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TEAM-TEACHING FOR INCLUSIVE LEARNING: PURPOSES, PRACTICES AND PERCEPTIONS OF A TEAM-TEACHING INITIATIVE IN IRISH POST-PRIMARY SCHOOLS

by

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A thesis submitted in fulfilment of the requirement for the Degree of Doctor of Philosophy, School of Education, National University of Ireland, Cork

Supervisor: Dr. Paul Conway
Head of School: Professor Kathy Hall

November 2011



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I hereby declare that this dissertation has not been submitted to any other institution, and is, except where otherwise stated, the original work of the author.

Signed _____
Finbarr Gerard Murphy

Date _____

ABSTRACT

Background

Schools unequivocally privilege solo-teaching. This research seeks to enhance our understanding of team-teaching by examining how two teachers, working in the same classroom at the same time, might or might not contribute to the promotion of inclusive learning. There are well-established policy statements that encourage change and moves towards the use of team-teaching to promote greater inclusion of students with special educational needs in mainstream schools and mainstream classrooms. What is not so well established is the practice of team-teaching in post-primary settings, with little research conducted to date on how it can be initiated and sustained, and a dearth of knowledge on how it impacts upon the students and teachers involved.

Research questions and aims

In light of the paucity and inconclusive nature of the research on team-teaching to date (Hattie, 2009), the orientating question in this study asks 'To what extent, can the introduction of a formal team-teaching initiative enhance the quality of inclusive student learning and teachers' learning at post-primary level?' The framing of this question emerges from ongoing political, legal and educational efforts to promote inclusive education. The study has three main aims. The first aim of this study is to gather and represent the voices and experiences of those most closely involved in the introduction of team-teaching; students, teachers, principals and administrators. The second aim is to generate a theory-informed understanding of such collaborative practices and how they may best be implemented in the future. The third aim is to advance our understandings regarding the day-to-day, and moment-to-moment interactions, between teachers and students which enable or inhibit inclusive learning.

Sample

In total, 20 team-teaching dyads were formed across seven project schools. The study participants were from two of the seven project schools, Ash and Oak. It involved eight teachers and 53 students, whose age ranged from 12-16 years old, with 4 teachers forming two dyads per school. In Oak there was a class of first years (n=11) with one dyad and a class of transition year students (n=24) with the other dyad. In Ash one class group (n=18) had two dyads. The subjects in which the dyads engaged were English and Mathematics.

Method

This research adopted an interpretive paradigm. The duration of the fieldwork was from April 2007 to June 2008. Research methodologies included semi-structured interviews (n=44), classroom observation (n=20), attendance at monthly teacher meetings (n=6), questionnaires and other data gathering practices which included school documentation, assessment findings and joint examination of student work samples (n=4).

Results

Team-teaching involves changing normative practices, and involves placing both demands and opportunities before those who occupy classrooms (teachers and students) and before those who determine who should occupy these classrooms (principals and district administrators). This research shows how team-teaching

has the potential to promote inclusive learning, and when implemented appropriately, can impact positively upon the learning experiences of both teachers and students. The results are outlined in two chapters. In chapter four, Social Capital Theory is used in framing the data, the change process of bonding, bridging and linking, and in capturing what the collaborative action of team-teaching means, asks and offers teachers; within classes, between classes, between schools and within the wider educational community. In chapter five, Positioning Theory deductively assists in revealing the moment-to-moment, dynamic and inclusive learning opportunities, that are made available to students through team-teaching. In this chapter a number of vignettes are chosen to illustrate such learning opportunities. These two theories help to reveal the counter-narrative that team-teaching offers, regarding how both teachers and students teach and learn. This counter-narrative can extend beyond the field of special education and include alternatives to the manner in which professional development is understood, implemented, and sustained in schools and classrooms. Team-teaching repositions teachers and students to engage with one another in an atmosphere that capitalises upon and builds relational trust and shared cognition. However, as this research study has found, it is wise that the purposes, processes and perceptions of team-teaching are clear to all so that team-teaching can be undertaken by those who are increasingly consciously competent and not merely accidentally adequate.

Conclusions

The findings are discussed in the context of the promotion of effective inclusive practices in mainstream settings. I believe that such promotion requires more nuanced understandings of what is being asked of, and offered to, teachers and students. Team-teaching has, and I argue will increasingly have, its place in the repertoire of responses that support effective inclusive learning. To capture and extend such practice requires theoretical frameworks that facilitate iterative journeys between research, policy and practice. Research to date on team-teaching has been too focused on outcomes over short timeframes and not focused enough on the process that is team-teaching. As a consequence team-teaching has been under-used, under-valued, under-theorised and generally not very well understood. Moving from classroom to staff room and district board room, theoretical frameworks used in this research help to travel with, and understand, the initiation, engagement and early consequences of team-teaching within and across the educational landscape. Therefore, conclusions from this study have implications for the triad of research, practice and policy development where efforts to change normative practices can be matched by understandings associated with what it means to try something new/anew, and what it means to say it made a positive difference.

