lacked the confidence, expertise and training to teach science effectively. Similar results are reported in studies conducted in the Republic of Ireland concerning the teaching of primary science (Murphy & Smith, 2012; National Council for Curriculum and Assessment, 2008; Varley et al., 2008; Smith, 2013) and music (Herron, 1985; McCarthy, 1999; Heneghan, 2004a, b; Stakelum, 2008). With eleven subjects included for study in the Revised Primary School Curriculum (DES, 1999), teachers educated in Ireland as pedagogy experts rather than as subject experts, admit not feeling equally confident to teach every subject (INTO, 2005, 2009). Comparable results are found in numerous international research studies (Carlisle, 2008; Lloyd et al., 2000). Accordingly, and as mentioned already (2.2.6) the DES encourages the creation of professional collaborations among the staff as well as with agencies outside the school to ensure that each child experiences the full curriculum (Department of Education 1971; DES, 1999). However, it is unclear how such collaborative practices are to be enacted in the context of a solo-teaching primary school culture (Kelleghan, 2009). Research on coteaching as a reciprocally enriching collaborative partnership offers one such mechanism for on-site professional development (Carambo & Stickney, 2009; Murphy & Beggs, 2010; Murphy & Scantlebury, 2010; Gallo-Fox & Scantlebury, 2016; Murphy, 2016; Guise et al., 2017; Kerin & Murphy, 2018).

2.3.2 Coteaching as Professional Development for Inservice Teachers
A number of studies have studied the potency of the coteaching model as it applies to in-service teacher professional development. Twenty years ago, Roth (1998) reported on the professional development experienced by two experienced teachers coteaching together, while more recently, Gallo-Fox (2010) revealed increased risk-taking, leading to new classroom practices amongst experienced science teachers while coteaching with a pre-service teacher. In Sweden, Nilsson and van Driel (2010) chronicled the development of both pedagogical skills and subject knowledge in the case of pre-school teachers who engaged in coteaching with pre-service science teachers. Closer to home, in Northern Ireland, Murphy, Beggs, Carlisle and Greenwood (2004) revealed that in comparison to traditional classrooms, children from cotaught classrooms displayed more positive attitudes to science, while in the U.S. a large-scale study disclosed increases in student maths and
literacy scores amongst children from cotaught classrooms (Bacharach, Heck & Dahlberg, 2010). Drawing on data from a longitudinal study conducted in the U.S. between practising and pre-service science teachers, Gallo-Fox and Scantlebury (2016, p. 2) claim to have published the first sole set of findings of the impact of coteaching on the professional development of the cooperating teacher, positing that:

Coteaching provides authentic learning opportunities for cooperating teachers, through situated co-construction and discussion of practice, exposure to student teachers’ perspective on science teaching and learning and as stimuli for reflection

Gallo-Fox and Scantlebury (2016) on revisiting the data from a four-year longitudinal study which focused on the implementation of the coteaching model in secondary science classrooms discovered data relating to how teachers had experienced authentic professional development while engaged with coteaching. Findings include claims of renewed enthusiasm for teaching as a consequence of coteaching with a pre-service science teacher; an expanded repertoire of skills and perspectives on teaching science the consequences of which included changes in practice, expanded professional identities as mentors, teachers and researchers and in some cases an appetite for responsibility and leadership.

These studies suggest that coteaching supports not only the school students and pre-service teachers but also the professional development of the in-service or cooperating teachers (Roth et al., 2004; Gallo-Fox & Scantlebury, 2016; Murphy, 2016). A significant finding from research conducted at Biden High School suggests that placing several pre-service teachers in one school resulted in the emergence of a learning community that included in-service teachers, pre-service teachers and university educators (Scantlebury et al., 2005). Consequently, several researchers have studied the aspects of the model which lend themselves towards the provision of reciprocal professional development for both coteachers. The following section investigates the concept of coteaching as a subset of collaborative teaching in the classroom, focusing in particular on the aspects of the model which lend themselves towards the provision of mutual learning.

2.3.3 Collaborative Teaching
Coteaching is one of several collaborative teaching models which includes team-teaching (Welch et al., 1999), cooperative teaching (Ozsoy & Yildiz, 2004) and co-teaching (hyphenated) (Martin, 2009; Murphy, Beggs & Carlisle, 2003; Gallo-Fox, 2008). Placing coteaching in the context of such collaborative teaching models will provide the reader with a clearer understanding of the uniqueness of the model.
Team-teaching is a form of collaboration that can be implemented in a variety of ways; for example, two or more teachers who act as ‘alternate solo performers’ in the same classroom, or two or more teachers who fully share responsibility to ‘plan and implement [lessons]’ (Carpenter, Crawford & Walden, 2007 p. 54). Carpenter et al. (2007) identify deficits with the team-teaching model, pointing to the lack of clarity around the roles and responsibilities of individuals within the team and the paltry evidence for the effectiveness of team-teaching in enhancing teacher practice and/or student learning (Martin, 2009).

Cooperative teaching has been particularly associated with an arrangement between the primary teacher and the special education teacher to accommodate students with diverse educational, physical, intellectual and emotional needs in mainstream education (Bauwens, Hourcade & Friend, 1989). However, cooperative teaching in the primary school currently involves two teachers capitalising on the relative strengths of each individual teacher; one teaching music to two classes while the other teaches another specialist area such as visual art or drama (GoI, 1999). Cooperative teaching is characterised as a delivery option (Ritter et al., 2010) not an opportunity for teachers to learn or to develop agency themselves. Consequently, researchers including Scruggs, Mastropieri and McDuffie (2007) contest the appropriateness of the term cooperative as a valid description of an arrangement which has limited collaborative scope, questioning also whether these relationships improve the quality of instruction, increase student achievement, or have any positive impact on the continuing development of teachers as professionals.

Coteaching or co-teaching (hyphenated) is associated with two distinct bodies of research literature (Hedin & Conderman, 2015). While each one focuses on joint practice, each differs epistemologically, philosophically and in their theoretical grounding (Gallo-Fox, 2008). In general, the hyphenated model (co-teaching) is associated with inclusive education; with mainstream teachers and special education teachers teaching together to address the needs of all students in the classroom (Cook & Friend, 1995). According to Murawski and Swanson (2001), this hyphenated term co-teaching was first introduced in the United States by Lynne Cook and Marilyn Friend (Friend et al., 1993). Cook and Friend (1995) define co-teaching as ‘two or more professionals delivering substantive instruction to a diverse or blended group of students in a single physical space’ (p. 2).

A variety of co-teaching arrangements (Bacharach, Heck & Dahlberg, 2010) have been recorded in the special education literature including (a) one teacher teaching, one observing; (b) one teacher
teaching, one drifting; (c) station teaching; (d) parallel teaching; (e) alternative teaching; (f) complementary teaching and (g) team teaching (Friend & Cook, 2004; Scruggs, Mastropieri & McDuffie, 2007; Nissim & Naifeld, 2018). In each of these situations, the teachers divide their time and attention to ensure that the students are given teacher-centred instruction. One of the distinguishing features of the co-teaching (hyphenated) model is the relationship between the teacher and special education teacher where the latter is described as complementary to the former (Thousand et al., 2006). Friend and Cook (2004) challenge this form of co-teaching as collaborative teaching, arguing that ‘although it is generally preferred that co-teaching be collaborative, it may, or may not be, as collaboration refers to how individuals interact and not to the activity they are doing’ (p. 6).

The second coteaching research corpus is situated within the sociocultural process of learning to teach with in-service and pre-service teachers teaching together with the intention of developing their own practice (Roth & Tobin, 2002, 2004, 2005b; Murphy & Beggs, 2005a,b; 2010; Murphy & Scantlebury, 2010; Tobin, 2006; Gallo-Fox & Scantlebury, 2016). For well over a decade, coteaching, as a method of learning how to teach (Sirry et al., 2010; Carambo et al., 2009) and as a means of improving teaching (Murphy, 2016; Juck et al., 2010) has been well researched, both nationally (Carlisle, 2010; Kerin & Murphy, 2015, 2018; Kerr, 2010; McCullagh, 2012; McCullagh et al., 2013; Murphy & Beggs, 2010; O’Connor, 2010) and internationally (Roth & Tobin, 2002; Tobin & Roth, 2006; Martin, 2009; Nilsson, 2010; Willis & Ritchie, 2010; Gallo-Fox & Scantlebury, 2016; Soslau et al., 2018).

Numerous studies have considered the rationale for coteaching and studied the implementation outcomes of the model in diverse teacher pre-service settings focusing also on the unique aspects of the model that promote reciprocal professional learning for both in-service and pre-service teachers (Roth & Tobin, 2002, 2005; Roth, Tobin, Carambo & Dalland, 2004; Tobin & Roth, 2006; Tobin, Zurbano, Ford & Carambo, 2003; Murphy & Scantlebury, 2010; Murphy, 2016; Gallo-Fox & Scantlebury, 2016).

Evidence suggesting that pre-service subject specialists might provide teachers with additional human resources to teach subjects which they perceive as requiring specialised knowledge and skills was the fundamental justification for the study of coteaching (Roth, 1998; Murphy & Beggs, 2005; Carlisle, 2008).

Consequently, coteaching in Canada was introduced towards the end of the twentieth century specifically as a means of addressing primary teachers’ lack of confidence to teach science (Roth,
Similarly, Murphy and Beggs (2005a) in response to similar confidence deficits, introduced coteaching into primary schools in Northern Ireland by pairing pre-service teachers, specialising in science, with primary teachers. At the secondary school level also, Tobin and his colleagues placed pre-service teachers in various coteaching arrangements with cooperating teachers and each other (Roth & Tobin, 2002, 2005; Tobin & Roth, 2006). Coteaching is now enacted in different teaching and learning environments so differences in implementation are likely to occur (Gallo-Fox, Juck, Scantlebury & Wassell, 2006). However, there is a consensus amongst researchers that one of the fundamental tenets of the model is that it always involves two or more teachers sharing expertise and simultaneously sharing the responsibility for meeting the learning needs of students (Murphy et al., 2008).

### 2.3.4 The Unique Characteristics of the Coteaching Model

Murphy and Scantlebury (2010, p. 1) define coteaching as; Two or more teachers teaching together, sharing responsibility for meeting the learning needs of students and, at the same time, learning from each other. Coteachers plan, teach and evaluate lessons together, working as collaborators on every aspect of instruction.

The authors emphasise sharing of responsibility for student learning through coplanning, coteaching and coreflecting and being open to learning from the expertise and experience of the other. As discussed in Section 2.3.3 above, this specific conceptualisation of the coteaching model evolved from research on the teaching of science which was conducted in North America (Roth, 1998; Tobin, 2000) and subsequently in Northern Ireland (Murphy & Beggs, 2002) during the 1990s. The evolution and development of this model of collaborative practice which has generated new fields of research in partnership, reciprocal professional learning and in learning to teach science has since been replicated in the USA, Sweden, Australia and in the Republic of Ireland and is widely published (Murphy & Scantlebury, 2010; Gallo-Fox & Scantlebury, 2016; Murphy, 2016; Kerin & Murphy, 2018). According to Scantlebury et al. (2006, p. 971), it is...

through the praxis of teaching, coteachers generate collective understandings of their practice together, thus expanding their knowledge about what it means to teach. It is a dialogic process that draws on reflective practice as a mechanism for making unconscious practices explicit.
While traditional methods of learning to teach are focused on the transfer of theory to practice, coteaching offers a model which also interrogates practice to generate theory (Murphy et al., 2015). Coteaching, which has been perceived as ‘a practice of method, rather than as a method of practice’ (Roth, Lawless & Tobin, 2000), offers a means of support for both partners, in many cases the pre-service and in-service teacher, to conceptualise teaching as a dynamic and context-specific process. This openness to the possibilities for understanding the complexities of teaching accommodates and celebrates the many perspectives on what it means to learn to teach (Hedin & Conderman, 2015; Guise et al., 2017; Kerin & Murphy, 2018). Such openness represents a significant epistemological shift in understanding how teaching and learning occur (Martin, 2009). Coteaching therefore offers a mechanism for learning from practice, for learning by doing, for experiential learning, while co-reflection, particularly with the development of shared understanding and a common language for expressing this understanding, provides a means to improve teaching and ultimately to learn about learning and teaching (Murphy, 2016). Therefore, the practice of teaching is theorised in the conversations between teachers following coteaching as they make sense of the experience, consequently availing of the opportunity to develop their own agency (Laflamme et al., in press; Murphy, 2016). While coteaching has evolved over the last fifteen years, the fundamental principle of learning to teach by being with others is integral to the model (Murphy et al., 2010; Murphy, 2016).

Roth and Tobin (2002) distinguish coteaching from all other forms of collaborative teaching by placing the emphasis on the practice amongst coteachers of sharing professional capital while actively engaging in the activity of teaching and learning ‘at the elbow of another’ (2002, p. 1). See Figure 2.1.

Figure 2.1: Coteachers sharing professional capital (Roth & Tobin, 2002)
Siry et al. (2010, p. 59) explain that coteaching is an approach to learning to teach where teachers work together and ‘then crucially analyse classroom events together’. Foregrounding the benefits for all participants Murphy and Beggs (2010), analogous with Gallo-Fox et al. (2010) and Bacharach et al. (2010), contend that coteaching therefore provides for the mutual support of two (or more) professionals to develop and reflect on their own and each other’s improving classroom practice with a view to expanding the learning opportunities for the students (Murphy & Beggs, 2010; Gallo-Fox & Scantlebury, 2016; Bacharach et al., 2010). Conceptualising coteaching as the sharing of professional capital involves teachers jointly engaging in three essential practices: coplanning, coteaching and coreflecting (Figure 2.2). Hedin and Conderman (2015) conclude that these three elements are essential if coteaching is to be successful.

![Coteaching Dynamic](image)

**Figure 2.2: Coteaching Model (Roth & Tobin, 2002)**

As outlined above, coteaching provides both pre and in-service teachers with opportunities to learn from each other during all phases of teaching, planning and reflecting. Each individual teacher becomes a resource, not only for the students in the classroom, but also for other teachers (Murphy, 2016).

### 2.3.5 Sharing Experience and Expertise

A fundamental requirement for the success of coteaching involves the facilitation of formal coteacher conversations about shared experience to generate understanding about teaching and learning and to co-generate strategies for improving practice (LaVan & Beers, 2005; Tobin & Roth, 2006; Gallo-Fox & Scantlebury, 2015; Guise et al., 2017; Soslau et al., 2018). This professional practice, commonly labelled cogenerative dialogue (Roth & Tobin, 2002; Tobin & Roth, 2006;
Scantlebury et al., 2008), is considered an essential component of the coteaching process. Cogenerative dialogue provides coteaching participants with a way to examine the social interactions between participating school staff, between pre-service and in-service teachers and between students and teachers in schools (Gallo Fox & Scantlebury, 2016). Such opportunities for professional discussion provide a platform for excavating meaning, for analysing results and for discussing actions while teaching. According to Jackson and Philips (2010) opportunities for professional exchange enables coteachers to understand how they can develop their practice to expand their agency and to enhance and promote learning in the classroom. During cogenerative dialogue no one voice is dominant or privileged over another. By listening to each other, coteachers eventually come to understand teaching and learning through the perspective of others. In this context the voice of the pre-service teacher is as important and as valued as that of the experienced teacher (LaVan & Beers, 2005; Tobin & Roth, 2006).

Conversing in relation to shared practice takes place in many different settings before, during and after coteaching. A number of authors have studied the use of huddles or ‘brief impromptu conversations that often take place during teaching enactment’ (Soslau et al., 2018, p. 100). Tobin, Zurbano, Ford and Carambo (2003) describe huddles as short focused meetings between coteachers which can occur before, during or after coteaching. During these short exchanges, either coteacher may initiate a conversation with the other to clarify some element of classroom practice (Gallo-Fox & Scantlebury, 2016). Concluding that coteachers use huddles to improve their practice, a recently published study by Soslau and her team revealed that the most common topics discussed by coteachers in this huddles include changing or altering teaching approaches to maximise student engagement; questioning, classroom management issues; the intention of one or other of the coteachers to model a particular technique; the clarification of a particular content issue; a suggestion to consider the pacing of the lesson and the need to clarify a set of directions (Soslau et al., 2018, p. 105).

2.3.6 Developing Coteaching

Guise et al. (2017) in researching the conditions for development in coteaching or for ‘moving pairs along the coteaching continuum’ towards collaborative practice while observing that the coteaching model is ‘rife with challenges’ (p. 380), recommend that coteachers are exposed to a theory ‘that prioritises teacher learning through collaboration and inquiry in a community of practice’ (p. 379) to ensure that traditional models of teaching are dismantled in favour of models of cooperation and partnership.
Referencing Roth and Tobin, (2005) coteaching, according to Gallo-Fox and Scantlebury, (2016, p. 3),

Is grounded in the understanding that learning to teach is a sociocultural historical activity where teachers collaborate to create a supportive environment.

Stetsenko (2008) further argues that individuals learn from first participating in a community, then later cooperating as a member of the community moving towards transforming the community through shared contribution. Stetsensko (2008) represents collaboration as development where stages such as participation, cooperation and contribution are articulated as steps along a continuum from relational engagement in a community towards co-contribution and transformation.

A proposal to situate the concept of collaborative development within the context of coteaching was first articulated by Murphy and Carlisle (2008). They describe how in considering coteaching as development, coteachers are encouraged to progress during the placement from being participants in the process to enacting conscious shared co-contribution. This is illustrated in Figure 2.3 as an ascending stepwise graphic (Kerin & Murphy, 2013, 2015, 2018). Kerin and Murphy (2013) further extended this Coteaching Developmental Model with the addition of text which sought to broadly articulate the main characteristics associated with each of the six progressive stages in the development of coteaching.

![Draft Developmental Model with Explanatory Text](Kerin & Murphy, 2013)

### 2.3.7 Implementing Coteaching

Two longitudinal studies describe the implementation of coteaching, identifying both the opportunities and challenges encountered. Murphy and Beggs (2010) reported on a five-year systematic study of the implementation of coteaching science in one hundred and twenty primary schools in Northern Ireland. Discussing the introduction of the model over three phases,
preparation, enactment and evaluation, the authors identify elements essential for success. These include, organisational alignment (school and university) and the development of interpersonal professional relationships based on shared understandings of the opportunities and challenges ahead. Their study identifies as significant the university teacher educators’ engagement with school personnel from the preparation stage and throughout the project; the shared ownership of the project by both the university personnel and the school staff; the responsibility of the university to support the sustainability of the programme should it benefit school participants and finally the dissemination of the results amongst all participants interested in accessing the findings.

A three-year ethnographic study in North America (Scantlebury et al., 2008) focused on the implementation of a coteaching partnership between the University of Delaware and Biden High School. The authors identified practices such as co-respect and co-responsibility as essential elements of successful coteaching. Gallo-Fox et al. (2006) drew on the experience of this research to offer the following advice to those considering conducting future research on the coteaching model:

- Ensure that the perspectives and philosophies of each participant is valued
- Facilitate time for discussion during coteaching seminars in advance of implementing coteaching in the school in order to accommodate philosophical differences and support full and open disclosure of the different perspectives on teaching and learning at the outset
- Allow opportunities for on-going professional exchange to enable the accommodation and modification of personal views and to establish joint ownership of the new model as well as facilitating the identification and rectification of tensions as they arise, particularly in the early stages of implementation
- Recognise the importance of the responsibility of the university co-ordinator as researcher to ensure that the views and opinions of all participants are valued and included in the research.

A more recent publication by Gallo Fox and Scantlebury (2016) discusses how, as the coteaching partnership between the University of Delaware and Biden High School matured, the facilitation of weekly on-site coteaching seminars which monitored the implementation of the coteaching model resulted in the creation of a community of practice where in-service teachers and pre-service teachers together with university personnel engaged in regular professional conversations which in time resulted in expanded roles for teachers as teacher-educators, researchers and leaders of coteaching in the school.
Kerr (2010) also observed that the quality of the coteaching improved when in advance of the implementation of coteaching, in-service and pre-service teachers engaged together in continuing professional development (CPD) led by experts. This CPD could be in diverse areas, such as nature of science, coteaching, practical science in the classroom, puppets, thinking skills and assessment for learning. The time spent learning together supported the development of professional relationships between coteachers and created changes in their teaching approaches which in turn revealed an expansion in coteacher agency. These findings led Kerr (2010) to suggest an extension to the current coteaching model (Section 2.3.4) to include in-service and pre-service teacher learning together in advance of coteaching implementation.

Similarly, a recent study conducted by Soslau et al. (2018, p. 17) calls for an extended role for the university teacher such that the hierarchy ‘flattens with all participants becoming collaborators working collaboratively to improve pupil learning, classroom teaching and coteachers’ individualised expertise’, suggesting that coteachers need the support and guidance of the project coordinator in implementing and developing coteaching.

2.3.8 Barriers to the Successful Implementation of Coteaching

A recent study by Guise et al. (2017) considers the main challenges to effective coteaching and the steps for the successful implementation of the coteaching model. They tracked the extent to which partners implemented the coteaching model with fidelity. Locating participation on a continuum extending from the first stage, traditional student teaching to the second stage which is described as a blended experience characterised by individual and joint contributions, they described the third stage as forward momentum or engaging the majority of the time in collaborative practice and identified the fourth stage as total openness to the views of the other. This final stage was indicative of a tight collaborative partnership.

Supporting Murphy and Beggs (2010) and Scantlebury et al. (2008), Guise et al. (2017) identify variables which impact negatively on the implementation of a coteaching project. These include (i) not taking time at the beginning to ensure that participants have a shared understanding of the theoretical framework which informs the rationale for coteaching (ii) not establishing a clear understanding of individual and joint roles and (iii) delaying in identifying difficulties as they arise particularly at the beginning.
A number of researchers point to the strains which occur when the quality of the relationship between coteachers is limited when one partner does not value the expertise of the other, or indeed when one partner is less committed to collaboration (Soslau et al., 2018; Kerin & Murphy, 2018; Murphy, 2016). Murphy and Beggs (2005) considered purposefully matching coteaching pairs to ensure greater harmony between coteachers. While their approach yielded positive results, the findings were not supported in a subsequent study conducted by Lawley (2012). Having sought the perspectives of cooperating teachers on pairing coteachers with similar personality traits, Lawley’s study (2012) involving sixty-six participants (in-service and pre-service teachers) concluded that in the long-term, there was no significant difference in levels of harmony between purposefully paired and randomly paired coteachers. Moreover, Lawley’s findings suggest that purposeful pairing could actually hinder effective collaboration. Lawley concluded her study recommending that purposeful pairing, particularly as it related to matching personalities be discontinued.

Several studies identify the tensions which can arise on first introducing coteaching in a solo-teaching culture (Gallo-Fox et al., 2006; Murphy & Beggs, 2010; Siry, 2011; Guise et al., 2017). Consistent with earlier findings (Gallo-Fox, 2009a; Gallo-Fox & Scantlebury, 2015), deficiencies in time and modes of coplanning continue to be identified as inhibitors ‘of plans, shared goals for students or ways to coordinate instructional activities’ (Gallo-Fox & Scantlebury, 2016, p. 4). A factor which inhibits successful implementation of a coteaching project includes curtailing the time allocated for coplanning. In accord with Carlisle (2010) and Scantlebury et al. (2008), findings from a study which focused specifically on coplanning (Gallo-Fox & Scantlebury, 2015) illuminate the challenges experienced by coteachers including finding a mutually satisfactory time to coplan, having to assign time after school to coplan and having to use virtual platforms. Reports from in-service teachers regarding pre-service teacher delays in submitting the final plans or modifying the plans at the last minute such that coteaching was impacted negatively were some of the challenges to coplanning report in this study. Levels of frustration experienced by coteachers when colleagues failed to deliver the lesson plans in a timely manner were also captured in the Gallo-Fox & Scantlebury study (2015).

During a three-year ethnographic study on implementing coteaching (Gallo-Fox et al., 2006) the authors identified some of the additional impediments they encountered. These included the difficulties which arose when multiple pre-service teachers were placed with individual teachers. Since teachers were expected to share responsibility for teaching with their coteacher, this, for some caused undue levels of complexity, negatively impacting the development of prosperous professional relationships between partners. The arrangement whereby one teacher might coteach with multiple coteachers also placed a strain on the amount of time for planning afforded
to each dyad which in turn negatively influenced coteaching. Consequently, a leaner and less complex coteaching model was reconceptualised, lowering the number of pre-service teachers assigned to one particular in-service teacher and allocating sufficient time for planning.

In summary, barriers to coteaching implementation mentioned in the literature include failure to implement the coteaching model with fidelity (Guise et al., 2017); non-alignment of partner perspectives on roles and responsibilities (Soslau et al., 2018) and teachers not being given the opportunity to volunteer for coteaching but being forced or expected to do so (Soslau et al., 2018); the dominance of one partner to the detriment of a collaborative approach and the professional development of the less dominant partner (Scantlebury et al., 2008; Gallo-Fox & Scantlebury, 2015; Murphy, 2016; Kerin & Murphy, 2018) and negative interpersonal relationships between partners (Gallo-Fox & Scantlebury, 2015; Kerin & Murphy, 2018). Coteaching which thrives on openness, dialogue and coreflection is limited and negatively impacted if teachers are not aware of these issues from the start.

The final component of the literature review explores the affordances of a number of theoretical lenses which span sociocultural, social development and new-Vygotskian learning theories. These theories will be employed collectively to provide interpretations on the pertinent aspects of the study.

2.4 A Theoretical Framework for Coteaching Music

In recent years, the influence of sociocultural learning theory on research in education has highlighted the importance of external and cultural influences on learning (Murphy et al., 2014; Carambo & Blasie, 2010). Sociocultural learning theory suggests that learning requires ‘additional cognitive resources found in the sociocultural milieu’ (Cole & Engeström, 1997, p. 3). Therefore, a socio-cultural framework may be useful in first describing and later interpreting the ways in which primary teachers experience and report coteaching music.

It is tempting to rely on Vygotsky’s seminal, well-established theory, the Zone of Proximal Development as it offers the most robust account of cultural development to date (Lantolf & Poehner, 2008; Shabani, 2016). Although Murphy, McCullagh and Doherty (2014) present a convincing case for the adoption of Vygotsky’s theory of the Zone of Proximal Development as an explanatory framework for coteaching, the unique opportunity to study the impact of coteaching music on both classroom practice and on school culture may be best served by a careful consideration of a number of additional key socio-cultural theories. The full staff take-up warrants
a consideration of Solidarity Theory. A consultation of the contribution of Situated Learning Theory is apposite concerning the possible influence of the specific location, an inner-city girls’ primary school. The tensions which may occur between structure (school) and agency (teachers, as they strive to develop via coteaching) may well be illuminated through the support of Structure|Agency Dialectic Theory and a closer look at the dynamics of how coteaching will operate as part of an activity system will surely benefit from an understanding of Cultural – Historical Activity Theory. Consequently, five specific theories of learning and development including Solidarity, Situated Learning, Structure|Agency Dialectic, Cultural - Historical Activity Theory (CHAT) together with Vygotsky’s theory of the Zone of Proximal Development (ZPD) are drawn on and interwoven in addressing the various aspects of the study as they relate to the research questions and in mapping the direction of this enquiry (Figure 2.4). A gap identified in the research literature is discussed in advance of the presentation of a more refined and extended set of research questions.

Figure 2.4: Theoretical Framework (Kerin, 2015 adapted from Carlisle, 2008)
2.4.1 Situated Learning Theory

Coteaching situates professional learning in school-based knowledge-building communities which involve pre-service teachers, class teachers and university tutors (Lieberman, 1992). Edwards (2005) asserts that the focus of the Situated Learning approach, including communities of practice, is on how the individual adapts to different social settings. Lave and Wenger (1991) view this type of collective learning as ‘situated learning’. Roth (1998) suggests that coteaching is a supportive approach accommodating as it does the movement towards increased participation and sharing of practice. Individuals first act as peripheral participants in the activities but over time, move towards greater inclusion and interaction with the community (Roth, 1998; Lave & Wenger, 1991). It is this emphasis on participation in learning, in the context of primary teacher perceived confidence deficit in music, the actual classroom in which (s)he teaches and the support of the school community, that aligns with this coteaching music study. Situated Learning Theory also provides for the study of development or progression in coteaching as partners become more experienced. However, one of the limitations of the theory is its positioning of the pre-service teacher as the learner, who adapts their behaviours according to the more experienced practitioner (cooperating teacher) (Murphy, 2016). Coteaching as conceptualised in the context of this study recognises the potential for reciprocal learning for all participants and particularly focuses on teacher learning from pre-service music education teacher acknowledging the unique expertise, professional capital and value of each partner, viewing each coteacher as equal, as both teacher and learner. This perspective is in contrast with the master/apprentice model frequently associated with situated learning (Murphy, 2016). While Situated Learning Theory may contribute to the theoretical framework for the coteaching music study, its limitations warrant further consultation with socio-cultural theory.

2.4.2 Solidarity Theory

Solidarity is a feeling of unity or agreement amongst individuals with a common interest (Oxford dictionary, 2008). This definition is compatible with Rorty’s (1989) much-referenced assertion (Carlisle, 2008; Murphy, 2016; Rigano, 2005; Roth, 2007) that ‘our sense of solidarity is strongest when those with whom solidarity is expressed are thought of as ‘one of us’ as opposed to ‘one of them’ (Rorty, 1989, p.191). The concept of solidarity has been adopted by researchers to deconstruct and scrutinise the collective and collaborative nature of coteaching (Roth, 2006; Ritchie & Rigano, 2005). In the context of this study, which includes a whole-school commitment to coteaching, Solidarity Theory may capture how teachers participate, contribute and develop during the coteaching process. Roth (2007) noted that coteaching has potential for fracturing the boundaries which one associates with institutional relationships, such as those between pre-service and in-service teacher. This potential arises because coteaching creates opportunities for
relationship—building, for participants to coplan, coteach and to coreflect. The shared responsibility arising from coteaching can establish cohesion whereby participants intentionally support each other as new practices emerge in the classroom. Accordingly, Roth and Tobin (2005), envisaged an ‘expanded agency for all participants so that they each might attain their goals within a context of collective agency’ (p. 12). Ritchie and Rigano (2005) and Collins (2004) highlighted the role of emotions and personal relationships in collaborations, claiming that successful interactions can lead to the production of positive emotional energy or ‘a feeling of confidence, elation, strength, enthusiasm, and initiative in taking action’ (Collins, 2004, p. 49). Solidarity has application in the context of promoting collective responsibility and harmony in the classroom. The limitations of this theory however relate to its inability to interrogate or articulate the manner in which solidarity is developed between coteachers.

2.4.3 Structure|Agency Dialectic Theory

The concept of Structure|Agency has been employed in a variety of contexts to characterise the relationship between social structures and human agency (Bourdieu & Nice, 1977; Sewell, 1992). Social science has an on-going debate regarding the superiority of either structure or agency in shaping human behaviour (Sewell, 1992). Structure is interpreted as the habitual, repeated arrangements which influence or limit the choices and opportunities available (Tobin, et al., 2003) encompassing systems and rules, codes of behaviour and accepted practices. However, these structures, intended to facilitate development and growth, might also restrict and limit. Agency is the capacity of individuals to ‘act independently and make their own choices’ (Ahearn, 2001, p. 211). Agency presents the idea that individuals don’t simply act or react in predetermined ways but have the capacity to change and to adapt in relation to given conditions (Roth & Tobin, 2005). From a sociocultural perspective, agency is not simply an individual character trait or activity, but a way of being in the world (Murphy et al., 2014).

A host of coteaching studies draw on the Structure|Agency Dialectic to examine the various dimensions of practice and to interrogate how a teacher’s practice can be influenced, and in some cases, transformed, by coteaching (Carambo & Blasie, 2010; Roth & Tobin, 2004; Murphy, 2008; Tobin & Roth, 2006). Scantlebury et al. (2008) employed the Structure|Agency Dialectic as a framework to explore pre-service teachers’ teaching experience within the context of coteaching science. They argued that a teacher’s agency is supported or constrained by the structure or schema of the classroom and by their own capacity to appropriate both human and material resources. Whether or not the resources are appropriated depends on the perceived agency and perceived capital of the participants and whether the structure of the field supports or restricts
their agency (Tobin & Roth, 2006; Carlisle, 2008; Grenfell, 2012). Coteaching in this study involved experienced in-service teachers sharing pedagogical knowledge with novice or pre-service teachers in exchange for subject knowledge as both members of the coteaching dyad co-constructed the pedagogical content knowledge associated with teaching music in the primary school. Kerr (2010) monitored the expansion of agency experienced by the class teacher while coteaching with a pre-service subject specialist. Roth and Tobin (2004, p. 170) reported that ‘in the context of coteaching, partners augment one another’s opportunities to act and hence their agency’. Murphy et al. (2008) argued that the development of effective coteaching is dependent not only on the perceived agency of participants and the structure of the social setting but also the working relationship between participants (social capital). Scantlebury (2005) also asserted that the working relationship between coteachers was a key factor promoting effective coteaching.

The Structure|Agency Dialectic is an appropriate sociological construct and may have much to contribute to an eclectic theoretical framework for coteaching music particularly in terms of understanding the context of the school and the classroom within which coteaching is enacted and how the local structure may best support coteaching. The theory is restricted however, in its capacity to articulate how the relationship between individuals affects their participation and how they develop their coteaching ability and skill-set. Therefore, while it contributes to the theoretical base, it is deemed of valuable albeit of limited use in that according to Murphy et al. (2014) it fails to capture the maximum potential inherent in the model.

2.4.4 Cultural - Historical Activity Theory

Cultural - Historical Activity Theory (CHAT), also referred to as ‘Activity Theory’ emerged in Russia in the 1920s associated with the scholarship of Lev Vygotsky. The central premise of this theory is that ‘awareness emerges from an individual participating in a social structure where activity, incorporating the use of tools...leads to socially valid outcomes’ (Masters, 2009 p.360). The author goes on to suggest that as a consequence of engagement in such a social structure, ‘the individual develops their own perspective, changing the way they think and behave in future situations’ (p. 360). The CHAT model, represented by Engestrom (1987) illustrates how the subject (in this study, the primary teachers) interacts with the coteaching community (colleagues, school principal, university researcher, musician coteachers and pupils), adhering to the rules of the community (reciprocity, co-respect, co-responsibility, coordination) and acknowledging a division of labour (teachers and musician coteachers) using instruments or tools such as musician coteachers to help them reach the object – a music programme for the pupils, the desired outcome (Figure 2.5).
Cultural - Historical Activity Theory (CHAT) has been used for more than twenty years as a lens through which human activity can be viewed and scrutinised. CHAT accommodates the connections between all participants involved, pre-service teachers, in-service teachers, school principal and university coordinator and is a useful model to identify and study the relationships, tensions and contradictions arising from these interactions (Murphy et al., 2010; Murphy et al., 2014). Roth and Tobin (2002) actually claim that contradictions should be viewed in a positive light, alleging that difficulties highlighted and analysed contribute to a fuller picture and therefore can be the impetus for change, development and expansion (Roth & Tobin, 2002; Carlisle, 2008). Roth and Tobin (2004) suggest that having teachers work together under the same conditions presents opportunities for modelling and experiencing what others do, for understanding the intentions and actions of the other and for emulating such activities. In coteaching, the collective activity involving two or more teachers expands the teaching resources or tools for student learning. It also supports opportunities for learning to teach (Roth & Tobin, 2004) and teacher professional development (Gallo-Fox & Scantlebury, 2016; O’Conaill, 2010; Murphy, 2016). Thus, coteachers (both novice and experienced teachers) have greater resources to support their professional learning both at a level of awareness and at an unconscious level as each appropriates new ways of teaching from being with each other (Roth & Tobin, 2004). In situations where teachers and musician pre-service teachers have different perspectives on how to teach, CHAT provides excellent opportunities for ‘looking in’ on the activity of coteaching from an external perspective (Murphy et al., 2014, p. 3).
As a contained community, the coteaching music study is ideal for framing within a CHAT paradigm which includes the notions that human behaviour is social in origin; human activity is mediated through cultural tools; communication is of paramount importance; values and beliefs are developed in a process of objectification and learning and development are incorporated in the activities of a community of practice (Masters, 2009). One important consequence of the activity within a system is that this activity brings about change to the environment. This means that rather than being static the system grows and changes as objects are achieved (Masters, 2009). These principles pertain to the coteaching music study which seeks teacher perspectives on the experience of collaborating with a pre-service music teacher via coteaching. However, according to Murphy et al. (2014), CHAT is limited in its ability to explain the enactment of coteaching and the process of development of coteachers. Situated Learning Theory, the Structure|Agency Dialectic Theory, Solidarity Theory and CHAT each supplies a perspective to inspect, investigate, examine and analyse the various dimensions and processes involved in coteaching. A unifying framework is now required to encapsulate these theories while incorporating the concept of coteaching as development.

2.4.5 Zone of Proximal Development

Vygotsky emphasised the primacy of social interaction in human development (Mahn & John-Steiner, 2012). Contrary to the dominant theories of his time which separated learning and development, categorizing learning as external and development as an internal process, Vygotsky considered their unity and interdependence. Seeking to explain how social learning takes place Vygotsky, (1978) advanced the construct of the Zone of Proximal Development (ZPD). This theory is accepted by many interpreters of Vygotsky’s scholarship on learning as the gap between what a learner has already mastered (actual development) and what a learner can achieve (potential development) under guidance (Vygotsky, 1978). Vygotsky articulates the concept thus: ‘the zone of proximal development refers to the distance between the actual development as determined through independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers ‘(p. 86). Vygotsky (1978) claims that the zone of proximal development is formed during collaboration, in that it ‘awakens a variety of developmental processes that are open to operate only when the (learner) is interacting with people in his environment and in collaboration with his peers’ (p. 90). Scholars argue that coteaching presents an ideal context for learning by creating a zone of proximal development in which the achievement of the collective exceeds that of the individual (Roth, 1998; Roth, Masciotra & Boyd, 1999). In considering coteaching as a zone of proximal development, the collective and socially mediated nature of teaching and learning is shared between coteachers.
Coteaching fosters reciprocal learning as coteachers plan, teach and evaluate lessons together (Roth et al., 2002). Therefore, both experienced and novice teacher, when afforded opportunities for exchange of expertise, create occasions for mutual professional development during coteaching. Roth and Tobin (2001) asserted that during coteaching the individual contributes to the development of the community and at the same time indirectly to their own development and learning process.

Vygotsky (1978) characterised the learner in the zone of proximal development as demonstrating ‘functions which have not yet matured but are in the process of maturing’, referring to these increments as ‘buds’ or ‘flowers’ of development rather than ‘fruits’ of development’ (p. 86). Van Oers (2007) observed lucidly that it ‘is not a specific quality of the learner, nor is it a specific quality of the educational setting — it is collaboratively produced in the interaction (p. 15). Contemplating the ZPD as collaboration between co-participants (Wells, 1999) or as symbolic space for interaction and communication where learning leads to development (Meira & Lerman, 2001), this concept continues to challenge researchers (Carlisle, 2008). The interaction interpretation while popular, is queried on the grounds that the maturing functions described by Vygotsky (1978) are not created in an interaction, but the interaction helps to identify the existence of these functions and the extent to which they develop (Chaiklin, 2003; Murphy, 2016). Such development via the ZPD occurs when specific conditions are satisfied. These conditions include dramatic collision; interaction between real and ideal forms; buds of development; the unity of affect and intellect; imitation and coreflection as facilitated by cogenerative dialogue (Murphy et al., 2014). An exploration of these concepts affords opportunity for the operationalisation of the zone of proximal development in context of teacher learning (Veresov, 2010) as illustrated diagrammatically by Laflamme et al. (in press) (Figure 2.6).
A conceptual framework for coteaching based solely on Vygotsky’s ZPD needs to incorporate regression and recursion as described by Veresov (2010) and discussed by several prominent scholars including Zebroski (1994), Tharp and Gallimore (1988) and Murphy (2016). According to Murphy, McCullagh and Doherty (2014), a model of critical reflection as developed by Lampert-Shepel (1999) is also vital to fully interrogate the nature of the interactions between individuals (Roth & Radford, 2010). The authors suggest that participants become (both) teachers and learners, a view which identifies ZPD as a symmetrical concept central to the idea that coteaching is based on the equal sharing of expertise (Murphy et al., 2014).

This ZPD framework acknowledges that because of the complexity of the interactions which need to occur at each stage, development is incomplete unless the shared problem, the principles involved in realizing the appropriate goals and the means of solving the problem, are considered concurrently (Rogoff, Mistry, Goncu & Mosier, 1993). Murphy et al. (2014) extended and challenged the work of Jones, Rua and Carter (1998) and Ash and Levitt (2003), adapting Vygotsky’s theory of the ZPD in the context of science teacher professional development:

In summary, Vygotsky’s ZPD focuses on learning as development via interaction; sees learning as arising from the interaction between real and ideal forms and as the further development of ‘budding’ capabilities; it addresses the importance of emotion in learning; acknowledges the importance of recursion, affording opportunities for coteachers to learn from struggles as well as affordances, and encourages Vygotskian ‘imitation’, which comprises more than simply modelling practice ...

(Murphy et al., 2014, p. 6)
The potential within the theory of the ZPD to explain and interpret the activity of coteaching and the successful outcome indicated by the findings from a study which piloted a model for coteaching based on Vygotsky’s Zone of Proximal Development (Murphy, McCullagh & Doherty, 2014) makes a strong case for the adaptation of the ZPD as the explanatory framework for the coteaching music study.

However, as mentioned earlier, factors such as the school context, the full staff commitment to the study, the changes wrought to the structure by the activity of coteaching itself warrant the contributions and considerations of the additional socio-cultural theories. Consequently, an eclectic model as illustrated in Figure 2.4 was adopted for the purposes of directing this study and also in relation to interpreting the findings.

2.4.6 A Gap in the Literature

An examination of the research on coteaching in the context of science education provides robust evidence regarding the potential for reciprocal professional learning for both in-service and pre-service teacher involved in coteaching (Murphy & Scantlebury, 2010; Gallo-Fox & Scantlebury, 2016). This present study is therefore an attempt to fill a gap in the current research, to commence a new discourse on coteaching in the context of yet another subject perceived by teachers as requiring specialist expertise, (Subsection, 2.2.4) adding to the knowledge base on coteaching. A coteaching partnership involving in-service and pre-service music education teachers (Figure 2.7) might resolve the problems associated with teaching music as reported by primary teachers. With its focus entirely on teachers and their perspectives on coteaching music over a three-year period, this study offers an opportunity for a slow, close-up scrutiny of coteaching from the perspective of the primary teacher. Should the findings resonate with those of Gallo-Fox et al. (2016) a mutually enriching coteaching partnership may well be sustained and indeed, may even be replicated with the objective of building mutually beneficial school – university partnerships which in turn might well shape the future of initial teacher education in the Republic of Ireland.
2.5 Conclusion

The purpose of this chapter has been to situate the study within the research literature as it applies to three aspects of the proposed research. Having explored the ubiquitous problems associated with teaching music in the primary school in the first section, the second section of the chapter investigated the literature on coteaching as a mechanism for teacher professional development. The final section considered the theoretical concepts which inform and underpin the research, and which together provide a theoretical framework for the inquiry. The following question and sub-questions have emerged from this literature review:

**What do primary teachers report as outcomes from coteaching music?**

Sub-questions:
1. *How do teachers describe the impact of coteaching on classroom practice in music? On:*
   (a) Teacher confidence
   (b) Teacher understanding
   (c) Teacher skills in music
   (d) Teacher beliefs about curricular music
2. *In which ways do teachers explain the influence of coteaching on the school? On:*
   (a) Teacher identity
   (b) School culture
The literature review indicates that while studies on the impact of coteaching in disciplines such as science and mathematics abound, little is known in relation to how the in-service teacher experiences professional development during coteaching and far less on how primary teachers might experience a whole school commitment to a coteaching music partnership between teacher and pre-service music teacher. Therefore, this research study was designed to add to the corpus of knowledge by examining how a full primary teaching staff implemented and experienced a whole school coteaching music partnership over a period of three years. It was expected that this line of inquiry will provide suggestions for informing primary teacher professional development, particularly in relation to the teaching of subjects which primary teachers perceive as requiring specialist knowledge and skills such as music and science and for managing the perceived intractable problems of practice they face when they lack confidence in their ability to teach such subjects.

Chapter Three outlines the methodology and research methods that were used to address the research questions which underpin the study.
CHAPTER THREE - METHODOLOGY

Generative ideas emerge from joint thinking, from significant conversations, and from sustained, shared struggles to achieve new insights by partners in thought (John-Steiner, 2000, p. 3).

3.1 Introduction
 Seeking the perspectives of twenty teachers on their experience of coteaching music, this three-year inquiry located in one urban primary school in Ireland initially took the form of an exploratory, mixed-methods study. Chapter Three outlines the theoretical basis which informed the research paradigm. The research design is presented and the methodology including data collection and analysis is discussed. Ethical issues and the limitations associated with the study are also addressed.

3.2 Research Aim
 ‘Sharing of ideas, experience and expertise lies at the root of coteaching as pre-service (PST) and in-service (IST) teachers work together in coplanning, copractice and coevaluating’ (Murphy, 2016, p. 1). Seeking to establish a reciprocally beneficial school–university partnership, the aim of this study was to describe, analyse and synthesise the perspectives of twenty teachers on the impact of coteaching music. The concept and experience of coteaching, as used for the purposes of this study (Chapter Two, Section 2.3), were completely new for the participant primary school teachers. A study which sought teacher perceptions on an innovative model of collaborative practice, and which challenged traditional professional conventions, required the use of sympathetic methods of inquiry.

3.2.1 Research Questions
 In exploring primary teachers’ experiences of coteaching the following broad research question guided the initial direction of the inquiry: What are primary teacher perspectives on the impact of coteaching music? Over time the overarching question evolved, became more focused and was represented thus: What do primary teachers report as outcomes from coteaching music? Time spent reflecting on the scholarly literature on primary music teachers’ perceptions of low self-esteem in music and on coteaching as a model for learning to teach, together with on-site visits to the school in preparation for the study, resulted in the final crafting of the research sub-questions for a more precise inquiry (Chapter Two, Sub-section 2.5).

3.3 Expected Impact
The 21st century no longer sees school as having the sole responsibility for educating children (Dwyer, 2011). In the field of music education international and local research support the notion of partnerships between school and outside agency (Kenny & Morrissey, 2016; Kenny & Christophersen, 2018). Accordingly, a recent review of initial teacher education provision in Ireland calls for sustainable partnerships between university and school (Teaching Council, 2011b). However, to fully embrace this situation, the educational field needs to adopt a change in traditional practices by actively involving itself in partnerships (Dwyer, 2011).

Coteaching provides a model for such partnership, one which is concerned with facilitating reciprocal professional development for both in-service (IST) and pre-service teacher (PST). Although research on coteaching is plentiful in areas such as science and mathematics (Murphy & Beggs, 2002; Tobin & Roth, 2006; Murphy & Scantlebury, 2010; Murphy, 2016; Gallo-Fox & Scantlebury, 2016) very little research on coteaching in the arts or in music has been conducted to date and a formal programme of coteaching involving a full staff of teachers within a single school in the Irish context has not yet been undertaken. Consequently, the study offers an insight into the affordances of coteaching within a completely new context. The study therefore has the potential to offer a valuable insight into coteaching in the context of music education and into the processes involved in inter-institutional or indeed inter-professional partnership in the primary school. While the focus is on one curricular subject and the location involves one school in Ireland, it is hoped that the research findings will extend to additional learning platforms and teaching arenas and that findings from this empirical study will advance universal scholarship on collaborative professional learning via coteaching.

3.4 Methodology
Methodology is concerned with the choices that are made in relation to data generation, data analysing and data interpretation. Section 3.4 outlines the theoretical basis for the choice of methodology focusing on the research design, research approach and data collection strategy.

3.4.1 Research Paradigm
Beliefs about ontology, or the nature of things, epistemology, the relationship between the knower and what can be known and methodology, how one investigates what they believe can be known (Denzin & Lincoln, 2011; Lincoln & Guba, 1985) were addressed in contemplating a research paradigm for the coteaching music study. Such a consideration was necessary since ontology directs epistemology which in turn guides methodology (Loxley, 2014). A researcher’s ontological, epistemological and methodological principles are referred to as their research paradigm (Guba,
A paradigm acts as a framework, or lens, through which the researcher views a particular phenomenon (Bloomberg & Volpe, 2012).

According to Denzin and Lincoln (2000) most social science research may be categorised under three major paradigms: positivist post-positivist; constructivist-interpretive and critical theorist. While positivist and post-positivist paradigms describe and explain reality objectively using scientific means, including quantitative methodologies, the constructivist paradigm espouses a relativist stance and values a context-specific subjectivist epistemology, exploring phenomena through the eyes of people in their lived situations (Weaver & Olson, 2006). Seeking to access the unique perspectives of twenty participant primary teachers on their experience of coteaching music and maintaining the focus of the research question over a three-year period were key elements in determining the constructivist paradigm adopted for the coteaching music study. The advice of Cohen and Mannion, (1994) to get close and go deep and to explore from the inside informs and underpins the predominantly qualitative research approach taken. Seeking to first establish a baseline in relation to teachers’ claims of low self-esteem regarding teaching music, and to explore their subsequent experiences of coteaching music as a possible solution to such confidence deficits, prudence suggested a combination of qualitative and quantitative methods; a mixed-methods research could reveal a fuller picture about an area in which little was already known (O'Donoghue, 2007). As an exploratory inquiry, this study is therefore situated predominantly within a constructivist paradigm facilitating the creation and co-creation of knowledge by teachers and researcher acting in partnership.

3.4.2 Research Design

In quest of a plan to explore the research questions it was the belief of the researcher that an interpretivist perspective, within a constructivist paradigm, was appropriate in exploring the unique perspectives of twenty teachers as they engaged in new practice, for the first time, over a three-year period. The study sourced data from a number of bases as a means of monitoring the enactment and evolution of new practice intending ‘not to discover reality, but to explore different interpretations of that reality by constructing a clearer experiential memory to obtain a more sophisticated account of things’ (Bresler, 1996, p. 6).
Bloomberg and Volpe (2012) suggest that qualitative research, which relies for evidence on observation, interview and document analysis, provides the possibility of in-depth scrutiny of a process and may result in a deeper understanding of a particular situation. The authors recommend that emergent themes from such procedures are placed in categories and interpreted on the basis of patterns. To ensure credibility, scholars employing qualitative methods are advised to be vigilant to the presence of their own biases and to position themselves accurately and overtly during the research (McIntyre & McLeod cited in McAleese & Hamilton, 1978 cited in Cohen et al., 2000). Returning to Bloomberg and Volpe (2012) and Bresler (1996) the researcher is reminded of the importance of the preservation of trustworthiness through reliance on openness to participant review of the findings and the interpretations of external reviewers. Accepting scholarly advice on the matter, participant teachers and the school principal were included as partners in member checking to protect against deviations from the representation of truthfulness (Bresler, 1996).

A quantitative approach employs questionnaires to seek information on attitudes and behaviour. The data generated is analysed using statistical analysis of scores, the results of which will confirm or contradict a theory or hypothesis. As mentioned above, the inclusion of a pre and post coteaching, music teaching confidence audit offered the prospect of unearthing the root of the problem regarding teacher perceived confidence deficits in music and identifying the areas of curricular music most in need of support. This quantitative element of the research was therefore considered a valuable source of data for this coteaching music study.

A mixed-methods design involves the use of two (or more) methods within a single study when one (or more) of the methods is not complete in itself (Morse & Niehaus, 2009). Much of the scholarship on the mixed-methods design has focused on the use of single designs (parallel or sequential), (Creswell, 1994; Morse et al., 2009; Morgan, 1998); few studies report truly integrated designs (Greene et al., 1989). The researcher concurs with a view expressed by Maxwell (2007), cited in Morse and Niehaus (2009), who argued that the term mixed-methods does not always accurately represent this design since the approach frequently uses a combination of methods rather than a mixture of methods. In this coteaching music study however, the pre-coteaching confidence audit facilitated the identification of areas in need of support so that the subsequent schemes of work, lesson plans and resources could be crafted with the needs of the teachers and the school in mind. Furthermore, in analysing the data from the quantitative element, the incorporation of a descriptive element which involved ‘no manipulation of the variables’ (Best & Kahn, 2003, p. 115) was relevant in proposing a number of questions for the semi-structured teacher interviews sharpening the focus even more on the perspective of the participant teachers. In the case of each subsequent coteaching music residency, the study employed data from one iteration to inform the
direction of the subsequent coteaching residency. Opinions shared, during pre-intervention focus-group discussions, for example, led to the design and distribution of a questionnaire-style confidence-audit where teachers were asked to comment specifically on their confidence in teaching music in comparison to their confidence in teaching eleven other curricular subjects. As explained below in Section 3.7.3 in addition to the eleven primary school subjects, (religion was also included in the audit since it is a subject taught at the school). Information from the confidence audits presented the researcher with an initial understanding of the issues which teachers encountered in teaching music. Taking various results from the questionnaire which probed teacher confidence in relation to teaching music in general, questions were reformulated and were used again during individual teacher interviews to delve deeper into the reasons behind the answers (Appendix 1). Information gleaned from interviews was used subsequently to select data gathering tools. This format could be represented as a developmental, multi-voiced, multiple perspective design which aimed for a purposeful polysemic perspective or as described by LeCompte and Preissle, (1993) to obtain multiple kinds of knowledge with different epistemological emphases.

The projected outcome sought more than simply another definition or a series of statements about coteaching. It was intended to tell a story with which readers could engage in a personal way and that would contribute to new understanding (Holloway & Todres, 2007) about coteaching. Such depth of understanding relied on a combination of qualitative and quantitative methods neither of which used singly would suffice. An exploratory mixed-methods design which used the strengths of both methodologies to provide a broader polysemic perspective on the overall issue while incorporating objective and subjective evidence reduced researcher bias, afforded opportunities for participant voice resulting overall in relevance and application beyond the population under scrutiny. However, Johnson and Onwuegbuzie (2004) argue that using both quantitative and qualitative approaches in the research design is expensive, time-consuming and can present certain difficulties including those associated with the researcher’s ability to interpret conflicting results and to analyse quantitative data qualitatively. These potential problems needed to be addressed if the findings were to be accurate, valid and credible. To that end the interweaving of results and analyses in the penultimate chapter (Chapter 6) was crucial to the overall integrity of the study.
3.4.3 Research Approach

Ethnographies, broadly speaking, are reports on studied situations assembled from information presented from the perspective of the participants (Van Maanan, 2006). Ethnographic research involves observation of a group of people in a natural setting. In attempting to gain an ‘emic’ or insider perspective, aspects of ethnography were appropriated for the purposes of this research study. The actual participation of the researcher in the lives of the community under scrutiny, over a period, while generating the data, is a feature of ethnography (Hammersley & Atkinson, 2007); such was the experience of the researcher. Welcomed into the school community, during this research study, interactions between teachers and between coteachers were observed as they spoke together in the staffroom, worked together in the classroom, an approach which is consonant with Hammersley’s description of ethnography (Hammersley, 1990). Therefore, to arrive at the fullest picture of teachers’ experiences of coteaching music, a number of methods associated with ethnographic research were employed. Researcher field notes, reflection diaries and semi-structured interviews provided the primary qualitative sources of data collection for this study. In addition, documents and artefacts such as summaries of the School Plan for Music and the Whole School Evaluation report (DES, 2016) were analysed as secondary qualitative data sources. Such secondary sources, including the ten, externally conducted, anonymously recorded and transcribed teacher semi-structured interviews refer to data troves which although analysed and interpreted were not sourced by the researcher herself but contributed greatly to proof of concept.

The challenges for the researcher included the need to fully appreciate and understand the setting or the socio-cultural system, the extensive and diverse nature of data collection and the amount of time needed for immersion into the field. The fact that this study was conducted in tandem with a restructuring of the school placement modules or practicum experience of the Bachelor in Music Education degree programme afforded the researcher the opportunity to spend time on-site, becoming familiar with school cultural practices and developing relationships with management and staff. Warnings that safeguards needed to be in place to ensure that the researcher in identifying so thoroughly with the field did not ‘go native’ and neglect to finish the study were extended by Cresswell (2007). As a former primary teacher with a passion for music education, and the ability to get carried away with the joy associated with the privilege of being back to school again, this advice was apposite and appreciated!
It was anticipated initially that the study would be completed after one coteaching music residency but with participant teachers wishing to remain involved the study was extended. Therefore, the research design which began as an exploratory mixed-methods study gradually evolved becoming a sequential, developmental, exploratory mixed methods design incorporating elements of ethnography.

3.5 Research Sample
The researcher as coordinator of pre-service music teacher education at the university attended by the pre-service music education teachers (PSTs) was responsible for organising and overseeing school placement requirements. This experience enabled an appreciation of the logistical challenges which PSTs face when meeting the requirements of professional placement. Therefore, choosing a school with a supportive staff, which was close to the university, was a major consideration. Contact with the principal teacher from a local school led to a discussion about developing a school-university partnership and elaborations relating to the benefits of building and sustaining such a partnership via a coteaching arrangement had immediate reciprocal resonance. An invitation to visit the school and to meet with the staff was followed by several more informal visits which presented occasions for both formal and informal discussion of the proposed coteaching music study. Given the generosity of the school in welcoming the researcher into their community and the enthusiasm for innovation and collaboration on the part of the principal teacher, one semester was devoted to encouraging teacher participation.

The study was conducted in an all-girls’ DEIS school situated in the city in a community experiencing economic hardship. The DEIS acronym represents a government scheme for Delivering Equality of Opportunity in School. The scheme identifies areas of economic disadvantage and offers structured support in terms of increased staffing and smaller class sizes. There were slightly less than two hundred children enrolled in the school; few, if any had opportunities to engage in music learning outside of school. At the time of the commencement of the study, teachers reported low staff morale as a consequence of a number of governmental cutbacks which affected teacher pay, class size, special education services, a depletion in resources, changes in working conditions and unwelcome changes in public attitude to teachers. Initially, at the start of the project, the teachers were all female with one male (subsequently this number rose to include three males) and although most of the staff had less than ten years’ experience, two teachers had more than twenty years’ experience and two had been teaching for more than thirty years. All, apart from one teacher, reported deficits in confidence in teaching music (See Appendix 7 for demographic detail.). Every teacher, apart from one who was on maternity leave, was involved in every stage of the planning
for coteaching. This involved two formal staff meetings with the principal teacher and the researcher and a number of e-mail correspondences to the school.

While time spent on developing a strong professional rapport with teachers was useful, the cultivation of a solid relationship of trust between the researcher and the school principal was hugely beneficial both to the introduction and sustainability of the study. Researchers are privileged when they are invited into other people’s lives to hear them communicate in detail about their experiences (Liamputtong & Ezzy, 2005). Such openness to new learning, professional development and innovative practice was a distinguishing feature of this school which is strongly committed to quality educational provision.

3.6 Implementing the Research Process

On commencing this study, a meeting was sought with the school principal during which the intended project was clearly articulated and fully discussed. The rationale for the project was presented and it was explained that the impetus for the school-university partnership arose as a result of a re-structuring of the Bachelor in Music Education course and from a recommendation from the Teaching Council of Ireland to develop meaningful partnerships between the university and school (Teaching Council, 2011c). Teachers were assured however that the intended focus of the study was on teacher professional development - exploring the potential in coteaching for the provision of reciprocal on-site professional development for teachers and pre-service music teachers for the benefit of the children. The reciprocal potential as it applied to coteaching was discussed, and a beginning was made in building a bridge (Errante, 2000).

Respecting the day-to-day activities in the school and remaining sensitive to the demands on teachers was a paramount consideration. Pre-service teachers arriving loudly and excitedly into a staff room during the short lunch-break necessitated a request for a separate room so that teachers could continue to relax and communicate without interruption. The school principal not only agreed to that request but consistently affirmed the contribution of the PSTs by providing space, treats, and copying facilities prior to and following, the coteaching lesson every week. The principal teacher demonstrated abiding support by visiting and chatting informally with the PSTs bolstering their confidence with on-going enthusiastic positive feedback. Cotaught music lessons were introduced to each year group from Junior Infants (age 4-5) to Sixth Class (age 11-12) on one occasion each week for approximately 25-minute (Junior Classes) and 35-minute (Senior Classes) periods over the course of twelve weeks during one semester. Table 3.1 summarises the context.
Table 3.1: Overview of data sources

<table>
<thead>
<tr>
<th>First Coteaching Residency</th>
<th>Data Source</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Primary School Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Mike, Mary, Maura, Flo,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ellis, Ciara, Sandra, Helen,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophie, Marian, Cathy, Margot, Carmel]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Junior Freshman Music Education Undergraduates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Teachers went forward to Yr2 [Mike, Mary, Maura, Flo, Ellis, Ciara, Sandra]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher interviews</td>
<td>13 interviews of an average of 1/2 hour per teacher</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field notes</td>
<td>Each teacher was observed at least twice over 12 weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informal conversations with teachers over 12 weeks (1 hour each week)</td>
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<td></td>
<td>Informal conversations with school principal (1 hour per week over 12 weeks)</td>
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<tr>
<td></td>
<td>Induction Workshop (2 hours)</td>
<td></td>
</tr>
<tr>
<td>Programme Documentation</td>
<td>Teacher reflective journal entries, music undergraduates reflective journal entries, lesson plans, miscellaneous instructional materials</td>
<td></td>
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<table>
<thead>
<tr>
<th>Second Coteaching Residency</th>
<th>Data Source</th>
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<tbody>
<tr>
<td>Participants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Primary School Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 from Yr1 + 3 new [Mike, Mary, Maura, Flo, Ellis, Ciara, Sandra, Geraldine, Frank, John]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Junior Freshman Music Education undergraduates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Teachers went forward to Yr3 [6 from Yr1, 2 from Yr2] [Mike, Mary, Maura, Flo, Ellis, Ciara, Geraldine, Frank]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher interviews</td>
<td>10 interviews of an average of 1/2 hour per teacher</td>
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<tr>
<td>Observations</td>
<td></td>
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</tr>
<tr>
<td>Field notes</td>
<td>Each teacher was observed at least twice over 12 weeks</td>
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<td></td>
<td>Informal conversations with teachers over 12 weeks (1 hour each week)</td>
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<td></td>
<td>Informal conversations with school principal (1 hour per week over 12 weeks)</td>
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<td></td>
<td>Induction Workshop (2 hours)</td>
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<tr>
<td>Programme Documentation</td>
<td>Teacher reflective journal entries, music undergraduates reflective journal entries, lesson plans, miscellaneous instructional materials</td>
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<tr>
<th>Third Coteaching Residency</th>
<th>Data Source</th>
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<tbody>
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<td></td>
</tr>
<tr>
<td>12 Primary School Teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 from Yr2 +4 new [Mike, Mary, Maura, Flo, Ellis, Ciara, Geraldine, Frank, Clare, Rose, Joan, Brid]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Junior Freshman Music Education Undergraduates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher interviews</td>
<td>12 formal interviews of an average of 1/2 hour per teacher</td>
<td></td>
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<tr>
<td></td>
<td>10 anonymously recorded and transcribed interviews</td>
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<tr>
<td>Observations</td>
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<tr>
<td>Field notes</td>
<td>Each teacher was observed at least twice over 12 weeks</td>
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<td></td>
<td>Informal conversations with teachers over 12 weeks (1 hour each week)</td>
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<td></td>
<td>Induction Workshop (2 hours)</td>
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<tr>
<td>Programme Documentation</td>
<td>Teacher reflective journal entries, music undergraduates reflective journal entries, lesson plans, miscellaneous instructional materials</td>
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</table>
3.6.1 First Pilot Study
An invitation was issued to the staff for one volunteer to participate in an initial one-lesson, one-coteaching dyad, pilot study. The following school staff-meeting facilitated a discussion on coteaching following which one teacher volunteered to participate in the one-lesson pilot study so that she and her class could learn to perform a popular song called ‘The Cup Song’. Coincidently, one of the 3rd year music education students who had recently devised a set of resources and a lesson plan on the same topic, volunteered to coteach so that he could learn from the teacher how to apply this ideal or theoretical lesson in a context that was practical or real. The researcher was also invited to participate as observer in the lesson with the coteachers, to take part in the planning, to record the event in field notes and to lead and contribute to post lesson discussion. According to Murphy and Beggs (2006b) researchers and school personnel need to share ownership and responsibility for the research and equal weight needs to be given to all participant voices in the design of the study. The school principal arranged with the staff that the researcher and the musician coteacher would attend the subsequent staff meeting where the coteaching lesson would be discussed. Although the experience for teacher, pre-service teacher and students was positive and was presented to the staff as such, teachers were nervous about and reluctant to make a commitment to coteaching. This reaction was not unusual as teachers sometimes view research with scepticism (Murphy et al., 2006b). Teachers seemed reticent to commit to something that they perceived as involving change in behaviour and workload, and which carried the prospect of professional disclosure.

On the suggestion of the researcher it was agreed that a second pilot phase would facilitate the enactment of coteaching by teachers who wished to volunteer for a pre-Christmas three-week coteaching module designed to help teachers prepare pupils for the Christmas concert. This experience would be discussed at length at a subsequent staff meeting, facilitated by the school principal, after which teachers were invited to volunteer to be involved in a twelve-week coteaching music residency and study if they so wished.

3.6.2 The Three-Week Pilot Study
Although not every teacher expressed interest initially, e-mail correspondence from the school principal confirmed that the full teaching staff agreed to participate in the planned three-week pilot study. The coteaching topic requested by the teachers was Teaching Christmas Music through Performance. Teaching teams were established in dyads. Musician coteachers were fully informed of their responsibilities and coplanning was conducted via e-mail. Difficulties regarding a lack of synchronicity with end of term university and school dates resulted in a disorganised end of term
schedule with only half of the musician coteachers available to attend the final school concert. Those musician coteachers who could do so, committed to the final rehearsals and attended all three concerts to ensure that partner teachers were supported. This generosity and flexibility on the part of PSTs who were in fact on Christmas holidays was very influential in the maintenance of goodwill. Serious ethical issues regarding short-term, beneficial projects in schools which are discontinued when the funding runs out, leaving the situation to revert and any benefits lost is a concern expressed by Murphy and Beggs (2006b). The commitment paid off and teachers, pre-service teachers and students reported positively on the experience. All teachers volunteered to participate in the first twelve-week coteaching music residency. The ultimate success of the pilot study was evidenced by the teachers agreeing to remain involved.

Lessons learned during the short pilot study included the need for all the participants to come together to discuss the project, to make an input into the shape of the project in the light of their experience. The inclusion of all participants in the research design and an assurance that each was willing to accept the responsibilities associated with working in new ways in the classroom was a practice maintained throughout the study. Joint ownership of the project with equal weight was given to all participants.

3.6.3 Building Capacity and Developing Agency

The first coteaching music residency and study commenced immediately after Christmas. A half-day professional development seminar for all coteachers which was co-conducted by the researcher and study supervisor took place three weeks into the residency. It provided the opportunity to clearly outline the philosophy underpinning the model, the rationale for using the model, as well as presenting evidence of the success of several Coteaching Science projects (Murphy & Beggs, 2005a, 2006a; Murphy & Scantlebury, 2010). The seminar dealt with issues such as participant responsibility, modes of communication, samples of lessons and resources. Having participated in an information-giving session on coteaching, coteachers including teachers and musician coteachers learned together (Kerr, 2010) under the direction of music education specialist who taught a practical module Teaching Complex Music Concepts through Simple Song-Singing. The seminar demonstrated an active learning approach to music stressing that coteachers concentrate not just on their own learning but also on enhancing the children's relationship with music. Coteachers learning together at these annual Induction Workshops provided opportunities for both relationship consolidation and the acquisition of new learning, equipping coteachers to work in a new context as learners and teachers.
Participants received and signed a consent form (Appendix 2) which outlined the purpose of the research, the dates and times that musician coteachers would be in the school and the mutually agreed scheme of work entitled in the first year *Composing through Song-Singing*. The induction workshop format was repeated at the start of each residency with teachers opting to focus on *Listening and Responding to Music (the Essential Music Concepts and Skills)* in the second residency and in the third, *Accompanying Music Performance on the Ukulele*. Agreed data gathering procedures were stated in the consent form and teacher participants were informed of plans to compile researcher field notes, reflection logs, and confidence audits and to conduct interviews with all participants including the school principal towards the end of each coteaching music residency. Such methods provided the primary data collection sources for the study. Respect for anonymity and confidentiality was conveyed as was the participants’ right to withdraw from the project without prejudice at any time.

### 3.6.4 The Learning Journey

Several important lessons were learned throughout the pilot study which assisted greatly with the development of the coteaching music study. These included the need to:

- build a relationship of trust with the partner school (Gallo-Fox et al., 2006)
- engage with the entire school personnel from the start of the research design; it is at this stage that the researcher develops the most valuable insights into the workability of their projects in school (Murphy & Beggs, 2010)
- engage all project participants to develop a code of practice for classroom teachers, musician coteachers and university tutors; seek consensus on division of labour, role definition and community rules (Engestrom, 1987)
- provide support on how to enact coteaching (Kerr, 2010)

In planning for the implementation of the research, all the above and the following issues were considered in accordance with teacher suggestions and advice from the experience of Murphy & Beggs (2006b). The steps included:

- a one-day launch seminar, and induction to be attended by school principal, researcher and all coteachers to facilitate acquaintance in ways which would lead to developing successful working relationships
- a coteaching information leaflet and booklet (Appendix 5)
3.7 Data Collection

In consultation with principal and school staff, several methods of data collection were suggested to gather evidence in support of new understanding within a framework designed to accommodate innovation and creativity (Bloomberg & Volpe, 2012). The specific methods included (i) researcher field notes which comprised of, on-site observation and informal conversations (interviews) with school principal and teachers, discussions on video footage, lesson plans and teaching resources including wall-charts and worksheets and a summary of the School Plan for Music and of the Whole School Evaluation report conducted towards the end of the study by the DES (ii) teacher pre and post coteaching confidence audits (iii) teacher and pre-service music teacher reflection journals and (iv) teacher semi-structured interviews, conducted by the researcher initially and by two external assessors two months following the cessation of the study. The four main sources of data are summarised below in Table 3.2.

Table 3.2: Summary of data sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcripts from 45, 20-minute semi-structured interviews (35 conducted by the researcher and 10 by external independent reviewers) n = 45</td>
<td></td>
</tr>
<tr>
<td>Confidence audits from each of 20 teachers before coteaching music n = 20 and for each teacher after each coteaching residency n = 35 totalling n = 55</td>
<td></td>
</tr>
<tr>
<td>Field notes from all visits to the school, including on-site observations, informal conversations with school principal and teachers, documentation including artefacts such as the new School Plan for Music (2016), lesson plans, teaching resources including wall charts, coteaching video episodes. A summary of the Whole School Evaluation in music WSE report (DES, 2016).</td>
<td></td>
</tr>
<tr>
<td>Teacher reflection journals (not all were submitted) n = 12</td>
<td></td>
</tr>
<tr>
<td>3 sets of 10 pre-service music teacher reflections n=30</td>
<td></td>
</tr>
</tbody>
</table>

A summary of all data sources as they relate to the research questions is presented in table format in Table 3.3.
Table 3.3: Summary of research questions and sources of DATA (adapted from Carlisle, 2008)

| Research Question: What do primary teachers report as outcomes from coteaching with pre-service music teachers? |
|--------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| Primary Data Sources:                            | Researcher field notes | Semi-structured interviews | Confidence audits | Reflection diaries |
| **Sub-question 1:** How do teachers describe the impact of CT on classroom practice in music? |
| Teacher confidence in teaching music             | ✓                | ✓                | ✓                | ✓                |
| Teacher understanding of school music            | ✓                | ✓                | ✓                | ✓                |
| Teacher skills in music                          | ✓                | ✓                | ✓                |                  |
| Teacher beliefs re music                         | ✓                | ✓                |                  |                  |
| **Sub-question 2:** In which ways do teachers explain the influence of CT on the school? |
| Teacher identity                                | ✓                | ✓                |                  |                  |
| School culture                                  | ✓                | ✓                |                  |                  |

The following section outlines the rationale for each research instrument, a description of the instrument, how the data were collected, and the type of analysis employed.

### 3.7.1 Researcher Field Notes

Field observations and the writing of field notes compiled over three years occupy a significant element of this study. These notes comprise of observations; informal conversations and interactions with school principal and teachers, artefacts and documentation including lesson plans and teaching resources (Bogdan & Biklen, 1992; Patton, 1990). Early field notes also contain ongoing drafts of research questions and ideas on data sources and positionality. Scribbled quickly and transcribed later, the field notes initially described meetings with the school principal and staff and informal conversations with individual teachers. As the study got underway and trust was established between teachers and researcher, on the advice of the study supervisor these field notes became more descriptive, analytical and methodological (Emerson, Fretz & Shaw, 2001). Field notes recorded events such as coteaching observations; rehearsals for school performances; liturgical or celebratory events; behaviours such as spontaneous requests for advice and
suggestions for developing a school plan for music and music resources and materials developed by individual teachers. Attitudes to music and/or to coteaching as expressed by teachers during informal conversations, were recorded. These allowed the researcher to observe the unfolding impact of coteaching in the school.

Marshall and Rossman (1989) define observation as the systematic description of the social setting chosen for study. Barnard (1994) considers observation as the process of establishing rapport with a community and of learning to act in such a way as to blend into the community so that its members will act naturally. Schensul, Schensul and LeCompte (1999) speak of participant observation as ‘the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting’ (p. 91).

LeCompte and Preissle (1993) remind the researcher of Gold’s (1958) classic categorisation of four degrees of observation. The first is the complete participant, where the researcher is one of the participants. The ethics of this approach can be questionable and in any case was neither possible nor helpful in the case of this coteaching study. The second and third forms of participation are described as participant as observer and observer as participant. The fourth stance, the complete observer, entails the observer being detached from the group, recording behaviour and attitudes at a distance, frequently unbeknown to the participants. Although such a role presents important opportunities, Merriam (1998) warns that while the researcher may have access to many different participants and situations and information sources, the group members’ control over the level of information given, presents limitations for consideration.

Of these four stances, the role providing the most ethical approach to observation is that of observer as participant, as the observer’s activities are made known to the group being studied. Observer as participant was adopted for the purposes of this study. Notes, including general observations of coteaching lessons, coteacher use of shared space, the layout of the class, how participants interacted during the lessons, were primary means of capturing the data that is sourced during class observations.

Physical observation of actual coteaching classes provided opportunities and challenges. It enabled the researcher to check for non-verbal expressions of feelings about the coteaching and to interrogate types of interactions between coteachers and their communication styles. It also enabled time-checking on various activities and clarifying of participant understanding of their role and artefacts such as lesson-plans (Appendix 4). Physical observation also offered opportunities
to view events that the participants might not wish to share or may overlook sharing at interview (Schmuck, 1997).

The challenges for the researcher include the fact that physical observation is time-consuming and requires the researcher to develop skills to enter into a new context and a new role - what and how to observe and record. The observational data is recorded as field notes which present their own set of challenges in terms of speed and accuracy, storage and later analysis.

In this study the researcher, as an experienced primary and secondary teacher, was familiar with school and classroom practice and could observe systematically the development in coteaching alongside the development in teacher confidence. The relationship of trust which emerged over the course of the first residency presented opportunities for videotaping where coteachers were eager to capture and discuss their development in coteaching. This use of video became more frequent after the first residency. It was prompted by the frequent conversations on coteaching in the staffroom and was more than likely influenced by the PSTs’ informal use of video to record their own development as coteachers. This trove of video evidence was curated by one teacher and was available for sharing of practice should others on the staff wish to view and discuss. These video recordings were frequently used by teachers to illustrate to the researcher their development in coteaching and were recorded as field notes.

While Silverman (2001) promotes observation as a method to acquire first-hand information in a natural setting, Bernard (1994) counsels the researcher to maintain a sense of distance, warning that losing objectivity will interfere with the rigour of the research and taint the findings. The researcher was aware of the need to develop skills such as maintaining an open, non-judgmental attitude, being interested in learning more about others, being a careful observer and a good listener and being open to dealing with the unexpected in whatever was discovered (DeWalt & DeWalt, 2010).

During this study, participant observation was used to provide ‘thick description’ (Denzin & Lincoln, 2001) as a support to understanding the culture and the place of music in the primary school. Observation also illustrated the ways in which individual teachers enacted the music programme and the difficulties they experienced in teaching music. This information was later used to support the implementation of coteaching.
The researcher relied heavily on field notes to document classroom practice in music and to create a fuller picture of the whole school during the three-year study. Notes were compiled after each of twelve coteaching music days each year. These notes consisted of reflections on meeting with the school principal at the beginning of each day, short informal meetings with teachers before the lessons started and more leisurely informal conversations with one or two teachers each week after coteaching. Each coteaching pair was observed coteaching twice during each residency and these observations were recorded as field notes. An abundance of documentation on the implementation, enactment and development of coteaching was gathered over the three years. These artefacts include lesson plans, teaching resources, e-mails with teachers and principal, a draft plan for music in the school and a Whole School Evaluation (WSE) report conducted by the Department of Education and Science (DES, 2016). The following section provides a rationale for each research instrument, a description of the instrument, how the data were collected, and the type of analysis employed.

3.7.2 Semi-Structured Interviews

Interviewing, particularly semi-structured interviewing, is one of the most common methods used in small-scale educational research (Drever, 1995). Cohen et al. (2007), describe a variety of interview models discussed in methodology literature including the structured, the semi-structured and the open-ended formats. The distinguishing feature is the amount of control that the interviewer retains over the situation. Interviews are popular methods of data generation in that they provide opportunities for the researcher to gain an ‘emic’ or insider perspective, authentic understanding of a situation (Silverman, 2001) probing participant perceptions and values at a deep level (Bell, 1993) and making connections between artefacts such as video–episodes, lesson plans and reflection journals (Corti, 1993). Hitchcock and Hughes (1995) extol the value of the semi-structured interview in facilitating negotiation and discussion leading to the eliciting of detailed information from the respondent.

The researcher bore in mind however the importance of identifying and addressing the limitations of this method. Denscombe (2007) notes that people respond differently depending on how they perceive the interviewer. Gomm (2008) concurs with this observation and goes on to describe how the interviewee’s responses are influenced by what s/he thinks the situation requires. In addressing this issue in the context of the coteaching study, the interviewer clarified the purpose of the interview and the anticipated topic for discussion at the beginning of each interview, having taken advice from the literature on how to put the interviewee at ease. The researcher was aware that interviews are not neutral instruments; each interviewee interprets events and experiences not
only subjectively but in deference to the perceptions of the interviewer (Sherman Heyl, 2001). Curtain, Presser and Singer (2000) in considering this issue of interviewer effect also claimed that the amount of information disclosed by the interviewee is frequently affected by their perceptions of the personal traits of the interviewer such as gender, age and ethnicity.

The interviewer (researcher) was already well acquainted with the respondents (participant teachers) but nevertheless made it clear to each interviewee that a large part the value of the interview as a data collection tool was the emphasis placed on the experience and perspective of the individual teacher (L).

All interviews were conducted as informal conversations which favoured probing for understanding over prompting (Wellington, 2004). This method proved successful in collecting rich data from twenty teachers in total over three years. Interviews were conducted annually at the end of each coteaching residency. A semi-structured schedule with sequential questioning was adopted with an emphasis placed on affording the interviewee every opportunity to express their thoughts, feelings, experiences, perspectives and values (Denscombe, 2003) while offering flexibility to the interviewer and interviewee. The initial research question, and analysis of the confidence audits, researcher field notes which included material from artefacts such as lesson plans and teaching resources, and teacher and pre-service teacher reflection journals, together with prevalent themes which had emerged from the literature review, assisted in constructing several interview questions ensuring the inclusion of participant voice. In keeping with the developmental style of the research model, data drawn from questionnaires and journals were linked with informal discussions presenting researcher and reader with a fuller, more complete picture of the participant experience (Corti, 1993).

Semi-structured interviews were conducted with participant teachers at the end of each of three coteaching residencies to elicit authentic information on their experiences of coteaching and to assist with the design of the subsequent residency. The teachers were asked questions about the coteaching experience and its impact on their confidence in teaching music. This served as a method of triangulation to validate the findings from the teacher and pre-service teacher reflection journals and classroom observations. A summary of the questions highlighted for discussion is included in Appendix 1. However, the importance of allowing the interviewee the chance to articulate their own perspective and experience were more important than the pre-prepared schedule as evidenced in the transcriptions. Recordings were made of all interviews and text was later transcribed as advised by Silverman (2001).
3.7.3 Confidence Audits

The self-efficacy beliefs that teachers hold about their ability to teach certain subjects shape their competence in teaching (Bandura, 1997). Teacher self-efficacy is defined by Bandura (1997) as beliefs in the ability to perform a teaching task. If teachers have strong teacher self-efficacy in the teaching of music, they are more likely to incorporate music in the classroom. Conversely, if teachers have weak teacher self-efficacy in the teaching of music, they are less likely to include aspects of music in their teaching (Holden & Button, 2006). It was appropriate at the commencement of this study to compile an overview of the confidence levels of teachers from the sample cohort. To obtain such information, a questionnaire-style confidence–audit, was completed by all teachers before they embarked on coteaching, to establish a base-line of participant teacher confidence in teaching music in comparison with their confidence in teaching other primary school subjects and after each coteaching residency to explore their self-efficacy beliefs and confidence levels in relation teaching the requirements of the primary school music curriculum.

Questionnaires are efficient, cost-effective and can be distributed and analysed easily (Cohen et al., 2011). In constructing the questionnaire, the researcher sought information that could not have been sourced elsewhere, ensured that the questionnaires could be understood by the recipients, ascertained that questions were unambiguous and were an appropriate length to ensure that all the required information was accessible (Wilson & McClean, 1994). Informed consent was sought from each participant and guarantees of confidentiality and anonymity were submitted (Appendix 2).

Questionnaires (Appendix 3) were designed and distributed by the researcher. While the literature was consulted, particularly the work of Holden and Button (2006) and the guidelines adhered to (Cohen, Mannion & Morrison, 2000), the eventual design was based loosely on a confidence audit created by Harlen (1995) and adapted by Carlisle, (2008). This instrument, which was used to investigate primary school teacher confidence in teaching science and technology had been used successfully for a similar purpose, in a similar context with a similar participant sample. In the context of the coteaching music study, it was adapted to source similar information in a different subject area.
The questionnaire (confidence audit) took the form of a six-page booklet and included an explanatory section on the cover page which clearly articulated the purpose of the research. The first question sought information on participant background, qualifications and prior experiences of learning music. The second question focused on teaching across the curriculum and teachers were asked about their confidence in twelve subjects. There are eleven compulsory subjects on the primary school curriculum (GoI, 1999). However, since religion is subject central to the ethos of the school and since many teachers employ the suggested hymns and songs from the religion programme for the music programme, religion was included in the subject selection. The concluding section requested respondents to indicate their levels of confidence in bringing children to an understanding of the various components of the primary school music syllabus as indicated in the Revised Primary School Curriculum, (GoI, 1999). The final question was an open-ended question encouraging the teachers to list areas within the music curriculum in which they needed support. The main section of the audit, questions 3,4,5,6 explored teacher confidence in relation to developing children’s understanding of the various aspects of the music curriculum (GoI, 1999). A four-point scale was included to allow respondents to indicate their confidence levels regarding aspects of teaching music within the statements in questions 2-5, inclusive. The scale ranged in degree of confidence from [1] to [4] as follows:

1. Need help [to teach this subject]
2. Can manage [with support from others]
3. Confident [with guidance]
4. Fully Confident

The questions were subdivided into units of investigation and structured to facilitate the respondent. Only one question, the final one, was open-ended and may possibly have been perceived as time-consuming ‘requiring opinions, feelings and value judgements’ (Wellington, 2000). Nevertheless, the information provide by participant teachers was an invaluable source for programme planning.

Prior to distributing the questionnaire, it was piloted with three final-year Bachelor in Education Pre-service teachers who were on location on school placement, none of whom were music experts. The respondents confirmed that the audit could be completed in approximately ten to fifteen minutes. While no changes to the instrument were suggested by the pilot group, it was obvious from the comments of the participants that the language of the music curriculum and the skills involved in teaching music were perceived as challenging.
3.7.4 Reflection Journals

Finding appropriate ways to get contemporaneous data is a challenge for researchers. Journaling has grown in popularity in both social and health-care research (Jones, 2000). Journals vary from having a very structured format to having a much more open reflective style. Both styles were used in this study to construct as full a picture as possible of the day-to-day coteaching activities and to capture spontaneous and in-depth personal perspectives on experiences of coteaching music. One of the major advantages of using journals in qualitative research is epistemological and relates to facilitating access to thoughts and feelings (Bedwell et al., 2012). Corti (1993) considers that the journal - interview method is one of the most reliable methods of obtaining information where detailed questions about journal entries are asked at interview.

Teacher reflection journals were used in this study to generate interview questions for the first iteration of teacher interviews. Zimmerman and Wieder (1977) describe a similar approach as a means of ensuring consistency in the data collected. Apart from seeking to collect meaningful data, the purpose of the journals was to focus participants on professional learning via coteaching in advance of a subsequent interview (Verbrugge, 1980).

Reflection journals were also employed in the coteaching music study as a means of triangulating the findings. Whilst journals tend to be recorded on paper, other formats can also be used such as electronic media or e-diaries. With the support of the school principal, teacher reflection journals were initially compiled by the school principal and shared with researcher and teacher-participants via e-mail.

Critics of journaling point to disadvantages such as the failure of participants to complete the journal (Verbrugge, 1980). This was an issue during the pilot phase as teachers were not experienced in writing reflectively and were acquainted with neither coteaching nor the responsibilities attached to their role as coteacher. They also reported that their deficits in confidence with music teaching limited their participation to peripheral support. Other problems associated with journals are the tendency to encounter vast amount of irrelevant data (this was also the case in relation to PST reflection journal entries during the first residency) and the cost in terms of time, particularly for the hard-pressed teachers (Verbrugge, 1980; Richardson et al., 2008; Cassel & Symon, 2004). Such considerations were significant in planning for coreflection.
The journal, both an on-line version and in hard copy with an explanation of its use, was provided to the participants at the time of consent. Participants in the coteaching study were asked to maintain a short reflection on coteaching lessons, following each lesson. Journals used during the first coteaching music residency served the researcher in monitoring the project closely on a weekly basis and in exploring the practicalities and usefulness of such a tool from both teacher and researcher perspectives.

Difficulties with time and internet access which reduced teacher response rates were counteracted by support from the principal teacher who volunteered to visit each participant within two days of the coteaching class to collect the teacher’s written reflections which the school principal collated and forwarded to the researcher. This was useful in getting started and helped to identify and remediate any problems encountered. However, during the second phase teachers took responsibility for recording discussing and maintaining the diaries referring to their contents during the one-to-one interviews at the end of the year. It was later decided that teacher participants would each maintain a hard copy reflection journal which they would submit to the researcher at the end of the project, prior to being interviewed individually.

This new procedure was very successful and provided plenty of material for conversation during the interviews. This was very helpful for the researcher in remaining informed especially during the first residency when there was a danger of lack of clarification of role. During the subsequent two residencies, teacher reflections were retained in written format in hard backed copybooks supplied by researcher. These provided rich data, recording not only a description of events but also emotional responses to such events.

A development in reflection was evident particularly during the second and third residencies with teachers focusing less on the ‘gifts’ of the musician coteachers and more on the music learning that was occurring in the classroom. Participants provided contextual and time-situated data, including data that may not have been uncovered by interview alone. Hence, journals provided huge benefits to both the researcher and the participant (Bedwell et al., 2012). Participant teachers and musician coteachers were consulted about the design of the journal and on the preferred format. Consensus was eventually reached on the e-format using a semi-structured form that would include three broad questions/sections presented below in table format.
Teacher participants were also invited to record whatever they felt was relevant to them within the context of coteaching. The questions were deliberately broad to encourage participants to express themselves freely. However, for practical purposes, it was necessary to give some guidance to avoid the risk of failure to complete the task, or, of the inclusion of substantial amounts of irrelevant data (Symon, 2004). Having consulted each other and co-reflect on the lesson the e-journal was submitted by the pre-service music teacher (the musician coteacher) weekly. As teachers in this study occupied the role of partners in research, they continued to retain the hard-copy versions in which they documented their experiences of enacting coteaching, the challenges, opportunities, organisational support and their own attitudes towards collaboration which they used as an aide-memoir during annual semi-structured interviews or indeed during informal conversations with the researcher.

Pre-service teacher (or musician coteacher) reflections worked very well in the e-journal format as neither time nor internet access seemed to inhibit the submissions of this cohort. Additional information about their impressions of the learning that was taking place in the classroom and their opinions on how they knew that this learning was taking place added a further insight into reciprocal learning and helped musician coteacher to increase their awareness of the flow of experiential knowledge in the classroom as well as their ability to move from writing descriptively to writing more critically.

Teachers and musician coteachers, were requested to complete the journal weekly, while they were involved in coteaching. Since entries were made very close to the time in which events occurred, its use as a data collection tool had the advantage of combating potential memory errors and it facilitated the researcher in monitoring, supporting or intervening when/if necessary (Cucu-Oancea, 2013). Guidance from the literature suggested that the optimum length of time for journaling is between one and two weeks. Less than a week, and the journals may not have sufficient depth of data, more than two weeks participants may tire of making of making regular

<table>
<thead>
<tr>
<th>Table 3.4: Journaling prompts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What did the children learn today? (How did they learn it and how do I know they learned it?)</strong></td>
</tr>
<tr>
<td><strong>What did I learn today? (How did I learn it and where is the evidence that I learned it?)</strong></td>
</tr>
<tr>
<td><strong>What did my coteacher learn today? (How did (s)he learn it and how do I know?)</strong></td>
</tr>
</tbody>
</table>

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74
entries. However, for logistical reasons musician coteachers submitted journals within two days of the coteaching lesson and teachers recorded their reflections within that time frame also giving them enough time to discuss the lesson with colleagues in the staffroom.

Finally, the usefulness of the journal lies in the contribution it can make to the achievement of the triangulation, which can either come as a complement for data collected by other (qualitative and quantitative) instruments, in this case the reflections like the confidence audit and field notes facilitated the next stage of inquiry, the in-depth interview. The experience from this coteaching project would support scholarship which suggests that a journal followed by interview is one of the most reliable methods of collecting data (Corti, 1993).

3.8 Data Analysis
The analysis of data was ongoing becoming an iterative part of the research process. An attempt was made from the beginning to construct a logical sequence of evidence to assist in forming a conceptually coherent account of the findings which began to emerge during the first coteaching residency and continued to do so over the second and third iterations. See Tables 3.5(a) and 3.5(b) below.
### Table 3.5(a): Analysis of data sources

<table>
<thead>
<tr>
<th>Research Question</th>
<th>What do teachers report as outcomes from coteaching music?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-question 1</strong></td>
<td><strong>Sub-question 2</strong></td>
</tr>
<tr>
<td><strong>Teacher Confidence (Music)</strong></td>
<td><strong>Impact on School Culture</strong></td>
</tr>
<tr>
<td><strong>Category 1</strong></td>
<td><strong>Category 2</strong></td>
</tr>
<tr>
<td><strong>Music Coteaching</strong></td>
<td><strong>Coteacher Collaboration</strong></td>
</tr>
<tr>
<td>Understanding, Knowledge, Skills, Values</td>
<td>Attitudes, Understandings, Skills</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Descriptor</strong></td>
<td><strong>Descriptor</strong></td>
</tr>
<tr>
<td><strong>Coplanning</strong></td>
<td><strong>Coteaching</strong></td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td><strong>Obuchenie</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Meaning making/Impact</strong></td>
</tr>
<tr>
<td><strong>Responsibility</strong></td>
<td><strong>Role exchanges</strong></td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td><strong>Mirroring</strong></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td><strong>Rehearsing</strong></td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td><strong>Sparks!</strong></td>
</tr>
<tr>
<td><strong>Time</strong></td>
<td><strong>Previous experience</strong></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Category 1 Music Coteaching (Understanding, Knowledge, Skills, Values)

<table>
<thead>
<tr>
<th>Descriptor 1 C coplanning (Subthemes)</th>
<th>Descriptor 2 Coteaching (Subthemes)</th>
<th>Descriptor 3 Coreflecting (Subthemes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR: Coteaching Role</td>
<td>CTO: Coteaching Obuchenie (Teacher and Learner at once)</td>
<td>CRMM: Coreflecting Meaning-making</td>
</tr>
<tr>
<td>CPRRes: Coteaching Responsibility</td>
<td>CTEx: Coteaching Role Exchanges</td>
<td>CRS: Coreflecting Self</td>
</tr>
<tr>
<td>CPRel: Coteaching Reliability</td>
<td>CTM: Coteaching Mirroring</td>
<td>CRO: Coreflecting Others</td>
</tr>
<tr>
<td>CPCom: Coteaching Communication</td>
<td>CTI: Coteaching Imitation/emulation</td>
<td>CPEx: Coreflecting Previous Experiences</td>
</tr>
<tr>
<td>CPP: Coteaching Power</td>
<td>CTS!: Coteaching Sparks!</td>
<td>CTRM: Coteaching Previous Experiences</td>
</tr>
<tr>
<td>CPT: Coteaching Time</td>
<td>CTPEx: Coteaching Previous Experiences</td>
<td>CREL: Evidence of Learning</td>
</tr>
</tbody>
</table>

### Category 2 Coteaching Collaboration (Attitudes, Understanding, Skills)

<table>
<thead>
<tr>
<th>Descriptor 1 Expertise (Subthemes)</th>
<th>Descriptor 2 Professionalism (Subthemes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCom: Teacher Competence</td>
<td>TRE: Teacher role expansion</td>
</tr>
<tr>
<td>TCon: Teacher Confidence</td>
<td>TM: Teacher Mentoring</td>
</tr>
<tr>
<td>TEn: Teacher Enthusiasm</td>
<td>TI: Teacher Inquiring</td>
</tr>
<tr>
<td>TEng: Teacher Engagement</td>
<td>TR: Teacher Relating</td>
</tr>
<tr>
<td>TE: Teacher Endurance</td>
<td>TS: Supporting</td>
</tr>
<tr>
<td>TD: Teacher Diversification</td>
<td>TG: Guiding</td>
</tr>
</tbody>
</table>

### Category 3 Cultural Transformation (Sustained music programme / Collaborative practice)

<table>
<thead>
<tr>
<th>Descriptor 1 Teacher Agency (Subthemes)</th>
<th>Descriptor 2 School Culture (Subthemes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTP: Coteaching Practices</td>
<td>NL Eng: New Levels of Engagement</td>
</tr>
<tr>
<td>PU: Philosophical underpinnings</td>
<td>P: Participation</td>
</tr>
<tr>
<td>CTM: Coteaching Mechanism</td>
<td>AP: Active Participation</td>
</tr>
<tr>
<td>CDM: Coteaching Developmental Model</td>
<td>C: Cooperation</td>
</tr>
<tr>
<td>EE: Essential Elements</td>
<td>SC: Shared Co-operation</td>
</tr>
<tr>
<td>FP: Fundamental Principles</td>
<td>Contribution</td>
</tr>
<tr>
<td></td>
<td>CONSC: Conscious Shared Contribution</td>
</tr>
</tbody>
</table>
Data analysis loosely incorporated the stages outlined by Miles and Huberman (1994) including:

- defining and identifying data
- collecting and storing data
- reducing and coding data; clustering emerging themes
- comparing and contrasting themes against each other and with the literature
- reporting the findings in writing

3.8.1 Field Notes, Interviews and Reflection Journals

Data analysis is usually considered the most time-consuming aspect of the qualitative research processes (Kvale, 1996). While Excel was employed to illustrate, in histogram format, the quantitative data sourced from the pre and post confidence audits, as this was a small-scale study of twenty teachers, NVIVO was not employed as a method of analysis for the qualitative data. The researcher chose to listen to recordings, read interview transcripts, regularly monitor journal entries and contemporaneously contemplate the field note entries to ensure an on-going, in-depth analysis of the data was procured. Analysis of each data set as a whole began with multiple readings. Data sets were arranged first chronologically as they appeared on a weekly or in the case of the formal semi-structured interviews, on an annual basis and later, as complete individual data sets, analysed annually. This method of on-going analysis helped in representing the evolution of a community of collaborative practitioners (Gallo-Fox, 2009a). At the conclusion of the study, data sets were cross-checked, cross-referenced and cross-analysed for codes and significant themes. Multiple readings facilitated a familiarity with the issues emerging and the creation of initial open codes where themes began to appear across the data set (Miles & Huberman, 1994). Relationship, reflection and inquiry, for example, surfaced from the beginning and continued to re-appear over the three years. The process was iterative and recursive (Gallo-Fox & Scantlebury, 2016) as two lenses were employed to ensure equity of attention was allocated to teacher confidence in music and to possible changes in teacher practice. Data was also examined in terms of the development of the relationship between in-service and pre-service teachers during the coteaching music residencies. The final level of analysis compared comments with other data sources such as reflection journals and observation recorded in field notes. The process was repeated and monitored at various stages during the project as more data was collected (Carlisle, 2008).
Transcripts were colour-coded initially, a process which greatly assisted the thematic clustering of participant quotes later in the process. A combination of listening and reading facilitated the formation of an overall impression of key emerging issues associated with topics that had been discussed during the literature review and in both informal and formal interviews with teachers. After several listening to recorded interviews and reading the transcripts a number of times, patterns and themes emerged. These were clustered and counted across all transcripts so that the dominant themes were identified across all data sources. The next stage involved making connections between themes – seeking comparisons and contrasts in experiences and accounts (Miles & Huberman, 1994; Robson, 2002). Some minor themes were incorporated into others. The dominant and related sub-themes were then divided into two findings chapters (Chapters 4 and 5) where they were explored in light of the research questions and the literature review including the theoretical framework for the study.