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Finn Ó Murchú

Mí na Samhna 2011

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ACRONYMS

DES	Department of Education and Skills
ESRI-LS	Economic and Social Research Institute-Longitudinal Study
EO	Education Officer
EPSEN	Education for Persons with Special Educational Needs
GAM	General Allocation Model
IDEA	Individual Disability Education Act (USA)
IEP	Individual Education Plan
ISCED	International Standard Classification of Education
LCA	Leaving Certificate Applied
LCVP	Leaving Certificate Vocational Programme
NCCA	National Council for Curriculum and Assessment
NCSE	National Council for Special Education
NEPS	National Educational Psychological Service
OECD	Organisation for Economic Cooperation and Development
SCoTENS	Standing Conference on Teacher Education North and South
SEN	Special Educational Needs
SESS	Special Education Support Service
SENO	Special Educational Needs Officer
SERC	Special Education Review Committee
SNA	Special Needs Assistants
TALIS	Teaching and Learning International Survey
UNESCO	United Nations Educational Scientific and Cultural Organisation
VEC	Vocational Education Committee
WSE	Whole School Evaluation

Chapter 1

TEAM-TEACHING: UNDER-USED, UNDER-VALUED AND MIS-UNDERSTOOD

1.1 Area of study

This research study examines what unfolds when teachers across a number of post-primary schools adopt team-teaching to support students with special educational needs in the mainstream classroom. Team-teaching, where two teachers teach together in the one classroom at the same time, is not a new concept (Armstrong, 1977)[1], but is increasingly being seen as an idea worth developing further in post-primary settings (DES, 2007; OECD, 2009; Shevlin et al., 2009). It would appear that team-teaching has the potential to play an important role in enhancing learning in post-primary classrooms, for both students and teachers.

However, what is not so clear is what exactly that role might be or how to go about instigating and sustaining such collaborative action. Teachers would appear to be increasingly comfortable with collaborating with one another outside of the classroom but are still reluctant to do so inside the classroom. The specific focus of this study examines the use of team-teaching to facilitate students with identified special educational needs accessing, participating and benefiting from the curriculum in mainstream classrooms. However, the wider remit of team-teaching as an inclusive approach extends beyond special education and the counter-narrative that team-teaching offers to existing models of teacher professional development will also be addressed.

[1] The referencing convention used throughout is that of the American Psychological Association (APA).

The autonomous nature of teaching still prevails and while classrooms are now occupied by an increasingly diverse student population they are still taught by one classroom teacher at a time. A recent OECD study (Teaching and Learning International Survey [TALIS], 2009), concluded that collaborative practices among teachers can be described as those associated with 'exchange and coordination' or 'more complex professional collaboration'. The latter being described as, involving closer engagement among teachers including jointly teaching the same class at the same time. On the continuum of collaboration it would appear that the closer one gets to the classroom the lesser the collaboration among teachers. Safer and less threatening collaboration exists through 'exchange and coordination' *for* classrooms rather than 'professional collaboration' *in* classrooms.

The 'legendary autonomy' (OECD, 1991) of the post-primary teacher in Ireland would appear to be alive and well, and not just in Ireland. Collaborative practices such as team-teaching are the exception rather than the rule in the TALIS report. Significantly, the same teachers who were not engaged in activities such as team-teaching share the view that the area of most need in their professional development is teaching 'special learning needs students' (sic). The fusion of inclusion with teacher collaboration echoes Hargreaves' (2000) invitation to teachers to adopt a post-modern view of teaching where teacher professionalism and teaching itself is made more publicly vulnerable and accessible. At the time, Hargreaves spoke of being publicly vulnerable and accessible to others outside of the school. Team-teaching asks of teachers to position themselves in a similarly vulnerable and accessible fashion with fellow teachers and determine

the benefits that accrue for their students and themselves. Indeed, team-teaching may ask more of teachers than Hargreaves' invite, as teachers open up their classrooms and themselves to their colleagues. Capitalising on the classroom, as a place for collective teacher activity and learning, has not been a traditional practice in education across the entire professional continuum.

An international appraisal of educational systems deemed effective by Barber and Mourshed (2007) contends, unsurprisingly, that instruction is central to success. They observe the curious and unique feature of the teaching profession, where professional development more often than not occurs away from the place of practice.

> …despite the evidence and the fact that nearly every other profession conducts most of its training in real-life settings (doctors and nurses in hospitals, lawyers in courtrooms, clergy in churches, consultants with clients) very little teacher training takes place in the teacher's own classrooms, the place in which it would be precise and relevant enough to be the most effective. (p. 31)

So, given the weight of historical practice and the norms of pedagogical solitude (Shulman, 1993) why team-teaching now and why in Irish post-primary schools? Entreaties from policymakers to teachers to engage with team-teaching have not changed, but contextual changes have taken place in the classrooms that teachers occupy. These changes, including a greater diversity among student profiles, are now recognised as presenting in mainstream classrooms. Student self-advocacy relating to where and how they wish to learn is shaping educational provision. Teacher voice is also of influence when concerns are raised about the ethics and merits of the traditional practices of segregation between mainstream and special schools, or segregation within a school through streamed classes and/or

withdrawal of students. The recognised value of another adult in the classroom, in the form of the non-teaching special needs assistants (SNA), has also seen the concept of team-teaching re-emerge in educational discourse.

However, as Hattie (2009) points out, findings on team-teaching remain inconclusive. The lack of clarity around team-teaching, its implementation and its impact, is often further obfuscated by repeated policy entreaties that encourage team-teaching but leave the enactment of team-teaching to fate. Consequently, team-teaching remains an isolated and unsustained practice, or a practice that schools wish to introduce but are unsure how to do so (Shevlin et al., 2009). This study involves seven schools in one VEC scheme, with two schools used as case studies. It examines the actions taken and the emergent reactions when a conscious effort is taken to shape an intervention that seeks to promote team-teaching within and across schools.

The orientating question in this study asks 'To what extent, can the introduction of a formal team-teaching initiative enhance the quality of inclusive student learning and teachers' learning at post-primary level?' The framing of this question emerges from ongoing political, legal and educational efforts to promote inclusive education. In line with international practice, Irish legislation supports the inclusion of students with special educational needs in mainstream settings (Education Act 1998, Education for Persons with Special Educational Needs [EPSEN] 2004, Disability Act 2005). The Department of Education and Skills (DES) *Inclusion of Students with Special Educational Needs Post-Primary Guidelines* (2007) suggests that team-teaching has an important role to play in

the movement towards more inclusive practices in mainstream post-primary schools.

The research study question also emerges from my own role, as a schools' inspector and policy advisor, with a keen interest in the area of inclusion and inclusive practices, for both students and their teachers.

Team-teaching involves the redirection of resources and shift in mindsets so that students, hitherto withdrawn for additional supports, now remain in class and the teachers who previously met them for withdrawal classes, now enter the classroom to teach with his or her colleague. The study seeks to enhance our understanding of team-teaching and the implementation of change by capturing the process, practices and perceptions of the teachers and students involved. It has three main aims. The first aim is to represent the voices, experiences and interpretations of those most closely involved in the introduction of team-teaching; students, teachers, principals and administrators. The second aim is to generate a theory-informed understanding of such collaborative practices and how they may best be implemented in the future. The third aim of the study is to advance our understandings of team-teaching regarding the day-to-day and moment-to-moment interactions, between teachers and students which enable or inhibit inclusive learning.

There are well-established policy statements in Ireland, as elsewhere, that encourage change and moves towards the use of collaborative practices, such as team-teaching, to promote greater inclusion of students with special educational

needs in mainstream schools and mainstream classrooms. What is not so well established is the practice of team-teaching in post-primary settings, with little research conducted to date on how it can be initiated and sustained, and a dearth of information on how it impacts upon the students and teachers involved. To date, limited research has been conducted on how team-teaching can be initiated and sustained at individual classroom level with the majority of research on primary-based dyads. Less research has been conducted at post-primary level where there is a particular paucity of information on how it impacts upon the students and teachers involved. At all levels, no research has addressed the change agenda of systematically initiating and sustaining such an innovation across a number of classrooms and schools in any given region.

Entreaties and reminders from policymakers (DES, 2003, 2007, 2011) continue to request teachers to use the provision of additional teaching hours, which have been allocated to promote inclusive practices, in as collective and collaborative a manner as possible. In Ireland, such collaboration includes the promotion of team-teaching, but in Ireland, as elsewhere, team-teaching is the exception rather than the norm (TALIS, 2009). Addressing issues associated with why team-teaching is under-used, under-theorised, under-valued and generally not very well understood is central to this research study.

The promotion of inclusive practices and the increased diversity of students presenting, are recognised as significantly challenging the way systems, teachers and students have operated in post-primary schools and classrooms. While inclusion is a sensitising concept and inclusive education contested ground, the

challenge to facilitate access to, participation in and benefit from schooling is played out day-by-day and moment-by-moment (Benjamin, Nind, Hall, Collins & Sheehy, 2003) in school classrooms; classrooms which are usually occupied by many students but only one teacher.

The standard model of classroom improvement, including the promotion of inclusive practices (Booth, 1996), has seen the solo teacher operate in isolation in the classroom, where despite efforts to increase collaborative practices, support from fellow teachers and others, but particularly fellow teachers, is usually at a remove from that very place of practice, namely the classroom (Little, 2003; Fullan, 2007; Supovitz, 2002; McLaughlin & Talbert, 2007). When teacher discourse about classroom practice does take place it involves recounting and sharing experiences, which Little (2003) describes as 'war stories' but does not involve shared experiences because the dominant model of one-teacher-one-classroom prevails. Indeed, the use of classroom-based collaborative practices, such as team-teaching, to promote inclusive learning in post-primary classrooms has only of late been addressed in the literature.

Such literature emanates most frequently from the United States of America (USA) and focuses most frequently on primary schools. These published studies, including the minority associated with post-primary cohorts, frame important questions such as; what team-teaching achieves, or does not achieve; what team-teaching should or shouldn't look like; and whether team-teaching is best suited to certain identified additional needs? Critically, what is rarely researched internationally and to date not researched in the Irish context, is what

collaborative processes and practices, such as team-teaching, ask of students and teachers? Where does team-teaching place them in the context of their own learning and what type of learner/teacher does it allow them to be? These are questions which need to be addressed if we are to better understand how best and when best to engage in collaborative practices such as team-teaching. Addressing these questions will assist in our understanding of how to promote, sustain and determine the value of team-teaching in promoting inclusive practices in Ireland and elsewhere.

This chapter begins by outlining the definitions of key terms used in the study, 'team-teaching', 'inclusive learning' and 'special educational needs'. Second, it briefly explains the research paradigm adopted and the efforts made to-date to promote team-teaching in the Irish post-primary context. Third, attention is given to the context in which team-teaching is being asked to develop and, in light of my own work as a DES inspector, attention is given to the role of the inspectorate in the educational system including policy formation and implementation. The chapter concludes with a brief overview of the aforementioned TALIS (2009) findings which gives an insight to the current place of team-teaching across the national and international educational landscape.