Classroom observations captured in field notes were analysed in terms of the roles enacted by teacher and musician coteacher for example, teacher leading /dominating, musician coteacher leading /dominating, equal partnership. After scrutiny of the separate roles in coteaching, an examination of when the roles were most prevalent was considered. Thus, the roles then adopted by coteachers were cross-checked with how far into the placement they were observed. Through this approach to analysis the researcher was able to look for common approaches to coteaching and how and when they were most likely to be observed and as the study progressed into the second and third year, developments in coteaching practice were noted. Classroom observations, field notes, informal and semi-structured interviews were used as a method of triangulation together with the reflection diaries and confidence audits to fully interrogate the experiences and enactment of this research into coteaching primary music.

3.8.2 Confidence Audits

The confidence audit was completed by the participant in service teachers just before they started coteaching and again at the end of the coteaching residency each year. There were sixty five items in the questionnaire and responses to these were presented as histograms using Excel. The data was subjected to descriptive analysis to elicit general information on the background of the respondents, confidence levels in relation to understanding, possessing the skillset for teaching music and self-perceived capacity to teach and evaluate music learning as outlined in the primary music curriculum (1999). Initial findings suggested results close to those in science and mathematics coteaching studies discussed in the literature in Chapter Two.
3.9 Ethical Considerations

The research conforms to the ethical standards of Trinity College Dublin (TCD), having been prepared using relevant Government of Ireland guidance (2012), and approved through the ethical approval procedures of the School of Education (SoE) at Trinity College Dublin (Appendix 8). The research also conformed to the ethical standard requirements as outlined by the British Educational Research Association (BERA). This included:

- explaining the aims of the research clearly to all participants
- clarifying the fact that the research would take the form of a PhD dissertation and would be disseminated at conferences and in journals
- indicating that the participants could withdraw at any point
- assuring confidentiality and anonymity
- seeking permission to record interviews and lesson observations
- forwarding letters of consent to the parents and guardians of the children informing them about the fact that certain lessons would be recorded and offering them the opportunity to opt out on behalf of their child if they so wished

The process of coteaching leads to a close personal relationship between researcher and research participants. The trust placed in the researcher carries with it an obligation to ensure that people and communities are respected. From the outset a prime concern was the sharing of ownership of all aspects of the study with all participants. As a former primary school teacher, the researcher believed that unless participants - school principal, teachers and musician coteachers were fully aware of what was involved and willing to engage, the study could not proceed. In addition, the researcher observed the duty of care to those whom teacher participants serve, the pupils in the school. Co-preparation for the initial meeting with the school principal and all the subsequent staff meetings were preceded by lengthy discussions with the study supervisor who drew on her vast experience of coteaching in the contexts of science teacher education in offering guidance (Murphy & Beggs, 2010; Murphy, 2016). The authors strongly suggest that the research should only proceed when all participants, the school principal, teachers and pre-service teachers are fully aware of the principles of coteaching and willingly agree to engage with it.
Researchers, including Gallo-Fox, Wassell, Scantlebury and Juck (2006), encountered three ethical dilemmas during the implementation of coteaching namely, participants who disagreed with the coteaching philosophy, participants who chose not to enact coteaching, and stakeholders who were not involved in the ensuing discussions among researchers. To avoid such ethical dilemmas the researcher adhered fully to the precautions advanced by Murphy and Beggs (2006b). In summary, the purpose of the research was outlined clearly to the school staff at the outset and this was reviewed and updated regularly as the project evolved. An ethical approach to the study ensured that all participants were aware of the principles of coteaching and what it would involve (Murphy & Beggs, 2006b). Ethical considerations were addressed by involving the research participants, teachers, musician coteachers and school principal in the research design and assuming shared ownership of the coteaching project. Participant consent was sought for all stages of data gathering exercises. Individual teachers had direct access to the researcher through phone, the coteaching group WhatsApp or e-mail and understood that they could withdraw without penalty at any stage.

Confidentiality was always an issue during the project both in terms of the collection and storage of data, and in terms of a commitment not to record information shared in confidence. All participant names were replaced with pseudonyms. Limiting data to study supervisor, researcher and teachers added another layer of participant protection. However, as the project developed, participant teachers became more self-confident and were willing and excited about openly sharing individual experiences of coteaching music amongst each other in the staff room, and with the researcher informally over coffee, on the school corridors and during the in-service seminar day at Trinity College and formally during the annual post-coteaching interviews. Conversations with the principal teacher indicated that staffroom conversation frequently related to coteaching music. Members of staff appointed after the first coteaching residency confirmed this perspective. In terms of disseminating the research, no reference was ever made by the researcher to the name of the school or to the teachers in that school.
3.9.1 Researcher Bias

As with all research, this study had certain limiting conditions. The most obvious limitation was the possibility of researcher bias. Having worked as a music educator and teacher educator in Ireland, the researcher holds assumptions, interests, and perceptions that relate to her individual experience. Consciously or unconsciously, these acuities may affect discussions and conclusions. The qualitative researcher must be constantly vigilant as to how their knowledge, bias, experience, approach and the methodological choices and interpretations influence the study, its participants and findings. The qualitative researcher is therefore part of the study and of the data found (Hammersley & Atkinson, 2007). Consequently, attempts have been made to reflect and identify researcher bias through the articulation of assumptions.

Awareness of the potential for bias amongst those interviewed was also important. While the positive relationships which were established with teachers over the three-year music residency period, an acceptance of the likelihood of teachers providing what they perceived to be the ‘correct’ answers to the interview questions, some of which may not have accurately reflected their actual attitudes towards coteaching music was necessary (Mercer, 2007).

Several steps were taken to ensure the findings are reliable. Triangulation was used to mitigate limitations; the study relied on data from four data sets. Prior to and following each coteaching residency teachers completed a confidence audit. Teachers as research partners engaged in frequent and regular contact with the researcher, advising on the progress on the study and responding to the initial findings annually. A report on the standard of music in the school was issued by the Department of Education and Science during the final coteaching music residency, the results of which, stored as researcher field notes were considered in relation to the overall findings. Two months after the cessation of the study, ten teacher-participants were randomly selected and interviewed by two interviewers, one of whom was a primary school principal and the other, a university tutor, neither of whom was previously known to the participants. A set of sample questions which emerged from data analysis was sent to the volunteer teacher - participants in advance of the interviews. Notes from these interviews were recorded and transcribed anonymously and cross-referenced as part of the full data set. The results from analysing this data is in accordance with the other sources.
Confronting her bias as teacher educator, the researcher was aware that a personal belief in the benefits of coteaching music needed to be shared with participants before and during the project so that they were always aware of the fact that as research partners they had the authority to question all aspects of the research design and of the representation of the data. A belief in collaborative practice amongst teachers is based on the researcher’s own experience of enrichment, expansion and growth while teaching closely with colleagues acknowledging the need to be open to the circumstances that create such synergy. Participants were encouraged always to match their own perceptions of events with the researcher’s records and interpretations.

3.9.2 Trustworthiness

The research approach was inclusive of the participants at every stage. Such an approach was conducive to the cultivation of relationships of trust and respect between researcher and teacher-participants (Liamputtong & Ezzy, 2005). Each data source was discussed formally and informally in terms of its logistical, relational and ethical implications. From the beginning, participants were invited to advise during the decision-making processes which informed the methodological design of the study; opinions were sought at staff meetings on how particular data might be obtained which would accurately reflect teacher perspectives on their experience of coteaching music.

To reduce the likelihood of misrepresentation, which could affect the trustworthiness of the research, several safeguards were put in place. In addition, as mentioned above, to the use of triangulation or the inclusion of multiple means of building evidence using multiple data sources (Bloomberg et al., 2012), the research design welcomed and accommodated shared expertise. Indeed, the core philosophical principal of coteaching, which involves sharing expertise, is mirrored in the research design and therefore addresses many concerns of participants, physical, emotional, ethical and professional as highlighted by Lee-Treweek and Linkogle (2000).

The study was situated over a three-year period during which relationships between researcher and research partners, participant teachers continued to grow. The time taken at the beginning of the project for full and open discussion of its purpose and its design assisted the maintenance of credibility. Building and maintaining a relationship of trust and openness so that data are continuously rigorously sourced, checked and analysed necessitated frequent informal and formal professional encounters and discussions over the course of the study. Peer debriefing with the study supervisor using field notes provided regular thorough checks on personal assumptions.
A further characteristic of this study was the support from the school principal, who from the beginning assumed the role of advocate for coteaching music as well as research partner and study facilitator, fastidiously attending to matters concerning the logistics of data - collection and data-reporting. The principal regularly discussed the data to ensure validity, trustworthiness and the representation of truthfulness (Bresler, 1996). Written records of every aspect of the project contributed to the dependability factor. As the qualitative parallel to reliability, dependability requires fastidious accuracy in tracking the processes and procedures used in collecting and interpreting the data (Guba & Lincoln, 1994; Bloomberg & Volpe, 2012). Detailed explanations of how the data were sourced and analysed was systematically maintained throughout the study and will continue to be available for review by the research supervisor and fellow participants. Such data sources have formed the basis for on-going discussion during the project. Finally, it is worth adding that samples of interviews were coded by a colleague to check the incidence of bias.

3.9.3 Transferability
Transferability in qualitative research, according to Guba and Lincoln (1994) is difficult. However, this research is positioned within a developing community of sophisticated coteaching scholarship and in building on what went before, it has the potential to contribute to other professional learning situations. In keeping with Denzin et al. (2001) the researcher sought to furnish ‘thick description’ to present a full and holistic picture of the project to the reader. This study sought to represent teachers’ perspectives on a particular model of teacher – pre-service subject specialist teacher collaboration, called coteaching. Bloomberg and Volpe (2012) advise that ‘lessons learned in one setting might be useful in another’ (p. 113). While this study does not claim to be a representative sample, it has the potential to be applied in similar settings if the ‘richness of the descriptions included in the study give the discussion an element of shared or vicarious experience’ (p. 113).

3.10 Limitations of the Study
This research explored the perspectives of twenty teachers engaged in coteaching primary music, each partnered with a musician coteacher. Although the data sources and the analyses of the data present an in-depth account of what occurred, and address known gaps in the research literature, these were the experiences of one small group and therefore are not generalisable across all contexts. However, this study describes in detail the perspectives of twenty primary teachers engaged in coteaching music in this one school. Such discussion provides insight into the potential within coteaching for supporting teacher professional development. Of particular note is the fact that the musician coteachers in this study are a group of Junior Freshman (Year One) pre-service music teachers. Should the study be repeated with more confident or indeed more experienced
musicians the results may be different. Both the school principal and the researcher were invested over three years in facilitating this coteaching music study. This on-going support was a feature of the study. Should the study be replicated without this support the results indeed may be different.

Limitations of the data set and of the various analyses also warrant consideration. One key limitation of the exploratory design is also its strength. Time spent with individual teachers in informal conversations bolstered relationships and the development of trust, but field-notes are based on recollections of key points in these unrecorded conversations and as they are compiled after the event they are as such, approximations of conversations. This data, however, documented progression from early attempts to mature coteaching, provided insight into how the teachers experienced the cotaught lesson, both emotionally and cognitively, how they organised coplanning and the nature of the coreflection. These conversations also recorded teacher reflections on the progress of the coteaching itself including the factors that were inhibiting as well as enabling progress. Conversations which were conducted with various individual teachers every week immediately after coteaching helped to assuage teacher anxiety initially and later facilitated the engagement of teacher and researcher in rich reflective professional dialogue on the development of coteaching. Such informal exchanges were hugely valuable in enacting and developing coteaching over the three years of the study. Comparisons drawn between teacher accounts of a coteaching event and that of their musician coteacher who was obliged to submit a structured reflective account of each lesson, provided one way of addressing the limitations of the field-note data set. Finally, to ensure that teachers were accommodated as partners, findings from this study were discussed informally and frequently.

3.11 Conclusion
In seeking methodological congruence, (Richards & Morse, 2007) this chapter presented the research questions which became more focused in the course of the study, the aim of the study, and a rationale for the research approach which sought to connect the problem, the purpose and the approach (Bloomberg & Volpe, 2012). After careful exploration of alternatives, having revealed the ontological and epistemological leanings of the researcher, the study design is presented as a sequential, developmental, exploratory mixed-methods study, incorporating elements of ethnography. This was deemed best suited to responding to the research question and of gaining a deep understanding of a social setting embracing change. The research instruments were discussed as was the research sample. Initiating the research required two pilot studies and several meetings with staff, recorded as field notes with the permission of the school principal and staff. Managing the inquiry involved immersion in the day to day life of the school on one day a week for twelve
weeks over three years. Additionally, the study entailed gathering and later analysing data from informal and formal interviews with teachers and school principal, maintaining careful notes on all discussions and observations, and monitoring confidence audits throughout the process. Ethical considerations and the maintenance of the participant confidentiality were also discussed. Perceived limitations to this idiographic study associated with its sample size and its confined location were disclosed.

The following two chapters (Chapters Four and Five) present the research findings as they relate to the broad research question which sought teacher perspectives on the impact of coteaching music.
There is a deep and interesting paradox in productive collaboration. Each participant’s individual capacities are deepened at the same time that participants discover the benefits of reciprocity (John-Steiner, 2000, p. 204).

4.1 Introduction

Chapter Four explores teachers’ perspectives on the impact of coteaching music on classroom practice. The results must be considered in the context of what was a modest but significant exploratory study conducted over a three-year period. The findings in this chapter relate to the influence of coteaching on teacher confidence levels including (i) knowledge of the music curriculum, (ii) expertise needed to teach music and (iii) ability to help pupils to engage in music activities. Data analysis also pointed to modifications in teacher beliefs regarding the value of music as a curricular subject and the role of the primary teacher in a music coteaching partnership. The chapter concludes with a short discussion.

4.2 Impact of Coteaching on Teacher Confidence

This section sets out and discusses the findings in relation to the teacher confidence audits (Appendix 3) administered before and after each coteaching residency, drawing on relevant points from analyses of participant teacher interviews, teacher and musician coteacher reflection journals and researcher field notes compiled over the three-year study.

As detailed in Chapter Three, there were six questions on the confidence audit. Question 1 requested demographic information including the number of years that teachers were teaching, an indication of the subject in which they may have specialised in the College of Education and their previous experience with learning music. Question 2 asked teachers to indicate their comparative confidence in twelve primary subjects. Question 3 explored teacher confidence in their understanding of the music curriculum focusing on the nine music elements and three strands. Question 4 concentrated on teacher confidence in possessing the professional knowledge and skills needed to teach music. Question 5 focused on confidence in relation to the ability to support pupil engagement in music. Question 6 was open-ended, inviting teachers to suggest the support they felt they most needed to teach music.
For each question, the Likert scale ranged from fully confident (4), confident with guidance (3), can manage with support from others (2) and, need help to teach this subject (1).

4.2.1 Comparative Confidence in Teaching Music

Teacher levels of confidence are not generally consistent across all curricular areas (Lloyd et al., 2000). Prior to joining the coteaching programme all teacher participants were asked to rate their confidence in relation to twelve primary subjects (Question 2). Results from Question 2 are shown graphically on Figure 4.1. This constitutes a baseline audit of teacher confidence in music relative to eleven other subjects.

![Figure 4.1: Comparative confidence teaching twelve primary curricular subjects before coteaching](image)

The first finding as illustrated in Figure 4.1, indicates that on average, music is the subject that participant teachers felt least confident to teach. One teacher (1/20), from the entire cohort over the three years, claimed to be fully confident to teach music before coteaching and this was someone who was appointed at the start of the third coteaching music residency specifically to ensure that music would be supported in the school (SPI/3). Teachers placed music in the lowest category, below science, confirming opinions expressed during the pre-participation phase, when strong resistance to coteaching music was expressed. Data compiled from two staff meetings, prior to the commencement of the first coteaching music residency, support this finding, as teachers revealed ambivalence to both music and to coteaching (RFN/PP). The fact that teachers in this study felt least confident about music was not unexpected as conversations with teachers during the pre-participation stage, recorded as field notes, indicated high levels of apprehension associated with the prospect of coteaching music, many claiming that of all subjects, music was considered the most difficult by the majority of teachers in the school. This opinion was also encountered by Hallam et al. (2009) who concluded that:
Music has been found to be one of the most difficult foundation subjects. Teachers lack confidence in teaching music particularly if they are non-specialists and there is an urgent need for continuing professional development or better initial training to address specific musical skills and musical vocabulary.

Concurring with Hallam et al. (2009), the school principal suggested that:

Primary teachers are ‘mathsy’ and they enjoy reading and the more senior teachers in particular enjoy Irish and that takes you places, history, geography and drama. Most of the staff enjoy art and sport but music is very specialised. We have one or two teachers, let’s say, who are very good at music but on the whole most teachers find teaching music very hard.

SPI/PP Recorded in RFN

During the pre-participation stage, some teachers requested that coteaching be introduced for an alternative subject as the consensus at staff level was that teachers ‘would have very little if anything to offer to a teacher–musician coteaching partnership’ (RFN/PP). On the other hand, confirming the opinion of the school principal, 16/20 teachers indicated that they were fully confident to teach maths and 13/20 were fully confident to teach English (Table 4.1). * Only 19/20 teachers entered scores for Art.

A study conducted in Northern Ireland by Carlisle (2008) revealed comparable results; out of nine subjects, pre-service teachers ranked music last. Results are also similar to those from international research studies on pre-service primary teacher comparative or relative confidence. Mills (1989) on completion of a study on pre-service teacher confidence concluded that ‘by a wide margin music is the subject in which most of these students have the least confidence as teachers’ (p. 131). Similarly, a more recent study conducted by Hallam et al. (2009), which asked 341 postgraduate trainee teachers from four primary pre-service programmes to rate their confidence in teaching music, also revealed that while 91% of respondents were confident in their teaching skills, less than half of the cohort (47%) indicated that they were confident teaching music.
Table 4.1: Teacher confidence to teach primary curricular subjects prior to coteaching (N=20)

<table>
<thead>
<tr>
<th>Confidence</th>
<th>Eng</th>
<th>Irish</th>
<th>Math</th>
<th>Hist</th>
<th>Geo</th>
<th>Art</th>
<th>Mus</th>
<th>P.E.</th>
<th>Rel</th>
<th>Scien</th>
<th>Dra</th>
<th>SPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Confident</td>
<td>13</td>
<td>8</td>
<td>16</td>
<td>13</td>
<td>11</td>
<td>7</td>
<td>1</td>
<td>9</td>
<td>12</td>
<td>5</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>65%</td>
<td>40%</td>
<td>80%</td>
<td>65%</td>
<td>55%</td>
<td>35%</td>
<td>5%</td>
<td>45%</td>
<td>60%</td>
<td>25%</td>
<td>45%</td>
<td>60%</td>
</tr>
<tr>
<td>Confident with guidance</td>
<td>7</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>35%</td>
<td>50%</td>
<td>20%</td>
<td>25%</td>
<td>35%</td>
<td>45%</td>
<td>50%</td>
<td>45%</td>
<td>15%</td>
<td>35%</td>
<td>15%</td>
<td>35%</td>
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<tr>
<td>Can manage with help</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
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<td>25%</td>
<td>30%</td>
<td>30%</td>
<td>5%</td>
</tr>
<tr>
<td>Need help</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>3</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

After completing each coteaching music residency, teachers were asked to rate their confidence levels again in the same twelve primary subjects. Figure 4.2 reveals a substantial increase in comparative confidence with respect to music, particularly after the first two coteaching residencies although there appears to be a slight decline in relative confidence in the third year. A number of opinions on the decline were proffered by participant teachers during the final interviews. These included the appointment of four new teachers; the introduction of a musical instrument, the ukulele; an increased appreciation of the subject, including its complexities. Mike suggested:

“It (the slight decline in confidence in year 3) could be that we know so much more now and we’re even more aware of the importance of the skills we don’t have.

(E-mail correspondence following the final data analysis)

Two teachers (both involved over the three residencies) suggested that that teachers’ new understanding and skills reached a plateau after the 2nd residency or that indeed teacher confidence in a range of curricular subjects increased because of coteaching (TI/3). However, on average, teachers indicated that they were more confident teaching music after coteaching than they were before (RFN/1-3; TI/1-3; Anon I/3; McTrJ/3).

This finding is in accordance with international research which suggests that teacher confidence levels can be impacted positively after short music training interventions (Hallam et al., 2009). While Seddon and Biassutti (2008) reported substantial confidence increases in teachers after just six, 12-bar-blues keyboard lessons, the authors do not indicate if this confidence was sustained. The current study however sought a long-term view of confidence, tracing its development over three years.
Figure 4.2 also reveals a substantial increase, on average, in confidence, across all subjects after coteaching. Focusing on the results after one coteaching residency, teachers remained *fully confident* to teach mathematics (16) and English (13) but there were substantial improvements in confidence in history, geography religion, drama and SPHE.

![Bar图](image)

**Fully Confident = 4, Confident = 3, Can Manage = 2, Need Help = 1**

**Figure 4.2: Comparative confidence in twelve subjects before and after coteaching**

The substantial confidence increases were notable in the subjects where teachers felt least confident initially, science and drama in particular. There was no meaningful change for those subjects where teachers already felt confident (mathematics and English). While there was an increase in teacher confidence in music, only one teacher recorded that she was *fully confident* after coteaching. This was the same teacher who had indicated a similar ranking prior to coteaching.

There were several possible explanations for the increase in confidence across various subject areas. Congruent with research undertaken by Murphy and Beggs (2005a) and by Carlisle, (2008), many participant teachers in the coteaching music study reported that, in sharing expertise during coteaching, while consciously supporting and promoting the professional development of their coteacher, a pre-service music teacher, they became aware for the first time of the quality and currency of their own pedagogic expertise. Several teachers recalled trying to model good practice to help improve the pedagogic skills of their coteacher and in doing so, becoming increasingly aware of their own. One teacher commented that having a coteacher was like holding a mirror to her own practice:
I could see my taken for granted approaches to teaching through the eyes of my coteacher ... I became more and more aware of what I was doing.

Mary RFN/1

Another factor which may have influenced the improvement in teacher confidence in teaching across other subjects was the emergence of opportunities for professional discussions on coteaching music in the staffroom, a practice which, according to most teachers and the school principal, seemed to develop after coteaching began (SPI/1; TI/1). Several teachers reported that they regularly discussed how each was faring with coteaching, sharing ideas on how they might better support each other and the professional development of their coteachers. Similarly, a small-scale study in Australia reported on the opportunities for peer learning that were experienced by the staff in one school when five teachers together with the school principal had a shared vision for music education (de Vries, 2015).

In summary, Figure 4.2 indicates that confidence in music, relative to eleven primary subjects, improved over the three-year coteaching residency but remained below that of eleven curricular subjects. This finding suggests that on average teachers were more confident teaching all subjects after one and multiple years coteaching. It is notable that the most substantial increase in confidence, particularly in music, but also across all subjects, occurred within the first coteaching residency. The findings resonate with those of similar coteaching studies, albeit in science rather than music, conducted in Northern Ireland, those of Murphy and Beggs (2005a) and Carlisle’s study in 2008.

The next section considers the findings in relation to teacher confidence in understanding the requirements of the music curriculum (GoI, 1999) before and after coteaching.

4.2.2 Confidence in Understanding the Music Curriculum

As outlined in Chapter Two (Subsection 2.2.2), the primary school music curriculum is loosely based around nine music elements including pitch, duration, tempo, dynamics, timbre, texture, tonality, style and structure and three music strands (skill) comprising listening & responding, composing and performing. Music curricular content is not specified, but it is recommended that it be culturally relevant and developmentally appropriate (GoI, 1999b). Teachers are responsible for ensuring that pupils experience the nine elements via the three strands incrementally and sequentially as they progress through the primary school.
Question 3 probed teacher understanding in relation to their understanding of the requirements of the music curriculum. Teachers were asked to rate their confidence in relation to the nine musical elements and the three strands, before coteaching. This is discussed in Chapter 4, Subsection 2.2.1 and 2.2.2.

**4.2.2.1 Nine Elements of Music**

In response to Q.3, it became obvious almost immediately (on distribution of the questionnaire) that teachers lacked confidence in their understanding of the nine music elements. While a minority of teachers completed the questionnaires independently, many did so in pairs or small groups (RFN/1-3). Of the twenty teachers, over two-thirds (15/20) of the sample revealed that they had difficulty in interpreting the terminology associated with the music curriculum seeking clarification in advance of audit completion. For example, almost every teacher asked for an explanation of one or more of the music elements listed after the question ‘How confident are you that you understand the following musical elements?’ Most teachers (11/13) before commencing the first residency asked ‘First, can you explain what these elements mean so that we can complete the questionnaire?’ (RFN/1). In response to the open-ended Q.6, one teacher wrote, ‘I don’t understand the elements duration and timbre; I would like help with my lack of understanding of the music elements’ (PrCtCA/2). Most teachers (19/20) voiced individual concerns such as “I’m not sure if I have interpreted ‘pitch’ correctly. Does it mean the notes?” Some teachers asked, “What is the difference between duration and rhythm?” (RFN/1). These and other such comments from teachers entering the music coteaching residency for the first time during each of the three residencies, hinted at a lack confidence in teacher understanding of the nine elements (RFN/1-3).

![Figure 4.3: Confidence understanding the nine elements of music before and after multiple years coteaching](image)

- **Fully Confident = 4**  **Can Manage = 2**  **Need Help = 1**
- **Confident = 3**

**Figure 4.3:** Confidence understanding the nine elements of music before and after multiple years coteaching
Figure 4.3 presents a summary of the findings from the confidence audit data in relation to the nine music elements before and after engaging in coteaching. The results confirm that before coteaching, teachers, on average, were less than confident in relation to all nine elements. Pulse, dynamics and tempo, elements which are as relevant to the junior infant classes as they are to the senior classes received the highest rankings, albeit in the can manage category, followed with a slightly lower score for duration, pitch and style. In 6/9 elements, although teachers on average could manage with help from others, structure, texture and timbre, were ranked lower still with most teachers indicating that they would need help to teach these concepts. Table 4.2 (below) confirms that there was no teacher who was fully confident in their understanding of the element style, only one teacher fully confident that they understood the element structure with 13/20 teachers indicating that they were less than confident in their understanding of this element.

Table 4.2: Confidence/9 music elements before and after one coteaching residency

<table>
<thead>
<tr>
<th>Confident understanding the 9 elements of music</th>
<th>Figures on top: before-coteaching</th>
<th>Figures below: after one coteaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully confident</td>
<td>(6) 13</td>
<td>(1) 1</td>
</tr>
<tr>
<td>Confident</td>
<td>(6) 3</td>
<td>(1) 4</td>
</tr>
<tr>
<td>Can manage</td>
<td>(5) 4</td>
<td>(1) 4</td>
</tr>
<tr>
<td>Need help</td>
<td>(3) 0</td>
<td>(1) 9</td>
</tr>
</tbody>
</table>

*Not all teachers completed this section post coteaching

There was a substantial improvement in teacher confidence in relation to their understanding of the nine music elements after participation in just one coteaching residency (Table 4.2.) and this improvement continued for those nine teachers (9/20) who took part twice and the six teachers (6/20) who participated three times as indicated in Figure 4.3. While this may not be so obvious in the quantitative data, during informal conversations (RFN/1-3), coteaching observation (RFN 1-3) and teacher interviews (TI/1-3), a majority of teachers frequently incorporated these elements in conversation. Coteaching music video footage recorded by coteachers also evidences some teachers using a limited music vocabulary associated with the music elements (RFN/1-3) and in a few cases exploring these elements in practice (RFN/3). Teachers’ use of the music elements in practice was confirmed in several reflection journal entries by musician coteachers in the 2nd and 3rd residencies in particular. Answers to the question what did your coteacher learn today? (MCtRJ
1-3) indicate that according to musician coteachers, quite a few teachers frequently explored 4/9 music elements including beat, tempo, pitch and dynamics. References to elements such as texture, timbre, structure and style, were rare in the first and second residencies becoming more noticeable in their use amongst 5/9 teachers who participated in coteaching multiple times (MCTRJ/1-3). The elements texture, timbre, structure and style were employed more frequently with senior classes; data suggest that junior teachers used these terms less frequently both in class and in conversation (MCTRJ/1-3).

In summary, teachers indicated quite a substantial increase in confidence across 8/9 elements after one and multiple years coteaching, endorsing the affordance of coteaching as professional development. While teachers indicated increased confidence in their understanding of the elements, their use in the context of classroom music was not consistently accurate, thus musician coteachers indicated that teachers needed on-going support in terms of the appropriate application of the terms (MCTRJ/2-3). The incident described in a musician coteacher reflection journal entry is typical of a number of others reported over the three-year residency:

Today I noticed that my coteacher was mixing up soft and low. I can understand the problem. A soft voice is low sounding, but I was trying to help the children to understand pitch high and low. My coteacher was genuinely participating but I don’t think he understood that soft describes the dynamic level and low describes the pitch.

John MCTRJ/2

A similar finding was included in a study on the impact of a music professional development intervention conducted by Hallam et al. (2009) in the UK. While teachers claimed to have improved confidence in the musical elements after the intervention, video recording analysis indicated that teachers were found to confuse musical elements. For example, high and low was sometimes confused with loud and soft. Coteachers also recalled that teachers’ use of beat and rhythm was not always clear.

However, several musician coteachers, in discussing the children’s progress frequently attributed successful teaching outcomes to the pedagogic skills of the teacher (MCTRJ/1-3). This incident below which took place in 5th class during the third residency and was observed by the researcher, is representative of many such coteaching music scenarios:
Musician CT: Girls today we are going to play with texture in music. We’re going to sing the song we learned last week and add a harmony line.

Teacher: Who can explain the word harmony?

Pupil: It means when you get along with your family or your friends.

Teacher: Very good so I wonder what harmony means in music?

Musician CT: Well in music when we add a new part or line to the melody, we make the texture fuller, but the new part must be in harmony with the tune …the two tunes must...

Pupil: Get along together?

Musician CT: Yes, they must sound well together...

RFN/3

Research published on the reasons for confidence deficits in music cited by generalist teachers include teacher perceptions of not having the appropriate specialist knowledge (Mills 1991; Hocking, 2009). As teachers in this study became more familiar with the music elements so too did their levels of understanding which in turn positively impacted their confidence as illustrated on Figure 4.3. Teachers reported that through coteaching as they gradually appropriated the relevant knowledge, their confidence improved as did their enthusiasm for teaching music and their enjoyment of the music classes (TI/1-3). This was a finding that emerged through several data sets (TI/1-3; RFN/1-3; Anon I/3).

Several teachers claimed that the most noticeable improvement in their understanding of the musical elements was associated with those which they had previously encountered (RFN/3). Four teachers (4/20) remarked that prior engagement with music during their own school days or as undergraduates, surfaced to consciousness during coteaching claiming that coteaching with a musician put into context the music theory which they had once acquired and later discarded because they failed to see its relevance in the context of classroom music (TI/3). These teachers said that observing how their musician coteacher integrated music theory into practice made them realise that they had acquired the theory during their own music lessons but until coteaching they did not have a means of applying it (TI/ 1-3; RFN 1-3).

Studies conducted by Holden and Button (2006); Russell-Bowie (2002) and Wiggins and Wiggins (2008) also point to the impact of prior music experience on primary music teaching. Most teachers suggested however that the methods employed by former instrumental teachers and the nature of the assessment of instrumental music, seemed to privilege recall over understanding, an opinion supported by Ford (2010) which might explain why 17/20 teachers claimed that their prior instrumental lessons bore no connection to classroom music teaching, before coteaching. de Vries (2015) also discovered that prior musical experience impacted positively on willingness to teach primary music in the case of 2/5 teachers involved in a study on generalist primary school teachers teaching music in an Australian school.
Of the nine teachers who participated in multiple coteaching residencies five (5/9) reported becoming increasingly aware over time of how during coplanning, coteaching and coreflecting, musician coteachers consistently and deliberately referred to the nine elements of music (RFN/1-3) consolidating their understanding of the ‘building blocks’ of the subject (RFN /2-3; TI/2-3). Nine teachers (9/20) claimed that although they were more confident in their understanding of the musical elements after coteaching, their confidence was linked to the on-going support they received from the musician coteacher. Congruent with Hallam et al. (2009), these teachers reported that although welcoming the creative approaches used by musician coteachers in bringing the children to an awareness of each element, they confessed that they would find it hard to repeat these lessons on their own citing as impediments, their limitations in terms of the skills of singing and playing a musical instrument. Several teachers however, claimed that while the musician coteacher offered these music skills in abundance it was the coteaching partnership between the musician and teacher which ensured that these specialist skills were appropriately and profitably deployed (TI/1-3). Teachers from Hallam’s study (2009) also claimed that on-going support was needed if the practices associated with a high-quality music programme were to be sustained. Arguments in favour of the deployment of specialist music teachers also cite the prestige value of the unique skills which musicians possess (Heneghan, 2002; Pascoe et al., 2005).

Journal entries from several musician coteacher in the 2nd and 3rd residency refer to the teachers’ confidence in exploring beat, tempo (fast and slow); dynamics (loud and soft); pitch (high and low) and to some extent, depending on the perceived self-esteem, natural ability and motivation of the teacher, rhythm patterns (TI/1). These reports, supporting the results from the post-coteaching confidence audit (Figure 4.3) indicate that teachers who engaged in music coteaching a second time became increasingly more assured in terms of their understanding of curriculum music and their role as coteacher. After the third coteaching music residency, teacher confidence increased regarding seven of the nine musical elements.

In summary, the findings suggest that coteaching positively impacted teacher confidence in relation to understanding the nine elements of music. Cumulative increases in confidence were detected after each residency with most benefits accruing on average, to those who participated multiple times (Figure 4.3). The findings also suggest that in accordance with the scholarly literature (Hallam, 2009; Wiggins & Wiggins, 2008) if teachers are to transition from understanding to implementing in practice, they may require additional support (MCtRJ/1-3; RFN/1-3). A third finding suggested that with increased confidence came a renewed interest in practice and a greater inclination ‘to create a space for music in the school’ (SPI/1). Finally, every teacher, every year, associated the increase in confidence in teaching music with coteaching as the ‘best professional development
model’ (RFN/1-3; TI/1-3). This finding supports the scholarly literature from Ireland (Irish National Teachers Organisation, 1989; Herron, 1985; National Council for Curriculum and Assessment, 1990) and abroad (de Vries, 2011) which argues in favour of specialist support for the primary teacher, teaching music.

4.2.2.2 Three Strands of Music

Question 3 on the confidence audit also asked teachers to rate their confidence in relation to the three music strands which represent the unique skills with which children are expected to engage as they experience music. These include composing, listening & responding and performing. As Figure 4.4 (below) illustrates, it is evident that prior to coteaching, teachers claimed low confidence in relation to all three strands. While teachers rated their confidence in relation to performing as marginally higher than listening & responding, composing received the lowest rating, albeit marginally. This finding is consonant with the research on the difficulty encountered by teachers particularly in relation to teaching composing (INTO, 2009; Mills, 1991; Pugh & Pugh, 1998; Glover, 2002; Young, 2001; O’Callaghan, 2003; McLoughlin, 2012; Berkley, 2001). However, an analysis of the data across all the three strands (Figure 4.4) reveals that in relation to all three, teachers prior to coteaching could just about manage with help from others. Analyses of the confidence audit responses indicate that teacher confidence improved after each coteaching residency in each of the three strands as shown. In fact, on average, nine teachers who participated in coteaching on multiple occasions indicated that they reached level 3 (confidence with help from others) in 2/3 strands. Several teachers claimed their lack of skills of singing in tune, playing an instrument and reading musical notation, was a major impediment to reaching confidence level in the performing strand (Anon I/3; TI/1-3; RFN/1-3).

Figure 4.4: Confidence in teaching the three strands, listening and responding, performing and composing and arranging before and after coteaching
Composing

Every teacher (13/13) who participated in the first coteaching residency indicated that they lacked confidence in their ability to teach composing prior to coteaching with only one teacher claiming to have engaged with composing in the classroom (RFN/1). Many teachers voiced the opinion that most teachers ignore this strand completely (RFN/1-3). Bearing this in mind it wasn’t surprising that composing was chosen by teachers as the strand of focus during the first coteaching music residency (RFN/1). Prior to coteaching, teachers indicated that on average, they could just about manage with help from others for each of the five sub-elements of the composing strand (Figure 4.5 below).

![Bar chart showing confidence levels for composing and arranging before and after coteaching](image)

**Figure 4.5:** Confidence teaching composing and arranging before and after coteaching

After one coteaching residency, teachers showed a marked improvement in their understanding of the requirements of the composing strand – particularly those aspects that might appear most technical including composing ostinati and inventing and using graphic symbols to record compositions (Table 4.3 below). Most teachers lacked confidence composing simple ostinati, before coteaching, with 7/20 teachers giving this aspect of the composing strand the lowest score, need help with only 3/20 teachers claiming to be fully confident. After one coteaching residency most teachers felt confident, with 10/20 feeling fully confident (Table 4.3).
Table 4.3: Compose simple *ostinati* before and after coteaching

<table>
<thead>
<tr>
<th></th>
<th>Pre Coteaching</th>
<th>After 1 coteaching residency</th>
<th>After 2 coteaching residencies</th>
<th>After 3 coteaching residencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Confident</td>
<td>3</td>
<td>10</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Confident</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Can Manage</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Need Help</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Of the six teachers who were involved in all three years of the coteaching music study, five indicated that they were now at least confident in engaging in composing with the children, with four teachers (4/6) claiming to be fully confident. As illustrated (Table 4.3), for the other teachers the increase in confidence, albeit marginally, continued over the three years, the most dramatic improvement happening during the first coteaching residency. The fact that the first coteaching residency focused on composing this outcome is unsurprising. All teachers, from Junior Infant classes to 6th class spoke positively about their experiences of composing, regardless of when they participated (TI/1-3; RFN/1-3).

The school principal confirmed that teachers were keen to become involved in composing describing how one teacher encouraged his class to compose a piece of music as a gift for a school benefactor (RFN/2). Several teachers described how they came to an understanding of composing via improvising where musician coteachers led the pupils in exercises which involved changing a tune by manipulating one or more of the nine elements (Figure 4.3). Most teachers claimed that they did not need specialist skills to teach composing. One teacher concluded ‘we just need our imaginations and some basic vocabulary’. Glover and Young, (2002) suggest that the role of the teacher in leading a creative activity such as composing is not so much that of teacher but one of facilitator.

The findings here indicate that teacher confidence continued to increase each year; that composing, a strand heretofore ignored was popular with teachers; that the skilled management of the elements of music by the musician coteachers, facilitated teacher understanding apropos composing. Finally, with understanding came confidence and motivation as evidenced in the efforts of one teacher to involve the children in the creative task of composing a short piece of music for a school benefactor. This finding supports the scholarly literature which points to the crucial position.
of the class teacher in developing and integrating music (Glover & Ward, 1993; Mills, 1989; Russell-Bowie, 2012).

**Listening and Responding**

Looking in more detail at the sub-elements as they relate to the second strand, *listening & responding*, Figure 4.6 (below) indicates that prior to coteaching, teachers displayed insecurity in relation to 5/5 of the sub-elements of this strand. Only 4/20 teachers claimed to be fully confident in relation to the first sub-element *using music vocabulary (to describe a piece of music)*, 6/20 teachers were confident with guidance, 4/20 could manage with support and 6/20 needed help. Yet this was the sub-element that received the highest ranking of the five. Some responses are particularly low for example, the tonality sub-element *recognise songs in a major/minor key*. This is not surprising as discriminating tonality is a relatively difficult skill for a generalist teacher (O’Flynn, 2002). The results below support such research as teacher ranking of their understanding of recognizing songs in the major and minor key (*tonality*) remained low after one and indeed multiple years coteaching.

![Confidence teaching listening and responding before and after coteaching](image)

**Figure 4.6:** Confidence teaching listening and responding before and after coteaching

The findings shown above indicate that the most notable improvement in tonality (discriminating between major and minor keys) occurred in the third coteaching residency with the introduction of chordal accompaniment in conjunction with performing on the ukulele (RFN/3). Three teachers described listening for chord changes with the children and being encouraged by the musician coteacher to stand up when a new chord was required, a practice which teachers of senior classes reported as very helpful in coming to an understanding of tonality (RFN/3).
During the post coteaching interviews, teachers from senior classes 4th, 5th, and 6th spoke about this activity in the context of the children’s understanding, saying that tonality changes were identified more spontaneously and less self-consciously by the children than by the teachers themselves (TI/3) suggesting that perhaps this facility is available for development only at certain stages in a child’s life as explored in a study conducted by Lamont (1998).

It emerged that some teachers, after coteaching, indicated a little more confidence in the sub-element *relate mood to the elements of performance*. In researching teacher practice Wiggins and Wiggins (2008) warns of the danger of accepting as fact, teacher self-reporting. In their study of primary teacher confidence/competence in teaching music, the authors concluded that even when teachers claim competence, closer observation may prove otherwise. Similarly, coteaching observation recorded as researcher field notes suggests that apart from asking the children to supply a word (adjective) to represent the mood of a piece of music, teachers did not display the ability to develop the children’s understanding via appropriate questioning beyond this point (RFN/2).

In the context of teaching all three strand units (but very particularly in relation *listening & responding*), musician coteachers were expected to demonstrate deliberate and consistent use of the vocabulary associated with the nine music elements (Chapter 4, Subsection 2.2.1). While teachers appreciated the consistency of approach and while they indicated (post-coteaching confidence audit) that their understanding of these elements was strong, a number of teachers discovered that understanding the activity is not synonymous with successfully engaging with that activity. Flo articulated this clearly in her description of her own experience of being questioned by her musician coteacher during a lesson based on the strand *listening & responding*:

I’m pretty accustomed to the nine elements now but during a listening and responding activity when my coteacher looked at me and asked ‘teacher, can you tell us what animal the composer is describing in this piece?’ (The Elephant, from Carnival of the Animals) and then gave me a hint... ‘think of the elements...’ I just froze!

Flo TI/2

In summary, in relation to *listening and responding*, teachers indicated improved confidence after one and multiple years coteaching. Efforts to apply the understanding in the context of developing children’s musicianship in the classroom were reported as challenging with most teachers indicating that ongoing support from a music specialist was necessary if the children were to receive maximum benefit from engagement with the strand.
Performing

However insecure teachers were concerning listening & responding pre-coteaching, results suggest that they were even more insecure regarding performing.

In relation to performing, and although teachers claimed that before engaging in coteaching music lessons, when they did occur, consisted of song-singing only, results from question 3 indicate that teachers, on average, lacked confidence in all the eight sub-elements of the performing strand before coteaching (Figure 4.7). Only one teacher (1/20) reported confidence in the sub-element singing or playing from staff notation or backing chords while 11/20 respondents ranked this sub-element lowest of all.

![Figure 4.7: Confidence teaching performing before and after coteaching](image)

Confident = 4  Confident = 3  Can Manage = 2  Need Help = 1

In fact, teachers on average lacked confidence in all the sub-elements of the performing strand (RFN/1-3). Some teachers reported that before coteaching they were unaware of the actual requirements of this strand. Mike’s attempt to throw some light on this point was typical of several teacher comments:

Reviewing these scores, I confirm their accuracy. None of us teachers ever thought of performing in terms of the sub-elements listed below. For me, singing was performing and singing consisted of the class singing to a CD. This audit has opened our eyes!

Mike TI/1
**Song-singing** and **playing percussion instruments** were ranked highest of these sub-elements before coteaching. These same sub-elements with the addition of **performing rhythmic patterns** received high scores, *confident with help from others* after coteaching. In general, teachers reported that confidence in relation to song-singing was more common amongst teachers of junior classes with the male teachers in particular referring to the difficulty in teaching singing to the senior girls’ classes and teachers of senior classes suggesting that by 4th class teaching music is particularly challenging. In line with the literature impediments to teaching music at the senior level, as reported by teachers, included perceptions of personal limitations in singing and instrumental accompaniment (14/20), (Bresler, 1993) and the overcrowded curriculum (8/20) with mandatory testing in certain subjects (Giles & Frego, 2004). Price and Burnsed (1989) presented research findings claiming an inverse correlation between the frequency of music lessons and grade (class) level, supporting the reports from teacher-participants in this present study claiming that the opportunities for music-making were less frequent in senior level classes. In accordance with Bresler (1993) several teachers conceded that singing in the senior classes was used to serve ends other than music itself including the provision of song-singing for liturgical and seasonal celebrations. Preparations for such events were led by one staff member with confidence in the area of singing (TI/2). de Vries (2013, p. 376) cited similar findings:

> When music is taught it is often used as an ‘add-on’ to other curricular activities and focuses on preparation for items for school assemblies and concerts rather than being taught for its own intrinsic value where genuine musical experiences and skills are developed over time...