1.2 Definition of terms

While a more in-depth analysis of terms such as 'team-teaching', 'inclusive learning', and 'special educational needs' will follow in the next chapter, it is important at the outset to provide some clarity in relation to my use of these

evolving terms. Drawing on the work of a number of researchers (Walther-Thomas, 1997; Hourcade & Bauwens, 2003; Villa, Thousand & Nevin, 2004; Hang & Rabren, 2008; Friend & Riesing, 1993; Cook & Friend, 2010) I have found it useful to describe team-teaching as involving two teachers timetabled to share equally, instructional and other responsibilities, for a single group of students in the same room and on a regular basis across the school week.

1.2.1 Team-teaching

The use of team-teaching over other similar terms, such as 'collaborative teaching', 'co-teaching', 'cooperative teaching', and 'coteaching' (Maroney, 1995; Villa, Thousand & Nevin, 2008; Murawski, 2009) is significant. The membership of 'team' in this context is comprised of all in the classroom, teachers and students alike. Suffice to say at this point that an over-emphasis on 'co' or 'co-', whether representing co-operation or collaboration, could run the risk of being misunderstood to be a binary arrangement with an over emphasis on the two teachers and not enough emphasis on the interactions and positions being taken up by the students as they interact with the teachers and with one another. Team-teaching as a term, avoids the danger of foreclosing prematurely on such possibilities. The term also allows a freedom of action and provides space to allow positions, identities and other emergent aspects of learning, both expected and unexpected, to reveal themselves to participants, the research and the researcher.

1.2.2 Inclusive learning

Student learning is the core business of schools (Hegarty, 2001), but how students learn is also important (Artiles, Kozleski, Dorn & Christensen, 2006). The term 'inclusive learning' is the preferred term in this research study. It seeks to avoid the false separation of 'learning' and 'inclusion', as the study wishes to determine if the learning environment that emerges from team-teaching assists in promoting inclusive practices among and between all students and teachers. When viewed through a socio-cultural lens, the manner as well as the content of learning requires attention. Learning is seen as a social activity and learning is about changed participation (relationship with others) and evolving identities (relationship with self). In Wenger's (1998) terms "such participation in communities of practice shapes not only what we do, but also who we are and how we interpret what we do" (p. 4). The axis on which 'inclusive learning' spins involves the ongoing tension between inclusion and exclusion and is determined by the interactions that people have with one another, interactions which may serve to engage or disengage inclusive learning. In the context of this study, 'relationships with others' and 'relationship with self' apply to teachers as well as their students.

1.2.3 Special educational needs

In this research study the term 'special educational needs' refers to the definition applied by the International Standard Classification of Education ([ISCED] UNESCO, 1997). This definition encompasses a wider range of needs than that associated with 'special education' and reflects the diversity of needs presenting in schools and classrooms. It also refers to the range of additional teaching

resources provided to meet such needs, including the deployment of resources through team-teaching.

> Special needs education- Educational interventions and support designed to address special educational needs. The term 'special needs education' has come into use as a replacement for the term special education…the concept of 'children with special educational needs' extends beyond those who may be included in handicap categories to those who are failing in school for a wide variety of other reasons that are known to be likely to impede a child's optimal progress. Whether or not this more broadly defined group of children are in need of additional support depends on the extent to which schools are able to adapt their curriculum, teaching and organisation and/or to provide additional human or material resources so as to stimulate efficient and effective learning for these pupils. (UNESCO, 1997, p. 41)

Recognition of 'needs' as including any student who is at the risk of failing or at risk of being excluded, from or within school and school classrooms, requires a broad interpretation of special education and recognition of the multiplicity of additional resources that are made available. These resources may be targeted at individuals, groups of individuals or entire schools. Furthermore such resources may take the form of human, material or financial resources. In order to overcome the many interpretations and possible misunderstandings associated with 'special educational needs' the OECD (2005) speaks of disabilities, difficulties and disadvantages to describe "the students for whom countries make additional resources available so that they can access the curriculum more effectively" (p. 12).

- Disabilities: students with disabilities or impairments viewed in medical terms as organic disorders attributable to organic pathologies (e.g. in relation to sensory, motor or neurological defects). The educational need is considered to arise primarily from problems attributable to these disabilities
- Difficulties: students with behavioural or emotional disorders, or specific difficulties in learning. The educational need is considered to arise primarily from problems in the interaction between the student and the educational context

- Disadvantages: students with disadvantages arising primarily from socio-economic, cultural and/or linguistic factors. The educational need is to compensate for the disadvantages attributable to these factors. (OECD, p. 14)

This broad resource-based interpretation of special educational needs as three dimensional (disabilities, difficulties and disadvantages) helps significantly to reflect the reality and diversity found in Irish classrooms. In such classrooms combinations of all three subsets are to be found side by side with a range of funding sources including those more usually associated with aspects of social equality and social inclusion. In short, the funding for team-teaching can come from a complex range of resource providers to meet a wide range of identified needs.

Recognition of the kaleidoscope of funding to be found in any one classroom and, on occasions, for any one student, will assist in making the findings from this study speak to a range of providers at national level while also being of interest to a broader international audience. In order to facilitate further clarity, it is also important to explain the choice of paradigm for the research and the philosophical assumptions that influence such a choice.

1.3 Interpretive paradigm

This research study adopts an interpretive paradigm where social interaction is seen as the basis for knowledge; knowledge which is specific to the situation being investigated. Such a paradigm is chosen as it honours the participants' perspective in relation to team-teaching while also honouring the unique contexts in which individuals find themselves at the time of the research. This paradigm

allows for a design that is "contextual, inclusive, involved and emergent" (Mertens, 2005, p. 445). It provides space for learning about team-teaching and its implementation, and it facilitates individuals to indicate their understanding of team-teaching and its influence upon them, both positive and negative, both as people and as professionals. In the parlance of special educational needs, such a paradigm avoids deterministic assumptions about ability, difference or background with respect to both teachers and their students. It allows the adoption of a differentiated approach that makes room for complexity and honours individuals' perceptions and contexts.

Other philosophical assumptions that support this paradigm include recognition that the promotion of inclusive practices involves relational interactions and ultimately involves improvement in learning environments which is achieved through ever-changing action and interaction. To understand how necessary change can be successfully implemented there is a need to work closely with teachers and students in their schools and their classrooms. For it is in these arenas that policies and research findings are implemented, refuted, ignored and refracted by a context that is itself multifaceted and evolving. A context that requires the researcher to repeatedly listen, observe, seek clarification and question. This action is of particular importance when inclusion is deemed to hinge on how people interact with one another in their day-to-day and moment-to-moment encounters.

1.4 Educational context in Ireland

To date efforts to ensure team-teaching obtains greater purchase in our educational system have not been successful. To better understand the research setting, an outline of the Irish educational context is described in the next section. This section begins with an overview of the Irish educational framework followed by an examination of aspects of policy and research developments which are pertinent to the implementation of the team-teaching initiative. It will be noted that the Irish context is only beginning to recognise the post-primary sector with regard to inclusion, and has only given scant attention to the role of team-teaching in such a context. Documented policy, DES circulars (2003, 2005 primary circulars, 2011 primary and post-primary), and guidelines (2001 primary guidelines and 2007 post-primary guidelines), advocate for team-teaching. However, to date this aspect of policy has largely been ignored at post-primary level. This is hardly surprising given that specific policy in relation to post-primary has only emerged in the past five years. Research studies in turn, apart from four small-scale individual studies (McCarthy, 2002; Nolan, 2005; Bates, 2005; McNamara, 2010), have also ignored team-teaching among post-primary teachers.

1.4.1 The post-primary school system

The Irish post-primary school system forms part of an overall school system that is best described as a single centralised system resembling one large district with a range of educational providers. The Department of Education and Skills (DES) is responsible for formation and implementation of government policy. My colleagues in the inspectorate and I, evaluate, advise and support schools in this

regard, and in regard to the quality of learning and teaching experienced by students. There are, as seen in Table 1, 730 post-primary schools in the country which cater for a student population of 305,156 and employ 26,273 teachers (DES, 2008). It should be noted special schools are classed as primary schools, even though there may be students of post-primary age enrolled and pursuing post-primary subjects in such schools.

Table 1. Students in Irish schools 1997/98-2007/08

Primary	**1997/98**	**2007/08**
Pupils in ordinary classes	446,359	470,270
Pupils in special schools[2]	7,409	6,619
Pupils with special needs in ordinary primary schools	7,077	9,555
Total Primary	**460,845**	**486,444**
Post-primary		
Junior cycle	192,944	167,864
Senior cycle	153,929	137,292
Total Post-Primary	**346,873**	**305,156**

Of those enrolled in post-primary schools, 54% attend secondary schools, 30% attend vocational schools and 16% attend community and comprehensive schools. Secondary schools are privately owned, in most cases by religious congregations, but are publicly funded. Vocational schools operate under the trusteeship of the local Vocational Education Committee. The Community and Comprehensive sector operate under the direction of the DES with the support of other trusteeships.

This research is based on a team-teaching initiative in one Vocational Education Committee (VEC) scheme. The VEC is a statutory authority providing education and training in accordance with the Vocational Education Acts (1930 & 2001)

[2] Special schools are deemed primary schools even though students may be of post-primary age c.12-18) and may sit post-primary state examinations.

and the Education Act 1998. It also sits on the boards of management of the community school sector. Nationally, the VEC is a growing organisation and currently has a role as provider in 40% of all post-primary schools, across 20 schemes. The scheme (district), in which this study was conducted, is relatively large and total enrolment, when combined with the smaller community school sector, exceeds that of the traditionally larger voluntary secondary sector.

Each of these VEC schemes is headed by a Chief Executive Officer (CEO) and an Education Officer (EO) who facilitate the promotion of initiatives locally, among schools within a scheme, or nationally between schools across a number of schemes. Each of the 20 VEC schemes in the Republic of Ireland resemble the district model of North American educational organisation, or Local Educational Authorities (LEA) in England, where the head of the VEC is similar to a superintendent, with powers to influence both school and classroom practice. Available, but limited data, indicates that the VEC schools have a higher proportion of students per capita, identified with special educational needs (DES, 2009; NCSE, 2009). These needs also include students from the Traveller community[3] and students from areas designated as socio-economic disadvantage.

Of note within the VEC structure is the support such schools receive from the scheme's CEO and EO who have the advantage of working with schools that are not in direct competition with one another, thus facilitating initiatives at local and national level among the VEC schools.