A few teachers reported that during coteaching they became more confident in using particular techniques to advance **performing** in the classroom. Sandra learned ‘to warm-up the voices, to practise breathing, to focus on in-tune singing’, especially in the 2nd residency when she was introduced to the Kodaly approach to teaching music by her two Hungarian musician coteachers (Sandra TI/2) but a minority of teachers (4/20) reported impediments to their progression citing deficiencies in pitch discrimination and in maintaining a steady pulse (TI/2, 3). Similarly, in Hallam et al.’s study (2009) efforts to teach certain aspect of this strand, following professional development, were also undermined by personal musical limitations despite teacher enthusiasm.

Perversely, and despite the qualitative findings which suggest that teachers really enjoyed learning to play and teach the ukulele (TI/3), Figure 4.7 appears to suggest a slight decrease from the previous year in the average number of teachers claiming to be **fully confident in performing**. Only the senior class pupils (3rd – 6th class) were taught the ukulele so the teachers in the junior school had less exposure to ukulele practice which may have negatively impacted their confidence. Some
teachers reported that as a consequence of coteaching they made time for the pupils to practise ukulele every day and in most cases the teachers themselves practised also (RFN/3; TI/3). Some teachers mentioned that others were more talented and better at the ukulele and others still enrolled in additional lessons in ukulele such was their enthusiasm. The six teachers who participated in all three residencies agreed that the third (and final) residency during which ukulele was introduced was the most attractive and exciting residency. An important finding was that four of the six teachers who participated over the three years posited that the theoretical aspects of music which they had encountered during the first and second residencies, music notation and vocabulary, prepared them to have the confidence to undertake learning the ukulele in the third year, suggesting that a sequential incremental approach to teaching music impacted teacher learning as did the frequency with which teachers participated in the coteaching music residencies.

Another valuable finding in relation to teacher experience of coteaching performing concerned an impact on their personal engagement with music. As observed in classroom practice (RFN/3) and revealed during the annual interview (TI/3) when coteaching became more integrated into the fabric of school culture three teachers reported that they began to develop the confidence to return to playing an instrument they had long since put aside, citing the encouragement of their musician coteachers as motivation. Rose discovered that she had reached a level of competency for playing with a group, something she had not experienced before coteaching (TI/3). John recalled having had a bass guitar which he had long since abandoned, positioned at the back of the classroom so that he could demonstrate a scientific rather than a music concept. John’s description of the encouragement he received from his musician coteacher, was typical of others:

‘Sean (music coteacher) noticed the instrument and began adding a line of music for the bass each week into the lesson and soon I was playing during every music lesson. I enjoyed it so much and became so accustomed to playing that I have decided to give it another go.

John TI/2

Maura brought her violin to class and began ‘using it to accompany the singing’ even encouraging a former pupil to consider returning to lessons. Maura, like the previous two teachers mentioned, reported really enjoying playing her instrument in the context of the classroom:

Playing Three Blind Mice on the violin really enhances the lesson, the children love when I play and after playing examination pieces all my life I never made the connection between classroom music and conservatoire music.

Maura TI/3

One musician coteacher described the children’s reaction when their teacher joined a musician coteacher music ensemble with her clarinet during a school performance:
The children were so excited when one of the teachers brought in her clarinet. The musician coteachers formed a little music group to support the choir. When the children noticed that their teacher had joined in they were amazed... they were urging the musicians to play softer so that they could hear their teacher’s clarinet.

Muireann CtRJ/3

Perhaps one of the most significant findings in terms of increases in teacher confidence in performing music was the renewal of interest in making music both personally and professionally which was observed amongst teachers during the third residency. Most teachers attributed this to the introduction of the ukulele and to the ‘excellent professional development’ they received from a distinguished international music educator and from a local professional ukulele teacher. Several teachers recalled the ‘vibrancy of the music programme’ (Frank Ti/3) during the final residency (Ti/3; RFN/3). Performing music became an aspect of school culture and changes in teacher confidence in relation to performing were evidenced across the data sets in video footage of lessons, (RFN/3); observations (RFN/3); teacher interviews (Ti/3) and musician coteacher reflection journals (MctRJ/3). All the teachers in confirming this finding referred as evidence to ‘the fun’ (SPI/3) they experienced as they performed together during the Christmas concert. Calling themselves the Teacher Ukulele Group (T(h)UGs), every teacher performed on stage ‘modelling our musicianship’ (Frank, RFN/3) for the children.

After coteaching there is an obvious progressive improvement across all aspects of each strand each year as represented in Figures 4.5, 4.6 and 4.7. Once again, some teachers observed that their understanding of the strands was boosted by the deliberate consistency with which lesson plans incorporated the nine elements of music through the three strands.

Teachers who learned to play music in the traditional music genre during their school years began to introduce a variety of instruments in their teaching. Brid revealed she could play the concertina and flute and Sophie also admitted to being able to play the traditional flute in the past. This finding is consistent with Wiggins and Wiggins (2008) who suggest that teachers who can play naturally using traditional instruments and guitars are more inclined to incorporate this music knowledge into their teaching.
The findings here suggest that while confidence in teacher understanding of primary curricular music increased so too did the awareness that the skills which related to music performance, singing and playing an instrument, are difficult (at best) and impossible (at worst) to acquire in just twelve weeks. For some, personal limitations in music indicated that these skills commensurate with the need for their use in the classroom particularly in the senior classes would never be developed. For those teachers, (Ciara 1-3; Flo 1-3; Mike 1-3; Geraldine 2-3) reports of the affordance of coteaching in providing a high-quality music programme for the children were frequent. Others (Maura, 1-3; John/2; Rose/3) reported the desire to develop the music performance skills they had acquired as children as they reported being more aware of how these skills could be applied in the context of the classroom.

4.2.3 Confidence in Possessing the Professional Knowledge and Skills to Teach Music

Question 4 on the pre-coteaching confidence audit asked teachers to rate their confidence in relation to possessing the professional knowledge and skills needed to teach and develop music. During the pre-participation phase, although most teachers claimed to be enthusiastic and, in some cases, passionate about music, most asserted that they lacked the confidence to teach music because of their perceived deficits in music skills and in curricular knowledge (RFN/1). This opinion was confirmed in the first set of pre-coteaching teacher confidence audits and in each audit of teachers who joined the coteaching residency over the subsequent two years. Similar findings emerged from studies conducted by Holden and Button (2006); Russell–Bowie (2002) and Wiggins and Wiggins (2008). Figure 4.8 indicates teacher confidence in their professional knowledge and skills to teach music before and after one and multiple years coteaching.
Prior to coteaching, the baseline confidence survey confirmed that teachers on average rate their professional skills in relation to music very poorly, indeed, in the case of all the sub-elements, below confident (Figure 4.8). Furthermore, although it was subsequently revealed that 18/20 teachers had, at some stage, taken individual instrumental music lessons (Figure 4.9) and at least five had reached an advanced grade level in instrumental performance (RFN/1-3; Appendix 7), on average, teachers perceived music to be their weakest area (Figure 4.1) and this is reflected in their responses (Figure 4.8). This is a common situation in primary schools (Mills, 1989; Gifford; 1993; Jeanneret, 1997; Hennessey, 2000; Russell-Bowie, 2009, 2010) the consequences of which can be grave for the provision of music education (Herron, 1985; Heneghan, 2002). Bresler (1993) suggests that not having a teacher with the knowledge and skills needed to teach and develop music, the essence of the subject is likely to be diluted such that the integrity of the subject is lost.
However, after participation in just one coteaching music residency, teachers on average began to show improvements in all sub-elements such that on average, teachers indicated that they were confident that they had gained the professional skills to teach music. For those teachers who were given the opportunity to continue to participate, the improvement continued in most areas over the two subsequent coteaching residencies (Figure 4.8).

Teachers cited several reasons for the improvement. Most teachers claimed that working closely with an expert in music over the course of the term positively influenced their enthusiasm for music and consequently, their confidence. This finding supports research findings from Hallam et al. (2009) and de Vries (2015), which indicated that increases in enthusiasm for music brought about increases in teacher confidence in teaching music. In every area except one, teachers gained considerable confidence with the professional skills associated with teaching music. The one area where confidence declined in the first year, was in relation to guiding other teachers to support music learning (this decline was reversed in the subsequent two years). Teachers at interview recalled being nervous and apprehensive at the prospect of coteaching with a musician coteacher but most reported that after the first residency all such fears were assuaged as teachers became more confident in their role as pedagogy expert (TI/2-3). Congruent with findings reported by Gallo-Fox and Scantlebury (2016, p. 199) which suggest that ‘through coteaching, teachers found themselves developing professionally’ a number of participant teachers (6/20) in the coteaching music study indicated a new awareness in the value of their pedagogic expertise and their skills as mentor as well as teacher indicating a development in their professional identity which perhaps impacted their confidence. Four teachers said that multiple years coteaching afforded them the opportunity to observe how the same basic concepts or music elements were developed progressively at the various grade levels in the school. Others mentioned that reflection amongst coteachers and teacher colleagues, stimulated by discussions around teacher experiences of weekly...
coteaching lessons, provided opportunities for supporting each other and for sharing experience. For others still, the newly appropriated custom and practise of archiving and sharing coteaching lesson video clips afforded teachers the opportunity to view how coteaching was enacted by colleagues and how similar elements and skills were treated at the various levels in the schools as indicated by the following indicative comment from one member of staff:

I found looking at video footage of music in a senior class very enlightening – I never understood how clapping the rhythm at junior infant level could progress. Here I can see the older girls reading rhythm notation and clapping quite complicated rhythm patterns against a steady beat.

Frank TI/3

Frank also indicated, in accordance with McCullagh (2012), that the video-footage helped him in reflecting on how he could play a more active role in the coteaching music class:

I’m surprised that I was so much in the side-lines in the lesson. I’m shocked because I would have seen myself as fully engaged in the lesson, but the video footage certainly didn’t support that ...I think video is powerful; we all do our best when we know that we are being taped...I need to do this more often.

Frank TI/3

Viewing his participation over time via short coteaching video episodes influenced him to make changes and to become more physically proactive both in terms of assisting his coteacher but also in terms of becoming a more confident coteacher.

Having the confidence to monitor learner progress; assess concepts (elements) and skills; evaluate student output are a vital aspect of primary teacher professionalism (GoI, 1999(b); O’Callaghan, 2003). Spruce (1996) and Best (1992) emphasise the importance of assessment in music and the arts as a means of justification for its place on the curriculum. The Report of the Review Body on the Primary Curriculum (Department of Education, 1990) stresses the importance of assessment in all subjects as an integral component of teaching and learning. Despite this, after coteaching music multiple times, the average teacher still struggled with assessment in music (Figure 4.8). During informal discussion with teachers, Eilis and Mike (each of whom participated over three years) attributed low expectations in relation to accountability in the arts (Giles & Frego, 2004) as somewhat to blame for this (RFN/3). The school principal also indicated that teachers are expected to regularly report progress in literacy and numeracy but not in music (RFN/1). Consequently, teachers tend to focus on assessment of what is considered priority to the detriment of the arts. Marian (TI/1) suggested that developing the practise of assessing children’s engagement with the
arts would affirm the talent and efforts of all children, not just those who are regularly affirmed for academic effort and excellence. One of senior class teachers reported that after multiple years coteaching she had the confidence that she could assess their pupils’ skills in singing and performing on the ukulele (TI/3 Ciara). All teachers reported confidence in reporting verbally the music progress of each child in their class. However, they were unsure as to how this data was to be reported in writing.

The overall finding here is that confidence in possessing the knowledge and skills to teach and develop music improved over the first coteaching residency and continued to improve, with mild fluctuations over two subsequent iterations of the coteaching study. As mentioned above teachers confirmed that the experience of coteaching with a musician coteacher as well as the support from staff involved in the same practice was responsible for increases in confidence. Teachers who participated multiple times valued the repetition and incremental sequencing of the nine music elements across the three strands and the use of video as means of reflecting on and improving practice. A finding here was the need for coteachers to prioritise and advance the area of verbal and written assessment practices in music.

### 4.2.4 Confidence to Engage Pupils in Music Activities

The primary curriculum in music recommends that children experience the music elements and the skills associated with the strands through active engagement with music (GoI, 1999; Murphy, 2012; O’Callaghan, 2003; Stakelum, 2008). Therefore, the penultimate question asked teachers to rate their confidence in their ability to help pupils to engage in music making activities including singing songs with vocal control, performing on instruments including percussion, accompanying themselves while singing, singing in parts and from notation. Prior to coteaching, teachers indicated that on average their confidence was low across all six sub-elements. Figure 4.10 (below) reveals the baseline as well as the end-point assessment in each of the sub-elements after participation in each of three music coteaching residencies.
Figure 4.10: Confidence in engaging pupils with music before and after coteaching

Figure 4.10 indicates that on average teacher confidence in relation to helping the children to engage with music improved incrementally after each coteaching residency. However, teachers indicated more confidence in some areas than others. There was a substantial improvement in identifying musical elements which is consistent with findings in question 3 (Figure 4.3). Several teachers suggested that this improvement was a consequence of being consistently exposed to the nine music elements each of which was interwoven into every coteaching music lesson (TI/3). Music accompaniment was the preserve of the senior classes (3rd – 6th grade) so this may account for the relatively low average increase in confidence in this area in post-coteaching audits in year three of the residencies. While teachers’ overall confidence in their ability to help pupils to engage with music increased after one coteaching residency (Table 4.4), confidence in assisting children to sing in tune and to sing in parts, appears to have been experienced as more challenging and only increased gradually perhaps suggesting that exposure to a music expert made teachers more aware of what these skills entail (RFN/3).
Table 4.4: Teacher confidence to engage pupils in musical activities before and after one coteaching residency

<table>
<thead>
<tr>
<th>Confidence Levels</th>
<th>Sing in tune</th>
<th>Identify Musical Concepts</th>
<th>Perform on musical instruments</th>
<th>Sing in parts</th>
<th>Invent/compose music</th>
<th>Accompany own songs (rhythm instrument or guitar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fully confident (4)</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>13</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>confident with guidance</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>can manage with support</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>need help (1)</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

The findings here suggest that on average, teachers, even after coteaching multiple times continued to indicate their confidence as low where it related to the specific skills associated with musicianship – *in-tune singing, singing in parts, performing on a musical instrument*. Several teachers suggested that the specific and unique skills associated with musicianship are learned and developed over time (T1/1-3). Mike surmised that the skills in teaching a language, French for example could not be acquired over a ten-week residency and that any expectation that a primary school teacher would teach French without adequate training would have to be tempered with an understanding that pupil progression in that subject over eight primary school years would be seriously inhibited:

I don’t understand how we stand for this. After seeing what is possible coteaching with a musician I feel angry that so few, if any teachers feel prepared to teach music. We shouldn’t accept this. Music needs specialist support especially here where the children have no access to music outside of school.

E-mail correspondence 2017, Mike

This suggestion is supported by the literature on music education. Bresler (1993) for example, speaks of the unique skills of the musician without which children are unlikely to experience the integrity of the subject. Deficits in subject knowledge and the skills to teach music have been reported by teachers in Ireland (Herron, 1985; Meany, 1986) and internationally (Alter et al., 2009; de Vries, 2011; Garvis & Prendergast, 2010; Holden & Button, 2006; Wiggins & Wiggins, 2008).
**4.2.5 Specific Support Requested by Teachers**

The concluding question on the Confidence Audit, Question 6, asked teachers to submit suggestions as to the support they would need to make progress. The following recommendations were proposed and were used to plan for the subsequent residency. These suggestions are summarised on Table 4.5.

| Supports which teachers recorded as being useful before they started coteaching mainly related to lesson plans and resource packs. The majority of teachers sought a crash course on the music curriculum. Several teachers requested lesson plans and teaching resources. However, after the first and subsequent residencies, teachers mainly looked for professional development in the skills they had observed modelled by their coteachers including (i) basic accompaniment on keyboard or ukulele with one teacher recommending the introduction of the xylophone; (ii) how to teach a song and part-singing; (iii) how to include culturally relevant music including popular song; (iv) how to... |
read music notation; (v) how to teach music notation; (vi) regular workshops with inspirational musicians and (vii) how best to assess the children’s engagement with and progress in music.

The finding here is that the demand for lesson plans or resource packs disappeared after the first year coteaching possibly because coteachers were now planning together and developing their own resources (Appendix 4). Three teachers sought music ‘that would stimulate them as coteacher’ (PrCTCA/2). This request is interesting considering the results of Gifford’s (1993) study where teachers were reported to have less confidence after a twelve-week professional development intervention due to a perceived lack of relevance. Two teachers mentioned that while they were confident teaching music to junior classes, they found that as they progressed to teaching in senior classes, they became more self-conscious of the deficits in their knowledge and skills to teach music, which resulted in them teaching music less frequently (Siebenaler, 2006). This finding is similar to that reported by Price and Burnsed (1989) which indicted that teachers tended to teach music less in the senior classes.

4.2.6 Overall Confidence in Music after Coteaching

As represented graphically on Figure 4.1 below and confirmed during interviews with teachers each year, teacher perceptions of confidence regarding music improved with each subsequent coteaching residency. Teacher assurance increased gradually over the three residencies in each aspect of the music curriculum assessed, including knowledge of the music curriculum, possessing the professional skills needed to teach music and the ability to help the children to engage in music activities. Those who had the opportunity to participate in two or three residencies indicated that on average they reached the level of confident in relation to teaching music after coteaching. Areas of continued concern involved those which relied on the music skills of the teacher. Several teachers over the course of the three years lamented the missed opportunities for the children in situations where teachers did not possess such skills (SPI/1-3; TI/1-3; Anon I/3). Referring frequently to the children’s reactions to their coteachers singing *Songs of the Auvergne* in the second residency; hearing the opening bars of *Rhapsody in Blue* played on the clarinet in a Junior Infants classroom in the first and third residencies; singing as part of a prestigious school–university public performance accompanied on stage by ten pre-service music coteachers during the second residency; having the opportunity to engage with music notation with PSTs from Hungary using *the Kodaly approach* during the second residency were some of the opportunities cited by teachers which were afforded by coteaching music.
However, on average, teachers continued to rate their levels of confidence in terms of teaching music lower than in other curricular areas (Figure 4.2). However, every teacher reported that after coteaching they were confident *coteaching* music and some (particularly amongst those (5/9) who participated multiple times) reported reaching confidence level teaching music (TI/3). This statement from a teacher who participated in all three residencies is typical of several similar comments:

I would say I understand the music curriculum and that I can implement and evaluate the aims of the curriculum. It took three coteaching semesters to have me say that. I had lost my confidence but not my knowledge. It took coteaching to make me realise that I didn’t lose the knowledge. I teach Junior Infants, it might be more difficult for teachers of senior classes, but everyone seems fully on board with music now. Yes, I can say with confidence, that I’m fully confident in teaching music but the opportunities for the children to be close to a musician are lost if coteaching finishes. That’s the real beauty of coteaching now. We have to keep it going.

*Eilis RFN/3*

Ciara, a teacher at the senior end of the school who also took part over the three residencies admitted that because of her own personal shortfalls in music (Ciara claims she cannot sing) having a musician coteach music with her gives her confidence that the children can progress in music:

I’m fully confident coteaching music because I know when I have a music coteacher I have access to the skills that are needed to ensure the children make progress in music. On my own, I have a ‘bag of tricks’ a set of resources from my time coteaching but I don’t have the confidence to sing in tune or the ability to conduct a piece of music or to keep a song in time. I don’t have the music skills that are so important if the children are to make progress every year.

*Ciara TI/3*
Siebenaler (2006) reported that after a vocal music intervention designed to increase confidence amongst pre-service music education teachers, PSTs continued to rate their confidence in music as low, despite the overall findings which showed that the number who considered themselves ‘good singers’ had risen from 25% to 39%.

While teachers continued to rate their confidence in teaching music below that of the other eleven subjects, after each coteaching residency, teacher confidence improved in each of the areas examined and enthusiasm for coteaching music was much higher. This ‘renewed energy towards practice’ as a consequence of coteaching, accords with findings reported by Gallo-Fox and Scantlebury (2016, p. 6). Results from the latter study suggest that coteaching ‘motivated them (teachers) to rejuvenate their practice’ and provided a ‘refreshing’ experience with their teaching’. This motivation was evident from participation in the first coteaching residency in the fact that every teacher opted to remain involved in coteaching music for a second and third iteration if they were assigned a class. Teachers who were assigned duties outside of the classroom however were not in a position to be included in subsequent years. Newly appointed teachers, on the recommendation of the staff, volunteered to participate which meant that the entire teaching staff maintained that enthusiasm for music and coteaching practices were diffused from experienced coteachers to new recruits, setting the scene for a cultural change from solo practice to collaborative practice (RFN/2-3).

It is interesting to note that despite having received positive affirmation from the DES after a Whole School Evaluation (WSE) in four subjects including music and despite participating in the coteaching residency for three years in some cases (6/20 teachers), two years for others (3/20 teachers) and with the entire staff (20 teachers) having participated for one year, teachers continued to indicate that of the twelve primary school subjects, their self-perception of confidence in relation to teaching music was lower than in every other subject (Figure 4.2).

Thus, while teachers indicated increased confidence in music their comparative confidence remained unchanged. Several teachers claimed that coteaching music helped them to become aware of the reasons for their lack of confidence and offered them the support they needed and that the children were receiving an authentic music program (TI/3).
4.3 Impact of Coteaching on Teacher Beliefs

To varying degrees, teachers, especially the six teachers who had taken part in all three residencies, contributed valuable insights into the impact of coteaching on teacher schemas, values, beliefs and attitudes, regarding both music and coteaching music. This section reports on developments in teacher perceptions of the value of music as a curricular subject and the critical role of the class teacher in a coteaching partnership. A representative sample of teacher voices, particularly those who participated twice and three times, are included to demonstrate the richness of the data and to support the ideas which emerged from both informal and formal discussions. Participant teachers were encouraged to reflect upon their experiences of coteaching, making the implicit as explicit as possible. The findings suggest that over the three residencies, in addition to an increased confidence and greater understanding of primary music (Section 4.2), teachers also expressed an emerging appreciation for the value of music and the pivotal role of the primary teacher in a coteaching music arrangement.

4.3.1 The Value of Music

Similar to the findings described by Bresler (1993) from her three-year ethnographic study on the teaching of music by generalist primary teachers in two schools in the United States, a majority of participant teachers in this coteaching music study revealed that despite State and curricular expectations, occasions for the children to engage with music, particularly after Second Class (age eight) were limited. When music was taught it served utilitarian ends, ends other than music itself; music lessons were largely informal and mostly unplanned and unlike other primary subjects, music tended to be devoid of possibilities for progression. Most teachers (19/20) reported that prior to coteaching, their music classes lacked the support of the specific subject expertise which they associated with music, vocal and instrumental proficiency, music literacy, subject knowledge and the relevant pedagogical knowledge.

All participant teachers vouched for the fact that singing songs was a regular daily event from Junior Infants to First Class. Most teachers (in accord with the scholarly research discussed in Chapter Two (Section 2.2) emphasised the beneficial links between music and the development of literacy and numeracy particularly in those early years. Mary recounted the situation as follows:

We teach everything through singing in junior and senior infants. We learn each other’s names, learn to count and recognise letters and about safety and hygiene, good behaviour. Yes, for everything we learn, there’s a song and the children love singing and really, that’s how they learn at that age.

Mary TI/1
To summarise, it seemed that teachers were saying that they teach everything through music, except music in the junior classes. As children progressed to the senior classes, teachers concurred with Bresler (1993) that opportunities for music making became more restricted. Maura’s description was characteristic; ‘even with the best will in the world, you leave music to the end of the day and it often gets overlooked’. Teachers of classes from fourth to sixth class reported feeling the pressure of trying to ‘fit it all in’ within an already overcrowded curriculum. While a few teachers, congruent with de Vries (2011) and Russell-Bowie (2009), cited lack of resources and time pressure as the main reasons for the limited opportunities for music engagement, reports from teachers (TI/1-3; RFN/1-3) claiming a lack of subject expertise were plentiful. Ciara is typical:

I try to include singing, but I find that the kids are ready for a challenge by the time they reach 5th and 6th and they’re being stretched in every other subject but where do you go with singing if you can’t even sing in tune yourself?

Ciara TI/2

Mike is similar:

It’s hard to find yourself teaching a subject you know very little about and that’s the reality for most of us with music. It’s particularly awkward when you’re teaching a senior class because those kids can see through you and you lose face if they think you’re bluffing. I’m very uncomfortable teaching music to 4th class. I take teaching seriously and I’d never go in unprepared, but I wouldn’t know where to start with music apart from singing. I teach them a historical ballad from time to time or maybe put on a CD and let them listen to music, but I can’t develop the learning – I’d hardly know what questions to ask them.

Mike TI/2

These accounts support the findings from a host of research studies, such as Hennessey (2000); Holden and Button (2006); Seddon and Biasutti (2008); Wiggins and Wiggins, (2008). Bresler (1993) also observed similar constraints, citing several situations where ‘the children’s singing indicated a readiness for further development’ (p. 4) but without adequate subject expertise teachers, were constrained in their ability to act.

Teachers like Mary and Flo (TI/1) who reported that they had always done their best to include music in their classes, described those musical activities as ‘playing a CD in the background to help the children relax’ and ‘encouraging the children to sing along to a YouTube backing track’. Mike (TI/1), was typical in admitting that he relied heavily on the songs in the religion programme. A few teachers (Carmel TI/1; Helen TI/1) described how they would ‘sing songs at the end of the day or as a break’. The finding here, in line with Bresler (1993) and de Vries (2014), was that music, when it was included in the curriculum, served ends other than music itself and consisted of; singing songs
to backing tracks for relaxation; preparation for liturgical or seasonal celebrations or singing simply for recreation. None of the teacher accounts indicated a systematic planning for music progression.

Every teacher, regardless of the number of times they participated in the coteaching residency, claimed that the single most important aspect of coteaching music was that it changed their conceptions of primary curricular music. Amongst the teachers who participated multiple times (9/20) all nine (and several others, possibly every participant teacher) acknowledged the emotional power of music. Seven teachers mentioned their growing appreciation of the significance of the unique pedagogies of engagement with music, *performing listening & responding and composing* (Coul, 1999a, b) and the social cohesion that can emanate from corporate music engagement.

Six teachers (6/9) who participated multiple times, spoke of gradually coming to recognise the immense possibilities for musical development within a simple song. All six teachers claimed that this aspect of primary curricular music was never available to them prior to coteaching. (TI/3). The following reflection was submitted by Carmel, who although she participated in the first residency only, came to understand the possibility for musical complexity while working with her coteacher, a mature musician coteacher with whom she developed a strong professional partnership:

> I was amazed at the amount of complexity within one little song, ‘I like the flowers’. For example, the girls (and myself) learned the song week one, using our ears... we focused on pitch and rhythm; week two we used a copy of the music and the children followed the music and sang the song, then they sang it in French, J’aime les Fleurs. The following week the girls sang the song as a canon, then with an ostinato ...

> Carmel TRJ/1

Sandra, Mike, Ciara and Eilis, after multiple engagements with musician coteachers, spoke of the potential for cognitive engagement, along a continuum for intricacy and development, with even a simple song. Each in their own way recounted becoming familiar with how systematically these layers could be revealed and developed. Sandra (RFN/2) remembered noticing how,

> ...every song was always stripped back to the basic parts, the nine elements of music, then it was put back together after they had explored the elements.
The finding here is that while for some teachers, the affordance within coteaching for cognitive engagement with music happened in the first residency, for others, depending on factors including teacher confidence, prior music learning and the quality of the relationship with the coteacher, such awareness may have taken longer. Most, (5/6) but not all indicated that they had reached a new level of understanding by the third residency.

As well as engaging with the cognitive aspects of music, several teachers described their emotional responses to the musicianship of their coteacher indicating their capacity for responsiveness to the intrinsic value of music. Several claimed the experience was even more intense in the company of the children. Flo, who like many participant teachers ‘would never, call myself musical’ revealed:

I felt myself being moved by the music, really, and at the same time by the children’s beautiful reactions to Nora’s (PST) singing. I remember wishing I could do that. I realised how much it impacted the children. It was very moving.

Flo TI/1

Maura who participated multiple times tried to articulate what she had come to identify as the most powerful aspect of coteaching music:

The best part of coteaching music is working with a real musician. Of the three coteachers I worked with, Seamus was the best; he could make that instrument talk. The other two were more like teachers, like me, they talked a lot about music, not like musicians, really and that wasn’t as effective I think… so I think the real power of music is in the music—listening to music especially when it’s live music and making music…not talking about it...

Maura TI/3

Maura showed real insight, an ability to discriminate between learning about music and learning music:

Teachers know loud and soft ...but musicians can demonstrate the power of dynamics, It’s really about.... not just knowing dynamics, what dynamics mean, but feeling how this element works – that’s the magic.

Maura TI/3

It would be easy to assume that Maura’s engagement over three years brought about this epiphany but there were other factors that are worth mentioning. Maura had reached an advanced level of violin performance and of music theory as a student herself but ‘never saw a place in the classroom, for the violin or for any of that theory, which I hated as a kid’ (TI/3). Coteaching enticed her to use her instrument in class; she immersed herself in learning the ukulele and even persuaded her learning support teacher colleague to participate in coteaching music and to try the ukulele.
However, she concluded ‘I was delighted to play for the children and to support my coteacher, but the power was in the performance of the musician’.

The finding here is that there was a consensus amongst teachers that having an instrumentalist or vocalist, a music performer in the classroom ‘was the real wow factor for us and for the kids’ (Maura TI/3). This from Marian who participated in the first residency only:

Sometimes it was just playing Three Blind Mice to demonstrate how the tune could be changed... but ..., every time she played that instrument the kids and myself were spellbound!

Marian, TI/1

Interestingly, Jeannerett (1997) recorded higher levels of enthusiasm for teaching primary music amongst teachers with prior experience in music and all six teachers who participated in the three music coteaching residencies had prior experience with instrumental music. However, of the six, only two reported reaching advanced levels of performance. None of the six reported positive memories of the experience.

Several teachers remarked on their own emotional reactions to participation in music at the annual coteaching music workshops. Two teachers, Flo and Eilis, said that they were ‘on a high for days’ (RFN/1). One teacher summarised the experience of music participation with real musicians as ‘good for the soul!’ (Eilis, RFN/1). Gradually, as coteachers with musicians, teachers began to indicate an emerging awareness of the intrinsic value of music (Reimer, 1971; Bresler, 1993).

Teachers began to observe and report the extrinsic benefits of music also. Ciara (involved for the three years) recounted taking account of occasions when the children were motivated to practise the ukulele chords informally during break time and in the case of a few, to start to form smaller groups or little bands, performing for the younger classes. The school principal also noticed how music was presenting opportunities for cohesion and creativity:

A little one from First (class) helped herself to a ukulele from a senior classroom so she could make up a band in her own class because her big sister had taught her ‘to count in and play the chord of C’!

RFN/ 3

Geraldine noticed the children in her class collaborating more and claimed that the practice of sharing ukuleles, one between two, and the group composing music lessons, had influenced this inclination ‘more than all the work I put into teaching collaboration all year’ (TI/3).
Sandra (TI/3) reported that the emergence of leadership qualities as some girls researched songs that they would have liked to learn on the ukulele during coteaching.

Several teachers, consistent with Pitts (2009) spoke of new connections between music engagement and identity. The following statement is from a teacher of a senior class:

I discovered that many girls described themselves as musical and even as musicians in a personal profile information sheet they were completing for their new secondary school. Now that’s very new, I never noticed that before.

Ciara TI/3

Most teachers disclosed that prior to coteaching they rarely, if ever, consulted the music curriculum, discussed the music programme or considered the value of music. When they did engage with music, most frequently with the junior classes, teachers reported that it was for its utility value (RFN/1-3; TI/1-3). The findings as they relate to changes in teacher perspectives on the value of music suggest that coteaching challenged teachers’ former schemas in relation to music, their attitudes, beliefs and values with some teachers demonstrating a ‘consciousness for musical possibilities’ (Bresler, 1993, p. 4) by the end of their participation in the third residency in particular. In the case of a number of teachers who participated multiple time, the cognitive (Oddleifson, 1989), emotional (Resnisow et al., 2004), intrinsic (Bresler, 1993; Department of Education, 1971; Gol, 1999; Reimer, 1971/89; Swanwick, 1979) and extrinsic (Hallam et al., 2009) dimensions of music education (Chapter Two, Section 2.2) were tentatively articulated, in some cases, contextualised, assessed and critiqued, for the first time and, according to participant teachers, as a consequence of coteaching.

4.3.2 The Pivotal Role of the Primary Teacher in a Coteaching Music Partnership

After just one coteaching music residency, teachers began to report transformed perspectives regarding the importance of their role in supporting the vitality and stability of the coteaching music programme (RFN/1; TI/1). While the entire staff endorsed the contribution of the specialist in redressing the challenges already described (Chapter 2, Subsection 2.2), in accordance with McCarthy (1999), Mills (1991) and Hennessey (2000) teachers realised that if coteaching music was to survive, the support of the classroom teacher was essential. Study findings compiled during and after the first music residency indicate that all thirteen teachers who claimed to have initially attributed the children’s musical development and progression solely to the expertise of the musician coteacher (TI/1; RFN/1) began to realise the importance of their own role as coteacher. After the first residency they concluded that without the support of the primary teacher, music,
regardless of the expertise of the specialist would fail to take root. Without such stability, teachers feared that music was in danger of being perceived as a (dispensable) specialist rather than mainstream subject, a concern which was expressed by Mills (1991) and Hennessey (2000). Several teachers volunteered comments on what they had to come to believe to be the singular role of the teacher in prioritizing music; managing the children’s learning beyond the single coteaching weekly lesson and supporting the professional development of the musician coteacher.

Mike’s concern was typical:

If the teacher doesn’t show interest well this is going nowhere. You might find a couple of kids interested, the really musical ones, but unless the teacher makes time every day to reinforce what’s done on Mondays, the impact of coteaching music is going to be very slight. It requires the teacher on board showing enthusiasm and offering encouragement.

Mike TI/1

Mike’s contention resonates with Sandra’s conclusion:

Coteaching requires the class teacher to be fully present. This means that as a teacher I show my coteacher and the children that I value music and I prove that by making space for music...

Sandra TI/1

Ciara also spoke of the importance of the commitment of the teacher for the success of the partnership describing the need to reinforce the learning throughout the week after the cotaught lesson:

It’s not only once a week anymore. Most of us make time every day to practise the song or the ukulele or even to remind the children what they learned in music on Monday. This kind of repetition is needed really if the children are to make progress.

TI/3
Five teachers mentioned the role of the teacher in planning for long-term sustainability. The school principal, anxious to promote music in the school reported that:

We showed our support for coteaching music by developing a school plan for music ... to make sure it was given the same status as the other subjects. One of the areas we discussed as a staff was the cross-curricular links we could make between music and history, geography, English and Irish but without losing the value of music itself. RFN/3

This comment which seems sensitive to the need to preserve the integrity of the subject reflects those of Hallam et al. (2009) and Bresler (1993) who warn against forcing tenuous connections with other subjects deflecting attention from the unique knowledge and skills of the subject itself. Endorsing both the role of the musician and the teacher, Maura’s comment, during the third residency is reminiscent of Hallam et al.’s (2009) contention in relation to the challenges which music presents for the primary teacher:

...music is very complicated, it has its own language... the music programme needs more than a teacher or a music specialist, it needs teacher and music specialist, and it needs a partnership like coteaching to bring out the best of both. Maura TI / 3

Flo, who also participated over three years, despite indicating improvements in confidence, described herself as a ‘very self-conscious singer and a failed recorder player’ emphasised how coteaching in accommodating her to position herself as learner increased her opportunities for observing both teaching and learning:

Even after three years, ...I just don’t understand music, but I’m more confident, I have a role. I can observe who is learning, how they need support and that includes my coteacher. I can show them I value this, and I want to learn music too. I’ve had three coteachers. The first one was brilliant and didn’t need help, so I stayed in the background. The last two depended on me so I was forced to become more active –that’s how I found my role... I think that’s my contribution, I’m patient and I like to support. Flo TI/3

The school principal also contended that the teachers’ role in both modelling learning and being a learner was hugely significant:

The wonderful thing about the teacher learning music with the children is they showed the children that with perseverance, anybody can learn an instrument really, if you practice enough, try hard enough. Some teachers we will say they are non-singers, non-musical people, but they were doing it. So, I think it gave all children a kind of confidence that ‘I can do this’. RFN/3
The school principal went on to emphasise the role of teacher as learner saying:

This profession needs life-long learners and as far as I can see coteaching is a wonderful opportunity for every teacher to learn from a coteacher with a different sort of expertise.  

RFN/3

Several teachers spoke about the role of the teacher in ensuring the children’s perseverance, concentration and motivation over extended periods:

Sometimes it gets tough staying on task and especially if some of the others are progressing quicker, so the teacher walks around and encourages the children who might have started to daydream or become distracted.

Mary TI/2

All teachers concluded that consistent progression in music depends on the vigilance of the teachers in ensuring that music is embedded in the curriculum, that skills are rehearsed every day and that cross-curricular links are forged between music and the other subjects on the curriculum. Most teachers displayed gradual increases in confidence teaching music themselves as reports were submitted of repeating the music lesson, once, sometimes twice, and sometimes every day, to ensure the children understood what was taught. Mike, a teacher at the senior side of the school spoke about repeating the lesson once a week and some other teachers spoke about rehearsing the lesson with the children so that they would be prepared for the musician coteacher:

I always repeated the lesson, at least once, I really enjoyed trying to do it on my own and the kids needed the repetition ...and they enjoyed it too.

Mike TI/1

Most teachers (including Ciara below) after the first residency, vowed to continue to support music even if they were without a coteacher:

I mean I am going to use what I learned next year if I am without a coteacher do you know? I will use those lessons I co-taught and everyone has kind of said that they will definitely follow up on it (music).

Ciara TI/1

In advance of coteaching several teachers feared their inability to co-construct music lessons with their musician coteacher because of their perceived deficits relating to music knowledge and skills. However, most teachers discovered that that, on average, their musician coteachers, who were in their first year of a four-year music teaching degree course, were experiencing a variety of pedagogical difficulties which needed their support. These included planning difficulties, time
management issues and pacing difficulties all of which needed sensitive assistance if the pre-service musician coteachers were to progress professionally. Some teachers suggested that in identifying the need to assist their partner, adopting the philosophy of reciprocity, they began to review their own role in the partnership as one of surplus taking into account the value of their pedagogic expertise, rather than one of deficit, based on their lack of confidence teaching music. This, according to the majority of teachers imbued them with a sense of purpose. Flo’s new insight was typical:

I was terrified of coteaching music, I was afraid of being found out for the fraud I was with music and all that, but I discovered that I had patience and that even when I could see, especially in the 2nd and 3rd year that my coteachers were unsteady and in the case of one of them a bit unreliable with the planning I just handled it, I supported them as best I could and from what they said to me, I helped them.

Flo TI/3

Reflection journal responses acknowledged the on-going assistance that musician coteachers received from their coteachers. Some musician coteachers lauded the in-class support they received, others referred to the direction they were given in coplanning and several acknowledged their coteachers for lessons learned during musician-teacher coreflection which they recorded in their weekly reflection journals (RFN/1-3). The following extract from a reflection journal which describes the positive learning atmosphere created by the teacher and hints at this coteacher’s support for music:

The teacher makes sure that children are enthusiastic to show me what they have learned – It’s easy for me to teach them because they’re excited about showing me what they’ve remembered. The children couldn’t make that progress without the teacher being on board.

Lilly MCTRJ/2

Gina, a musician coteacher who participated in the 2nd residency reflected on her coteacher’s expertise in handling a situation which without support, according to Gina, could have diminished her confidence as teacher:

I spent the entire class focusing on tempo. The kids walked slowly, spoke slowly, sang slowly, then I changed the tempo and we skipped fast and sang faster and then I asked the children if someone could tell me the meaning of the word tempo. All the hands shot up, I chose one girl she said, ‘my sister Tiffany has a horrible temper!’ I was lost for words, - I never expected that answer - Maura, jumped in and said – ‘good definition of TEMPER now how about a sentence with TEMPO’ – the children’s hands went up and I realised...it was probably my accent rather than my teaching that confused everyone...

Gina MCTRJ/2

Although this varied each year, analyses of reflection journals confirm an acute level of awareness amongst a majority of musician coteachers of the amount of support and direction they were
receiving from their coteachers. Specific support mentioned included assistance with lesson planning, particularly in relation to pacing a lesson; class management skills including techniques to ensure the children remained focused; questioning for understanding and topic development, including opportunities for the children to make connections with prior learning and with subjects other than music.

Researchers including Scantlebury et al. (2008), Rigano et al. (2005) and Carlisle (2008) suggest that coteaching between novice and expert presents opportunities for expanding the expertise of both parties. The coteaching music study which involved each partner positioned as both expert and novice – primary teacher as expert pedagogue and novice music teacher and musician coteacher as expert musician and novice teacher, opportunities for reciprocal learning were amplified.

The findings here, which describe teachers’ perspectives on the pivotal role of the primary teacher in a teacher–musician partnership, support the recommendations of several institutions and organisations a propos provision for primary music including; The Conference of Convent Primary Schools in Ireland (1975); Irish National Teachers’ Organisation (1976); Department of Education (1980); Benson (1979); and concur with international research on the topic including Russell–Bowie (2011), Cane (2009), Garvis and Prendergast (2010) and Hallam et al. (2009), that the class teacher be supported by, but not replaced by, a subject specialist. In terms of the focus of this study however, the salient finding here is that once teachers, in line with Small (1980) discovered through coteaching that ‘music is too important to be left to the musicians’ (p. 214), they not only identified their role but claimed the import of that role in the coteaching arrangement. The consequence was an augmented agency, increased self-confidence and in some cases an expanded identity as teacher, learner and mentor (Murphy & Beggs, 2010; Gallo-Fox & Scantlebury, 2016). This level of self-awareness teachers reported was the first step towards forming a solid partnership of equals based on the expertise of each member of the dyad.
4.4 Discussion and Conclusion

This chapter presented an analysis of the data generated in relation to the main research question focusing in particular on the first sub-question which sought to elicit teacher perspectives on the impact of coteaching on classroom practice in music. The chapter began by reporting on teacher confidence in music before and after coteaching. It detailed the modifications to teacher perspectives in relation to primary music and concluded by summarizing teacher views on the unique role of the teacher within a teacher – musician coteaching partnership.

Consistent with the positive correlation between coteaching and increased confidence in teaching science (Chapter 2, Subsection 3.2), all teachers affirmed that coteaching positively impacted their confidence to teach music, their understanding of the curriculum, and, to some extent, the development in their skills in music. Nonetheless, of twelve curricular subjects, music remained the subject in which teachers continued to indicate least confidence. Some teachers posited that while they became more confident in most aspects of teaching music, coteaching with a musician gave them an insight into the type of unique music expertise they believed was needed to fully respond to the musical needs of the children and to sustain and promote musical development. Witnessing the specialist skills of the musician at play in the classroom, a majority of teachers reported that they came to understand the reasons for their own low confidence in teaching music. Analogous with the research literature (Chapter 2, Subsection 2.3), several teachers argued they did not have sufficient knowledge or musical skills to claim confidence teaching music. Most participant teachers, in accordance with the research (Chapter 2, Subsection 2.5) revealed that coteaching challenged their former perceptions of the value of music and afforded them an insight into the crucial role of the teacher in ensuring that the cotaught lesson is embedded, integrated and developed. Finally, in line with the findings from robust research discussed previously (Chapter 2, Subsection 2.6) many teachers suggested that, through coteaching, they could see how the intrinsic qualities unique to music warrant the support, but not exclusive responsibility, of a musician. The following chapter explores the findings as they relate to the second research sub-question, teacher perceptions of the impact of coteaching music on the school.
In the course of intense partnerships new skills are acquired. The partners may develop previously unknown aspects of themselves through motivated joint participation. The collaboration context provides a mutual zone of proximal development (John-Steiner, 2000, p. 187).

5.1 Introduction

Qualitative research can lead to unintended outcomes (Bloomberg & Volpe, 2012; Gallo-Fox, 2016) and an unanticipated outcome from the music coteaching exploratory study was the fact that in seeking to implement coteaching in a solo-teaching school culture, teachers as a collective operationalised a theoretical construct. In so doing the culture of the school was transformed from one ‘situated within and aligned with more traditional urban contexts to cultures embodying the ontological and epistemological cultures of coteaching’ (Gallo-Fox, 2009b, p. 450). The significance of process in the coteaching experience was therefore a key finding of this research study.

Chapter Five presents the results from a dataset which focused on the impact of coteaching on the school, seeking to disinter the most salient aspects of the experience as narrated and documented by participant teachers. The findings reveal how teachers appropriated a theoretical explanation for learning and development (Stetsenko, 2008) which was presented during the annual induction workshops and how they employed, modified, and operationalised a particular theoretical construct to conceptualise the experience of coteaching.

A representative sample of participant teacher statements are employed here to ensure teacher perspectives are awarded the prominence they deserve. These testimonials illustrate the richness of the data. The inter-relationship of themes means that some discussions are relevant at more than one point in the chapter.

Data for this chapter was sourced from researcher field notes (RFN/1-3), teacher interviews (TI/1-3) including an externally conducted, anonymously recorded set of interviews from ten teachers, two months after the study was terminated (Anon/3). A set of teacher and musician coteacher reflection journals (TRJ/1-3; MCtRJ/1-3) were also analysed and coded.
5.2 Operationalising Theory

Coteaching was new to the school in which the study took place and while teachers mentioned that they regularly accommodated pre-service teachers on placement, in-class collaboration was not the norm as the following teacher explained:

We have student-teachers quite frequently, but we don’t coteach or team teach. I generally withdraw children who are having difficulty with reading or with maths and use that time to work with them on a one-to-one basis.

Mary TI/1

An unexpected finding in this study is that, having been exposed to sociocultural theory (Vygotsky, 1978; Stetsenko, 2008; Murphy & Carlisle, 2008) during the coteaching induction workshop, a number of teacher participants from the first and second residencies in particular, reported discussing the theoretical explanation of how cognition develops between, and later within individuals (Vygotsky, 1978) as a means of discussing, understanding and exploiting the possibilities for reciprocal learning during coteaching (Murphy, 2016). One teacher said:

We found the theoretical basis for coteaching very interesting….it gave us an idea of the possibilities for professional development during coteaching.

Marian TI/1

After the induction workshop, ideas which resonate with Vygotskian theory were referenced by several teachers to describe how they came to understand the processes involved in collaborative learning during coteaching. The most frequently cited concept was the idea of each coteacher positioned as a ‘more knowledgeable other’ (Vygotsky, 1978), one partner as pedagogy expert and the other as subject expert. The following indicative remark, illustrates the emergence of consciousness as the teachers came to realise the value of their pedagogic expertise in a coteaching partnership:

I was concerned … that the children would think I wasn’t able to teach music or that I didn’t like music, but … I began thinking of my role in a different way … a more knowledgeable other … to model best practice and to support my partner to develop as a teacher.

Mike TI/1

Most teachers, during the first residency, reported that the idea of learning from each other during practice, while originally confusing, became clearer with the support of theory. A number of teachers, in accordance with Hallam et al. (2009), reported becoming empowered when they experienced ‘buds of development’ (Vygotsky, 1978) during coteaching as they re-experienced
aspects of music theory which many (17/20) had already encountered during instrumental lessons themselves but had, until coteaching, failed to apply to the classroom context. The following statement is typical:

I was surprised at all I knew already. I remembered 4-beat rhythm, and key signatures and andante and allegro ... some from my own instrumental lessons as a child and some from music pedagogy classes in college ... it was coming back to me. I began to see how my experience with music could be used in the classroom...

Maura TI/1

A few teachers reported discussing Vygotsky’s (1978) explanation of how learning takes place, first externally during social interaction and later internally. The school principal affirmed these reports in her description of the emergence of an enthusiastic engaged staff, a ‘thought community’ (John-Steiner, 2000, p. 204), stimulated by the experience of coteaching and fuelled by the desire to understand the processes that might facilitate co-learning (RFN/1). This school principal, in line with John-Steiner’s notion of ‘the interdependence of thinkers in the co-construction of knowledge’ (p. 3) described the aftermath of the coteaching lesson each week thus:

The staff-room was always a buzz after coteaching, teachers asking each other how they got on, what they were doing, what they learned, how the children reacted, so you could say that the learning went on after the lesson during the discussions - teachers were reflecting together – making sense of coteaching as an experience common to all of them.

RFN/1

Similarly, all teacher participants during the first and second residencies regularly referred to sharing experiences of coteaching and in some cases, comparing their experiences with the theories they had encountered during induction (Anon/3; RFN/1-3; TI/1-3). The following comment is representative:

So, it wasn’t just the lesson, there were always chats afterwards...sometimes in the staffroom...sometimes on corridors and little by little I began to get the theory behind collaborative learning – she was the musician expert and I was the pedagogy expert and together we started to create our own music pedagogy.

Mary TI/1

The finding here is significant in that it seems to suggest that with the support of theory, concurrent with implementing new practice, teachers began to interrogate as a staff the processes involved, thus indicating a gradual transformation from teaching exclusively as practice, teaching as an isolated endeavour to teaching as inquiry and collaboration. Over the three residencies the data suggests that in seeking a shared understanding of a new practice, teachers adopted, modified and operationalised a theory of development as conceptualised by Stetsensko (2008). Stetsenko,
building on Vygotsky (1978) postulates that there are three major stages in development as participants advance from a relational ontology to a transformative activist stance, from *participating* in a process to *cooperating* in that process and finally to *co-contributing* to the process (Figure 5.1).

![Participation
Cooperation
Contribution](image)

**Figure 5.1: Stages in development (Stetsenko, 2008, modified)**

Furthermore, Stetsenko (2008) suggests that each of these major stages in development may be experienced at both an early and at a more advanced phase. After *participating* in the process, a person may experience more conscious or *active participation* and having *cooperated* may subsequently experience a greater intensity or *shared cooperation* (Figure 5.2).

Murphy and Carlisle (2008) extended Stetsenko’s notion of development adding *conscious shared contribution* as an advanced contribution stage and suggested *coteaching* as a means of achieving transformation in elements of classroom practice.

![Participation
Active participation
Shared cooperation
Cooperation
Contribution
Conscious shared contribution](image)

**Figure 5.2: Stages in development (Stetsenko, 2008; Murphy & Carlisle, 2008)**

For the purpose of the present study, Murphy and Carlisle’s suggestion (2008) was illustrated as an ascending stepwise progression and a representative text-bite was inserted on each stage to help participants conceptualise coteaching as progressive, developmental and possibly transformative (Figure 5.3). The adaptation was intended to support teachers to realise the processes involved in working towards dynamic interdependency (John-Steiner et al., 1998) in transitioning from solo to collaborative practice.
Figure 5.3: Coteaching Development Model (CtDM) (illustrating the ascending stepwise development of coteaching from participation to conscious shared contribution (Kerin & Murphy, 2015)

An unexpected finding in this study was that teachers reported immediately attempting to adopt modify and operationalise the model (Figure 5.3) as a means of reaching a shared conception of a new practice, as the following insert reminiscent of John-Steiner’s notion of ‘we-ness’ (2000, p. 204) indicates:

Teachers said that they found the step-wise model very useful. They liked the idea of the change from ‘I’ to ‘we’… suggesting that they might move from individual to collaborative practice… They said that the model helped them to imagine stages in coteaching where they begin as participators and work towards becoming contributors.

RFN/1

Reflecting on the first music residency in particular, the majority of participant teachers (10/13) recalled how, in attempting to implement coteaching, the diagrammatic illustration of development (Figure 5.3) afforded something tangible, a starting point for discussion. Subsequently, during the many discussions over the three years which began with the question ‘How is the coteaching going?’ teachers reported consulting the developmental model, as a mediational means of reflecting on development. The following extract, from researcher field notes during the first coteaching residency, documents the frequency with which participant teachers consulted the developmental model:

Whenever I ask the question informally ‘how is the coteaching going?’ teachers reach for their reflection notebooks and using the steps (Figure 5.3), point to the stage they feel they have reached, discussing the progress of the coteaching in relation to their conceptions of that particular stage.

RFN/1
All participant teachers reported that during the first residency they committed to considering together as a group the three major stages of their coteaching journey from participation to contribution – monitoring the development of coteaching as it was deployed in the school:

As partners in researching the impact of coteaching music we were encouraged to discuss coteaching, to be objective, to give our opinions and we used the model (CtDM) as a starting point but we didn’t see it (the model) as fixed. We played with it.

Sophie TI/1

An emerging finding here is the impact of theory on the implementation of change. The majority of teachers, particularly during the first and second residency, reported that they employed the CtDM as a mediational means of discussing individually, in pairs and as a community of learners, the notion of coteaching as interdependent development (TI/1, 2). Several teachers, including one whose statement is included below, described how they reflected together on what form participation, cooperation and contribution might take in the context of coteaching:

The coteaching development model seemed to suggest that coteaching music was more than just a temporary intervention ... the model suggested progression, development ... levels... from the beginning to an advanced stage and this notion of progression definitely challenged us ... but I think inspired us too.

Marian TI/1

Indicative evidence provided by the school principal aligned with accounts by teachers, as she recalled how teachers’ understanding of coteaching changed after encountering the theoretical basis for coteaching presented with the help of the CtDM, particularly during the first coteaching induction workshop:

During the pilot stage teachers saw the impact on the children of having a musician in the classroom and began to like the idea of coteaching for that reason but after the first coteaching induction workshop that took place a few weeks into coteaching, I think we all realised this was not simply a guest in the classroom scenario, coteaching needed the commitment and the cooperation of the class teacher if it were to become more than just a temporary intervention.

RFN/1

With the support of the CtDM (Figure 5.3), teachers recalled how they began to formulate a shared understanding of coteaching as they first discussed together and then charted onto the model their collective experiences across each of the developmental stages (Figure 5.3) as the following statement from one of the teacher participants during the first residency explains:
With the help of ...(the researcher)... we started to reflect on our experiences of coteaching...

... we saw the principal’s support as an important factor, and we agreed to record this and any help we received from other sources as ‘organisational support’. Everyone saw coteaching as a huge challenge so ‘challenges’ was an obvious focus ... we could see the benefits for the children, so we listed ‘opportunities’... that led to us to thinking about our own personalities – were we as individuals, sort of used to working on our own in the classroom or could we collaborate with others. After some advice we considered our ‘dispositional characteristics’. Mary TI/2

A majority of teachers, intimated that the CtDM, provided them with a mediational means of focusing in, of truly exploring the processes involved in coteaching during the first residency (RFN/1; TI/1). These teachers identified the CtDM as instrumental in their growing awareness of coteaching as a process of interdependency. Analogous with a body of scholarly research on coteaching as development (Murphy & Carlisle, 2008; Murphy, 2016; Kerin & Murphy, 2015, 2018; Wassell & LeVan, 2009) and the notion of development as transformative (Vygotsky, 1981; Stetsenko, 2008; John-Steiner & Mahn, 1996) the majority of teachers considered that the real power of the CtDM was that it presented coteaching as an on-going dynamic process (Murphy & Carlisle, 2008; Kerin & Murphy, 2015; Murphy, 2016) rather than as a static, short-term intervention.

Explaining why they had affixed the illustration of the CtDM to the inside of their reflection journals, several teachers referred to the fact that it helped to establish a shared understanding of coteaching as a process of development as the following teacher in informal conversation with the researcher during the first residency explained:

None of us had ever cotaught so we really didn’t know what we were expected to do. The CtDM labelled the stages starting with participation, gradually moving towards co-contribution. The suggestions (text bites) made me think about what I could bring to each stage and what I might take away. I used the model to help me to think in a different way about teaching.

Mary RFN/1

One teacher’s comment which represents that of many others, suggests an energised staff engaged in on-going, habitual dialogue and collective reflection (Lampert-Shepel, 2006; Lampert-Shepel et al., 2018) even at this early stage:

We had so many questions about how we’d go about coteaching... the staffroom was the place where the discussions took place ...all informally. We were excited about coteaching, but we sort of looked to each other for guidance...

Marian TI/1

Most teachers frequently referred to the vibrant staffroom discussions after coteaching, a community of inquirers where participants relied on each other to make sense of a new practice:
The staff room is always lively but coteaching added something else...gave us something new to chat about... we became obsessed with coteaching music, who was doing what and how were they doing that, we’d compare songs, we’d be asking each other what happened in the lesson and comparing our experiences.

Flo TI/2

John-Steiner (1985, p. 208) refers to the significance of the formation of a community thus:

When creative people form a community – however temporary in may be – they become more aware of themselves, they profit from the criticism of their peers and they learn new ways to claim their experience.

This expansion in teacher awareness of the possibilities for enhanced learning via coteaching echoes the scholarship of Lampert-Schepel (2008) and Lampert-Shepel et al. (2018) who contends that *mediational means* such as the CtDM facilitate and foster psychological tools such as cognition which in turn promote higher psychological functions such as conceptualisation, reflection, imagination and volition. Such higher functioning processes, according to Lampert-Shepel et al. (2018) are evidenced in the subsequent development of personal and professional agency or the power to act and make conscious decisions rather than simply reacting to situations as they arise (Sewell, 1992).

Many teachers and the school principal contended that the whole-school commitment to coteaching demanded on-going lively debate and discussion on coteaching which in turn stimulated further reflection:

Everyone was involved, everyone had an opinion or an experience to share...I could see that some, the more musical teachers were very excited about working with a musician, some others were noticing already the effect on the children and nearly everyone was interested in the kind of coteaching relationships that people were experiencing...

RFN/2

All thirteen teachers (in the first residency) recalled the lengthy discussions on the implementation of the tri-partite coteaching structure which included a commitment to coplanning, coteaching and coreflection:

When we finally accepted the idea of coteaching music we spent quite a while thinking about how coteaching might work - how we might coplan, coteach and coreflect.

Eilis TI/1

Invited to participate as both coteachers and partners in research, all participants were encouraged to engage in the process of disinterring meaning from the experience of coteaching music.
Congruent with research findings which indicate that the first level of reflection concerns the problem encountered (Lampert-Shepel et al., 2018), an analysis of the first dataset, suggests that the dominant theme emerging from reflection and discussion and labelled ‘implementation’ focused on how this new collaborative practice was being enacted and experienced (TI/1; RFN/1; MCrJ/1). Informal conversations and formal interviews with teachers over three years reveal the gradual emergence of an agentic staff committed to consciously experiencing, critiquing and documenting the various coteaching developmental stages (RFN/1-3; TI/1-3; Anon/3; TRJ/1; MCrJ/1-3). Teacher testimonials reveal reflections, sometimes descriptive of process, sometimes evaluative of effect, but in all cases moving from a surface engagement with coteaching towards a deeper understanding of its import. The following sections depict how using the CtDM as a mediational means of reflecting on the experience of coteaching, of imagining what form coteaching might take, of conceptualising a new way of being as coteachers, began to co-construct and critique a model of professional partnership and concurrently chart their progression as coteachers. Data analysis revealed the distinguishing elements of each stage, the mediational means most frequently employed, and the processes reported in adapting to a collaborative approach. These experiences were classified in categories such as dispositional characteristics, organisational support, challenges encountered, and opportunities accessed.

5.3 Extending the Model: The Pre-Participation Phase

As discussed in Section 5.2, the original model proposed by Stetsenko (2008) included three major stages of development in transitioning from what she describes as a relational ontology to a transformative activist stance including participation, cooperation and contribution (Figure 5.2). A third important finding, indicating a development in teacher agency and collaborative practice was the corporate decision by teachers to expand the original coteaching continuum to include an additional stage, a pre-participation stage. Reflecting on their initial reactions to the prospect of coteaching, most (11/13) teacher participants from the first residency believed that the addition of this stage to the existing model was necessary to describe their experience of dread at the thought of participating in coteaching from the start – even to the point of passive resistance:

We needed to represent an extra stage if we were to accurately describe our experience from the start. I’m talking about the resistant stage – we call it the pre-participation stage. We were so resistant to coteaching and to coteaching music that many of us who were there from the beginning still wonder how it actually took off!

Eilis TI/1

In line with international research on reflection (Lampert-Shepel, 2006), teacher accounts of the pre-participation stage suggest the emergence of a staff attempting to use prior experience as a mediational means of developing the tools of collective reflection via staff discussion. However,
without the relevant mediational tools for promoting deep inquiry, the data suggests that teacher conceptualization of the process was truncated, limited to a mastery of the technical aspects of coplanning, coteaching and coreflecting. This accords with a concern expressed by Lampert-Shipel et al. (2018) that ‘current reforms and pre-packaged curricula often focus teacher reflection on efficiency and technical implementation rather than on meaning-making and inquiry’ (p.6). In the absence of the CtDM, during the pre-participation stage of the first residency, teachers pointed to the many opportunities for dialogue and the two coteaching pilot studies (Chapter 3, Section 6.1; 6.2) as the main mediational means of supporting their conceptualization of a new professional role as partner in a coteaching dyad.

The pre-participation stage was described by most teachers as a time of great uncertainty and confusion. Many teachers reported feeling vulnerable and several spoke of feeling anxious, particularly in relation to music teaching. All thirteen teachers in the first residency, testified that the effective management of this pre-participation stage was seminal to the success of the subsequent intervention. Teachers, in retrospect, referred to this stage as ‘the make or break time’ referring to how their initial opposition to change and to coteaching was gradually eroded and transformed. Reflecting on the early days, one teacher (Maura) reminisced thus during an informal conversation with the researcher:

> All of us were against coteaching initially. We were... threatened by the fact that it was a music coteaching partnership and we were exhausted from the vast number of changes that had been introduced around that time. We were not in the mood for coteaching.  

RFN/3

Having agreed to ‘give it a go’ (TI/1) teacher recollections on this period suggest an urgent desire for a means of conceptualizing the technical practicalities of the proposed coteaching model. One teacher summarised their primary concerns:

> The practicalities puzzled us. How and when would we co-plan or co-reflect? It didn’t seem possible that this could work in an already full school day.  

Maura TI/1
Teacher accounts of the pre-participation stage indicate that the subject of their reflection related to potential problems with a new collaborative approach to teaching music and to their search for solutions. Teachers asked:

- How can we co-plan for music? Like, how do we find the time for co-planning?  
  Carmel recorded in RFN/1

- What do we do in the classroom? How can we teach together? How would you know what to do?  
  Mike recorded in RFN/1

- It might be OK for the musical teachers, but I won’t have a clue.  
  Flo recorded in RFN/1

The mediational means, most commonly referenced was collegial discussion as teachers struggled to make meaning of this new practice (RFN/1; TI/1). All teachers professed to valuing the time allocated by the school principal for group discussion and to the willingness of the researcher and school principal to act as ‘more knowledgeable others’ (Vygotsky, 1978) creating in discussion ‘zones of proximal development’ bringing teachers to a clearer conceptualization of the reality of a collaborative model founded on the philosophy of reciprocal learning (RFN/1; TI/1). Other forms of mediational means referenced by teachers included the group discussions and reflections following two coteaching pilot studies conducted in advance of a staff commitment to participate:

- Moya was a great help with the Christmas play but I’m not really sure what we’ll be doing together from day to day without a purpose, a performance or something like that  
  Ciara Recorded in RFN/1

Focusing initially on the technicalities associated with the implementation of the new model, teacher reflections on their dispositional characteristics, the organisational support they received during this stage the challenges and opportunities they experienced, the majority indicate an urgency for clarity, shared meaning and the need to translate the understandings of complex situations in practice (John-Steiner, 2000; Lampert-Shepel et al., 2018) as the following insights gleaned from the data set, suggest.
5.3.1 Dispositional characteristics in the Pre-Participation Phase

With the exception of three teachers, one of whom claimed to be confident in music (Joan) and two who had experienced coteaching as undergraduates (Frank, John) virtually all teachers (17/20) involved in the study over the three years identified the dispositional characteristics which they associated with the pre-participation stage as reluctant, hesitant, confused and particularly during the first residency, ambivalent, frequently referencing their emotional state as nervous and anxious.

Researcher field notes document a teaching staff resistant to the notion of coteaching. Characteristics such as ‘closed’ ‘opposed’ and ‘indifferent’ were recorded by the researcher after meeting for the first time with the full staff on the invitation of the school principal (RFN/1). The following description of the meeting was chronicled in these field notes:

While individual members of staff were polite and welcoming, teachers as a group, showed little if any interest in coteaching music. After presenting the staff with an outline of the proposed coteaching music model, staff remained silent and questions, although encouraged by the researcher and the school principal, were very few. The school principal, although quietly supportive seemed careful not to pressure staff into making a decision. She asked some key questions as clarification and commented on the musicianship of the children describing some of the successful music performances which teachers had organised.

RFN/1

Referring to the comments they had recorded in their reflection journal entries, 9/13 teachers who joined the first residency recalled being opposed to coteaching and ‘never really believing it (coteaching) would happen’, (Eilis TI/3) such was the level of initial resistance to coteaching music (RFN/1; TI/1-3). Ten of the thirteen (10/13) teachers agreed that the corporate characteristics associated with teacher temperament at this point included ‘shocked, confused, and threatened’ (T1/1) at the prospect of involvement in the coteaching music residency. In considering all three residencies, 17/20 teachers reported experiencing similar dispositions as they reflected on their own pre-participation phase emotions (RFN/1-3; TI/1-3).

The emerging finding in relation to the teachers’ reported need for an extra stage to the original model of development (Figure 5.2) is evidenced by the teachers’ vivid recollections of their initial ambivalent attitudes and their urgent desire to understand what was being asked of them. One teacher, speaking for her colleagues supplied the following indicative description of teachers’ emotional states at the prospect of participation in the first coteaching music induction workshop:
We were terrified…we were like children…hiding in case we were asked a question ... or required to participate in the singing aspect of the workshop.

Eilis TI/1

Data analysis, particularly of the first data set (RFN/1; TI/1; MCTRI/1) reveals a combination of insecurity and diffidence in the case of the majority of coteachers at the expectation of coteaching. Consonant with findings from several studies on teacher reaction to change (Fullan et al., 2004; Hargreaves & Shirley, 2009; Terhart, 2013), teachers felt vulnerable and perceived risk as they discussed and reflected on this novel approach. According to most, the quality of the organisational support they received scaffolded their attempts at making sense of this new experience.

5.3.2 Organisational Support in the Pre-Participation Phase

Informal conversations prompted by the researcher probed teacher perspectives on the structural and organisational support during this period. All participants mentioned as significant the willingness on behalf of the university and school management to host a series of open discussions before and following the two coteaching music pilot studies. On the topic of open discussion in advance of coteaching, the following is typical;

The full staff meetings and the group meetings on coteaching music were really helpful. Even though none of us really thought it would happen, the presentations were interesting ...we began to see how the partnership would benefit the music education students (musician coteachers) and the children.

Carmel TI/1

Teachers were unanimous in suggesting that the two short coteaching pilot studies which were conducted in advance of the participation phase, were influential mediational means of buttressing teacher understanding of coteaching. The following testament of a teacher who participated over the three years is typical:

When the teacher and the musician coteacher who piloted the first coteaching music lesson spoke to us about the experience, I had a much better picture of how coteaching music might work – the practical aspect. Then the short, full-staff pilot before Christmas was really helpful... every teacher was paired with a musician coteacher to prepare for the Christmas concert.

Mary TI/1
Such sentiments suggest that the pilot studies which offered teachers a chance to experience first-hand the practicalities of coplanning, coteaching and coreflecting provided the mediational means for discussion and reflection on the technicalities of coteaching. However, a majority of teachers emphasised that it was the opportunity to discuss the experience together, openly, at staff level that was for them the most substantial support as the following implies:

> When I heard how others experienced coteaching, especially the musician coteachers, what they learned from us the teachers - helped make me more confident in believing I had a part to play in coteaching ...

Helen TI/1

Most teachers (9/13) from the first residency mentioned the importance of the researcher’s credibility in assuaging fears. That the researcher was a former primary teacher who understood the primary school context was reported by several teachers as supportive in helping them to probe the responsibilities they would undertake as coteachers. One teacher recalled thinking that a university-school partnership was alien to their way of operating but was impressed that the researcher established common ground (Edwards, 2010) early in the process.

> I was really impressed by your (the researcher’s) first presentation – the fact that you were a primary teacher made you one of us straight away ...you understood our situation...and your passion for music and particularly for music for the kids was contagious.

Carmel TI/1

What is emerging here is the importance that teachers attached to the organisational support which offered the school and the university the time and opportunity to find common ground (Edwards, 2010) and to begin to establish shared meaning (Murphy & Beggs, 2010; Murphy, 2016).

5.3.3 Challenges in the Pre-Participation Phase

The challenges to involvement in the coteaching music residency during the pre-participation stage as recounted by teacher participants were many. They mentioned (i) lack of clarity of their role in coteaching (16 teachers); (ii) lack of confidence regarding music (18 teachers); (iii) prior negative experience in either learning music (6 teachers) or teaching music (8 teachers), (iv) anticipation of an increased workload, (7 teachers) and (v) lack of experience of collaboration (12 teachers) and the prospect of not bonding with their coteacher as impediments to initial participation. Sixteen teachers (16/20) feared professional disclosure or being ‘found out’ as not being able to teach music something they were contractually expected to do. The following statement is typical:

> We’re responsible for teaching music and I can’t sing, how is that going to look?
Professional disclosure (Stoll et al., 2007) was mentioned frequently as a serious impediment to participation prior to the first coteaching music residency in particular (RFN/1; TI/1). The following testimonial is typical:

It (coteaching music) was a terrible prospect because we are actually expected to teach music but most of us simply can’t! The expertise I have is in language and mathematics. I was genuinely very nervous.

Flo TI/1

Twelve of the twenty teacher participants (12/20) claimed that, despite the many discussions, presentations and the two coteaching pilots, they still lacked clarity in relation to their role in the partnership, focusing on their lack of confidence and particularly on their deficits in terms of music rather than on the abundance of pedagogical expertise they possessed and how this might contribute to enacting a coteaching programme. The following short teacher reflection on the pre-participation period reflects the lack of clarity in terms of role of the teacher in coteaching in advance of the induction workshop.

I don’t think we had a clue what this was all about until we had the coteaching induction workshop. All we seemed to worry about was not knowing enough about music.

Eilis TI/3

For most teachers (18/20) their reluctance to engage in coteaching music was strongly linked to lack of confidence regarding music (TI/1-3; Anon/3; RFN/1-3). The following teacher self-appraisal was congruent with many others:

You know yourself that you’re useless at teaching music. You try of course, but in my own case, I’m uncomfortable, I’m self-conscious, especially with senior classes and the kids know that too. So, I’m not particularly impressed at being asked to coteach with a musician.

Mike TI/3
Teachers who learned classical music as children (14) were less inclined to risk playing their instrument in the classroom as the negative experiences and criticisms associated with their attempts to play in public which they reported encountering while attempting to learn to play these instruments as children severely dented their confidence. For some, it was the constant comparison with more competent siblings:

My parents paid for me to learn keyboard but compared to my sisters I wasn’t very good. I concentrated on sport.

Mike TI/3

For others it was the humiliation of being teased:

They used to ask me to take the recorder outside and frighten away stray dogs from the house!

Flo TI/2

While suggestions that teachers collaborate are included in the primary school curriculum (DES 1999), several teachers (14/20) cited uncertainties in relation the skills needed to collaborate with another professional in the classroom as a barrier to participation:

It’s not that we’re against collaboration, it’s just that we’re not accustomed to collaboration and we don’t have those skills

Geraldine TI/3

Similar to research carried out in Northern Ireland (Murphy & Beggs, 2005a), some teachers spoke of being apprehensive about the prospect of not bonding with a coteacher. Many confessed to having pre-conceived notions of musicians as ‘gifted and precious’. For these teachers, time allocated to discussion after each pilot study, learning together during the first coteaching music induction workshop and informal conversations with the researcher afforded opportunity for excavating common ground (Edwards, 2010) and shared meaning (Murphy, 2016).

5.3.4 Opportunities in the Pre-Participation Phase

A number of opportunities became apparent during the pre-participation stage. Several teachers (7/13) reflected on the possibility of gaining a fresh perspective on partnership and the acquisition of a new way to collaborate (TI/1). For most teachers (10/13) the most attractive opportunities were those that offered ‘something worthwhile for the children’ (RFN SP/1). Ciara (T1/1) although still terrified said ‘it was handed to us – when you think of what the kids were going to get you almost had to say yes’. A few teachers (3/13) mentioned artistic opportunities. Most (9/13) had a
love of music and had enjoyed opportunities to learn music themselves. They reported feeling compelled to avail of the opportunity presented to enrich and enhance the school music programme. Almost all the teachers reported how their initial reaction to coteaching music was influenced negatively by their past experiences with learning music but reported being seduced by the passion and credibility of the researcher. A summary of teachers’ experiences of the pre-participation stage is presented on Table 5.1.

Table 5.1: Teachers’ experience of the pre-participation stage

<table>
<thead>
<tr>
<th>Dispositional characteristics</th>
<th>Organizational support</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reluctant</td>
<td>Researcher’s credibility</td>
<td>Fear of disclosure/prior negative experiences with music</td>
<td>Fresh new perspective</td>
</tr>
<tr>
<td></td>
<td>Researcher’s empathy</td>
<td>Lack of familiarity with music curriculum</td>
<td>Affirmation of local expertise</td>
</tr>
<tr>
<td></td>
<td>Researcher’s enthusiasm, passion and confidence in project</td>
<td>Fear of an unsympathetic pairing</td>
<td>In situ professional development</td>
</tr>
<tr>
<td>Hesitant</td>
<td>Researcher’s and principal’s shared belief in positive outcome</td>
<td>Collaboration not the norm / lack of clarity</td>
<td>Expertise, resources in music</td>
</tr>
<tr>
<td>Fearful</td>
<td>Principal’s willingness to pilot</td>
<td>Expectation of workload increase</td>
<td>Teachers as partner in research /mentor</td>
</tr>
<tr>
<td>Resistant</td>
<td>Realistic attitude towards organization’s current culture</td>
<td>University partners as ‘outsiders’</td>
<td>Skills of collaboration</td>
</tr>
<tr>
<td>Ambivalent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reluctant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accordingly, all the teachers agreed to participate in the study and so proceeded to the next stage which is identified as the participation phase.

The participation phase has been portrayed as a time when coteachers come to an awareness of their individual aptitudes and capacities (Murphy et al., 2008; Murphy, 2016). Findings from the music coteaching study support such research. This was the time when the musician brought their expertise and experience associated with musicianship while primary teachers identified the need for their own professional experience as pedagogue. According to Kerin and Murphy (2018) several teachers reported that the musician coteacher, coming from a theoretical or subject-focused perspective relied on the primary teacher to ensure that the children were accommodated, that the music lesson was relevant to the age-group and that the children were engaged with the
expertise which the musician offered. Murphy (2016) identifies further development within coteaching suggesting that ‘recognizing and bringing these two (perspectives) together, characterises the next stage of active participation’.

5.4 The Participation Phase

The majority of teachers regarded the emergence of their awareness of the value of complementary expertise as the most important factor in their experience of the participation stage. This attitude is typified by initial teacher reflections on the ‘awesomeness of the musician’ (Marian TI/1) and the impact that such musicianship was having on the children, most of whom would never have the opportunity to encounter such musicianship outside of the classroom. Many teachers claimed that this realization grew in response to their reflection on the first and second CtDM text bites – *sure I’ll be involved* and *what should I do?* (Figure 5.3) as teachers began to discuss and share their reasons for becoming involved. Marian’s comment is typical:

> Although I wasn’t keen on becoming involved, I was stunned by my musician coteacher’s voice and musicality when we partnered together for a short pilot study. The children were mesmerised. So was I. It was such a privilege to have that level of musicianship in a junior infant classroom. We were quite honestly, spellbound. This was real music.

*Marian TI/1*

While the majority of reflective accounts initially related to the talent of the musician, as the residency progressed teachers began to reference not only the value of their role in the music lesson but the confidence and certainty that their role as coteacher was essential if the children were to derive maximum benefit from coteaching music:

> I could see how talented she was, but she had absolutely no confidence in herself. She seemed very self-conscious. In fact, she reminded me of myself when I was starting out a few years ago. After two coteaching classes I saw she really needed my guidance and support.

*Mike TI/1*

Teacher accounts of their dispositions, the organisational support offered, challenges encountered, and opportunities enjoyed during this the early or participation phase indicate an almost immediate awareness of the value of teacher expertise as experienced pedagogue both for the musician coteacher and for the children. Thick reflective descriptions seem to indicate an emerging awareness amongst teachers of the collaborative and transformative ways in which complementary knowledge could be co-constructed (Mahn & John-Steiner, 2012) to establish a rich mutually satisfactory ‘bespoke’ (Mary, TI/1) set of music lessons. One such practical application of complementary expertise in the classroom is described thus:
I love music, but I just never knew how to teach music. We do lots of singing in the infant classes, so it was great when we’d sing one of our songs for Aibhinn and then she’d play it back for the kids on her violin. I’d ask her to stop playing at a certain point and we’d guess on which word of the song she stopped. They were confused at the beginning but...they became great little listeners...

Eilis CTI/2

During the first residency, every teacher (13) considered the CtDM provided immense support in this journey towards conceptualizing and reflecting on the benefits of complementary expertise, referencing the CtDM’s vocabulary of development, participation, cooperation and contribution in addition to the text-bites supplied by the researcher as useful initial prompts or mediational means (Lampert-Shepel et al., 2018), helping teachers to conceptualise and discuss the practices and approaches which they might consider and adopt:

We began to discuss what participation might mean – how each of us imagined participation and gradually we developed a shared vocabulary to describe how we experienced this first stage...

Sandra TI/1

The challenge of finding shared meaning, of the initial ‘paucity of language’ to describe a new approach is, according to John-Steiner (2000, p. 192), characteristic of the initial phases of collaboration. According to most teachers, their collective discussions on the new social practice became habitual over the course of the participation phase. The interesting finding here in relation to the content of the dialectic reflection during the participation phase was that at first teachers, focused on ‘others’ (the progress of the children and the ‘awesomeness of the musician coteacher’). However, as coteaching developed in tandem with reflection, teachers gradually came to include in their reflective accounts, their own roles and responsibilities as coteaching partners committed to receiving and giving, to modelling pedagogical expertise and to supporting the professional development of the musician coteacher. The following comment, documented in field notes, was typical:

In the beginning we were fixated on the expertise of the musician coteacher, and in my case wishing I had her talent, but as the weeks went by, we became more and more aware of the relevance of our own expertise and experience as teachers.

Flo recorded in RFN/1

Teacher accounts of dispositions, support, opportunities and challenges during the participation stage reveal certain tensions between opportunity and challenge associated with problem identification and resolution, and progression, as the following findings imply.
5.4.1 Teacher Dispositions in the Participation Phase

The consensus amongst participant teachers regarding the exemplar teacher dispositions for promoting coteaching at this initial or participation stage, included willing, open, curious and agreeable.

Several teachers mentioned openness and a willingness to self-reflect as fundamental prerequisites for successful professional engagement with another. Comments such as the following were common:

You really need to be open and willing to reflect on what the other person has to offer the children, even if for some reason you don’t value music yourself or you think that other subjects are more important than music.

Brid TI/3

Most teachers spoke about how the habit of producing a short weekly reflection report provided another mediational means of becoming aware for the first time of their own particular dispositions, their body language, and their verbal communication and how these character traits might be interpreted by their musician coteacher:

There was no book, no set of rules other than put yourself in the shoes of your partner and ask yourself “would I feel comfortable working with me?”

Carmel TI/1

Two teachers who joined the coteaching music residency in its second year added tolerance and patience to the ideal list of teacher dispositions needed during the participation phase. Both teachers, reflected on changes or developments in their initial impatient reactions to the fact that their musician coteachers were often late when submitting the lesson plan or deviated from the plan during the lesson rendering their participation in the lesson less significant. These two teacher participants suggested that, on reflection, they came to an awareness that the value of the contributions of the musician coteacher to the development of the child’s musicianship was greater than the discomfort caused by coteacher tardiness. One teacher concluded:

I asked several times for the lesson plan but there was always an excuse and I didn’t know how to handle that...in the end I decided that the kids were enjoying the lesson, they were engaged in the lesson and observing the lesson certainly helped me, so I would gently approach the question of professional standards but not let the lack of professionalism, when it did occur, get in the way of the lesson. Then I would repeat the lesson later in the week.

Frank TI/2
A second teacher reached a similar conclusion:

Not all musician coteachers are the same. Some are more mature, others more musical. Some are more reliable and committed. But when you reflect on it the children are the real winners, so I think being tolerant and patient is essential particularly at the beginning until you build a relationship and establish a few rules. You can’t change people. J was a great musician but I’m not sure he’s interested in becoming a teacher really... but it was well worth having him coteach music.

Mary TI/2

The occasions to reflect not only on their musician coteacher and on the children’s musical development but also on their own perspectives was significant in promoting criticality amongst teachers evidenced in their ability to come to terms with the concept of collaboration via coteaching as a dynamic interdependency reliant for its success on the affordances of the community (Vygotsky, 1962).

5.4.2 Organisational Support in the Participation Phase

Quite a few teachers mentioned the CtDM as a strong structural support referring to how it was used in initiating reflection to explore the problems and to clarify the purpose.

I would often stare at the model before recording my reflections and I found it a very useful starting point in composing my thoughts. The researcher and myself had many chats on what participation means in the context of school... the model really helped me to talk about my own experience. This was the first time I had thought about the importance of my own personality in a collaborative arrangement...

TI Anon/3

For most teachers (14/20) the support of the school principal was crucial in promoting this culture of reflection during the participation stage. Her frequent reminders to ‘jot down a few lines about the coteaching’ encouraged discussion and critical reflection:

M, (the school principal) would visit us after the lesson each week and ask how it went, if the children were engaging with the music, how the musician coteacher had brought ‘added value’ to the lesson... just general things really, as a way of getting us to think about what went on. She would then hand us a single page and say, ‘write a few sentences there for M (the researcher) and I’ll send it off to her’. Without that reminder I think we probably wouldn’t have developed the habit of reflecting.

Ciara TI/2
A recurring theme in this study is the frequency with which every teacher reported how the school principal created and supported the ideal conditions for progression via reflection on coteaching supporting coteaching but also allowing teachers the freedom to critique the model, to opt in or out, encouraging them to reflect, to share experiences and offer suggestions. For many teachers (13/20), the fact that the entire teaching staff opted to participate in coteaching music was another important support, a substantial mediational means of collective reflection and shared meaning-making:

I think that the fact that we were all doing it meant that it was easier to learn to reflect, we did a staff co-reflection on coteaching every Tuesday and that’s how we developed—through the support of each other.

Flo TI/2

With the whole school involved, many teachers referenced the consequent solidarity (Rorty, 1989) that emerged amongst the staff evidenced again in the enthusiastic discussions which were reported by the school principal and by staff in general (RFN/1-3).

Teachers reported that each Monday, following coteaching, the school principal made a point of initiating critical discussions on how the coteaching had worked, collecting and collating short written accounts of coteaching experiences from each teacher. Another interesting finding during the participation stage is that some teachers (7/13) requested that these reflections, which initially took place directly after each lesson, be postponed for a day or two so that they could reflect on the process at a deeper level. The following excerpt from a teacher interview is similar to a number of others;

Sometimes I’d ask M (school principal) to come back later for my reflection on coteaching because I liked to think about it with the model and to chat with the others to find out how they were doing, to see how they were getting along.

Flo TI/1

Such accounts seem to indicate that teachers, having experienced coteaching and having reflected on it, requested time to internalise these processes, to make sense of this new role in the classroom, before committing their reflections to paper. Such accounts seem to illustrate the Vygotskian construct of internalization, having experienced learning in an authentic social and cultural setting, teachers now needed the time to internalise this learning to come to a deeper understanding of the import of their actions. Vygotsky argues that mediational means (in this case, the CtDM and coreflection) are used to connect the external and the internal, the social and the individual (Wertsch & Stone, 1985).
Teachers reported that this practice of collective interaction, of teachers reflecting, discussing and critiquing, became the norm during the participation phase, indicating the emergence of a culture of co-contribution to practice, a harbinger perhaps of a transforming culture (Stetsenko, 2008).

5.4.3 Challenges in the Participation Phase

The challenges reported by teachers during this stage were both practical and conceptual. The main practical challenge as reported by most teachers (9/13) was that of balancing the need to implement the coteaching model with fidelity, while at the same time ensuring that the model was aligned to the needs of the school (Guise et al., 2017). This involved the logistical elements (Badiali & Titus, 2010) associated with time for coplanning and coreflection:

School is intense, we’re going all the time apart from a short lunchbreak, the children are our priority, so we couldn’t envisage how coplanning would work.

Carmel TI/1

Several teachers (8/13) reported feeling relieved at the solution offered by the researcher which suggested a sequential 4-step coplanning process involving coteachers and the university researcher in the process. Figure 5.4 illustrates the coplanning process which was adopted by partners over the three years.

Figure 5.4: Coplanning process adopted by coteaching partners over the three years

Another challenge, as discussed earlier, in relation to planning emerged early in the process when a few teachers (2/13) reported that certain musician coteachers did not meet the deadlines imposed for submitting the lesson plan to their partner (Darragh et al., 2011; Guise et al., 2017; Heckert et al., 2013). This was handled by teachers themselves with a WhatsApp group where reminders were posted to ensure everyone remained on track. Musician coteachers also reported a challenge which they encountered with coplanning during this stage as several teachers (8/13) were not in the habit of using e-mail and so delayed the process by not responding. This too was
rectified with the *WhatsApp* reminder. An interesting finding here is that in identifying and rectifying the various challenges they were encountering; teachers were becoming more agentic.

Teachers reported on the challenges the encountered with the coreflection process as they worked to implement the coteaching model. The coreflection template asked coteachers to record and share the answer to three fundamental questions each week including: (i) *what did you, your coteacher and the children learn today?* (ii) *How did you, your coteacher and the children learn this today?* (iii) *How do you know that you, your coteacher, the children learned this today?* These reflection prompts were maintained initially by teacher participants but later replaced by the coteaching developmental model. All teachers reported finding collective reflection using the model as a mediational tool more useful for reflecting on and tracking their development as coteachers.

We found the developmental model more useful for our purposes. The three questions were repetitive – we could see the improvements in our music provision, but we became more interested in our development as coteachers and we felt that the three reflection questions limited our reflection whereas the developmental model always gave us food for thought.

Carmel TI/1

Several teachers confessed that they struggled to try to make sense of their own role in the process but, on reflection, this was due to their own poor self-confidence. Many claimed that the CtDM helped their discussions on the meaning of participation and brought them eventually to an awareness of their own contributions and the possibilities inherent in the coteaching music proposal.

### 5.4.4 Opportunities in the Participation Phase

All participant teachers reported from the outset that the greatest opportunity they encountered from coteaching with a musician which many described as ‘awesome’ was their renewed interest in teaching music. Most teachers (17/20) referred to the musicianship of their partners as being the trigger for this restored desire to have music in the classroom as this short comment indicates:

> I found myself thinking, I’d love to be able to sing like Neassa.

Flo TI/1
Several also spoke of the interesting pedagogies which their musician coteacher introduced:

Isabelle used rhythm tiles to help the children to compose their own music. They could choose a ‘ta ta ti-ti ta’ pattern or a ‘ti-ti ti-ti ta ta’ pattern but they soon came to understand that the tune would have to end on a ‘ta-a ta-a’ or ‘ta ta sh sh’ pattern. It was extraordinary to see how they learned to compose so quickly with Isabelle’s beautiful music pedagogy ideas.

Ciara TI/1

Every teacher reacted enthusiastically to having live music in the classroom and some welcomed the opportunity to include their own musical instrument in the lesson.

I used to mess with the bass when I was in school and enjoyed playing with the lads but although I had it in the classroom, I never used it in school, Sean persuaded me to play a simple bass line to accompany the singing and I grew to enjoy using the instrument in class. It works really well.

John TI/2

Teachers also mentioned how coteaching had given them a means of collaboration by providing a philosophical foundation based on sharing expertise in a spirit of mutual respect together with a structure for sharing that expertise (Badiali & Titus, 2010; Beers, 2009).

On a conceptual level, the majority of teachers spoke of the opportunities which coteaching had provided for cultivating the processes involved in self and collective reflection (Tobin & Roth, 2005) as the following indicative excerpt reveals:

We’ve heard a lot about reflection and the reflective practitioner, but it wasn’t really until we started to reflect on coteaching collectively and in pairs that we realised the power of reflection. I started to become aware of myself, how I was in the classroom, others said the same. I started to make changes – to become more open to new ideas – to try new things.

Geraldine TI/2

While initially unclear about how coteaching might be enacted, participants referred to how they used the CtDM as a means of reflection on coteaching, viewing and reviewing their initial conceptualizations on the philosophical and practical aspects (TI/1-3; RFN/2).

None of us had ever cotaught before apart from one teacher who was part of a pilot project for literacy in her first school. Being in this together and having the developmental model to guide us gave us opportunities to think how it was working and why we might continue to use it while we were actually doing it.

Sandra TI/1

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Several musician coteachers supported this observation claiming that progression depended on both teacher and musician coteacher electing to engage as a team and sharing a joint vision for the semester ahead. Every teacher mentioned the framework or prototype which the CtDM had provided as a mediational means of developing a shared vocabulary which eventually gave rise to a shared understanding and a subsequent shared appreciation of complementarity and how the unique expertise and skill of the each coteacher could contribute to enhancing the learning experience of the child:

From thinking that this (coteaching) would never happen at all to now reflecting on what was happening and why it was happening and how we could make it better the model was really useful even if at times we just stared at it and thought about these things.

Mary TI/1

Graduating from the participation phase to the more advanced active participation stage, teachers evinced a certain facility with the process of critical reflection, claiming that the CtDM had provided them with a tool for reflecting on and describing elements of the experience such as the dispositional characteristics which best illustrated their collective experience of participation, the organisational support they received as well as the challenges and opportunities they experienced. Furthermore, the teachers describe these reflections as a dialogic process, where the CtDM was used as a mediational means of interrogating vagueness and uncertainty in a collective drive towards meaning-making. This is consonant with current research on teacher mastery of mediational means in seeking to acquire the tools for the promotion of higher psychological functions including reflection (Lampert-Shepel, 2018). Steiner et al. (2012) contends that ‘semiotic mediation is the key to all aspects of knowledge co-construction’ (p. 192). A summary of the teachers’ experiences of the-participation stage is presented on Table 5.2.
5.5 The Cooperation Phase

Murphy’s research on coteaching (2016) suggests that the cooperation phase is a stage at which coteachers come together to develop a joint pedagogical approach. A substantial finding in the present coteaching music study is that every teacher described the cooperation phase as a time of coming together, of interaction, of connection, of cultivation of professional relationship (RFN/1-3) supporting Murphy’s observation above. Several teachers spoke of rapport and the importance of establishing a spirit of reciprocity such that each member of the dyad is committed to enriching the relationship on which coteaching is based. With a new understanding of the value and the currency of their own expertise as pedagogues and an appreciation of complementarity of expertise as central to progression in coteaching (TI/1-3), teachers reported that during the cooperation phase they began to use the CtDM to reflect on the relationship. The first step, according to the school principal was acceptance of difference:

I suppose the musicians are different to the teachers. They’re very talented artistically and musically but they may not necessarily be grounded. They’re imaginative and other-worldly, focused on music and the arts. They’re very creative. Teachers on the other hand are more down to earth. Generally speaking, they are practical and are called upon to be practical and to ensure the child is learning, not just experiencing but learning.

RFN/2
Commenting on the experience of the cooperation phase most participants (14/20) claimed that, while their former pre-occupation concerned reflecting on solving the problem, the next step involved grappling with the need to self-examine and in some cases to change in order to build relationships. Ciara articulated the situation thus:

This cooperation phase is experienced when the relationship between coteachers deepens into something meaningful... If it doesn’t, then the chance of progression is either delayed or lost. If it does the possibilities for success are great.

RFN/3

This finding is consonant with research conducted by Lampert-Shepel et al. (2018) which concludes that conceptualization of transformation is essential if progression or development is to follow. In the case of coteaching, teachers were adamant that the development of strong relationships was essential if coteaching was to take root, thrive and develop beyond the early or participation phase.

Several teachers once again mentioned the CtDM as an important means of mediating successful reciprocal relationships. One teacher’s explanation of how teachers began to conceptualise cooperation is representative of many others:

The ascending direction of the CtDM, is a strong visual that suggested that cooperation was a higher form of collaboration than participation so conversations on cooperation began to focus on how we (the teachers) might support our musician coteacher so that everyone was enabled to learn. Basically, we began to put ourselves in the shoes of the musician and to think how we could make the musician feel comfortable.

Mike Ti/2

Additionally, several teachers mentioned the tripartite coteaching structure, which required teachers to coplan, copractice and coreflect, as an essential tool for promoting interaction between partners.

We got into the habit of reviewing the lesson plan, e-mailing it over and back until we were happy, and after coteaching we’d ask the children to do a little assignment, so we could have a quick chat to set aside some time together for reflecting on the lesson. My coteacher (PST) would then send me some questions about his progress and I’d try to e-mail him some ideas to help him to prepare for the next lesson.

Mary Ti/2
Where teachers attended to e-mail correspondence, the relationships seemed to flourish. Such deliberation eventually resulted in teachers considering the four essential elements of teacher disposition, organisational support, challenge and opportunity to attempt to reach a shared understanding of the cooperation phase and a consensus in terms of the kinds of supports teachers could offer musician coteachers so that they could progress together.

5.5.1 Teacher Dispositions in the Cooperation Phase

All participants (20/20) maintained that having experienced, discussed and reflected on coteaching for one full residency, the key dispositional characteristics which supported relationship-building and which they agreed distinguished the cooperation phase from the earlier participation phase were self-awareness, responsiveness, and empathy (Table 5.1). The following sentiment is typical:

I was so terrified of teaching music at the beginning that my focus was on myself, I was self-conscious and awkward and afraid of being asked a question by my coteacher but at this stage I’m much more conscious of the skills I have built up as an experienced teacher and how I’m using those skills to support my partner.

Flo TI/2

One teacher said that her awareness of the need to be empathetic and supportive arose after the induction workshop that was held not in the school but in the university.