[3] While Irish Travellers are native to Ireland, they have much in common with European Roma, Sinti, and Gypsies such as their nomadic tradition, a tendency to live in extended families and a history of having to protect their identity from attempts to assimilate them into the majority population (National Consultative Committee on Racism and Interculturalism, http://www.nccri.ie/cdsu-travellers.html).

The size of post-primary schools in Ireland, as determined by enrolment figures, indicate that the majority of schools, 54%, number between 100-499 students. Schools with student populations of 500-999 represent 41% of schools. The ratio of teachers with recognised qualifications in special education in post-primary schools vary from school to school but an unpublished survey of 25 schools (DES, 2007) reveal that many teachers involved in the provision of special educational needs, and particularly those involved in resource-hours teaching, have no special education qualifications or training. This has implications with regard to the quality of provision when implemented using only a withdrawal model. The same survey (DES, 2007) found that teachers were beginning to question the merits of the withdrawal models being used in their schools, which were not always seen as conducive for teachers to communicate with one another or for students to learn. It was reported by principals that a growing number of students expressed unease at being withdrawn from class to access additional supports with their learning. Some, but not all, principals were aware that team-teaching was another means by which students could access additional support.

1.4.2 Policy efforts to promote inclusion

The movement towards inclusive schooling in Ireland was considerably influenced by the convening of the Special Educational Review Committee (SERC) in 1991 and their highly influential report published in 1993. This comprehensive report has significantly influenced national policy in the area of special education and "has provided a blueprint for the development of special education that continues to influence policy decisions up to the present day" (Griffin & Shevlin, 2007, p. 45). The report stated that:

> Except where individual circumstances make this impracticable, appropriate education for all students with special educational needs should be provided in ordinary schools. (SERC, p. 20)

Conscious of administrative and financial implications the committee recognised the social factors that can give rise to special educational needs but adopted a categorical and within-student approach to educational provision. Such an approach was influenced by the desire to ensure access to resources and drew upon the World Health Organisation categorisation of disabilities and the USA's IDEA 1975 (personal correspondence from retired DES official).

Borrowing from the US concept of 'least restrictive environment' SERC recommended 'as much integration as is appropriate and feasible with as little segregation as is necessary'. How such action would be played out in 'ordinary schools' or indeed 'ordinary classrooms' was not so clearly stated. However, influenced once more by engagement with American counterparts, it was at this juncture that team-teaching entered the official lexicon of Irish education when referenced by the SERC report.

> The remedial teacher should be encouraged not to restrict themselves to a withdrawal model of work-organisation. When appropriate, schools should be encouraged to implement adapted curricula and adopt a flexible approach to school organisation including *team-teaching*[4] in order to meet their particular needs. (p. 220)

Team-teaching was not defined nor elaborated upon by the SERC report, and as a model of supporting inclusive practices, was thereafter confined and associated only with special education. Such a view may be explained, in part, by the association of the enactment of team-teaching with the provision of additional

[4] Throughout this thesis, segments of quoted text are italicised where I wish to emphasise their importance.

teaching resources. Furthermore, it is not clear if the presumption existed among SERC members that teachers would automatically know what team-teaching was, never mind know how best it would be implemented. The engagement with 'shared learning areas' by some primary schools in the 1970s and 1980s (Irish National Teachers Organisation, 1985) may explain the lack of clarification. However, such practice was not widespread at primary level and indeed on the wane at the time of the SERC report, with no evidence of post-primary ever engaging in such activities.

Currently, the DES provides what is described as a continuum of provision for students with special educational needs, ranging from full-time enrolment in mainstream schools and classrooms, or enrolment in special classes within the mainstream school, to full-time enrolment in special schools. Providing education to all students with special educational needs in mainstream settings was enshrined in the *Education Act* of 1998. This act provided, for the first time, a national legislative mandate in education. It does not make specific reference to team-teaching or other delivery models but states that each person concerned with its implementation must have regard to thirteen specific objectives and give practical effect to the constitutional rights of all children.

These rights relate to providing an appropriate education, promoting equality of access and participation in education, acknowledging the rights of parents to send their children to the school of the parents' choice, promoting best practice in teaching methods in accordance with the diverse needs of students, and enhancing the accountability of the education system. Influenced by international

practices and accords, the 1998 Act introduced an 'automatic response' for students with identified special educational needs. For the first time, on the basis of assessed needs, children with special educational needs were entitled to be automatically allocated resources (e.g. resource teaching, special needs assistants and special equipment) in mainstream schools if not, as transpired, always in mainstream classes.

In defining special educational needs the focus of the Act was very much upon the psycho-medical model of identifying deficits that required additional resources. As Mac Giolla Phádraig (2007) outlined such a definition was restrictive in that "the emphasis on disability as the locus of special educational needs excluded the particular circumstances of a pupil adversely impacting on his/her education" (p. 294). Special education was seen as one dimensional as opposed to the OECD three-dimensional model. Furthermore students deemed 'exceptionally able' were categorised as having special educational needs but were not entitled to additional resources.

The clash between prosaic provision and poetic pedagogy is played out between the administrative sections of the DES adopting an accountability-based model of identification, while teachers were being asked to use the resources in a range of eclectic ways while still being accountable for the individual in the collective setting of the school. Such tensions and dilemmas are captured by McDonnell (2003) who criticises the practice of directing "the professional gaze towards the pupil rather than towards professional practices or organisational structures" (p. 262). Efforts to avert such a gaze in the direction of 'organisational structures' were made by the DES with the issuing of a number of circulars or directives to

schools, though notably until 2007, they were addressed only to primary schools. These communications sought to give guidance to schools on how best to use the resources allocated. The 2003 primary circular gently encouraged the need to differentiate between the manner in which resources are accessed and applied.