I think we all felt overwhelmed at the thought of attending a music workshop in the university but the musician coteachers met us and gave us such a warm welcome and such support with the singing that I know I began to think how I could do the same for them when they were in the school once a week.

Ellis TI/1

Several teachers referenced as significant in terms of cementing insecure relationships, the opportunity to attend a coteacher professional development session at the university a finding similar to that of Seddon and Biasutti (2008) and indeed Boyce-Tillman (2018). Another teacher remarked how having first-hand experience of observing the school principal welcome the musician coteachers and acknowledge their contribution strongly impacted her concept of relationship:

I noticed how school principal led by example, she treated the musician coteachers with great respect although they were student -teachers. She supplied refreshments for them each week and ensured that the children wrote little thank-you notes to accompany little gifts to mark Christmas and Easter. She regularly visited their assembly room and looked for their opinions.

Maura TI/2
Some musician coteachers (9/30) spoke about the support they received and how the teacher’s enthusiastic response to their lesson plans and to their ideas helped them to become better and to become even more committed to coteaching music as the following comment indicates:

I love when the teacher responds to my e-mails especially if the response is enthusiastic which it nearly always is. I know some (musician coteachers) don’t get replies and they feel down-hearted because that sort of suggests that the teachers don’t really value music.

MCTRJ/2

The same musician coteacher shared her technique in ensuring the teacher continued to respond to her e-mails:

I use the DEAL model (Ash & Clayton, 2009) to reflect on the lesson but then I add lots of questions for the teacher asking what she enjoyed and what she thought the kids enjoyed most and general questions like that. It makes it easier for her to reply and for me to complete a co-reflection.

MCTRJ/2

Analogous with Donato (2004) a majority of teachers conceded that discussing the various unique experiences of collaboration via coteaching, with prompts from the researcher and encouragement from the school principal, they gradually came to understand that cooperation was as much reliant on their own actions in the partnership as it was on the actions of their partner as the indicative comment below suggests:

For quite a long time most of our conversations were on the musician coteachers – however our discussions in the staffroom gradually came around to what we were doing as coteachers – what we were bringing to the relationship to ensure that the children were really benefitting from the lesson and to how different people were supporting the development of their partner, the musician coteacher.

Marian TI/1

Many teachers mentioned that aiming for cooperation as a higher level of collaboration via coteaching promoted an examination of self and other and of the unique dispositional characteristics that support or inhibit relationship. One teacher suggested that the skills of collaboration should be introduced formally as part of induction (Geraldine, TI/3) but most teachers indicated that while the skills unique to relationship building were developed via coplanning, coteaching and coreflecting, collective reflection forced teachers to practice introspection and self-examination which was the essential element in helping them reach the shared cooperation phase. Many also mentioned that the organisational support cemented successful relationship building.

5.5.2 Organisational Support in the Cooperation Phase
Teachers en masse mentioned three particular aspects of organisational support which helped them to develop an awareness of how they, through their own dispositional characteristics, may have advanced or restricted shared cooperation. These included, once again, the leadership style of the school principal, the inclusive nature of the research model and the fact that the entire staff agreed to become part of the coteaching music residency.

All teachers mentioned that the leadership of the school principal encouraged relationship building by modelling partnership with the university researcher and the musician coteachers as mentioned above and by continuing to create opportunities for discussing coteaching and for reflection on practice. A typical teacher statement:

The school principal is very interested in how collaborative practice is enacted in the school and has encouraged reflective practice since this coteaching began. She always creates opportunities to discuss coteaching, to develop coteaching and to ensure especially that the children are benefiting.

Mary recorded in RFN/1

Furthermore, the participative nature of the research, which valued individual voice and supported criticality, enabled development and sustained momentum.

The researcher sees all lesson plans to ensure that the lesson is planned appropriately, she speaks regularly to all coteachers and she monitors coteaching closely every Monday. She stays in regular communication via the group WhatsApp and e-mail and has really modelled both reflection and relationship building in her interactions with us from the start.

TI Anon/3

Such a sentiment was frequently expressed at interviews and in researcher field notes and represents the views of most teachers.

Teachers also mentioned the whole-school participation as supportive in charting their negotiation of the cooperation phase and of coteaching development. Teachers associated the cooperation phase with the increased frequency of informal professional dialogue – the conversations in the staffroom ‘about the music curriculum, ukulele chords, new songs, websites, evening classes in aspects of music’ and the nature of their dialogues which, according to Mary;

‘seemed to have moved on from what we learned to how we were learning’

TI/1
5.5.3 Challenges in the Cooperation Phase

Reports of difficulties in communication between coteachers were reported by some coteachers who were fastidious about maintaining weekly deadlines in planning and reflection (Guise et al., 2017). Many coteachers, both teachers and musicians pointed to the introduction of the coteaching WhatsApp group as hugely impactful in ensuring that deadlines were met, and communication was monitored regularly:

> With WhatsApp we were all on the same page. The timelines for submission and editing of lesson plans were strictly enforced which made the technical aspects much smoother so we could concentrate on the deeper more significant issues like how to tackle a music element such as timbre with a junior infant class!

Frank TI/3

Once again teacher action resolved misunderstandings and deviations from planned action. Several teachers suggested that challenge at this cooperation phase was associated with acquiring the tools needed to surface the diverse ontologies, to find ways of understanding the world-view of one’s partner and to negotiate a new relational ontology, based on a common vision, which could in turn offer a firm foundation for progression to the final stage, contribution to practice.

> I think the cooperation stage is the most difficult stage with the greatest number of challenges. You can of course be empathetic and accommodating of your partner but really understanding your partner’s perspective especially I think in the case of musicians, is a real challenge.

Maura TI/3

The school principal regularly commented on the challenges associated with differences in perspectives:

> Musician and teachers are different really. Musicians are sort of arty, they’re artists really whereas teachers are more down to earth

RFN/3

Most teachers suggested that the main difference in terms of outlook between teacher and musician coteacher was the tendency of one to emphasise the child and the other to privilege the music. Four participants (4/20) commented that while their concentration was on the development of the child in relation to music, the musician coteacher tended to over-emphasise music progression at the expense of the quality of the children’s engagement with music. This included setting weekly targets and expecting the teacher and the children to rehearse daily, ignoring the demands of an already overloaded curriculum. Teachers of the senior classes (4), reported feeling ‘under pressure’ when musician coteachers asked the children how often they had practised the
ukulele each day over the previous week (Mike TI/3). They described already feeling harried trying to ensure that all subjects in the curriculum were well covered and taking exception to the musician coteacher’s expectation in relation to additional practise time. Mike, one of the four teachers who encountered this situation summarised the problem thus:

I was trying to cope with the demands of testing and preparing for secondary school. I became more and more frustrated with my musician coteacher’s expectation of daily instrumental practice. It was as though she though they intended to make a career of music.

TI/3

Anticipating this challenge and developing the skills of negotiation to attempt to reach a mutual understanding between coteachers (Darragh et al., 2011) is, according to several (12/20) teachers, one of the major challenges of this cooperation phase as revealed in the conclusion to Mike’s report:

The issue was resolved when I explained the pressure, we experience to complete the courses in the various subjects and although she was polite and conceded that the children would do less practise than she suggested I think her own commitment to music has skewed her outlook!

TI/3

Sandra described a situation which arose while she was coteaching with a teacher from Hungary. The Kodaly approach to teaching pitch discrimination and music literacy required the children to access the various notes of the scale incrementally over the semester. However, when the musician coteacher returned the following week she expressed her disappointment that the children did not adhere to the exact pitches of the song they were asked to practise and had instead improvised and added extra notes unintentionally. The musician coteacher explained that the children were singing a ‘new version’ of the song. This finding highlights an emerging tension between fidelity to the coteaching lesson plan and the class teacher’s acceptance of the need for pupil enjoyment and engagement with the music. Sandra reported that her coteacher explained that the song, which was based on only four notes, (s, l, s, m) ‘had mutated’ over the course of the week; the children had introduced a few more notes to make the song more interesting for them. Sandra’s musician coteacher, Fanni, recorded in her reflection entry, how the situation was resolved:

I was, note by note introducing the children to the pitches and helping their aural skills by training their ears ...semitones and tones but when I returned to the school for the next lesson the children were singing new versions of the short songs, we had taught them. I was confused and thought about finishing the intervention. My coteacher Sandra who was very enthusiastic sang with the children every day but didn’t seem to notice or understand the value of following the lesson. I spent some time after class explaining the approach to
Sandra that it was like teaching a mathematical concept little by little... one step at a time... but in practising the song the children began to sing it incorrectly. She (teacher) asked if she could record our lesson so that she could check that she was practising correctly and the problem was solved.

MCT-RJ/2

Co-reflecting with her Hungarian coteacher, Sandra began to understand that, for the musician, preserving the integrity of the music takes precedence over the social aspect of singing for enjoyment. Initial disappointment on the teacher’s part was assuaged as each coteacher came to understand and respect the perspective of the other. Resolving the issue by discussing perspectives and by the musician coteacher providing a recording of the song ensured that the views of both coteachers were accommodated (RFN/2). Once addressed, teachers reported experiencing many new prospects and possibilities having reached this stage of coteaching.

5.5.4 Opportunities in the Cooperation Phase

Amongst the opportunities mentioned most frequently by teachers in relation to the cooperation phase were gaining new insights (Gallo-Fox & Scantlebury, 2016) into the discipline of music; the chance to develop joint music pedagogical approaches; the prospect of learning some new music skills or of brushing up on some skills acquired formerly; observing how the children engage with a two-teacher approach; and analogous with Guise et al. (2017) the opportunity to become a learner again while coteaching with an expert.

Opportunities identified by all coteachers included the development over time of a pedagogical approach to teaching music which emerged from the expertise and experience of both coteachers. Several teachers described it thus:

At the beginning the musician coteacher was talking too much and the children were losing interest but as the weeks went by, he talked less and played more and both of us came to realise that you need never speak - if you have lots of musical activities ready the children will stay with you...

Ellie Ti/1

The majority of teachers mentioned being grateful for the opportunity to gain confidence. For some that confidence emanated from an awareness of the currency of their own expertise and how this was impacting the music lesson, the children’s acquisition of music skills and the professional development of their coteacher. Several musician coteachers reflected on how the teachers’ expertise helped them to establish a routine so that each week the children knew what to expect. This excerpt from a musician coteacher reflection journal is typical of many others:
Over the past semester I learned this from my cooperating teacher. The children love routine and they hate too much teacher talk. So, we started the lesson singing Good Morning and then we had the melody (roll)-book and then we had ‘guess the name’ rhythms and then we had voice timbre games and then we added more texture to the nursery rhymes using the drums and any percussion sounds we could find. We gradually helped the children’s appreciation of the elements of music ... all through activities involving sound.

Once again, teachers claimed that operationalising the CtDM prompted them to reflect deeply on their own behaviour within a coteaching partnership and, in some cases, caused them to change their behaviour to accommodate their partner and to cultivate a collaborative relationship. In addition, data revealed two themes commitment and harmony as being essential if prosperous partnerships are to ensue (Kerin & Murphy, 2018).

Most teachers referenced once again the support they received from both the practices associated with the tripartite coteaching structural mechanism and the CtDM (RFN/2). They recalled how the CtDM challenged them to conceptualise cooperation – how cooperation might be fostered and enacted how their personal characteristics might accelerate or inhibit progression, how the organisational supports accessed might scaffold development and how the opportunities and challenges encountered at this stage might be categorised. Not all relationships experienced commitment and harmony but for those who did, subsequent feelings of affirmation, well-being and engagement contributed to the formation of deeply synergetic relationships evidenced in the ultimate stage of coteaching development co-contribution to practice. A summary of teachers’ experiences of the-cooperation stage is presented on Table 5.3.
Table 5.3: Teachers’ experiences of the cooperation stage

<table>
<thead>
<tr>
<th>Dispositional characteristics</th>
<th>Organizational support</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
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<tr>
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<td>Shared leadership model</td>
<td>Prioritizing music and rehearsing during the week to progress</td>
<td>Co-constructed music pedagogies</td>
</tr>
<tr>
<td>Supportive</td>
<td>Solidarity/ School – university; staff; coteacher</td>
<td>Embed systems for communication for coplanning and corefection</td>
<td>Becoming a learner again</td>
</tr>
<tr>
<td>Empathetic</td>
<td>Teachers as partners in research; inclusive research model</td>
<td>Assumptions challenged re children’s capacity for engagement with the music curriculum</td>
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<tr>
<td>Responsive</td>
<td>Opportunities for discussion, sharing perspectives</td>
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</tr>
<tr>
<td>Encouraging</td>
<td>Individual and collective autonomy</td>
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<td>Accommodating</td>
<td>Establish a climate of inquiry</td>
<td>Resolving different ontologies</td>
<td>Increased self-esteem</td>
</tr>
</tbody>
</table>

5.6 The Contribution Phase

According to Murphy (2016), ‘seeing what they can create together is the apogee of coteaching as it results from a synergy between coteachers which is greater than either could dream of producing alone’ (p. 21). Analyses of data from the present coteaching study suggests that while teachers unanimously agreed that reflection on ‘self’ and ‘other’ were characteristics of the former phases, they associated the final shared contribution phase with experimentation and transformation and the emergence of confident agentic professionals, imbued with enthusiasm for new challenges and new opportunities, ‘active innovation agents in the production of a new pedagogic discourse’ (Edwards & Brunton, 1993, p. 156). Findings concur with international research on coteaching which points to an expansion in teacher professional identity (McCullagh, 2012; Gallo-Fox & Scantlebury, 2016). According to one teacher ‘for some of us it was the new identity, we were no longer teachers, we were teacher – mentors and partners in research’ (Mike, TI/3). For others it was the confidence that came from discovery, the expansion of professional identity with the realization that they had the potential to contribute to the professional development of their pre-
service coteacher. The following comments from teachers are representative of the local context and support the findings from international studies (Kerr, 2010; Gallo-Fox & Scantlebury, 2016).

I always knew I hadn’t a note (of music) but I discovered from coreflection with three musician coteachers that I have something to offer them in terms of their professional development as teachers...

Flo TI/3

...the feedback from my partners over the two years suggested that I was supportive of my coteachers ...this has helped my confidence...

Geraldine TI/3

While several teachers referred to the opportunities for expanded identity via coteaching, for many the real value in coteaching with a musician was the professional development they received in relation to teaching music. For those who were always musical but were not sure how to apply their musicianship to the classroom context, it was the realization that each new partnership presented possibilities – to learn an instrument, to delve deeper into a musical genre, to conceive and deliver joint musical performances and that the opportunities presented were dependent on joint contribution:

Without teacher and musician there is no way that we could have undertaken a public music performance of that magnitude and of that quality.

Sandra TI/1

Most teachers reported viewing coteaching as a content transaction between the particular two coteachers as they progressed from participation to the cooperation phase but, with a more mature insight, began to experience the more nuanced dimensions of collaboration, tuning into their partner’s talent and to imagining possibilities for joint venture that the complementary expertise might present. Thus, many teachers at this stage stated that they were encouraged to embrace a progressive pathway towards what Murphy (2016) describes as the ‘apogee’ or ideal in coteaching, co-contribution to practice. Once again, 13/20 teachers recounted that the systematic use of the developmental model (Figure 2) provided a template which helped to impel the process from collaboration towards contribution. For those partners who did not progress beyond this stage, a certain level of synergy was experienced in mutual collaboration (Kerin & Murphy, 2018). However, several teachers maintained that most of the benefits accrued to those who progressed to the highest level of conscious shared contribution to practice which was characterised as interdependency the outcome of which was described locally in a WSE report conducted by the DES in 2016 and internationally, by Gallo-Fox and Scantlebury (2016), as energised and innovative teaching). An external review of the music teaching in the school in 2016 confirmed a standard of
music teaching on a par with mathematics and English. On delivering the feedback to the staff the principal paraphrased the following extract from the Whole School Evaluation Report (DES, 2016):

Coteaching between teaching staff and the university music education students indicates the emergence (development) of a more pro-active, agentic ‘energised’ teaching staff.

WSE feedback Recorded in RFN/3

Evidence of inter-dependent relationships was plentiful. Teachers reported that one duo produced a text, a music listening resource for primary school teachers called Travelling around the World in Search of Musical Concepts. Another pair staged a public performance of school children, university music students with an international musician of repute. All the teachers formed a ukulele orchestra and performed together on-stage for the children, to demonstrate their support for music. Coteaching dyads prepared the children to sing at the university. Coteaching partners supported the children’s liturgical and seasonal celebrations. Several teachers referenced a school culture of synergetic inter-relationships and interconnections such that professional development was provided by the university for teachers, and by the school for musician coteachers, and communities of practice extended from the staffroom to include the university community. Three additional collaborative partnerships were subsequently established in science, dance and parental partnerships. Two more music partnerships were established subsequently, a choral music coteaching partnership and a sea-shanty partnership.

Not all teachers reported reaching this stage of coteaching maturity but those who claimed to have done so described cotought lessons as creative and spontaneous. These teachers spoke of weaving with confidence, their own area of expertise and unique experience into the fabric of the lesson (Kerin & Murphy, 2018). Some teachers recalled these lessons as dynamic and energetic with partners describing how yielding to the other during copractice often triggered a deeper engagement, both with their own area of expertise and with that of their partner (RFN/3, Rose/Mary/Eilis/Flo/Ciara, TI/3). Although mentioned in descriptions of the previous phase, respect and admiration for the expertise of one’s coteacher was emphasised again by several teachers as a crucial factor in reaching this advanced and mature stage of coteaching:

You know you have reached that stage when you can say that you have complete trust in your coteacher

Mary TI/3
Accounts of the use of coteaching video clips for professional development conflates with findings from McCullagh (2012). Teachers, as they continued to grow in confidence, increase in agency and expand in identity contended that the use of video clips together with the CtDM presented an even more powerful mediational means of conceptualizing, implementing and discussing the practices associated with this mature stage.

I think we should use video a lot more because, honestly, I was shocked when I saw how little I was featuring in the lesson. It woke me up to think how I could be more involved – I do a lot of work with music with the children during the week, a bit every day but I need to be more active in the coteaching lesson.

Frank TI/3

There were many examples of innovation and contribution the outcome of which was the fact that a school which, prior to coteaching, did not have a music programme boasted an entire staff who claimed to feel committed to teaching music. This remark from Eilis recorded in Research Field Notes is typical:

I can do it now. I really understand the curriculum. I don’t have the skills of the musicians, but I know what it’s all about.

RFN/3

5.6.1 Teacher Dispositions in the Contribution Phase

Most participants (15/20), especially staff members appointed subsequent to the first coteaching residency, identified and recorded dispositions such as energy, curiosity, spontaneity, creativity and inter-dependency which suggests quite a marked development in agency from the pre-participation stage. The following comment recorded in field notes, typical of many others, confirms this observation:

I think I can speak for everyone when I say that we now really look forward to coteaching music and although I’m personally sorry when the 12-week residency period comes to an end, I’m always excited about the next partnership and what the next musician might bring to my classroom.

Eilis TI/3

Consonant with research on coteaching published recently by Gallo-Fox and Scantlebury (2016), quite a few teachers (9/20) mentioned that as coteaching developed into maturity, they become more trusting, more relaxed, took more chances, became less afraid of being wrong and more concerned with expanding the music programme and creating new opportunities and new knowledge as Mary said:
I suppose you could say coteaching is a bit like dancing... you have to get the feel of a new partner but once you’re familiar with the steps you can lead and it doesn’t take long ...soon the two of you will be making up new steps and the dance will change but there will always be energy. We’re confident as a staff now, that’s the difference, we’re leading.

RFN/3

Several of the teachers who joined coteaching after the first residency spoke of the enthusiasm of the teachers in the school for the diffusion of coteaching practices amongst new staff members:

They (teachers) talk about coteaching all the time – I was delighted because I love music, so I loved hearing all about this musician – teacher coteaching.

Joan TI/3

The school principal reminisced on the enthusiasm of the teachers for coteaching music during the Whole School Evaluation process (2016) and for sharing the coteaching music residency with the many visitors to the school including researchers from Spain, Canada, Hungary and the United States. (RFN/2-3). The following excerpt form a teacher interview following the third residency illustrates the openness and willingness of teachers to share their new practice:

Coteaching is a very natural part of what we do now. We see the value particularly in the case of specialist subjects and I think that since we came to know the importance of the role of the class teacher, we became confident so we’re always happy to share that with visitors who are curious. It’s very enjoyable and a great relief from the isolation of the solo lessons!

Maura TI/3

5.6.2 Organisational Support in the Contribution Phase

Recording the organisational support, they received at this stage, participants commented once more on the sustained encouragement and affirmation of the school principal. Several teachers once again referred to the influence of the good relationship modelled between school principal and the university researcher.

The principal has supported and developed this coteaching project from the beginning and all through to today. She is a strong presence always open to a point of view...she gives much to the partnership, preparing the room for the musicians each week, welcoming them, offering words of wisdom and ensuring they have tea and coffee and ...this is such good example for the rest of us. She often asks the children what they learned and never forgets to report their answers to the musician coteachers. She has been involved in all aspects of coteaching over the three years hiring teachers with an interest in music every year to ensure the programme continues to be supported.

Ciara TI/3
Teachers also referred to the affirmation they received from the very positive WSE report (DES, 2016) and the purchase of new musical instruments – resources that were needed for the development of the programme.

Amazing...three years ago we would have simply died if we were told we were to have a WSE in music! We were thrilled when we heard this news after three years coteaching music, we couldn’t wait to show what we knew and were not at all surprised that music was rated up there with maths and English... above Irish!

Mary recorded in RFN/3

5.6.3 Challenges in the Contribution Phase

Several teachers (8/20) suggested that reaching this stage in coteaching could not be taken for granted and was challenging and dependent on a number of variables in any given year. Variables most commonly cited as challenges, are consistent with international research on coteaching. These include inter-personal relationships, quality of music resources and levels of commitment to progress. Many teachers admitted that while the teacher became more experienced in collaboration during the second and third residencies, inconsistencies amongst musician coteachers in relation to levels of maturity, commitment and musicianship in particular, influenced the quality of their own commitment to the partnership each year. Many teacher comments in relation to challenges to reaching the pinnacle of coteaching relate to the annual dismantling of the coteaching partnership as that coteaching residency came to an end. The prospect of starting again the following year with a new coteacher, mustering up the momentum needed, building a new relationship and re-designing a programme based on a mutual coteaching vision was reported as being both a challenge and an opportunity. Three teachers spoke of their difficulty in maintaining their initial enthusiasm in subsequent partnerships and in sustaining a joint vision for the music programme over time. The following statement is indicative of their opinions:

I’ve had two types of experience with coteaching. One was brilliant, the other just OK so I now realise the partnership is only as good as the talent and commitment of its coteachers. It’s hard to start all over regardless of the previous experience. If it wasn’t good, you’re not very motivated and if it was great, you’re worried that the new partnership won’t measure up.

Geraldine TI/3
Some teachers remarked on variations amongst musician coteachers in terms of maturity:

I couldn’t get through to her that she needed to stick to the lesson plan that we had agreed. She just did her own thing. I wasn’t surprised to hear that she decided to leave the course ...she discovered that teaching wasn’t for her.

Frank TI/2

Some others referenced the paltry resources suggesting that schools should have access to a good piano at least and a set of tuned percussion instruments such as xylophones and glockenspiels. The following comments were typical of many others:

The children adored the ukulele. Instrumental performance, especially from 3rd class upwards added a new dimension to the school music experience. We should be better funded musically – I think tuned percussion would be very popular. We have the expertise now, so it would be brilliant to have the resources. Without the proper equipment, music is too restricted.

Maura TI/3

Flo, in accord with John-Steiner’s (2000) belief in the significance of partners’ fascination with the expertise of their collaborator observed:

I think the quality of the musicianship of the coteacher is terribly important. I had a terrific musician in the first year who was also a natural teacher. I was in awe of her, I wanted to be like her even though music is my weakest subject ...you could say I was inspired by her. Our lessons together were magic ...but not so much in the second and third year. The second year was I suppose OK but not magic and the third year wasn’t exactly a memorable experience.

Flo TI/3

The significant finding here is that, according to the teacher participants, the quality of the coteacher both in terms of their levels of musicianship and professional maturity is an important factor in coteaching progression. Where musician coteachers were well-matched and committed to undertaking an equal professional partnership, all teachers reported experiencing development (Carlisle, 2008; Murphy et al., 2005a). A second factor reported by teachers that accords with international research in music education (Seddon & Biasutti, 2008) was that the quality of the actual music programme itself and the resources available for its execution impacted the quality of the experience.
5.6.4 Opportunities in the Contribution Phase

For the teachers (8/20) who claimed to have reached the *contribution* phase, the opportunities for a wide range of personal and professional development were celebrated. Some, (Frank, Ciara) spoke of being inspired by the expertise of their coteacher to seek opportunities for instrumental and /or choral music participation in the community. Another teacher spoke of having the ‘confidence to complete a postgraduate course in educational leadership’ (Mike, TI/2). Three teachers spoke about the fun they experienced playing an instrument they had long before discarded, as part of a class ensemble (Rose, Clare, Maura). Most referred to the quality of the music lessons which they co-planned for their students with a few teachers remarking on the satisfaction they gained in first witnessing their pupils engage with a musician and later in supporting them to remain engaged and progress as musicians over the following weeks. For these teachers, coteaching with a musician at this level presented opportunities for their pupils to receive public affirmation for the quality of their music performances at liturgical and seasonal events:

During the coteaching residencies the children took part in public performances in prominent public spaces, they have performed publicly alongside the university music students; they have participated in choral performances with mature choirs from the most affluent schools in the city.

SP recorded in RFN/3

According to the seven teachers who participated in these activities, involvement depended on the consciously shared co-contributions of teacher and musician coteacher. The school principal also commented on the potential which emanated from shared contribution:

These opportunities would not be possible for the school on its own, it was possible only because of the coteaching partnership sharing expertise making a joint contribution. While I have no doubt that the coteachers reaped the rewards they so justly deserved, the children were the great beneficiaries of this conscious sharing of resources. These initiatives consolidated the partnership and served as a model for what could be achieved.

RFN/3

Several teachers spoke of the diverse ‘joint ventures’ which ensued between coteachers listing in particular the music composition projects (Mike, TI/2) and the numerous performing projects which they were adamant ‘could never have taken place without coteaching’. As documented in the previous chapter, some reported how coteaching pairs compiled original music workbooks e.g. John TI/2; novel PowerPoint presentations, (Geraldine TI/2); bespoke lesson plans, (Mary TI/3, Maura TI/1,3, John TI /2; Margot, TI/1; Sophie, TI/1, Helen TI/1; Mike TI/2) state–of–the-art wall charts (Sandra TI/2, Geraldine TI/3) featuring the songs and/or ukulele chords that children liked to play, others cotaught with their partner during a formal school inspection (DES, 2016); some actually
resumed playing a musical instrument with one teacher reporting that he could see for the first time how he might incorporate his instrumental music into the lesson:

I thought my days of playing the bass were over until my coteacher asked me to play a simple line he composed to accompany the children’s song. He made it easy – the line was very simple, but the children responded so well that I made a habit of playing along to their songs during coteaching. I have to say I really enjoyed it myself.

John TI/2

The school principal concluded saying that ‘teachers are generally a modest bunch and don’t tend to claim personal achievements’ but in her view the ability of the staff to form a music group and perform publicly was evidence indeed of the confidence (renewal) they had gained from coteaching with musicians over three years:

The teachers formed ThUGs (teacher ukulele group) and performed at the Christmas concert; they shared video clips of coteaching to better understand how elements of the music curriculum are developed in the various classes and to discuss how colleagues were interpreting their role as coteacher.

RFN/3

A summary of teacher experiences of the contribution stage is presented on Table 5.4

**Table 5.4: Teachers’ experiences of the contribution stage**

<table>
<thead>
<tr>
<th>Dispositional characteristics</th>
<th>Organizational support</th>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energetic (Communicative)</td>
<td>Expansion in support networks in tandem with demand</td>
<td>Managing dissonance</td>
<td>Extended and enriched professional community</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>Regular and frequent acknowledgement and affirmation</td>
<td>Creating / identifying opportunities for showcasing the fruits of coteaching e.g. public performances</td>
<td>Increased confidence as teacher and mentor with consequent increases in job satisfaction</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>Opportunities to expand partnership model into additional disciples</td>
<td>Adding value</td>
<td>Co-create innovative pedagogy and new practice</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>Emergence of new shared vision</td>
<td>Maintaining energy and dynamism while starting over again with new coteacher</td>
<td>Opportunity to compile culturally relevant, pedagogically strong music repertoire</td>
</tr>
<tr>
<td>Interdependent</td>
<td>Teachers and teaching assistants with experience in music prioritized for appointment</td>
<td>Establishing trust with new partner</td>
<td>Contributing to a school-university network of knowledge</td>
</tr>
</tbody>
</table>
In summary, adding an additional stage (pre-participation) to the original coteaching developmental model teachers concluded that while development occurred within as well as between each stage, their experiences of progression during coteaching could be illustrated as follows:

![Diagram of teachers' experiences of progression during coteaching]

Figure 5.5: A summary of teachers' experiences of progression during coteaching
5.7 Discussion
The first significant finding in this chapter, relates to the manner in which the appropriation by teachers of a theoretical concept on human development (Stetsenko, 2008) provided the mediational means not only to implement coteaching but to transform school culture. This chapter revealed how the processes involved in researching and implementing coteaching concurrently, gradually induced a dramatic change in whole-school culture from a proclivity towards individualism and isolated, solo practice (Kellaghan, 2009) to one of collaboration via coteaching. Most teachers pointed to the theoretical explanation of development or transformation (Vygotsky, 1978; Stetsenko, 2008; Murphy & Carlisle, 2008), as a crucial catalyst for initiating, supporting and directing change. Furthermore, data analyses seem to suggest that the operationalisation of a developmental model (CtDM) founded on the scholarship of Stetsenko (2008) and Murphy and Carlisle (2008) provided teachers with a powerful mediational means of meta-reflection (John-Steiner & Mahn, 1996; Lampert-Shepel et al., 2018) such that on accepting, albeit reluctantly, the challenge to participate in and to contribute to a coteaching music residency, the school culture seemed to change in favour of collaborative practice. Exchanging a relational ontology or spectator stance for a transformative activist stance (Stetsenko, 2008; Murphy & Carlisle, 2008), teacher accounts of the experience of coteaching suggest that habitual engagement in cycles of interconnected inquiry, reflection, conceptualization and imagination supported by the CtDM revealed the affordances of synergetic relationships founded on reciprocity and mutuality. Evidence of the development of functions such as volition and agency resides in their choice to sustain and extend the coteaching model in the school.

A second finding relates to the development of agency and expansion of professional identity. Positioned as research partners, teachers in this study participated in a process of disintering the meaning of their everyday experiences of coteaching. Focusing on process (Chapter Five) as well as product (Chapter Four), teacher accounts reveal how a theoretical framework provided a culturally relevant mediational means to support the process of implementation through social interaction (Vygotsky, 1978), which in turn broadened and strengthened the original theoretical framework (Tables 5.1; 5.2; 5.3; 5.4). By using the CtDM (Kerin & Murphy, 2015), four major stages of development in coteaching were identified and interrogated by teacher participants including (i) pre-participation, (ii) participation (iii) cooperation and (iv) contribution. Reflecting on their experience of coteaching, most teachers (14/20) claimed that the model provided a powerful mediational means of (a) conceptualizing how reciprocal learning occurs during coteaching, (b) perceiving coteaching as a developmental activity, and (c) accessing a common language to engage in collective reflection and discussion on coteaching development and progression. Additionally,
the findings in this chapter reveal how teachers used the CtDM to classify the *dispositional characteristics, organisational support, challenges and opportunities* they experienced during the four major stages of development (Tables 5.1 to 5.4). The result was the emergence of an ethos of inquiry, a *thought community* (John-Steiner, 1997) which the majority of participant teachers claimed was ultimately responsible for the observable changes in school culture. Roth and Tobin (2005) also stress the important link between agency and social change claiming that the collective agency of the participants can change structures and produce new cultures.

A third finding relates to teacher adoption of the ontological, epistemological and cultural practices associated with coteaching as a means of extending the coteaching music model to incorporate three additional partnerships in science, dance and parental schemes in addition to two further music coteaching partnerships including a very successful choral singing partnership and a *Composing sea-shanties* local community partnership.

In conclusion, teachers claimed that in collectively adapting and operationalising a theoretical model of development, based on a sociocultural theoretical construct, they acquired several mediational means or psychological tools which promoted the habitual use of higher psychological functions (HPFs) including volition, reflection, imagination and conceptualization which in turn, supported the development of agency and cultural transformation. It appears that the acquisition of such mediational means and the habitual use of HPFs afforded teachers the devices and mechanisms needed to tackle the social and cognitive challenges, the inter-personal and intra-personal trials posed in transitioning from solo to collaborative practice (Lampert-Shepel et al., 2018).

The next chapter presents a synthesis of the overall findings which signals the potential in coteaching for effecting personal and professional development and cultural transformation.
Chapter 6: Coteaching as Potential Agent of Change - Synthesis of the Findings

Shared vision...is crucial to successful collaboration, but is not always sufficient. For partnership to be truly creative, to change a discipline and transform a paradigm, multiple perspectives, complementarity in skills and training, and fascination with one’s partner’s contributions are also essential (John-Steiner, 2000, p. 64).

6.1 Introduction

The purpose of this three-year coteaching music study was to explore teacher perspectives on coteaching with a pre-service music teacher. Data analysis revealed two overall findings, a perception amongst teachers of increased agency, particularly in relation to teaching music (Chapter Four) and an unexpected shift in a predominantly solo-teaching tradition towards a general espousal of more collaborative practices (Chapter Five). These findings, when conflated, distinguish coteaching as a potential agent of change. In an attempt to further explore such a hypothesis, Chapter Six presents a synthesis of the research findings drawing on three features unique to the study, the impact of coteaching in a new context, primary school music; the possible effects of duration and frequency, the significance or otherwise of the three-year coteaching music residency and the number of times teachers were involved, and the possible implications of staff solidarity, the fact that the full teaching staff committed to coteaching. Following a short introduction, the links between increased teacher agency and coteaching are considered; teacher-participant claims of the emergence of a culture of collaborative practice are evaluated and the potential of coteaching as an agent of change is discussed. A re-engagement with the sociocultural theoretical framework which was formerly discussed in Chapter Two offers an opportunity to gain a deeper interpretation of the overall findings. To begin, Figure 6.1 presents a summary of the findings.
6.2 Coteaching and Teacher Agency

The overall results from the coteaching music study resonate with findings from a host of studies compiled in *Coteaching in International Contexts* (Murphy & Scantlebury, 2010), all of which report increased professional agency as a consequence of coteaching (e.g. Jackson & Phillips, 2010; Wharton & Pitts, 2010; Siry & Lang, 2010). Furthermore, the findings in this coteaching music study also suggest that to varying degrees, former perceived confidence deficits relating to the teaching of music were addressed and ultimately reconciled (Chapter 4, Section 2). Consonant with Willis and Ritchie (2010), the consensus view of the majority of teachers was that coteaching, delivered an enhanced form of agency and produced outcomes that were greater than anticipated. Most teachers, for example, entered the partnership with perceptions of subject knowledge *deficiency* in music and as a consequence of the coteaching experience, a majority of teachers reported gaining, to varying degrees, a new *sufficiency perspective*, not only in music teaching but in relation to the pivotal role of the teacher in raising the profile of music in the school, developing the children’s musicianship and in particular, supporting the professional development of their coteacher. Therefore, the data suggests that the purpose for the study which sought to explore the affordance of coteaching as a means of offering professional development for in-service teachers was achieved.
Consistent with results from Gallo-Fox and Scantlebury (2016), one of the few studies to have focused entirely on the experience of the in-service teacher during coteaching, findings from this coteaching music study which relate to teacher agency also indicate an *increased confidence* amongst teacher participants; *a new enthusiasm* for teaching music and in the case of some teachers *an expanded professional identity*. See Figure 6.2 below.

![Figure 6.2: Teacher agency as discussed in Gallo-Fox & Scantlebury, 2016](image)

**6.2.1 Increased Confidence**

In accordance with the outcomes discussed in Roth and Tobin (2005), Murphy and Beggs (2005a; 2010), and Murphy (2016) most teachers in this study, despite severe misgivings and, in many cases, initial resistance to coteaching and to coteaching music in particular, reported ‘becoming less awkward’ and gaining confidence within two months of the first coteaching music residency (Chapter 4, Subsection 2.1). Supporting Guise et al. (2017), the majority reported that regular commitment to implementing the coteaching model *with fidelity* positively impacted teacher confidence. However, findings from the music coteaching study, extending the research conducted by Guise et al. (2017) indicated that increased confidence was influenced more by the dexterity with which they aligned the essential processes of coteaching to their particular context rather than by the fastidiousness with which they adhered to the coteaching model itself. For example, encouraging their musician coteachers to draft the lesson plan at first instance and editing and reviewing these plans with their coteachers over virtual platforms was, for most teachers a more efficient use of time and expertise (Chapter 5, Subsection 4.3). Not every teacher reported editing and modifying the initial plans however, those who did (comparable with Willis & Richie, 2010) commented positively on the opportunity for coteacher communication and dialogue as they
‘accessed the virtual platform of e-mail as a resource for communication when direct contact between participants was neither practicable nor possible’ (p. 299).

Coteaching, two teachers teaching together at the same time, was reported by some teachers as uncomfortable and uncoordinated at first but similar to coplanning, teachers reported finding their feet (Murphy, 2016) after just a few weeks (Chapter 5, Sections 4-6). Extending the literature on the process of coteaching (Murphy, 2016) teachers spoke about the confidence they gained on receipt of positive feedback from their partners and of subsequently becoming more aware of, and intentional, in terms of the pedagogical manoeuvres they were modelling for their musician coteacher during the lesson (Chapter 5, Section 6). In accordance with Nilsson (2015) ‘catching the moments, taking advantages of the unplanned experiences’ (p. 298) was mentioned frequently by teachers in the context of the evolution of their confidence as coteacher. Additionally, analogous with the research literature, (Murphy & Beggs, 2010; Gallo-Fox & Scantlebury, 2016) most teachers argued that having committed to the philosophical tenet of reciprocity, their obligation to promote the professional development of their partner, positively impacted their own commitment to modelling pedagogical excellence which in turn further positively impacted their confidence.

The findings suggest that the music context for coteaching, did not diminish the development in teacher confidence in any way, despite original perceptions amongst teachers of deficits in their abilities to teach music and about music having peripheral value in the primary curriculum. For almost every teacher, coteaching with a musician was reported as positive, stimulating, and insightful and in some cases coteaching resulted in changes in teacher self-belief in terms of their music teaching competence and in their values and attitudes regarding music in the primary curriculum (Chapter 4, Section 3).

Results from the confidence audits seem to suggest that, on average, there was a positive correlation between the length of time teachers were involved in coteaching and increases in confidence (Chapter 4, Section 2). However, confidence in relation to music occurred for some within the first residency while for others increased confidence took longer. In some cases, confidence levels plateaued after one residency while for others, confidence continued to increase with subsequent coteaching participation. In this regard, a few teachers in proffering explanations associated a number of supplementary factors with increases in confidence. For some teachers, consonant with de Vries (2015), previous experience of learning music was significant in this new coteaching context, including memories of success and enjoyment in learning an instrument. Also resonating with findings from Murphy and Beggs (2005a) and de Vries (2015) in the case of all teacher participants organisational support in the form of school principal and university researcher
who throughout the three years occupied ‘the third space’, ‘the in/between space’ ‘the middle space’ (Kind et al., 2007) between teachers and musician coteachers was deemed influential in supporting and promoting confidence. In summary and in accord with the extant literature on the factors which promote confidence during coteaching, (Bianchi & Murphy, 2014; Nilsson, 2015), many teachers reported the quality of the partnership, opportunities to learn experientially through practical activities and receipt of on-going specialist support as significant (Chapter 4, Subsections 2.2 and 3.1; Chapter 5, Subsection 6.3).

Consistent with Guise et al. (2017) the significance of the collective commitment to coteaching, was endorsed by teacher participants in the coteaching music study. In addition to engaging in professional dialogues with coteaching partners, teachers frequently referred to the on-going collegial support of the full staff (Chapter 4, Subsection 2.3 and Chapter 5). Descriptions of making music together (Chapter 4, Subsection 2.2.2) and of supporting each other while learning new music performance skills abound in the data.

6.2.2 An Expanded Identity
The findings from this coteaching music study endorse current research with regard to the positive influence of coteaching on the expansion of professional identity. Similar to Gallo-Fox and Scantlebury (2016), Nilsson (2015) and Hedin and Conderman (2015), the majority of teachers concluded that as a consequence of coteaching, they too assumed extended professional identities as both learners and mentors. Teacher–participants reported that coteaching music called on them to find new ways of operating in the classroom, thereby developing their frame of reference beyond simply that of teacher towards the Russian concept *obuschenie* (Vygotsky, 1935/1994), a state of being both teacher and learner at once. Coinciding with Gallo-Fox and Scantlebury (2016) and with Kerin and Murphy (2018), most teachers reported that this new frame of reference offered fresh perspectives on teaching and learning and on self as teacher and learner. Several teachers claimed that coteaching offered discrete insights into the consequence of being a learner in the classroom. Some indicated that in becoming learners with the children, they became conscious of the cognitive and emotional processes involved in learning, learning to play chords on the ukulele, learning to identify which chord matched the tune, learning how to give a starting note, learning to count in before starting a song and learning the joy of playing music with others (Chapter 4, Subsection 2.2.2). In addition, most referred to how their acquisition of subject knowledge and skills expanded their professional identity as generalist teacher to include that of music facilitator. A few teachers, resembling Guise et al. (2017) spoke of the value of the symmetrical positioning of partners as
teachers and learners so that during the coplanning, coteaching and coreflecting teachers each partner received and offered expertise.

Besides affording opportunities for teacher to become learner while teaching, teachers were also required to mentor their musician coteacher so that they could develop the pedagogy associated with teaching music. In contrast with coteaching studies conducted by researchers such as Gallo-Fox (2010) and Soslau et al. (2018) where both pre-service teachers and teachers required experience of teaching prior to coteaching, some teachers and all musician coteachers in this study were in their first year of a four-year undergraduate music education course. Many teachers claimed that becoming aware of the pedagogic deficits of these first-year undergraduate musician coteachers empowered teachers to support their coteachers modifying their own teaching to ensure that the neophytes were mentored into the profession. This, they claimed helped them to identify and employ their own expertise from the outset and extended their teacher identity to include that of mentor in the context of coteaching (Hedin et al., 2015).

The literature cited in Chapter Two identifies the links between coteaching and an expanded professional identity where teachers, consistent with Grimes (2010) reported taking on additional roles. In this coteaching music study some teachers assumed leadership identities becoming champions and advocates for music and in the case of a few teachers, activists for change (Chapter 4, Subsections 3.1). For example, seeing an opportunity for staff professional development in music, Frank volunteered to act as the curator of coteaching video clips cataloguing, compiling and storing video material pertaining to the various class groups and representing the various stages of development in coteaching. Mike, activist for equality in education, articulating his frustration with the lack of provision for primary music education in this country, pursued a higher education qualification to equip him with the skills he perceived as important if teachers are to campaign for equality. The school principal also reported an expansion in her professional identity. Acting as liaison person for the school university partnership, her role extended to supporting the professional development of the undergraduate students as they prepared for placement. As part of the coteaching team she actively participated as partner in research in coteaching for the duration of the study. Additionally, the findings indicate that the school, formerly a teaching only institution underwent a transformation to become a teaching, learning and research hub attracting attention from local and international researchers from Europe and North America due to its support of coteaching as an innovative solution to perceived deficits in specialist knowledge amongst primary generalist teachers. (Chapter 4, Subsection 2.1).
6.2.3 Enthusiasm and Renewal

Claims of renewed enthusiasm and increased job satisfaction after coteaching are well documented (Bacharach et al., 2012; Gallo-Fox & Scantlebury, 2016; Nilsson & Van Driel, 2010). As discussed in Chapter Two (Subsection 2.3.2) a host of scholars including Murphy and Beggs (2010) and Gallo-Fox and Scantlebury (2016) acknowledged the impact of coteaching on enthusiasm for teaching science and on having gained greater subject knowledge and on-site professional development. Findings from the coteaching music study resonate with those of Murphy and Beggs (2005a), Carlisle (2010), Kerr (2010) and Gallo-Fox and Scantlebury (2016) which, considering initial opposition to music and to coteaching music in particular, indicated quite a transformation in attitude amongst teacher participants (Chapter 4, Section 4.3; Chapter 5, Section 4). This coteaching music study adds to current research by confirming the impact of coteaching on sustained enthusiasm for music over three years. Findings revealed in Chapter Four (for example Chapter 4, Section 3) document the prioritization and preservation of a vibrant music programme such that music, a subject, once perceived as possessing marginal value was elevated to a status alongside mathematics and English. Music, three years after the coteaching music study was completed, still retained its core curricular status such that all children could access an incremental, developmental, sequential primary music programme and a high-quality music lesson at least once each week. The long-term effect of teacher enthusiasm for music was also evident in the expansion of the classroom music programme. At the beginning of the third residency the school principal reported that the school appointed a teacher with a specialist interest in music and a special needs assistant with keyboard skills, demonstrating its commitment to the preservation of music education (Personal communication with school principal, September 2016). Sustained teacher enthusiasm for music is also evident in the support of two further music coteaching partnerships one of which resulted in the school winning a prestigious Feis Cheoil silver cup for choral singing at the time of writing this study. Evidence of such collective and extended support for music in the form of a positive Whole School Evaluation Report (2016) by the Inspectorate of the Department of Education and Skills has already been mentioned in Chapter Four (Subsection 4.2.6).

As already reported in Chapters Four and Five, the majority of teachers asserted that the collective commitment amongst staff together with the support of school leadership also contributed to the preservation of enthusiasm for coteaching over three years. Learning together during the three annual Induction Workshops, on-going informal discussions amongst peers on coteaching music, and the collective espousal of an inquiry stance on enacting a coteaching developmental classification system (Chapter 5, Section 5.2) were factors which were reported as influential in sustaining enthusiasm amongst staff which in the case of a majority of teachers resulted in
transformed beliefs in relation to the value of the music (Chapter 4, Section 3). Finally, although the study was completed, an ethical commitment to the school-university partnership discussed in Chapter Two (Subsection 2.3.7) and Chapter Three (Subsection 3.6.2) ensured that access to resources such as coteachers, instrumental accompaniment and subject expertise continued to be made available by the university to the school. Furthermore, while the study seemed to suggest that enthusiasm for music continued after the study ended, it is worth noting that both the school principal and the university researcher continued to play an active role in supporting, developing and expanding the school music programme.

6.3 Coteaching and Collaborative Practice

Considering best practice in the context of the three pillars of professionalism reflection, relationship and research, which underscore the Teaching Council’s Strategic Plan, 2015-2017, most teachers reported that via coteaching these customs became the mechanisms through which they transitioned from individualistic towards collaborative practice in the school (Chapter 5, Section 3).

Although collaboration between teacher and musician is strongly recommended in music education (Bamford, 2006; Campbell et al., 2008), previous research into teacher–artist partnership (Bresler, 2010; Christophersen, 2013; Kenny, 2010; Griffiths & Woolf, 2009) identified strains associated with differing philosophical beliefs, lack of clarity in relation to individual roles, responsibilities and identities. Findings from this coteaching music study indicate that coteaching in its support of coreflection, relationship-building and co-inquiry, provided a solid collaborative structure deserving of close consideration. See Figure 6.3 below.