> Although children with SEN may learn at a different pace and in a different way from other children, they need to belong to a peer group and to mix with children of different abilities in a variety of situations. Research on mixed ability teaching illustrates that children of lower ability benefit greatly. However, the practice has developed in recent years of using resource hours for individual tuition only. An exclusive reliance on this approach is contrary to the principles of integration in teaching and learning. Wherever possible, schools should provide additional help for children in the mainstream classroom, or if necessary in small groups. This will also have an effect of minimizing the disruption to the normal class programme that can happen if individual children are being withdrawn at different times of tuition. (DES, 2003, p. 3)

The circular, by default, acknowledges that the five years since the enactment of the 1998 Education Act had seen the allocation process influence the manner in which schools used the resources. Often hard-fought individual allocations were frequently seen by schools and parents as resources which should be provided on an individual, one-teacher-one-student, basis (interview with former Minister for Education, Micheál Martin, 2006). As witnessed by the tenor of the 2003 circular and that of 2011, attention to the best use of resources to promote inclusive practices was beginning to enter educational dialogue in Ireland at both primary and post-primary level. Automatic responses based on individual needs and infinite resources have begun to be replaced by maximum numbers being set for teaching hours and special needs assistants. The place of team-teaching has an added dimension in such circumstances where efforts are made to achieve more with fewer resources.

Policy responses for post-primary level also come under the spotlight with the enactment of the primary and post-primary related *Education for Persons with Special Educational Needs Act* (Government of Ireland, 2004) which moved from the concept of integration to inclusion and states that:

> A child with special educational needs shall be educated in an inclusive environment with children who do not have such needs unless the nature or degree of such needs of the child is such that to do so would be inconsistent with the best interests of the child as determined in accordance with any assessment undertaken within the Act, or the effective provision of education for children with whom the child is to be educated. (p. 7)

The Act makes further provision for students with special educational needs to access, participate in and benefit from an inclusive education. The main school-focused provisions of the act includes the duties of the board of management, enrolment policies and procedures, content of individual education plans (IEPs) and their implementation as well as the role of the school principal in relation to individual educational plans and assessment, the rights of parents and the role of the then newly established National Council for Special Education (NCSE). Categories of needs were in keeping with the Education Act 1998 and, except for the exclusion of the 'gifted and able', range from those with low achievement in literacy and numeracy to a wider range of needs which are classified as low-incidence and high-incidence needs in the psycho-medical tradition of categorisation.

Under the terms of the EPSEN Act the newly established NCSE took responsibility for the allocation of resources to schools relating to students with disabilities, to ensure that students' progress is regularly reviewed, to disseminate best practice, provide information to the public, and to conduct and

commission research. The Council was also charged with producing an implementation report (NCSE, 2006) within a year of its inception outlining how the EPSEN Act would be implemented over a five year period to October, 2010. While the full implementation of the Act has been deferred indefinitely, aspects that do not carry cost implications to the state have been implemented. A study of the NCSE implementation report gives an interesting insight into context-sensitive issues regarding the promotion of inclusive practices in Ireland and where team-teaching might be best positioned to address systemic deficiencies. The key points include:

- There are numerous 'soft' barriers preventing students from accessing mainstream education
- There is no structured emphasis on outcomes with and an almost endemic fascination with inputs with no means of ascertaining what outcomes are being achieved by students with special educational needs
- Schools are under resourced in terms of capacity to deliver inclusive education
- There is insufficient investment in training and development at all levels (schools, teachers, support personnel etc)
- Funding mechanisms are overly based on disability deficit approaches and include criteria and thresholds which may not be in accordance with the intent of the Act
- Research on special educational needs is not sufficiently supported
- The current regime is open to the interpretation that it allocates resources inappropriately, is not efficient and is not outcome focused. (NCSE 2006, p. 17-18)

Looking to the future the NCSE implementation plan set out a road map for inclusive education and concludes that future provision for special educational needs should be based on 'strong fundamental building blocks' as follows:

- The development of the inclusive school is key to delivery. Proper resourcing, training, building capacity, supporting schools and teachers will be the key to successful implementation
- Re-orientating the system from a deficit approach in relation to funding, assessment, allocations etc. to one of systemic capacity building are a fundamental requirement of the change agenda

- Dealing holistically with inclusive education, in all of its manifestations and implications rather than dealing with individual modalities as stand-alone issues will also be critical to success. (p. 18)

Each of these principles merits some attention in understanding the context and potential of team-teaching. It will be of interest to note that the NCSE report makes no reference to team-teaching. The first point asserts that:

> Building capacity in, resourcing and supporting the inclusive school is, we believe, the only sustainable model for successful implementation of the Act. Ensuring access for children with SEN (sic) to the inclusive school (which must become the universal norm), effectively teaching them while they are there and achieving successful outcomes for them is the critical challenge. (p. 97)

The focus on teachers and schools is clear and important but the report only makes, on a total of four occasions, passing reference to classrooms and classroom practices. One school can have many classroom experiences, making the concept of the inclusive school difficult to grasp when a range of classroom experiences, both inclusive and exclusive, can reside simultaneously in any given classroom in any given school. One reference is made to possible models of support though team-teaching is not cited as one such possibility. These are significant factors for a report that seeks to ensure that effective teaching is to occur. This shortcoming is aggravated by the fact that the classrooms mentioned are implicitly primary classrooms. No cognisance is taken of the complexity of the post-primary setting where a student may have 10 teachers across 12 subjects, and a teacher may have upwards and over 250 students across a number of classes.