![Figure 6.3: Teacher as collaborative practitioner](image)

6.3.1 Coteacher as Reflective Practitioner
Consonant with Guise et al. (2017) and Hedin and Conderman (2015), teachers who participated in the coteaching music study also reported severe misgivings initially about the prospect of coreflecting, citing logistical impediments including time and space as impediments. Most teachers indicated that for them reflection was an ambiguous, nebulous, aspirational endeavour. A significant finding in this study points to the encouragement of the school principal for coreflection amongst staff in the context of their support for coteaching. Such support was cited by many teachers as vital to the initiation of the practice of reflection and coreflection (Chapter 5).

Findings presented in Chapter Five suggest that coreflection was enacted at a micro-level as individual teachers reported reflecting each week on their own experiences of coteaching, committing these reflections to writing and discussing them with colleagues and with the school principal; at a meso-level between partner coteachers, and at a macro-level as teachers collectively recorded, considered and critiqued the coteaching model using the Coteaching Developmental Model (Chapter 5, Section 2). The significant consequence of this web of diverse reflective interaction was, according to teacher participants, an on-going dialogue which privileged equal voice and full participation representing Buber’s (1970) conception of dialogue in which collaboration is more than the sum of individual participants and where according to John–Steiner et al. (1998, p. 775) ‘there is a shared knowledge of an emergent form’. Analogous with the research literature on coteaching science, the findings from this coteaching music study also endorse the scholarship of Nilsson (2015) and Hedin and Conderman (2015) suggesting that coreflection or reflection between coteachers occupied a significant role in consolidating professional learning. Through the cultivation of a state of sustained wide-awakeness (Greene, 1995) via coreflection, teacher participants reported becoming increasingly conscious of the positive impact of coteaching as professional development on themselves as teachers; on the children, whom, they reported, evinced enthusiasm for music, and on their coteachers, whom they observed developing as teachers (Chapter 4).

All teachers referred to staff solidarity as a significant factor in promoting collective reflection. The fact that the full staff chose to be involved each year offered rich and frequent opportunities for professional discussion on the music curriculum and on coteaching as new practice. Most teachers spoke of conceptualizing, imagining, interrogating, discussing, critiquing an on-going process of reflection on practice which they claimed was instigated by the new practice of coteaching. Data analyses suggest that there was a positive correlation between time spent coteaching and teacher engagement in deep reflection. For the nine teachers who engaged with the music coteaching residencies on multiple occasions, several reported gaining an increased fluency with the processes and the dialogue of reflection during each residency. Data analyses of teacher
reflection during formal semi-structured interviews reveal a deeper understanding of both the music syllabus and of coteaching music amongst teachers who participated multiple times. However, some teachers who participated only once gradually developed over the course of that one residency a greater understanding of both music and of coteaching as recorded in Field Notes based on informal conversations after coteaching each week. Reports on the impact of coteaching on the staff suggest that this new practice of collective dialogue and coreflection continued to develop and become embedded in school practice throughout the three coteaching residencies (Chapter 5, Section 6). While coteachers, similar to Zimmerman Nilsson (2016a) and Hedin and Conderman (2015) coreflected on their lessons, teacher participants also reflected together on their learning of music. Furthermore, the staff also coreflected on how to implement a model of collaborative practice in a school culture formerly characterised as predominantly solitary, isolationist and individualistic, a culture which, for the most part, preserved the autonomy of the individual teacher. Teachers and school principal co-reflected with the university researcher to better understand the new practices associated with this new model. The entire community engaged in a continuous cycle of operationalising theory and theorizing practice.

In line with Vygotskian theory, all participant teachers reported embracing coreflection as a dialectical, socially constructed and culturally mediated metacognitive action (Lampert-Shepel et al., 2018), where as a collective, the full school staff engaged in meaning-making prompted by the continuous exploration of the coteaching experience itself.

Deeper levels of reflection were evidenced over the course of multiple engagement with coteaching. The shift in focus from the other, (the coteacher and the children) to self, and the ability to consider themselves and their own actions as contributing to, if not influencing change, signified the emergence of teacher as reflective practitioner.

6.3.2 Coteacher as Relationship Builder

Two strong themes emerged from analysis of teacher accounts of their awareness of the importance of relationships within the context of coteaching. Endorsing Murphy and Beggs, (2005a) and Carlisle (2008), the first was coded as harmony and described the significance of their inchoate willingness to accommodate the subject expertise of their partner. The second concerned commitment and was described by teachers as a continuum ranging from resistance, through compliance, towards trust (Kerin & Murphy, 2018). As in a music recital, where sensitivity between musicians affects the overall performance, the majority of teacher participants claimed that
sensitivity to the relationship between coteachers was integral to the success of the coteaching partnership (Chapter 5).

The findings reported in Chapter Five, similar to those of Carlisle (2008), indicated that harmonious relationships laid the foundation for sharing expertise, a cornerstone of a flourishing coteaching collaboration. Extending current research on the importance of harmony between coteachers (Murphy & Beggs, 2005a; Carlisle, 2008) teachers identified three degrees of consonance within their coteaching collaborations. Borrowing the common parlance for texture in music, these were categorised as monophonic, homophonic and polyphonic relationships (Kerin & Murphy, 2018). In this study monophonic relationships were experienced by teachers in situations where one of the partners dominated and in so doing, diminished the possibilities for co-creation of new ideas and professional development (Chapter 4, Section 2). A homophonic relationship was described by teachers as an attempt to form a relationship in which partners offered and accepted support, but in a situation where one partner dominated, thus limiting the opportunities for mutual professional development. Teachers who eagerly supported the coteaching music project were disappointed in some instances when the musician coteacher failed to communicate during coplanning (Chapters 4 and 5). Teachers reported that the time needed to communicate as coteachers was not always available but where partners were willing, coteaching provided a framework for supporting them towards a truly democratic or polyphonic partnership.

A polyphonic relationship was characterised as the valuing of individual voice within the collective. Sharing expertise, such that the integrity of each philosophical viewpoint and the complementary expertise of each partner was observed, preserved and valued by the other, was reported by a number of teachers as exciting and energizing. Not all participants experienced polyphonic relationships but for those eleven teachers who did, subsequent feelings of affirmation, well-being and engagement contributed to the formation of deeply synergetic relationships evidenced in co-contribution to practice. The consequence of experiencing via coteaching such synergetic relationships was according to teacher participants, the willingness amongst teachers to extend coteaching into a number of additional disciplines and contexts.
In terms of commitment, keeping teachers on side (Titus & Gremler, 2010), most teachers recalled being resistant to coteaching initially. This they attributed to their fear of the prospect of change. The findings indicated a gradual move towards compliance over the course of each residency where teachers spoke of becoming aware of the benefits for themselves and especially the children. This was followed by the highest level of commitment, which they described as trust. Teachers stated that the coteaching framework - coplanning, copractice and coreflection - helped nurture and build inter-relational trust as partners progressed from the initial participation phase, to the co-operation phase and, for some, to the phase of co-contribution to practice (Kerin & Murphy, 2018).

Even for those partners who did not progress further in their relationship, a certain level of synergy was reported. However, the consensus amongst teachers was that most of the benefits were experienced as relationships progressed to the trust stage. All teachers agreed that trust was built on mutual affirmation and reliability and on the solid foundations developed during coplanning and coreflecting. With the development of trust, (John-Steiner, 2000) teachers reported that lessons became more creative and spontaneous as coteachers wove their own expertise into the fabric of the lesson. They recalled these lessons as being dynamic and energetic with partners describing how yielding to the other during copractice often triggered a deeper engagement, with their own expertise and an appreciation of that of their partner (Chapter 4, Subsection 3.2).

In contrast with Murphy and Beggs’ description of purposeful pairing of coteachers (2005a) but in line with Lawley’s recommendation that in-service teacher and pre-service coteacher be randomly rather than purposefully assigned (2012), the positive findings from the music coteaching study evolved from random coteacher pairing each year. While the nine teachers who participated multiple times agreed that some experiences of relationship between coteachers were more rewarding and in terms of development more likely to reach the stage of co-contribution than others, they all agreed that the actual coteaching framework provided the skills needed to construct productive coteaching partnerships however limiting. Not all relationships progressed smoothly. Teachers reported that variables such as the maturity and the commitment of their coteacher could impede progression (Chapter 5, Section 6).
6.3.3 Coteacher as Inquirer

According to the Teaching Council of Ireland (2013(b)) research by and for teachers is essential to support their learning and practice as professionals. Although a call for teachers to adopt an inquiry stance in schools in Ireland is relatively recent, as early as the 1950s, teachers in the U.S. were encouraged to carry out action research on their practice inspired by the work of John Dewey and the Progressive Movement (Corey, 1949, cited in Hammersley, 1993).

The teacher as researcher is described in the research literature as emanating from a belief that teachers, rather than simply reproducing and replicating traditional teaching practices, should adopt an inquiry stance through reflective practice and ongoing systematic inquiry to improve their own practice (Stenhouse, 1983). In this study teachers reported positively on opportunities for sustained and rigorous inquiry via individual and collective reflection on both the processes and products of the new coteaching model and on the primary music curriculum.

As already discussed in Chapter Five, teachers as research partners operationalised a theoretical construct and used the heuristic to create a model of coteaching progression capturing dimensions such as organisational support and teacher dispositional characteristics at the various stages from pre-participation to co-contribution to practice. Challenged by self-perceptions of deficits in confidence in music, they welcomed the opportunity to implement and enact a coteaching model and in doing so to critique the new practice. Opportunities and challenges were discussed, documented and recorded systematically. The heuristic produced as a consequence of collective inquiry (Chapter 5, Subsections 5.3, 5.4, 5.5, 5.6) illustrated transformational rather than oppositional attitudes with the mechanisms associated with coplanning coteaching and coreflecting providing powerful mediational means for individual and collective inquiry.

The findings in relation to teacher as co-implementer of new practice (Chapter 5) contributed significantly to the extant research literature on coteaching. In the context of their collective engagement with coteaching, participant teachers, in line with Gallo-Fox’s insightful observation of Wassell and La Van’s study (2009), indicated that in working together over a three-year period to implement coteaching in the school they ‘appropriated the cultural practices and ontological and epistemological stances of coteaching and used these perspectives and practices’ (p. 449) consequently transforming a former predominantly isolationist and individualistic teaching tradition into a collaborative school culture (Chapter 5).
6.4 Coteaching as a Potential Agent of Change

The findings suggest that (i) coteaching as implemented in this study acted as a possible catalyst for change and agent of change and that (ii) the implementation and enactment of coteaching initiated and nurtured discursive practices which in turn resulted in the (re)-shaping of consciousness (Daniels, 2015). Teachers claimed that coteaching, which demanded mutual commitment to reciprocal learning, together with the complementarity of the shared expertise, provided effective conditions for synergistic exchange (Chapter 4, Subsection 3.2; Section 6.6). See Figure 6.4 below.

![Figure 6.4: Coteaching as possible agent of change](image)

In accordance with Murphy and Scantlebury, (2010) who stated that:

‘coteaching...has) transformed how science and mathematics are taught and learnt in urban, rural and suburban classrooms, pre-service teacher–education programs, undergraduate and graduate content courses and programs focused on teachers’ professional development across the world’ (p. 388).

Findings from the coteaching music study clearly suggest that following the introduction of coteaching, classroom practices and staffroom relationships in the school were significantly transformed (Chapter 5, Sections 2, 5 and 7). A staff which formerly resisted the notion of coteaching, post coteaching endorsed the practice, recommending its adoption in a wider context educationally and beyond. An ambivalence towards change was according to teachers, replaced with a collective enthusiasm for the possibilities inherent in new coteaching partnerships. A once predominantly solo teaching culture embraced collaborative practice as the norm and a perception of music as a subject of peripheral value was replaced by one which valued music on a par with mathematics and English. From a culture of compliance to a culture of inquiry and activism,
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evidence of change was manifold. Uncertainty and a fear of professional disclosure was replaced with openness and enthusiasm for each subsequent coteaching music residency and indeed for each subsequent coteaching opportunity. Coteaching, a socio-cultural interpretation of teaching, enacted as a democratic model which fosters teacher self-efficacy through critical collaboration was unanimously identified by teachers in this study as a significant agent of change, a catalyst which triggered new ways of thinking and acting in a reformed cultural context.

Desimone (2009) identifies change as an interactive relationship between professional development, teacher knowledge and beliefs, classroom practice and student outcomes. In this study, the findings suggest that coteaching promoted individual teacher autonomy within collaborative, collective decision making. Coteaching, according to teacher accounts of the experience extended the role of teacher beyond the traditional teacher/pupil transfer of knowledge, skills and attitude model. Coteaching, in recognizing the importance of professional reflection, relationship and inquiry encouraged collaboration. In order to meet the demands of coteaching, teachers, as individuals and as part of a collective were constructively engaged and challenged in equal measure in the process of continuously re-negotiating meaning as part of a social process enacted in a specific culturally defined context. What emerged was a potentially rich and varied culture of ongoing change and renewal (Chapter 5).

Coteaching, according to participants in this coteaching music study, created the conditions for change, nurtured the skills needed for change (Fullan, 1995) propelling teachers’ use of the opportunities and the flexibility afforded by the model to develop personally and professionally thus radically changing and improving the quality of the learning environment. Where expertise is often seen as external (Zeichner et al., 2015), coteaching in acknowledging the currency of local knowledge, facilitated a dialogical process of professional interaction. Ultimately, coteaching necessitated approaches based on collaborative enquiry which supported teachers in reconstructing their own knowledge, valuing the currency of local wisdom and resulting in transformative change.

Teachers reported that sharing expertise, embracing the principle of reciprocity, learning from and teaching the other, which formed the philosophical basis of the coteaching model, called on them to find new ways of connecting, extending their frame of reference beyond simply that of teacher (Chapter 4, Subsection 3.2; Chapter 5, Section 6). Four key characteristics as they pertain to ‘change agents’ according to recent research carried out by van der Heijden et al. (2015) include openness towards new learning, demonstrating mastery (through giving guidance), contributing to innovative practice and cultivating collaboration. Fullan (1993) identified four similar core capacities for
promoting and supporting change including adopting an inquiry stance, mastery, vision-building, and collaboration. Such accounts of change resonate with teacher perceptions of the impact of coteaching music. While teachers reported that coteaching impacted positively on their conceptualization of collaborative practice and of primary music, citing changes in their personal and collective beliefs, values, attitudes, understanding and skills in music, every teacher identified the activity of coteaching as the agent of change (Chapter 5, Section 7).

Teacher perceptions of coteaching as change agent point to the philosophical and mechanical dimensions of the coteaching framework which promoted the norms and practices of collaboration via reflection, relationship-building and research providing the impetus to change at both personal and organisational levels. Recalling the initiation or pre-participation stage, field notes reflect a staff reacting despondently to the suggestion of coteaching. This initial resistance to change underpinning the pre-participation stage is revisited by several of the teachers and recorded in the interview material at the end of the first residency. Comparing these data sources with researcher field notes compiled over the subsequent three years, which capture the positivity and excitement amongst the staff at the prospect of a Whole School Evaluation (WSE) in music, reveals the expansion in teacher agency and significant cultural change which has taken place in this school.

6.5 A Theoretical Reflection on Coteaching as Change Agent

The conflated findings from Chapters Four and Five suggests coteaching as a possible agent of change. As discussed, according to the twenty participant teachers, coteaching evolved to catalyse improvements not only in the quality of music teaching but in the mobilization of the full staff, resulting in expanded professional agency and a transformed, vibrant, energetic coteaching culture.

A return to the theoretical framework which guided this study offered an opportunity to come to an understanding of the deeper processual components of the coteaching experience which in turn provided support for the notion of coteaching as agent of change. Offering inter-related explanations of the complexities of the coteaching model, this theoretical framework (Chapter 2, Section 2.4) comprised contributions from a number of sociocultural, social development and neo-Vygotskian theories including Situated Learning Theory, the Structure|Agency Dialectic, Solidarity and Cultural-Historical Activity Theory (CHAT).

Vygotskian learning theory (1978, 1981) underpins the coteaching music study both operationally and theoretically (Chapter 2, Subsection 4.5; Chapter 5, Section 2). Three seminal ideas in particular had relevance in the context of explaining coteaching as change. Chapter Five described how
teachers, following a lecture on learning and development, in advance of coteaching, appropriated Vygotskian theory and related its essential or fundamental principles to the locus of learning, their everyday practice, to co-configure new ways of being in the classroom. Reporting on what and how they learned during coteaching teachers, analogous with Vygotskian theory pointed to the social origins of the learning and the influence of external tools, the mediational means (Chapter 5, Section 2). However, Vygotskian scholarship is also relevant to a further interrogation of the overall findings as they pertain to the emergence of coteaching as a powerful agent of change. Vygotsky suggested that social interaction provides an ideal set of conditions for development by creating zones of proximal development (ZPD) optimal conditions for learning ‘where intellect and affect are fused in a unified whole’ (Vygotsky, 1934/1987, p. 373). Teachers in the coteaching music study, in line with Vygotsky, reported being mutually stimulated and motivated to learn by encountering, exchanging and later appropriating the expertise of their coteacher (Roth, 1998; Roth et al., 1999). Elements of Vygotskian learning theory identified as significant in studies including Murphy, McCullagh and Doherty (2014) and Laflamme, Murphy and Kerin (in press) including the dramatic collision, buds of development, imitation, real and ideal form supply a deeper insight into the processes that lead to teacher claims of a change in attitude in relation to the value of music during coteaching, (Chapter 4, Section 3), the procurement of the skills of collaboration during the process of coteaching (Chapter 5, Section 6) and their gradual awakening to the value of the currency of their professional expertise (Chapter 4, Section 3.2 and Chapter 5). Congruent with Vygotskian theory and the belief that higher psychological functions such as conceptualization, imagination and reflection are themselves social processes which require prolonged engagement in social settings, teachers who were involved in coteaching music multiple times reported that the time allocated by the school principal to careful consideration of coteaching in advance, during and after the coteaching study was an important factor in their development as coteachers, a factor which they claimed provoked change. The relevance of context, another significant theme, was further explored via Situated Learning Theory.
6.5.1 Situated Learning Theory

While key findings indicated that coteaching was frequently experienced as the ‘best continuous professional development ever’ (Chapter 4, Subsection 2.2.1), of particular significance for teachers was the connection between site and context, the locus of the learning, and the learning itself (Brown et al., 1989; Bruner, 1990). A theory which acknowledges context as inextricably bound to learning was therefore relevant to reaching a deeper understanding of the findings of this study. Coteaching, social co-participation in legitimate practice (Lave and Wenger, 1991) viewed through the lens of situated cognition theory, had much to offer. Brown et al. (1989) argued that concepts can only be understood through using them as actual tools. This insight was helpful in coming to an understanding of why teachers chose to operationalise the neo-Vygotskian construct to create a shared appreciation of the role they occupied as coteacher and of the actual coteaching activity itself (Chapter 5, Sections 2, 4 and 6). Roth (1998) also contends that coteaching, situated in an authentic teaching-learning setting, facilitates opportunities for the operationalisation of theory into practice.

6.5.2 Structure|Agency Dialectic

Another aspect of the theoretical framework, Sewell’s (1992) theory of culture was also significant in providing evidence in support of coteaching as a possible change agent. Suggesting that a dialectic or tension exists between the structure and agency, in this case the traditional solo-teaching school culture, and the agency of the individuals who operate within its confines, the Structure|Agency Dialectic theory provided a useful lens to examine the unexpected impact of coteaching music, the change in school culture. The significant finding in this study was that coteaching was identified by participant teachers and school principal as being solely responsible for altering the traditional, solo-teaching school structure. The modification of the structure through the introduction of coteaching accommodated the development of teacher agency which in turn impacted the structure, which in turn influenced teacher agency. Using this theory as a lens the duration of the study became a significant factor, the longer the study remained vibrant, the more the opportunity for transformation. This dialectic between structure and agency was experienced as an on-going mutual adaptation, a shared reinforcement rather like the image of a mobius (Figure 6.5) which has the mathematical property of being dynamic but un-orientable. Just as each plane in the mobius strip is simultaneously facing inwards and also facing outwards, so also the teachers and the musicians were simultaneously operating as teachers and learners. The evidence recounted in Chapters Four and Five seems to suggest that the possibilities for change once activated became limitless. The structure remained constant but with the activity of coteaching its shape became malleable facilitating agentic development. The increase in agency of
the individual teachers in turn impacted the shape but not the actual structure. The school maintained its purpose, the provision of a high-quality educational experience for the children, its shape however began to accommodate more than one teaching approach.

Figure 6.5: Mobius

### 6.5.3 Solidarity Theory

According to teacher participants, the processes involved in coteaching nurtured a strong sense of solidarity (Rorty, 1989) amongst the staff. Establishing a set of shared beliefs about this new practice, becoming risk-takers together and the ongoing opportunities for dialogue, during the process of implementing new practice created and nurtured according to the majority of teachers, strong bonds between staff members. Many teachers frequently cited peer and leadership support as positive influences on their ‘prolonged periods of committed activity’ a factor of significant importance according to Ritchie and Rigano (2007) in the establishment of successful interactive collaborations. The fact that the entire school staff voluntarily embraced coteaching music over a three-year period was unique in the context of coteaching scholarship. The relationship between the processes involved in coteaching and the establishment of successful interactions between interdependent coteachers occurred in all of the data sets reported earlier in this chapter and in Chapters Four and Five. Solidarity between the school and the university, musician and teacher, and between the teachers themselves as they became co-inquirers into this new practice was also cultivated not only by the mechanism of coteaching but by its philosophical commitment to sharing expertise.

### 6.5.4 Cultural-Historical Activity Theory (CHAT)

The coteaching music partnership involved an alliance between coteachers, primary teacher and pre-service music teacher; between the primary school and the university; between theory and practice; between ideal and real situations. Cultural–Historical Activity Theory (CHAT) has the capacity to conceptualise the complexities of this situation and of all participants involved in the coalition including teachers, musicians, pupils, school and university tutor. CHAT, while taking
account of the importance of context, cultural and historical, considered the contribution of each element to the whole and the tensions and conflicts that may have arisen within this complex interaction. Figure 6.6 represents the coteaching CHAT model where the subjects of the activity (teachers) interact within the community, employing the rules, tools, and divisions of labour to achieve the object of the activity, a school music programme.

Figure 6.6: The intended outcome of coteaching within the CHAT framework (Adapted from Engestrom, 1987 Second Generation Activity Theory Model)

The original subject was the teacher or the group of teachers. The tools identified to support this were the musician coteachers who possessed the music expertise. The community, which in this case included school Board of Management (BOM), the school principal, the teachers, the musician coteachers, the university co-ordinator acting as principal researcher and the pupils, was governed by a set of clearly articulated rules based on the philosophy of sharing expertise. Labour was divided amongst the main actors (coteachers) acknowledging a commitment to co-responsibility co-respect and coordination. While the original intended object of activity was the provision of a high-quality curricular music programme the result was much more dramatic. The arrangement that actually emerged as a result of the development in teacher agency over three years may be represented more accurately in Figure 6.7.
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Figure 6.7: The outcome of coteaching within the CHAT framework (Adapted from Engestrom, 1987 Second Generation Activity Theory Model)

The subject became the coteachers, teachers and musicians tightly working together. The tools which emerged during the enactment of new practice included the expanded coteaching framework with the coteaching developmental model, while the rules, community and division of labour remained constant. The object of the activity and indeed, as some teachers reported, the activity itself transformed over the three years, with the activity now identified as colearning. The object of the activity became the development in teacher professional agency and the transformation in school culture. CHAT provided excellent opportunities for micro-analysing the contributions of the various single elements that constitute the complex network that is coteaching and for proposing the reasons for the development in cultural transformation identifying coteaching as the agent of change.

The eclectic but inter-related nature of the five social theories which contribute to the socio-cultural theoretical framework provide a prism which refracts subtle perspectives on the contributions of the various interconnecting elements that contribute to understanding coteaching as change agent. Classifying the importance of the contribution of one over the other or indeed seeking a unified theory to explain the unexpected findings from the coteaching partnership may be futile. The theoretical framework instead explained how sociocultural experiences provided opportunities for transformation of existing knowledge and cultural practice through the shared contribution of all participants (Stetsenko, 2008; Murphy et al., 2008).
6.5.5  A Single Model

Seeking a theory which ‘generalizes and essentializes only when it yields a single model and will admit no other’ (John-Steiner et al., 1998, p. 77) suggested that in addition to the various theoretical contributions discussed, the theoretical work of Stetsenko, (2008) which was discussed in Chapter 5 may be worthy of consideration in the context of consolidating the argument in support of coteaching as an agent of change. Drawing on Vygotsky (1978) Stetsenko’s views on learning as development, offers a comprehensive and penetrating interpretation of the findings. The results of the coteaching music study suggest that having committed collectively to coteaching, most teachers in progressing beyond a relational ontology moved towards a transformative activist stance (Murphy & Carlisle, 2008) appropriating the cultural practices and the ontological and epistemological perspectives of coteaching (Gallo-Fox, 2009b) which supported by the collective commitment of the entire staff to coteaching and the three year duration of the study, transformed the culture of the school from an exclusively individualistic solo-teaching tradition to a more collaborative environment propelled by coteaching as the sole significant agent of change.

6.6  Conclusion

This chapter, in synthesizing the findings as reported in Chapters Four and Five proposes that coteaching acted as a possible agent of change and employing the lens of the theoretical framework, sought to establish a case in support of such an assertion. Evidence of expanded teacher agency, a sustained commitment to the maintenance and development of a high-quality music programme and a shift towards collaborative practice contributed to a transformed school culture.

The impact of the coteaching music residency on the school was, according to the school principal, ‘quite dramatic’ (RFN/3). Music which was formerly regarded as a subject of peripheral value, after coteaching, was elevated on a par with mathematics and English (Chapter 5, Section 6).

Cultural change as a consequence of coteaching was reported by a majority of teacher participants (Chapter 5, Section 7). A predominantly solo teaching culture five years later actively embraces collaboration via coteaching and a former propensity towards individual and isolated practice (Kellaghan, 2009) is replaced with a commitment to collaboration via coteaching. A staff, once at best compliant in accommodating change (Chapter 5, Section 4), now embraces the prospect of coteaching music annually and continues to expand the coteaching model to several other subject disciplines including science, mathematics, dance and teacher-parent partnership.
The initial aim of the study was to seek teacher perspectives on coteaching as a mediational means of addressing perceived deficits in teaching primary curricular music. While teachers endorsed the affordances of coteaching in the context of learning how to teach a specialist subject, the findings suggest that coteaching itself, with its philosophy of consciously sharing expertise via collaborative planning, teaching and reflecting while appearing to resolve the initial dilemma, disrupted the traditional solo-teaching culture instigating a more pervasive cultural change. The findings from this coteaching music study therefore consistent with Roth and Tobin (2004) support the claim that coteaching, with its potential for bringing about change in praxis, be recognised as a powerful agent of change.

Chapter Seven considers the implications of this study into the future.
...the achievement of productive collaborations requires sustained time and effort. It requires the shaping of a shared language, the pleasures and risks of honest dialogue, and the search for a common ground (John-Steiner, 2000, p. 204).

7.1 Introduction

The coteaching music study began with a desire to reciprocate the support of experienced in-service teachers (ISTs) for the role they play in accommodating university undergraduate pre-service music education students (PSTs) on school placement. The challenges relating to teaching music have been described by primary teachers for over one hundred years (Chapter 2, Subsection 2.2) and the consequent poor quality of primary music provision in Ireland is well documented. However, despite regular calls for support, the responsibility for the teaching of music continues to reside with the generalist classroom teacher (GoI, 1999). The purpose of this three-year, exploratory, developmental, mixed-methods study was to investigate whether coteaching, an approach which involves 'two or more teachers teaching together, sharing responsibility for meeting the learning needs of students and, at the same time, learning from each other' (Murphy & Beggs, 2005a) might address issues relating to primary teacher perceived confidence deficits in music by offering simultaneous, reciprocal on-site professional development opportunities for both IST and PST. The study, in complying with the rigour of academic research and guided by two main research questions (Chapter 2, Section 5) explored, analysed and documented the perspectives of twenty participating primary teachers on the impact of coteaching music.

The concluding chapter presents an overview of the entire study, compiles a synthesis of the salient findings and summarises the contribution that the study makes to the field. This chapter reveals the potential implications of the findings, makes recommendations for action and offers some suggestions for policy and future research. Finally, the chapter discusses the dissemination of the findings. All conclusions drawn relate to the two research questions. The results of this study may be useful for primary schools interested in introducing collaborative practice via coteaching as a means of developing school improvement outcomes.
7.2 Overview of the Study

The coteaching music partnership between twenty primary teachers and thirty pre-service music education students in their first year of a four-year university degree course, involved a joint commitment to a philosophy of sharing expertise and to the practices of coplanning, coteaching and coreflecting. The coteaching took place on one day a week for twelve weeks over three years. The research site was a small school with on average ten class groups ranging from junior infants (age 4) to sixth class (age 12). Each year every class teacher volunteered to participate in the coteaching study with a total of twenty teachers participating over the three years as follows: six teachers completed all three years, an additional three teachers completed two years and eleven teachers completed just one year. In seeking the richest data possible regarding teachers’ experiences of coteaching, the main research question was constructed broadly as follows: *What do primary teachers report as outcomes from coteaching music?* This was refined and developed however and is presented in an extended form in Chapter Two (Section 5).

Data was sourced from interviews with the twenty participant teachers and the school principal. There are forty-five interviews in total. Each interview lasted approximately twenty minutes. The final set of interviews was conducted by two external assessors. All interviews were recorded and transcribed. The ten externally conducted interviews were anonymously recorded and transcribed. Additional sources of evidence include teacher *before* and *after* music confidence audit questionnaires, researcher field notes compiled over the three years, teacher and music coteacher reflection journals supported by video footage of coteaching episodes that were compiled by coteachers themselves and shared during informal conversations on coteaching progression. These informal conversations were recorded as researcher field notes as was the summary report from a Whole–School Evaluation (WSE) which was conducted by the DES and which focused on the quality of the teaching of English, Irish, mathematics and, coincidently, music. The WSE took place shortly before the completion of the coteaching study.

7.3 Synthesis of the Salient Findings

At an individual level, teachers reported that coteaching was beneficial in addressing their own needs in relation to music teaching and learning. Several teachers commented on their altered beliefs in relation to the value of music as a curricular subject and of the pivotal role of the primary teacher in a teacher–musician partnership (Chapter 4, Subsection 3.2). A majority of teachers also claimed to have an expanded identity as pedagogue, learner and mentor and displayed a new enthusiasm for music and collaborative practice (Chapter 4, Subsection 3.1).
While not all teachers in the study reported the same level of confidence or the same quality of experience, in general ISTs recounted incidences of learning with regard to both music and coteaching. Findings revealed that most teachers reported that they had become fluent in all components of coteaching with enhanced music pedagogical knowledge (Chapter 4, Subsection 2.2) and furthermore, most teachers reported increased confidence, not only in music but in all subjects as indicated by the post-coteaching confidence audits (Figure 4.2).

An unexpected consequence was the impact of coteaching on the collective staff, as teachers reported that participation in the coteaching music initiative resulted in the evolution of a vibrant school learning community and the extension of the coteaching music initiative into four additional partnerships in science, mathematics, dance and teacher-parent coteaching arrangements. This is important and timely since, although the primary school curriculum (GoI, 1999) calls for teachers to work collaboratively, the structures which might support this type of sharing of expertise are not articulated.

The most frequently cited opportunities which coteaching provided as reported by teachers included:

Professional knowledge, as indicated by:

- The provision of a high-quality music programme for the children as evidenced by the positive WSE report (DES, 2016) and teacher enthusiasm for and confidence in teaching music
- The acquisition and dissemination of professional expertise, particularly knowledge of the primary music curriculum, in an authentic teaching location as evidenced by the WSE and in coteaching observation
- The opportunity to put learning into practice immediately (Cortis, 1977 cited in Killeavy, 2001) and to critique this learning via coreflection as evidenced by both informal and formal conversations with teachers and by the teacher reflections on coteaching
- The opportunity to co-construct a bespoke music course which was tailored to the needs of the teacher and the pupils of the class as evidenced by the many references in teacher interviews and in reflection journals
Professional relationships as indicated by:

- Full-staff take-up of coteaching every year and an increased enthusiasm for reporting on coteaching music over the three-years
- Positive reporting on the opportunity to occupy several identities while coteaching including those of teacher and mentor
- Descriptions of mutually enriching professional partnerships
- Increase in teacher agency in music and in collaboration and in teaching in general
- Richer professional interactions – teacher as relationship-builder, reflective practitioner, mentor and researcher

Altered attitudes as indicated by reports of:

- Challenged beliefs about musicians being too artistic and teachers being too practical
- New insights into the value of studying music for its own sake, particularly the aspects of music that are unique such as vocabulary, literacy, instrumental and vocal performance
- Altered attitudes regarding music as relevant only for the talented. ISTs reported seeing music as a powerful means of self-expression and of accessing emotions thus relevant for all children
- Challenges to former assumptions which equated music with entertainment rather than education

Teachers reported very few challenges to coteaching, citing their own agency and organisational support as sufficient in dealing with logistical or interpersonal issues that arose from time to time each year. Challenges cited included:

- Initial lack of clarity in relation to specific role of IST during the earlier months of the first coteaching music experience
- Lack of confidence in their ability to contribute to a music coteaching partnership
- Insufficient time for planning and reflection
- Insufficient training in the skills of collaboration

Teething problems in the earlier days, including absenteeism or tardiness on the part of the music coteacher, were dealt with and structures were put in place to ensure that professional mores were adhered to. Teachers volunteered to provide input on professional standards in teaching and they established a contingency pairing system such that music coteachers could deputise for one another should the need arise. When instrumental music was introduced in the third year, teachers
recommended two music coteachers be paired with each teacher to ensure that the children received as much support as possible.

In relation to the longer-term impact of coteaching, the school sustained the practice over the three years of the study and has continued to do so in the two years since the research was completed. There is an expectation by school management and staff that newly recruited teachers will adopt the commitment to music and to the general coteaching culture. Commitment to coteaching has been maintained through the school management’s support and through opportunities for professional collaborative partnership. School management has ensured that creative timetabling facilitates staff development and that staff are supported and acknowledged for their participation. The school principal regularly liaises with staff and with the university partners on matters relating to planning and prioritises the diffusion of the coteaching ethos. New recruits report a willingness to engage with the practice as a result of positive reviews from the staff.

The nine teachers who participated in two or more years of the coteaching music partnership reported that the duration of the study over multiple years was an important factor in helping them to consolidate the pedagogy of coteaching. In the case of those ISTs involved multiple times the model became familiar and was aligned to meet their needs and those of the school. This resulted in some teachers (2) taking ownership of and responsibility for the practice and helping with its dissemination to new teachers joining the staff annually. One teacher became responsible for curating resources including the video-clips and for ensuring that coteaching was well represented on the school’s website.

The organisational structures that encouraged the sustainability of coteaching over the three years include:

- Support from the school principal and the advocacy of the coteaching music co-ordinator
- Corporate commitment to the principles of the coteaching framework, which included open communication, shared pedagogy and reflective practice
- The coteaching framework which included the philosophical underpinnings of sharing expertise, the structural elements of coplanning, copractice and coreflection together and the development and operationalisation of the Coteaching Development Model (CtDM)
Having analysed teacher perceptions of the impact of coteaching music on teachers’ professional learning, the chapter now presents the implications of these findings.

7.4 Contribution of the Study to the Field

This study extends the coteaching model into the field of music education for the first time. A key finding confirmed that the tripartite coteaching model (Chapter 2, Subsection 3.4), used for the first time in the teacher-musician partnership context, can be successfully applied in the context of a teacher–musician partnership. This is the first time also that coteaching has been considered as a whole-school undertaking, where every member of the teaching staff participated each year over three years. Furthermore, this is the first time that teachers have been the sole subjects of a coteaching study. This is the first time that teachers have operated as co-participants in coteaching music research and calculated its impact on one school over three years. Another first for this research study is the development and operationalisation of a coteaching developmental model (CtDM), (Chapter 5, Section 2) which was co-constructed during the whole–school implementation of coteaching, in response to the need for a shared understanding of this new practice. Consequently, the CtDM offers a mechanism to build capacity across the primary school system for a staff who wishes to become involved in collaborative practice. It is a tool which, by offering a process of mutual adaptation, as opposed to uniform implementation, may take partnership beyond the personal relationship level, raising it to a practice within the classroom and the overall school. Teachers reported that this step-by-step progressive implementation model supported them to confidently engage, to visualise and to understand their progression as learner and as teacher from the early stages to mature coteaching. As with an ascending musical scale pattern, each note or step is considered vital to the overall integrity of the scale. The tempo is the preserve of the individual performer. Factors such as fluency, interpretation, technical accomplishment and mood, together with the musician’s relationship with his accompanist affect the quality of the outcome. Some teachers chose andante, lingering a little longer on each step, others, especially those with experience, proceeded con spirito! There is flexibility in the model to allow for individual and joint interpretation.

7.4.1 Contribution to the Literature

This study has made a contribution to the existing literature in five major areas.

The first contribution is to research on the musician–teacher partnership at primary level in Ireland as there is a dearth of literature relating to models of practice best suited to such partnerships. This
study fills a void in the literature by presenting coteaching as a possible paradigm not only for teacher–musician professional partnership but for coteaching partnerships in general.

The second contribution is to the literature on primary teacher competence and confidence in relation to teaching music. The findings from this study confirm the concerns expressed in several national reports on the poor primary music education provision in Ireland (Heneghan, 2004; Herron, 1985) and on the difficulties faced by the primary teacher in attempting to meet the requirements of the curriculum (Stakelum, 2008; O’Callaghan, 2003; McCarthy, 1999). The findings concur also with many international research studies (de Vries, 2011, 2013, 2015; Hallam et al., 2009; Hennessey, 2000; Mills, 1989). The coteaching music study complements this body of research by providing a deeper insight into the issues effecting primary teacher perception of low self-confidence in teaching music.

The third contribution is to the body of scholarship on coteaching. This study identifies the possibilities for coteaching beyond the experience of the PST (Murphy & Beggs, 2005a; Carlisle, 2008) by positioning the experience of the in-service primary teacher at the centre of the research. It also broadens the context for coteaching into the field of music education, opening opportunities for further research into partnership opportunities in the various specialist subject areas such as science, language, technology, arts disciplines including visual art, drama and dance. The study is also the first to explore the consequences of a whole-school approach to coteaching.

The fourth contribution is to the literature on school leadership in primary education. This study contributes to the existing body of such research, which affirms the pivotal role of the principal in supporting innovative professional development in music teaching.

The fifth contribution is to theory. This study, in operationalising a theoretical construct in the context of a whole–school approach to coteaching, extends the research carried out by Murphy and Carlisle (2008) where relational ontology (Stetsenko, 2008) was situated in the context of coteaching.
7.5 Contribution to Practice
As outlined above, this research presents significant findings which may be of value to schools as part of the school improvement process by providing a coteaching partnership model for on-site professional development including:

- An account of a teacher-musician coteaching partnership
- A model for initiating collaborative practice
- A model for conceptualizing and enacting coteaching development

7.5.1 An Account of a Teacher-Musician Coteaching Partnership
Participant teachers, although initially reluctant to engage with the prospect of coteaching music because of perceived personal deficits in music and music teaching, were motivated to become involved so they could offer a music programme to the pupils in their class.

The collaborative implementation process which was based on the philosophical and operational dimensions of the coteaching model afforded teachers their autonomy, it valued their expertise and it granted them flexibility to adapt aspects of the model to suit their needs. Coplanning, for example, was conducted via virtual platforms such as e-mail and WhatsApp (Chapter 5, Subsection 5.3). Co-reflection was initiated towards the end of the music lesson while the children were engaged in a reflective activity, completed individually after the lesson and compiled by the researcher some days later. This allowed teachers to think about the lesson and to discuss the coteaching together as a staff.

Teacher professional development in music was substantial as evidenced in the post-coteaching interviews, reflections, confidence audits and the WSE report, but there was also considerable evidence that the whole-school commitment to coteaching yielded additional benefits. Teacher assumptions in relation to what constituted music education were challenged by the music coteacher. Music was no longer perceived as horizontal knowledge with children engaging with the same concepts at the same level throughout primary school. With a whole-school approach to coteaching music, each class engaged with the same skill and concept-set, albeit at different levels of complexity, and with open and free access to discussion and coteacher music video clips, teachers experienced the vertical knowledge where the nine music concepts and three strands as outlined in the music curriculum were developed incrementally from kindergarten to sixth class.
All the twenty teachers agreed that the musician–teacher partnership model was the best approach to ensuring that these unique concepts would be explored not through description but through active engagement in the skills of Composing Listening and Performing as recommended in the curriculum (Chapter 4, Subsection 2.2.2). Opportunities for teachers to observe the expertise of their musician coteachers and to reflect on and discuss the experience informally in the staffroom brought the realisation that constructing music lessons from exemplars in textbooks places a burden of responsibility beyond the capability of most the primary teachers. The combined efforts of teacher and musician provided the expertise to address the children’s interests and to maintain the integrity of the subject.

The post-teaching confidence audit recorded increases in teacher confidence not only in music but also in several subject areas and teacher interviews reported an increase in collaborative practice, a change in teacher’s beliefs, values and attitudes in relation to music and a commitment to collective reflection and staff collaboration resulting in a transformation of school culture. The school, in facilitating the coteaching music initiative became, in the process, a dynamic hub, an ecosystem of concerted professional teaching and learning.

Veteran teachers not only engaged more in professional dialogue but mentored novice teachers in coteaching offering advice, sharing lesson plans and video recordings of lessons. Teachers adopted collaborative practices, using the skills and principles of coteaching across additional subject areas to establish partnerships in science, mathematics and physical education.

### 7.5.2 A Model for Initiating Collaborative Practice

One of the most significant outcomes of this exploratory research is the discovery that coteaching offers primary teachers a solution to their perceived difficulties regarding the teaching of music. This partnership model addresses the gap in the current literature on collaboration as recommended in the Primary Curriculum (1999) providing a model for teacher–artist partnership. While the fundamental principle of coteaching involves two or more teachers teaching together, sharing responsibility for meeting the learning needs of the children, (Murphy & Beggs, 2005a; Murphy, 2016), the enactment of coteaching is context-specific and develops in response to the circumstances in which it is implemented (Carlisle, 2008). Commitment to sharing expertise via planning, teaching and reflecting empowered teachers in the study in two ways. Having a specific role in the coteaching lesson as pedagogy expert created an essential function for the teacher, infusing the partnership with energy, a sense of dynamic involvement which gave teachers a focus and impetus to contribute to the collaboration as a teacher. On the other hand, as learner, the
teacher could observe, rehearse and appropriate the expertise of the musician. Having the sense of being different-but-equal created a space for both coteachers to participate, cooperate and build relationships while planning, teaching and reflecting. Teachers suggested that coteaching provides a solid framework, based on synergy, sharing expertise and mutual respect, for supporting teacher-artist collaboration. The coteaching architecture comprises the three interdependent elements of coplanning, copractice and coevaluation and an incremental progression route to support coteachers to proceed from the earliest experience as ‘participant’ in the process towards mature coteaching in which partners share contribution to practice improving learning for themselves as well as for their students.

7.5.3 The Coteaching Development Model
During the coteaching study most teachers appropriated and operationalised a theoretical construct (Vygotsky, 1978; Stetsenko, 2008) which was introduced during the first coteaching induction workshop. They reported finding it useful as a mediational means of describing and discussing how a collaborative practice such as coteaching might be implemented and developed in a predominantly solo-teaching culture. The incremental trajectory from solo to collaborative teaching appealed to them as did the idea that collaboration is dynamic and allows for progression. Proposing that a continuum ranging from a relational ontology to a transformative activist stance be situated in a coteaching framework, Murphy and Carlisle’s scholarship (2008) presented teachers with the prospect of operationalising the original construct and in so doing examining the many dimensions of their lived collaborative experience, including the challenges and opportunities they encountered. Through regular coreflection on the experience of coteaching, combined with the original theoretical construct (Vygotsky, 1978) as re-articulated by Stetsenko (2008) and Murphy and Carlisle (2008), teachers were presented with an opportunity to conceptualise collaboration as development. The operationalisation of this theoretical tool in the context of teacher professional development is a worthwhile contribution to current coteaching research.

The model enabled teachers to classify levels of involvement in coteaching according to the characteristics which they themselves had applied to each of the six developmental steps (Chapter Five). Teachers also reported how these designations were influenced by inter-personal factors such as harmony and commitment between coteachers (Chapter Six). Using this CtDM framework, experiences of coteaching were discussed frequently. Teachers referred to their development in terms of three broad stages of engagement. These were categorised as:
• *Participators* acquiring a finite body of knowledge but lacking ability to develop further
• *Co-operators* demonstrating confidence in teaching music, developing lesson materials and the ability to make connections between theory and practice and
• *Contributors* where partners, by combining ideas, created original lessons, materials and resources

7.6 **Recommendations for Action**

To support the development of coteaching as a paradigm for a primary school professional partnership, the following recommendations are offered:

• A pilot teacher-musician coteaching partnership be undertaken at national level in respect of the very legitimate concerns that primary teachers in this study expressed in relation to their capacity for teaching music
• A commitment by the DES and School Boards of Management to establish long-term teacher-artist partnerships, such that collaborative practice becomes embedded in school cultures and children benefit from the expertise of both the generalist and the specialist
• The role of the school principal in embedding on-site professional development structures such as coteaching music be acknowledged and supported by the Teacher Education Section within the DES
• Coteaching Induction Workshops to run concurrently with each coteaching initiative with mandatory training in the skills of collaboration such as relationship-building, communication and evaluation for all coteachers
• Funding be made available from sources such as the DES, the Teaching Council and Arts Council for supporting teacher–artist partnerships based on the coteaching paradigm
• A commitment at DES level to promoting the integration of expertise, particularly artistic expertise at primary school level in Ireland, by supporting alternative forms of professional learning situated locally and managed at the discretion of the school staff
• Coteaching partnerships between schools and local organisations (e.g. Comhaltas Ceoltoiri Eirinn) and national agencies (e.g. Music Generation) be fostered, developed and acknowledged
7.7 Suggestions for Future Application and Research

7.7.1 The Coteaching Developmental Model

The findings indicate that the theoretical developmental model, as a mediational means for reflecting and projecting on the continuum of development from participation to transformation, made a significant contribution to coteaching. However, as this is a small-scale study based on one school’s experience, it is recommended that a larger national study, extending over a range of primary schools, is needed to explore the application of this developmental framework.

It is also suggested that research needs to be undertaken on how teachers might be supported to progress beyond the initial three steps of participation, active participation and collaboration to the more advanced stages of active collaboration through to conscious shared contribution.

7.7.2 Coteaching

Of particular value and relevance is the voice of the musician, their values and attitudes and how they make sense of their role coteaching with an IST. A comparative study examining the experiences of experts, artists, linguists or scientists would be beneficial to compare the various experiences of experts across the subject disciplines.

Video–data from this study could be analysed to further explore the unique pedagogy of coteaching.

In light of the need for ongoing review and embedding of practice, further research is needed to explore the development of a coteaching evaluation framework to inform practice.

The extent to which coteaching may provide in-service teachers with a framework for mentoring novice teachers is also worthy of research.

7.7.3 Teacher Professional Development / School Improvement

The issue of life-long learning is central to professional development. The findings indicate that a commitment to the concept of sharing expertise empowers all learners and teachers, facilitates equity of participation and cultivates rich and diverse professional dialogue. It is therefore recommended that further research is needed to explore the impact of coteaching as a mechanism for professional development in a wide variety of professional placement contexts.
In this study, some teacher-participants preferred coteaching with two music coteachers (particularly in the case of practical music-making activities) while others favoured developing a strong relationship with one coteacher. Further research on how teachers might optimally coteach with one or more musician coteachers is worth exploring, particularly in the context of developing choral singing groups, bands and orchestras.

The extent to which coteaching may provide in-service teachers with a framework for mentoring novice teachers is worth researching.

A similar study with post-primary schools in Ireland is also recommended to further explore the potential for reciprocal learning in a school–HEI partnership.

Additional research is necessary to better understand the impact of whole-school collaborative practice on school culture. Research into the ways in which primary principals are using their autonomy in this regard is needed to shed light on whether the development of policies which support such practices offer promise for overall school improvement.

While this study focussed on the teacher experience within the music coteaching framework, it is recommended that supplementary research could explore the coteaching experience from the perspective of the child in the music classroom.

7.8. Dissemination of Findings

The most immediate step will be the dissemination of this research, as promised, in the form of a concise summary of the main findings, to the twenty participant teachers and the school principal who took part in this study. An executive summary will also be provided to the Board of Management of the school and to the Dean of the Faculty of Arts and Social Sciences who sponsored the research. A summary of the research will also be provided to the Teaching Council in Ireland.

The findings have particular professional significance to national agencies such as HEIs and providers of teacher education and the Department of Education and Skills: both the Teacher Education Section and the Professional Development Services for Teachers. The findings are also useful for primary school principals and Boards of Management who may wish to extend the opportunities for collaborative practice in their schools and indeed to potential partner agencies such as Music Generation and Comhaltas Ceoltoiri Eirinn. Opportunities to disseminate the findings
more widely by presenting seminars and writing papers for professional journals will also be a priority. Conference papers based on this research were delivered over the past four years (AERA, 2018; BERA, 2014; ECER, 2016; SMEI, 2015, 2016, 2019), two journal articles were prepared (Kerin & Murphy, 2015; LaFlamme, Murphy & Kerin (in press) and a book chapter (Kerin & Murphy, 2018) has been published. There is much researcher and practitioner interest in the data and in the findings regarding the CtDM in particular.

7.9 To Conclude
The purpose of the study has been achieved. The coteaching music study set out to explore the coteaching model in the context of primary music education by compiling, analysing and documenting teacher perspectives on the impact of coteaching music to contribute to the knowledge base in both music education and in coteaching and with a view to establishing a meaningful school–HEI partnership. This study presents the lived experience, over three years, of the teachers from one school as they implemented a coteaching partnership in a culture primarily of solo endeavour. While there was a turnover of staff annually over the three years, coteaching practices, once established were diffused easily amongst new staff. The school principal remained entirely supportive of coteaching music. Her influence on the successful outcome cannot be underestimated; it was perhaps the single most important variable and is therefore deserving of the final salute.
With hindsight, life takes on a certain symmetry. I started as a primary teacher, continued as a post-primary teacher of music, became a college lecturer in music education and returned to primary school as a doctoral researcher to re-examine the ubiquitous issues concerning primary music, issues I had encountered first-hand, half a lifetime ago. These relate to primary teacher perceptions of deficits in the specialist knowledge and skills in music. The opportunity to research a possible solution arose on the appointment of a new colleague who had extensive experience with coteaching science. The issues associated with primary science are similar to those of primary music - the generalist primary teacher perception is that teaching a specialist subject requires specialist knowledge and skills without which success is not possible (Chapter 2, Subsection 3.1). This results in a tendency towards teachers paying lip-service to these specialist subjects at best and the avoidance of these subjects at worst.

As co-ordinator of the Bachelor in Music Education degree course I am aware that students at third level tend to have studied music generally, and almost exclusively, through self-funded private tuition. It is common for students to remark that the primary or post-primary school which they attended had not offered music education. The accusation of elitism has been levelled more than once at the Bachelor in Music Education course, so it was time to take notice and to consider how the resources of the university could be leveraged to improve the standard of music provision in an economically and socially challenged community adjacent to the university. Inspired by the positive findings in primary science education published by my colleague (Murphy & Scantlebury, 2010), I committed to exploring how coteaching might also improve primary music education.

I have long been involved in music education, as learner, teacher, teacher educator, policy-maker and author. For me, the most significant attraction of coteaching was the opportunity to explore a solution to a problem whereby, in terms of music education, students in Ireland are the least well provided for in Europe (Herron, 1985). Professional development courses for teachers abound but are mainly held outside school during the summer holidays and are concerned with up-skilling teachers to enable them to change their practices to influence better pupil outcomes. Coteaching offered a different model – a partnership between teacher and musician which was site-specific, bespoke and in real time.

While music has been a subject on the primary curriculum in Ireland since the 19th century problems with implementation have been noted since its inception. Prior to 1980, applicants to primary
teacher education were required to pass a musicianship test. This is no longer part of the selection process. Pre-service teachers receive music pedagogy classes during their training, and many have had experience in music-making formal and/or informal during their own schooling, but the surveys reveal the same results; primary teachers in general claim that they lack the confidence and competence to teach music.

Because of my research with the teaching community, I have gained a deeper insight into the complexity of the problem and of the obligation on the part of the university to address this predicament. My professional identity as teacher has afforded me an invitation into the teaching community and my commitment to ethical research practice has ensured I received every support I needed. In accommodating and valuing multi-perspectives during my research, I have come to appreciate greatly, the worldview of the other.

The relentless reading during the six years of the study has impacted my teaching which has progressed from what Bernstein (2000) views as a craft–based model, one which draws on experience more frequently than on theory, to one informed by contemporary research. Research is a practice now firmly embedded in the Bachelor in Music Education course and to an extent in the culture of the primary school in which this study was undertaken. Focus-group meetings and workshops are situated on strong research foundations which in-service and pre-service teachers have grown to appreciate. It is a privilege to have been welcomed into the community of coteaching scholars and to continue to learn from their research. My own pilgrimage as a researcher, from participation to conscious shared contribution, taken with the support of my supervisor has been transformational. I am now, to quote T.S. Eliot (1927) ‘no longer at ease here in the old dispensation’. For such an epiphany, I look back with gratitude.


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Department of Education (1968). Proposed New curriculum for Primary Schools: Views submitted by the Educational Bodies who were represented at the meeting on the 11th October 1968 to discuss the draft working document. Unpublished.


Engeström, Y., Engeström, R., & Suntio, A. (2002). From paralyzing myths to expansive action: Building computer-supported knowledge work into the curriculum from below. In


Flynn, P; Johnston, T (2016) *Possible Selves in Music; Summary of a research partnership between Music Generation and St Patrick’s College Drumcondra*. Music Generation


Hall, K., Murphy, R., Rutherford, V., & Áingléis, B. N. (2018). School placement in initial teacher education.


Irish Times, Louise Holden (8th October 2013) *The budget puzzle: How many cuts to education, and how big?*


Lecompte, M., Preissle, J., & Tesch, R. (1993). Ethnography and qualitative design in educational research (2nd ed.). Academy Press Ltd.


Murphy, C., & Smith, G. (2012). The impact of a curriculum course on pre-service primary teachers' science content knowledge and attitudes towards teaching science. *Irish Educational Studies, 31*(1), 77-95.


Russell-Bowie, D. (2002). Where in the world are we? How the perceptions of Australian primary teacher education students differ from those from four other countries in relation to their background and confidence in music education. *Australian Journal of Music Education, (1)*, 33-44.


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Teaching Council (2007). *Codes of Professional conduct for Teachers*. Maynooth: Teaching Council of Ireland.


Teaching Council (2011 (c)). *The continuum of teacher education*. Maynooth: Teaching Council of Ireland.

Teaching Council (2011(a)). *Guidelines on School Placement*. Maynooth: Teaching Council of Ireland.

Teaching Council (2011 (b)). Initial teacher education: Criteria and guidelines for programme providers. *Maynooth: Teaching Council*.


APPENDIX 1 - SAMPLE INTERVIEW QUESTIONS FOR TEACHERS

In examining coteaching within initial music teacher education, the following research question was posed and explored:

*What do primary teachers report as outcomes from coteaching music?*

1) How was the CT music partnership implemented in your class this year?
2) How did it work for you?
3) Was it worth it?
4) Would you do it again?
5) What were the best bits?
6) What could be better?
7) If you were doing it again what would you do differently?
8) How could we improve it?

**Tell me about your own experience of the coteaching project.**

a) What were the best parts?
b) What could have been better?
c) What was it like coteaching with a student -teacher?
d) How was this different to your former experiences with having student teachers in your classroom?
e) Mention anything that you learned about yourself as a teacher during the coteaching project?
f) How did your experience of coteaching with a music specialist student teacher effect;
   (i) your own understanding of music as a curricular subject
   (ii) your skills in music
   (iii) your attitude to music
   (iv) your confidence in teaching music
   (v) your commitment to prioritizing music?
g) (i) How did coteaching with a music expert impact on your awareness and understanding of the PCK (Pedagogical Content Knowledge) pertaining to music? (ii)Had you experienced this in College or CPD courses? (iii)How would you rate the coteaching professional learning opportunities compared to your previous experience of CPD courses? (iv) Could there have been more opportunities offered for teacher professional development? Comment on any changes in your attitude to music or in skills you may have developed.

**In terms of the 3 elements of coteaching, coplanning, coteaching and coreflecting what worked and what didn’t?**

a) What (additional) support is needed in advance of coteaching implementation?
b) What (additional) support is needed during the coteaching project?
c) How has coteaching impacted on your own classroom practice?
d) What in your opinion is the most effective way to coteach music?
e) How important is the working relationship between the student teacher and the class teacher?
f) What were the highlights of the project from the point of view of your own professional learning?

*Recordings were made of all interviews and text was later transcribed as advised by Silverman, (2001).*
The Coteaching Music Study

In this work we hope to explore teacher perspectives on the experience of coteaching music.

Dear

Thank you for agreeing to participate in this coteaching music study and to share your experience of coteaching via your lesson-planning and your reflection journals during the academic year 2013/14.

As you know, the project will involve you and your coteacher coplanning, coteaching and coreflecting on one shared lesson per week in music teaching over three to four weeks starting on November 26th 2013, and over eight weeks starting January 19th 2014.

My plan is to gather information from your reflection notes over this time. I would also welcome the opportunity to view the class from time to time. I intend to regularly liaise with and informally interview the school principal. I will also gather data from teacher reflection journals, informal conversations with teachers, observation of coteaching and I will interview each teacher at the end of the coteaching music residency.

Confidentially and anonymity will be preserved at all times during the project and after the research is completed. The school or individual teachers will not be identified in any reporting of this research. My research findings will be shared with you and will form a basis for understanding how coteaching between teacher and pre-service music teacher can play a role in future education developments in Ireland.

If you are happy to consent to this research, please sign below.

I should emphasise that partners can withdraw from the study at any time without having to give a reason. I value any suggestions you might have and look forward to working with you.

Very best wishes,

Marita Kerin

Participant Signature: _______________________________ Date: ______________

Research Supervisor: Professor Colette Murphy, Director of Research, Trinity College Dublin
Consent Form: PARENTS and GUARDIANS

The Coteaching Music Study

In this work we hope to explore teacher perspectives on the experience of coteaching music.

Dear Parent/Guardian

I am a researcher in the area of music education at Trinity College Dublin. I am in the process of carrying out research on teaching which is about having a student music teacher and the class teacher working together teaching music to your child/ren. Through this work I hope to address issues around music teaching and learning in the primary school and around building a partnership between your school and Trinity College. This work will conclude with a concert next December which will take place at Trinity College.

My work involves observing your child’s teacher and the music student teacher from time to time, teaching music together as co-teachers. On Monday next March 31st during the music lesson the coteachers plan to video their lesson. Every child will be given this note for their parent or guardian. If you would prefer that your child is not in the room during the taping, please sign below and we will make sure that your child remains with another teacher during the music lesson.

All this information will be treated in the strictest confidence in accordance with ethical guidelines for working with children. Your child will also remain anonymous throughout and no individual school or child will be mentioned in reports, papers or at conferences.

I would greatly appreciate it if you would give your permission for your child to be involved in the videotaped music lesson. However, if you wish your child to remain with another teacher during the taping, please indicate this by filling out the slip below. These slips can be returned to your child’s teacher before ___Monday March 31st___

Yours faithfully

Marita Kerin

Assistant Professor in Music Education,

School of Education, Trinity College Dublin

I give permission for my child to take part in the video-taped music lesson on Monday March 31st 2014

I do not give permission for my child to take part in the video-taped music lesson on Monday March 31st 2014

Signed: ________________________ (parent/guardian)      Date ____/____/____
The Coteaching Music Study

In this work we hope to explore teacher perspectives on the experience of coteaching music.

Dear

Thank you for agreeing to participate in this project. The purpose of the study is to research your experiences of coteaching music during the coming academic year.

As you know the project will involve you coplanning coteaching and coevaluating one shared lesson in music teaching over three weeks starting on November 26th, 2013 and over eight weeks starting January 19th 2014.

My plan is to gather responses and information from chatting with you from time to time, from your reflective journals, from the teacher confidence audit questionnaire and through short interviews with you at the end of the coteaching residency. An opportunity to view the class from time to time would also be welcome. To ensure the coteaching residency is running smoothly I intend to liaise with and interview the principal informally from time to time also.

Confidentiality and anonymity will be preserved at all times during and after the research is completed. The school or individual teachers will not be identified in any writing done on the subject of this research. My research findings will be shared with you and will form the basis in understanding how coteaching between teacher and pre-service teacher can play a role in future education developments in Ireland. If you are happy to consent to this research, please sign below.

I should emphasise that partners can withdraw from the study at any time without having to give a reason. I value any suggestions you might have and look forward to working with you.

Very best,

Marita Kerin

Participant Signature: ____________________________

Date: ____________________________

Researcher: Marita Kerin kerinm@tcd.ie

Research Supervisor: Professor Colette Murphy, Director of Research, School of Education, Trinity College Dublin
This brief questionnaire is designed to get a sense of your confidence around the requirements of the music syllabus before and after co-teaching and to identify areas in need of further support or professional development.

1: DEMOGRAPHIC INFORMATION

Q1(a) Background Information

How many years have you been teaching in the primary school? Please tick:

- [ ] 0-5 years
- [ ] 6-10 years
- [ ] 11-20 years
- [ ] 21 years and over

Q1(b) What was your specialist subject in College?

________________________________________________________________________________

Q1(c) Have you ever taken lessons on a musical instrument? If so, name the instrument and indicate your level of achievement e.g. a grade examination.

________________________________________________________________________________

2: RELATIVE CONFIDENCE

Q2 Primary teachers can be more confident in teaching certain curricular areas (Lloyd, 2000). Please indicate your confidence level regarding the following 12 primary school subjects:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Fully confident (4)</th>
<th>Confident with guidance (3)</th>
<th>Can manage but depend on advice from others (2)</th>
<th>Need help to develop my knowledge and skills (1)</th>
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<td>Mathematics</td>
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<td>P.E.</td>
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<td>Religion</td>
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</table>
3: CONFIDENCE in UNDERSTANDING PRIMARY CURRICULAR MUSIC

Q3 How confident are you that you have the knowledge, skills and understanding with regard to the requirements of the music curriculum? (GoI, 1999):

<table>
<thead>
<tr>
<th>(a) Elements of the music curriculum</th>
<th>Fully confident (4)</th>
<th>Confident with guidance (3)</th>
<th>Can manage but depend on advice from others (2)</th>
<th>Need help to develop my knowledge and skills (1)</th>
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<tbody>
<tr>
<td>A sense of pulse</td>
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<td>A sense of duration</td>
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<td>A sense of pitch</td>
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<td>A sense of dynamics</td>
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<td>A sense of tempo</td>
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<td>A sense of structure</td>
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<td>A sense of style</td>
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<td>A sense of timbre</td>
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<td>A sense of texture</td>
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<table>
<thead>
<tr>
<th>(b) Planning</th>
<th>Fully confident (4)</th>
<th>Confident with guidance (3)</th>
<th>Can manage but depend on advice from others (2)</th>
<th>Need help to develop my knowledge and skills (1)</th>
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<tbody>
<tr>
<td>Set appropriate learning outcomes in music</td>
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<tr>
<td>Plan music lessons / music activities</td>
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<tr>
<td>Use critical reflection for future planning</td>
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<tr>
<td>Guide other teachers to support music learning</td>
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</table>
### (c) Strands:

<table>
<thead>
<tr>
<th>• Listening and Responding</th>
<th>• Performing</th>
<th>• Composing</th>
<th>Fully confident</th>
<th>Confident with guidance</th>
<th>Can manage but depend on advice from others</th>
<th>Need help to develop my knowledge and skills</th>
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<tbody>
<tr>
<td>Use music vocabulary to describe a music performance</td>
<td>(4)</td>
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<tr>
<td>Identify structural elements within familiar songs</td>
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<tr>
<td>Differentiate songs in major/minor keys</td>
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<td>Identify various genres of music and refer to the style characteristics of the genre</td>
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<tr>
<td>Relate mood of song to elements of performance</td>
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<tr>
<td>Sing a variety of songs with vocal control</td>
<td></td>
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<td>Perform tunes from memory or notation</td>
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<tr>
<td>Sing rounds and canons based on the pentatonic scale</td>
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<tr>
<td>Sing tunes or play from staff notation or backing chords</td>
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<tr>
<td>Sing in parts</td>
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<tr>
<td>Play percussion instruments</td>
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<tr>
<td>Perform rhythmic patterns</td>
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<tr>
<td>Accompany on an instrument e.g. the ukulele</td>
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<tr>
<td>Invent short musical pieces</td>
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<tr>
<td>Invent and use graphic symbols to record reaction to music or to record compositions</td>
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<tr>
<td>Use standard symbols to notate simple rhythm and pitch</td>
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<tr>
<td>Use simplified notation</td>
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<td>Compose simple ostinato</td>
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</table>

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4: CONFIDENCE in POSSESSING PROFESSIONAL KNOWLEDGE and SKILLS to TEACH AND DEVELOP PRIMARY CURRICULAR MUSIC

Q4 Teaching Music involves professional knowledge and skills, some of which you may find more difficult than others. Please indicate how confident you are in terms of the following criteria:

<table>
<thead>
<tr>
<th>Possessing the knowledge and skills to teach music</th>
<th>Fully confident (4)</th>
<th>Confident with guidance (3)</th>
<th>Can manage but depend on advice from others (2)</th>
<th>Need help to develop my knowledge and skills (1)</th>
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<tbody>
<tr>
<td>Decide which concepts to be developed in music</td>
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<tr>
<td>Decide which skills to be developed in music</td>
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<tr>
<td>Ensure pupils’ sustained interest in concept development</td>
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<tr>
<td>Introduce concepts / content sequentially</td>
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<tr>
<td>Develop music topics progressively</td>
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<tr>
<td>Respond to pupil questions about music</td>
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<tr>
<td>Explain music concepts to children</td>
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<tr>
<td>Organise practical music activities</td>
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<tr>
<td>Question pupils about music</td>
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<tr>
<td>Assess pupils’ grasp of music concepts</td>
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<tr>
<td>Assess pupils’ music skills i.e. composing, singing</td>
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<td>Monitor learner progress</td>
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<tr>
<td>Reflect upon and evaluate the work of children</td>
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</table>
5: CONFIDENCE in SUPPORTING PUPIL ENGAGEMENT with MUSIC

Q5 Please rate how confident you feel in helping pupils to:

<table>
<thead>
<tr>
<th>Engage with music</th>
<th>Fully confident (4)</th>
<th>Confident with a little guidance (3)</th>
<th>Can manage but depend on advice from others (2)</th>
<th>Need help to develop my knowledge and skills (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sing in tune</td>
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<tr>
<td>Identify music concepts</td>
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<tr>
<td>Perform on musical instruments</td>
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<tr>
<td>Sing in parts</td>
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<tr>
<td>Invent / compose their own music</td>
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<tr>
<td>Accompany their own songs (rhythm instruments or guitar)</td>
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Q6 Please indicate what help, if any you would need in relation to your teaching of music and what form this might take.

________________________________________________________________________________
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Your help in completing this questionnaire is much appreciated

YOUR NAME (OPTIONAL)___________________________________________________________
APPENDIX 4 - SAMPLE LESSON PLAN

Music Lesson: ‘Travelling the World in search of musical concepts’

Coteachers:

Date: Monday 23rd March

Time: 1:00-1:30

Class: 1st Class

Topic: Performing

Focus: Elements of music composition: Structure (Form) and Style

Aims:

• To familiarise the children to music performance through song-singing
• To extend the children’s innate ability to perform through maximizing their enjoyment of and engagement with the essential basic elements of music performance
• To develop and cultivate the children’s awareness of the essential elements of music performance, single voice, pronunciation, pitch, beat & rhythm, tempo/speed, discipline and communication
• To acknowledge the unique contribution of each child to the overall performance.
• To develop an appreciation of music from different countries around the world.

Objectives/ learning outcomes:

At the end of this lesson I want the pupils to be able to...

• Sing a warm up song using only these three pitches; ‘Tony Chestnut’ led by Mr. Reidy/ lead a warm up exercise (Buzzy Bee)
• Understand the meaning of the word ‘form’ (structure).
• Recognise and experience form/ structure in a song which they have already learned, ‘Hey Mr. Miller’.
• Comment on the structure of a song by creating and looking at graphic scores
• Demonstrate through bodily movement (using the Dalcroze’s Eurhythmics approach) differences and similarities in music; and hence understand form.
• Recall the concepts of music which we covered and possess a clear understanding of all 9 concepts, styles of each, which country it came from and some performance techniques.
• Recognise Mr. Reidy as their new music teacher

Resources:

• Interactive worksheet for children
• Keyboard
• bells
• card board flash cards
• parachute
• coloured ribbons

Blue: Music Coteacher  Red: Teacher  Green: Both

Intro: (5 mins)
• Begin immediately by playing three bells of different pitches; ‘mi’. ‘soh’ and ‘lah’. See if the class recognizes them pitches.
• Prompt the students to stand up and find a free space on the floor
• Invite students to lead the warm-up exercise ‘Buzzy the Bee’.
• The class will sing the warm-up song, Tony Chestnut, using only these three pitches; mi, soh, lah. (Mr Reidy: actions, Seimi: plays)

Development: (20 mins)
• Teachers asks the class what they learned last week as a form of quick revision.
• Teacher invites the class to stand up and plays ‘Hey Mr. Miller’ (a song that we learned in week 1). The class sing while carrying out the actions. Co-teacher will ask the class to sing the piece again but change the dynamics; ‘what is dynamics again?’
• Teacher will ask the class what actions they did first (click).

• Teacher will ask the class what actions they did first (click), second (stamp) and third (play trombone). He will ask class ‘how many parts is that?
• Coteacher will ask the class to remind him what action came 1st/2nd/3rd while teacher draws a graphic score on the board of each subject (ABC). The class will clearly see and understand that the song is in three sections (beginning, middle and end)
• Coteacher invites the class to pick up a ribbon from their desks and find a space in the floor. They have to pretend that they are trees and the ribbon is their leaves blowing in the wind. Teacher plays tune called ‘Summer storm’. The class are invited to respond accordingly in action (Dalcroze Pedagogy) Coteacher will guide the class by suggesting; ‘oh so this first section is slow - what a lovely day’ etc. When the music changes dramatically the children will hopefully change their movement and the coteacher will suggest that it has become windy. Finally the calm day comes back; the children respond the same as in ‘A’ and understand that it is the same as the first piece they heard.
• Teacher will ask what happened in that song? Start/middle/end or same-different-same or slow/fast/slow. He will use 2 circle cut-outs (A and C) and one square (B) to explain this and use the letters A-B-A. Teacher introduces the word form and explains.
• The class will now stand up and hold a parachute. They will sing the familiar song ‘Jack in the Box’ in Binary form (Verse-Chorus). They will stand with parachute stretched for verse and for chorus they will bring parachute into middle. We will then discuss from

Conclusion (5 mins)
• The class will quickly brainstorm all the musical concepts and countries that they visited in a fun musical sing-through. The coteacher will ask the class what style each piece is (further revision)
• The class will be given a worksheet to complete for next week which is a form of visual assessment.
• The teacher will present the class with a little certificate to mark the end of their module, ‘Travelling the world in search of musical concepts’. The class will finish like it started by singing in the pitches ‘mi, soh, lah’ - ‘thank you everyone’.
Explanatory Booklet Prepared for the Participants in the Study

What is coteaching?
Coteaching is most commonly referred to as an approach to teaching, involving very close cooperation between two or more professionals to promote learning.

What is team-teaching?
Team teaching involves a team of teachers working together to formally support the children’s learning.

What’s the difference between coteaching and team-teaching?
Coteaching differs from team-teaching because control of the approach to coteaching is the emphasis on sharing expertise so that each coteacher improves their own practice. Coteaching brings two or more teachers together to increase what they can offer to the children while providing opportunities for the teachers to learn more about their own teaching. Coteachers plan, teach, and evaluate lessons together and share responsibility for the lesson. (Murphy et al. 2004, Murphy and Beggs, 2005

So what are the unique characteristics of coteaching?
- Coteachers plan, teach, and evaluate all shared lessons.
- Coteachers are not necessarily peers.
- Coteachers learn about teaching from each other; each brings their own expertise to the lesson.
- Student teacher and teacher work as equals.
- Student teacher and teacher learn from each other to improve their own practice.
- Student teacher and teacher develop a shared understanding of the situation they are in together.
- The student teacher is a “more expert” – the classroom teacher may or may not be a “more expert”
- The student teacher learns more about teaching; the classroom teacher learns more about music teaching.
- Student Teachers are not be assessed on coteaching.

How does coteaching actually work in the classroom?
1) Coteaching occurs in whole class settings where at different times during the lesson one of the coteachers might feed the other providing support, both are on stage together, or at a different mode.
2) Coteaching is a key aspect of coteaching: Coteaching provides opportunities for joint responsibility for the lesson and also facilitates coteachers in clarifying their individual roles in relation to the particular lesson. It provides opportunities to plan ideal lessons for the children.
3) Another very important aspect of coteaching is coterative dialogue or the conversations that emerge among teachers about all aspects of the learning which opportunities for change are suggested and subsequent lessons are designed.

What are the different coteaching models? Some are...
- Student teachers and class teachers working together
- Class teachers working together
- Student teachers working together
- Student teachers and class teachers and university tutor working together

So, what is coterative dialogue exactly?
Coterative dialogue refers to the structured discussion sessions between all participants involved in teaching the lesson. The purpose of this dialogue is to generate discussion around the lesson as well as expanding the agency of each participant which in turn will promote a collective responsibility for all aspects of the taught lesson. The following rules are associated with coterative dialogue:
- Talk should be shared among participants.
- Participants should be active listeners.
- A mutual focus must be established from the beginning.
- Banknotes do not apply.

Above all, coterative dialogue helps teachers to develop new, innovative pedagogical practices, as they move from novice to expert in the master.
The information on coteaching contained in this booklet is informed by research carried out by Professor Colette Murphy TCD, Dr. Jennifer Gallo-Fox, University of Delaware and from the experiences of the students of the Bachelor in Music Education at Trinity College Dublin together with their coteachers at . I am grateful to all for their input.

Marita Kerin,

Music Education Course Coordinator, T.C.D.

Typesetting and Production: 

Senior Freshman, B.Mus.Ed (TCD)
What is coteaching?

Coteaching is an approach to teaching where two or more professionals work closely together in planning, teaching and evaluating shared lessons. Each brings something unique and valuable to the process, to meet the needs of all pupils in the class. Additionally, coteaching offers opportunities for student-teacher learning and for teacher professional development.
What is the difference between coteaching and team-teaching?

Coteaching differs from team-teaching because central to the approach to coteaching is the emphasis on sharing expertise so that each partner or coteacher has the opportunity to improve his/her own practice. While sharing expertise, classroom space and teaching resources, coteachers must also share attitudes of co-respect and co-responsibility in planning, teaching and reflecting together.

Coteaching therefore, brings two or more teachers (and/or student-teachers) together to increase what they can offer to the pupils while providing opportunities for each coteacher to learn more about their own teaching. Coteachers plan, teach and evaluate lessons together and share responsibility for the lesson (Murphy et al., 2004, Murphy and Beggs, 2005).

What can coteaching offer?

Coteaching is about maximising opportunities for learning.

It provides on-site teaching and learning opportunities for student-teachers as well as providing continuing professional development (CPD) opportunities for teachers while addressing the needs of all pupils.
So, what are the unique characteristics of coteaching?

- Coteachers **plan, teach** and **evaluate** all shared lessons
- Coteachers are **not always peers**
- Coteachers learn about teaching **from each other**; each brings their own expertise to the lesson
- Student-teacher(s) and teacher(s) work as **equals**
- Partners learn from each other to improve their own practice
- Partners develop a **shared understanding** of the situation they are in together
- The student-teacher at primary school level is positioned as "**music expert**" - the classroom teacher may or may not be a "music expert" and is positioned as "**pedagogy expert**"
- The student-teacher at post-primary level brings a specific music expertise (traditional player, conductor, vocal coach, new curricular knowledge etc) as the classroom teacher brings music and pedagogic expertise and experience and knowledge of the pupils
- The student-teacher learns more about teaching and school culture specifically in relation to the place of music in the curriculum; the classroom teacher learns more about specific music skills e.g. music technology, idiosyncratic instrumental/vocal expertise
- Student-teachers are not assessed on coteaching
What are the different coteaching models?

- Student-teacher and teacher working together
- Teachers working together
- Student-teachers working together
- Student-teacher, teacher and university tutor working together
How does coteaching work in the classroom?

1) Coteaching occurs in whole class settings at different times during the lesson; one of the coteachers might lead with the other providing support or observing.

2) Co-planning is an essential aspect of coteaching. Co-planning provides opportunities for joint responsibility for the lesson and also facilitates coteachers in clarifying their individual roles in relation to the particular lesson. It provides opportunities to plan ‘ideal’ lessons for the children.

3) Another very important element of coteaching is cogeneative dialogue or the structured conversations that take place between teachers about all aspects of the lesson during which opportunities for change are suggested and subsequent lessons are designed.
So what is cogenerative dialogue exactly?

Cogenerative dialogue refers to the structured discussion sessions between all participants involved in teaching the lesson. The purpose of this dialogue is to generate discussion around the lesson and to expand the agency of each partner which in turn will promote a collective responsibility for all aspects of the cotaught lesson.

The following rules are associated with cogenerative dialogue:

- talk should be shared among partners
- partners should be active listeners
- a mutual focus must be established from the beginning
- hierarchies do not apply

Above all cogenerative dialogue helps student-teachers to create new innovative pedagogical practices as their teaching skills develop. It affords teachers the opportunity to expand their own practice.

What are the potential benefits of coteaching for the pupils?

- Another teacher in the room to monitor, assist and attend to the needs of the pupils
- Coteachers can differentiate instruction to meet pupil learning needs
- Coteachers remain actively engaged to maintain the momentum of the lesson
- More individual pupil/small group time
- More individualized and specialized attention. Student-teacher transition to teacher is smoother as there is continuous support from the coteacher
What are the potential benefits of coteaching for student-coteachers?

- Active engagement at all times
- Increased agency – greater sense of commitment to school, classroom and pupils
- Increased sense of confidence from working alongside an experienced team
- Increased ability to make decisions as coteachers gain experience engaging in shared decision-making processes
- More teaching time and engagement with pupils

What are the potential benefits of coteaching for teachers?

- Opportunity to continue to teach pupils and simultaneously address individual/group learning needs
- Professional development opportunity – the student-coteacher brings new perspective, fresh ideas, renewed enthusiasm and energy to the classroom
- New teaching partner to talk through ideas, try new teaching approaches, monitor pupils and collaborate on new lessons

What are the research based long-term coteaching benefits?

- Teachers use professional learning from coteaching experiences even after the student coteachers leave their classroom.
- Fosters collaborative and networking practices
- Supports a culture of communication and collaboration within coteaching schools
- Coteaching graduates actively seek networks and use collaborative practices to support their teaching at their new schools (Gallo-Fox, 2014)
- Develops student-teachers as reflective practitioners
Coteaching Approaches: Quick Guide

Co-planning
Co-planning should occur weekly in order to support successful coteaching.

Unified Coteaching
Both coteachers have equal roles in the lesson. The process of "stepping forward and stepping back" as the lead teacher and/or assist teacher is often planned. A goal of coteaching is for both teachers to truly share classroom and instructional responsibilities. When coteaching is fully attained, coteachers are able to anticipate each other's moves.

Teach and Actively Observe Students
In this coteaching approach one coteacher leads class instruction while the other actively observes the classroom. This is a time for anecdotal note taking, pupil study, or curriculum assessment. The coteacher observing is engaged in the classroom activity and ready to support instruction as needed.

Teach and Assist
One coteacher takes a lead in providing instruction, while the other monitors the classroom for management and understanding, and assists individual pupils. As the student-coteacher begins to take on lead roles, the teacher remains actively engaged in the lesson as the assist role. The assist role provides a great opportunity to support the student-coteacher, to model decision-making skills, or to model teaching approaches. The assist role also provides coteachers with opportunities to work more closely with pupils, to monitor progress, to observe behaviours, and to remain engaged in the class.
Group Teaching

During small group instruction, both coteachers may be working with different groups of pupils around different or similar goals. Coteachers divide the instructional content into two or more smaller components and present this content at separate locations in the room. Groups transition from one coteacher to another; sometimes a third or fourth group of independent work may be incorporated. Group Teaching allows for independent teaching opportunities for the student-coteacher. This is an excellent strategy for differentiation of instruction.

Split-class instruction (Parallel Teaching)

There are multiple reasons why coteachers might choose to split the class. During split-class instruction, each coteacher may teach the same lesson using the same approaches, or through different approaches but with the same goals. Split-class instruction provides one way to decrease pupil:teacher ratios and groupings may be heterogeneous or homogeneous depending upon instructional goals.

Differentiated Instruction

Similar to parallel/split class teaching, a class is divided into two groups. Differentiated instruction is planned to meet the unique needs of the pupils within the two groups. The learning goals are the same, but the instruction is differentiated.

Supplemental Training

While one coteacher is leading classroom instruction, the other coteacher can work independently or in small groups to help strengthen pupil learning. This may occur one-on-one or in small groups, and could take many forms including support, supplemental instruction, and catch up for pupils who have missed class.

Teach Regroup

One coteacher has the lead role and the other coteacher identifies pupils who may be struggling with the concept. This coteacher regroups a smaller group of pupils from the whole group to provide more individualized small group instruction.

- Coteaching is an approach that strongly supports differentiated instruction for pupils
- Coteaching is an approach that provides independent teaching opportunities for the student-coteacher
Comparing coteaching models with collaborative teaching or traditional student teaching

<table>
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<th>Coteaching</th>
<th>Team teaching or Collaborative Teaching</th>
<th>Traditional Student Teaching</th>
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<td>Classroom observation followed by classroom take-over</td>
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<td>Shared classroom responsibility</td>
<td>Often support teachers work with specific students only</td>
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<td>Focus on mutual learning</td>
<td>Focus on student learning may be specific to certain students only</td>
<td>Should focus on student learning but may be distracted by focusing on own development as teacher</td>
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<td>An observer cannot tell who is the teacher</td>
<td>Observer can tell who works with particular student</td>
<td>There is only one teacher in the room who is teaching</td>
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<td>Co-planning is an essential aspect of coteaching</td>
<td>May coplan if teachers schedules allow</td>
<td>Student teacher usually plans alone</td>
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</table>
1. **We share responsibility for:**
   a) deciding what to teach
   b) discussing what teaching strategy(s) to use
   c) discussing how to assess pupil learning

2. **In planning we:**
   a) have regularly scheduled times to meet and discuss our work
   b) communicate freely
   c) each contributes to the planning process

3. **While coteaching:**
   a) both teachers work with all pupils
   b) we use a variety of coteaching roles and approaches
   c) pupils see coteachers as equal partners in the classroom
   d) both coteachers participate in the assessment of the pupils
   e) we make changes as needed during a lesson
   f) we actively reinforce classroom rules and manage the classroom together
   g) we demonstrate co-respect and share expertise

4. **After the cotaught lesson we:**
   a) provide feedback to one another on the lesson
   b) make improvements in our lessons based on what happens in the classroom

5. **We demonstrate coteaching characteristics, qualities, and functions:**
   a) depend on one another to follow through on tasks and responsibilities
   b) model collaboration and teamwork for the pupils
   c) have a process for dealing with any disagreements we must have
   d) communicate with our administrator about our needs as a coteaching pair
   e) reflect on pupil learning
   f) reflect on pupil work
1.) Describe

Today’s class was slightly different to the format of my other lessons as we used it as a revision class.

When I walked into the class, and before I even greeted them, the girls all sang, ‘Hello X’, using lah, soh and mi. I was extremely impressed, and we continued some dialogue (questions and answers) using these three pitches.

While the girls were clearing their tables after lunch, I used these few minutes to discuss the lesson plan with Mr. Y and we agreed on our individual and shared duties for the class.

Both of us, standing at the top of the room, invited the class to stand up to do some warm up exercises. I led the first warm-up, ‘the body shake out’, Mr Y led the next warm up, ‘Buzzy the Bee’ and we both conducted the final exercise, ‘Mammy made me mash my MnMs’ (I played, and Mr Y sang).

I then explained to the class what we were going to focus on in our lesson today. The girls were delighted to revisit all the songs that we previously learned and sang.

I asked the class if they remembered all the countries that we visited on our ‘journey around the world’. One by one, they eagerly told me ‘America, Ireland, Denmark, Jamaica and England’. I then asked, ‘what concepts did you learn while travelling the world?’. Similarly, the girls stated in turn, ‘pulse, rhythm, dynamics, tempo, pitch’.

Using my PowerPoint presentation on the interactive white board, we began by revising ‘Hey Mr. Miller’. I asked the girls what they remembered about this piece and they told me, ‘there are trombones and saxophones’ in it. I asked one student to demonstrate how you would play the trombone, and she showed me using her hands. I then invited all the class to play their invisible trombones. Mr Y similarly asked how one would play a saxophone and the class also mimed this action. We then sang through the song (with the aid of the lyrics on the PowerPoint). The class remembered it perfectly. Now, it was time for Mr Y to actively participate and collaborate with me in the class. I gave him a jar with loads of lollipop sticks in it. On each stick was a word associated with each concept that we covered so far, eg. ‘diminuendo, tutti, solo, steady pulse, presto, high pitch’ etc. Mr Y drew a lollipop stick, eg. Steady pulse, and the girls had to demonstrate that word while performing the song. They did this by marching to the steady beat. He then drew, presto, and the girls performed ‘Mr Miller’ very fast. Mr Y conducted the singing with his ‘conductors stick’. I also explained to the class that this was a ‘jazz’ song. They told me that it was jazzy because of the saxophone and the bass (Mr Y played the bass the week we learned this song). I complimented the class and confirmed that that piano, sax. and bass make a ‘Jazz Band’.

We repeated this procedure for each of the other songs:

- Ireland: ‘Ta me tuirseach’ – the word was ‘piano’ which reflected the mood of the song. I asked the girls what type/ genre of song this was, and Macy told me it was a lullaby. We sang the song again pretending to rock a baby to sleep and singing piano. This rocking, gentle song demonstrated the features of a lullaby to the class.
- Denmark: ‘Stamping Land’ – diminuendo; we sang forte for verse one ‘stamping land’ and got diminuendo for verse two, ‘tip toe land’. Mr Y got Alanah to tell us about Denmark as her uncle lives there. We also looked at it on the map. We marched on the spot for this song too; this showed that the girls understood the genre on the song, a march.
- Jamaica; ‘Water come a me eye’ – solo; Mr Y selected a student to sing solo. I invited her up to the top of the room and everyone listened carefully. We all clapped and discussed what was good about her performance. The girls suggested, ‘she stood straight, her feet were a bit apart, she sang loudly’. I then commented that to make it even better, she could have picked a spot on the wall and looked straight ahead instead of looking down.

- England: ‘Jack in the Box’ – low pitch; the class crouched down on the low C and jumped up in the air for the high C.

For the last 10 minutes, Mr Y and I taught the class the refrain of ‘Mary Immaculate Mother.’ While Mr Y distributed the sheets, I played and sang the hymn. I then asked if anyone knew what a hymn was and explained that it was a holy piece of music that can be sung in their church, St. Agathas. They were excited to hear that they would be performing this hymn with the whole school. Mr Y read through the difficult lyrics with the class and I then taught them the melody phrase by phrase. Having learned the hymn, we invited the class to stand and perform as a choir, both forte and piano.

The class ended with some solfa dialogues and I presented Mr Y with a special instrument from Australia for the class. The wooded block has different whistles attached, each one a different pitch. I showed him how it works and explained that he could use it to pitch a note for starting a song.

I distributed the corrected worksheets and collected last week’s sheets to correct.

Examine

I feel that today’s class had many strengths and some weaknesses.

I was extremely impressed by the students when they greeted me in solfa on entering the class. Normally, I begin the call and response of lah, soh and mi but this week they began on their own initiative. This proves that they have a good understanding of these solfa pitches.

I feel that by using the few minutes at the start of the class, while the girls were cleaning, to talk to Mr Y was valuable. While coteaching and co-evaluating occurs every week between Mr Y and I, I feel that the co-planning is often neglected. Although we had our lesson plan completed, this was a great chance for us to co-plan who would carry out each activity in the lesson.

Shared participation was evident in today’s lesson as we split up the warm up exercises. We demonstrated different types of coteaching;

- **student teacher leads, classroom teacher guides**: as I led ‘Body shake out’ and Mr Y helped the girls
- **classroom teacher leads and student teacher guides**: Mr Y led ‘Buzzy the Bee’ and I joined the class.
- **Equal teaching roles**: we both conducted the final exercise, ‘Mammy made me mash my MnMs’ (I played, and Mr Y sang).

While the class mostly served as a revision class it worked on two other levels:

1. A method of aural testing
2. An introduction to a new musical concept, genre (style)

Today’s class was a great way of aurally testing the class to see how they developed over the past few months. The girls, without fully knowing that they were being tested/assessed, demonstrated their knowledge of music through their practical involvement – singing! The lollipop sticks idea served as both an interactive musical game and a way of testing. The class applied each concept to each song without having to worry about definitions or any theory. The girls also made cross-curricular developments over the coteaching experience, especially in geography. They possess a good understanding of the world, where countries are situated and musical cultures thanks to our module, ‘travelling the world in search of musical concepts’.
I also covered a new concept, style (genre), with the class today. The girls demonstrated an understanding of different styles through performing songs of different genres. We discussed jazz, lullaby, march and hymn in today’s class. For each genre, the class and I responded to the music before talking about it; i.e. for the lullaby, ‘Ta me tuirseach’, we all swayed to the beat and sang piano (softly) first. Having demonstrated this, I then explained that these were features of a lullaby. I did this for each genre.

We also discussed good performing techniques in today’s class, however, instead of Mr Y or I stating the elements of a good performance, the students were the teachers. They watched Alanah sing solo, and I then invited them to point out the good elements of her performances. I feel that this peer-led work (critical thinking/engagement) was very beneficial as the girls had to think for themselves.

The only negative element of today’s class was the introduction of the hymn, ‘Mary Immaculate Mother’. While the piece is a nice hymn, it was simply too challenging for the class. Having identified the students’ difficulty with the lyrics, I decided to only teach them the refrain. With a lot of interaction from Mr Y and I (singing different phases, inviting the class to stand up, move into a choir formation) the class eventually learned the chorus. Although it was difficult, they are looking forward to performing it in their church with the whole school.

I feel that the coteaching experience between Mr Y and I has almost reached the final stage of the coteaching model, shared contribution. This was evident in today’s class as Mr Y and I took it in turns to do exercises, i.e. the warm-ups. Up until this, I had a lack of agency in the classroom as I found it hard to draw upon the resources present. However, this week I had a much greater understanding of agency in the classroom. I used two fantastic resources this week which aided my lesson:

1. This was my first week to use a powerpoint presentation. This offered the class visual aid and supported me throughout the lesson also.
2. The greatest resource of all; the classroom teacher, Mr. Y. I made much more use of Mr Y in today’s class as he stayed at the top of the classroom for the whole time. He was such a valuable resource today as due to his active participation, we were able to move at a quicker pace. With two coteachers present the weaker students were offered greater support and assistance, while the stronger students were offered more attention due to two teachers being present.

Articulate the learning: What did I learn? And how did I learn it?

I learned a lot in today’s lesson about pedagogy and assessment.

Now that Mr Y has become more actively involved in the music class, I am beginning to gain more pedagogical knowledge. One example of this is the method in which Mr Y selects students for a certain task. He has all of their names written on lollipop sticks and draws a name out. I feel that this is a very fair way of selection and I will use it in the future.

I also learned that by spending a minute at the beginning of class to briefly discuss the format of the lesson plan was extremely valuable. I saw this today as our lesson ran much smoother than normal and Mr Y was much more involved. I feel that, because he knew exactly what his role was in the class he was much for comfortable and content. Mr Y led parts of the lesson that he felt confident and competent at and this resulted in a better relationship and atmosphere in the class. I believe, to reach our final stage of coteaching, shared contribution, both of us coteachers should do more co-planning, whether in person or online. If both of us contribute to the lesson plan, the responsibility of the lesson lies with us both. Consequently, I feel that Mr Y would get more involved as he would be more prepared and confident.
Finally, I feel that today’s revision class was a great tool for assessing the students’ knowledge and development. This form of aural and practical assessment was a very informal and relaxed way of testing the girls’ knowledge. I was delighted to see that the students responded to each concept correctly and I noticed an enormous development in their musical knowledge from when we started before Christmas. I now believe that to make our assessment accurate, we should make a fun and interactive worksheet for the class to complete as a form of written assessment. The worksheet, which could appear to be fun game of match up words with their meaning, would give us another insight into the students’ learning and development.

Overall, I think that today’s lesson was very successful. This was mainly due to the equal responsibility shared between Mr Y and I. This shared responsibility and collaboration undoubtedly improved the children’s enjoyment, interest and learning of music.
## Teacher demographics

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Bibliography

APPENDIX 8 - ETHICS APPROVAL

Approval Marita Kerin (Ph.D)

Dear Marita,

The School of Education received and considered your application in 2013 for ethical approval of your Ph.D. research project entitled “Coteaching Music Study”, which was submitted to the ethics committee chaired by Prof. Colette Murphy, the then Director of Research.

It was the decision of Prof. Murphy that no additional information was needed regarding your application. Therefore, approval was granted for your research, on the condition that it is carried out as indicated to Prof. Murphy. Should there be a change in the design of your research project, you will need to re-apply again for approval from the School of Education’s Ethics Committee.

You are required to include a copy of this letter as an appendix to your thesis.

If you have any queries regarding this decision, please contact the current Chair of the School of Education’s Ethics Committee and Director of Research, Dr Ann Devitt (devittan@tcd.ie).

We wish you all the very best with your research project.

Kind regards,

Fiona McKibben
Research Officer at the School of Education on behalf of Professor Ann Devitt. Director of Research

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3088 Scoil an Oideachais
Coláiste na Tríonóide, Baile Átha Cliath, Ollscoil Átha Cliath
Baile Átha Cliath 2, Éire.