It would appear, despite what it professes, that the report is of the view that classroom practice will follow the creation, outside the classroom, of inclusive practices and cultures, rather than seeing classroom practice as central to such

desired changes. The report also fails to detail what is meant by successful outcomes through inclusive education. For team-teaching to be seen to be effective for students, requires an understanding of what effective outcomes for students actually means.

The second and third point above speak of the 'change agenda' and 'dealing holistically' as central to the promotion of inclusive practices in schools. The report speaks of a paradigm shift from the deficit model which focuses on the inability of the child to a systemic model which focuses "in terms of an inability on the part of the education and health systems to effectively meet the needs of, and deliver outcomes for, children with SEN(sic)" (p. 97). It is not clear from the report if those students that would be classified under the OECD definition of special education are seen as part of the change agenda, in a manner that is holistic. What is clear is the challenge the report lays down to all concerned to set in motion a range of responses to address the weaknesses identified. The report is a product of its time with a lack of insight into pedagogy and classrooms, being masked by a focus on what rightly should be done, but not outlining how it might be done.

To support the implementation of the EPSEN Act the NCSE's report places particular attention on the method in which resources are accessed and the role that teachers have to play in determining how best to use such resources. This aspect of the report is influenced by two interconnected factors associated with primary schools, namely the NEPS adoption of a three stage approach to

assessment, similar to Response to Intervention models, and the introduction of the General Allocation Model (GAM) by the DES. The GAM is in keeping with the OECD concept of special educational needs taking account of disabilities, difficulties and disadvantage. It was intended "to make possible the development of truly inclusive schools" (DES Circular SP ED, 02/05, p. 1) and remove the need for assessment of students with high incidence disabilities, such as borderline and mild general learning disabilities and specific learning disabilities.

The GAM is due to be reviewed at primary-level and possible implementation in post-primary settings may be considered. Meanwhile, NEPS (2010) have implemented a staged approach with post-primary schools. This staged approach recognises, as the NCSE have done the challenge that school-based assessment model will present to teachers and schools. However, its view is that in the longer term, this model will assist teachers in the classroom as "it will address the problem at the lowest level" (NEPS, 2010, p. 125). It is planned that professional development opportunities will be provided for teachers so that school-based assessments and classroom level interventions can occur in a timely and efficient manner. In short, teachers will be given a greater say in deciding who receives what resources and when, though it is not envisaged that a greater voice will result in a greater allocation of resources. The staged approach as outlined by NEPS (2010) provides a framework for a continuum of support within classrooms and makes reference to the role team-teaching can play in supporting student learning. The role team-teaching can play in dynamic assessment of learning is alluded to but not clarified.

The NCSE report, like the NEPS continuum of support, also values professional development as a lever for improvement. In recognition of the key role that mainstream teachers have to play in promoting inclusive practices, the NCSE recommended, in addition to the specific training of teachers to obtain qualifications as teachers of special education, a range of continuing professional development opportunities for general teachers over a number of years. In light of the economic downturn a slimmed-down version of professional development was rolled out by the DES through the Special Educational Needs Supports Service (SESS) which, since 2003, is charged with delivering, at the invitation of the school, in-service training and support on a national basis.

As with all aspects of professional development in Ireland the activities of the SESS do not include for example teacher observation or coaching. Such activities in Ireland are usually associated with teacher training and to a lesser extent teacher induction, but as outlined in the TALIS (2009) and Conway, Murphy, Rath and Hall (2009) they remain the exception rather than the rule. This is an important point of departure for team-teaching as it opens up possibilities relating to professional discourse and development around a deepening understanding of pedagogy. Is it legitimate to adopt a twin-approach where using additional resources in the form of team-teaching can also assist with teacher professional development? Is this what Barber and Mourshed (2007) were alluding to when they spoke of how other professionals learn from each other by working with each other? To answer these questions requires some attention being devoted to the issue of additional teaching resources.

1.4.3 Resourcing inclusion

Additional resources to facilitate students in accessing, participating and benefiting from the curriculum are provided by a number of sources which are accessed by schools through a variety of means. Additional resources for students with learning needs in the area of literacy and numeracy development are funded by what the DES term Learning Support allocation which is based on the size of school and ranges from 0.7 of a whole-time equivalent (wte) teacher to 1.2 wte. A whole-time equivalent equates with 22 hours teaching per week. Students identified with a range of disabilities are assessed by an educational psychologist who is usually drawn from The National Educational Psychological Service (NEPs).

The National Council for Special Education (NCSE) through its national network of Special Educational Needs Officers (SENO) determines what additional resources (teaching hours, special needs assistants or assistive technology) are required for each individual case. The allocation of hours range from 1.5 hours per week for high incidence disability, to between 3 and 5 hours for low incidence disability. A visiting teacher service exists to assist students who may have sensory difficulties, and usually works with students who are visually impaired or blind and students who are hard of hearing or deaf.

Where applicable, support is also provided for students with English as an additional language. Additional funding for students from the Traveller Community has recently ceased (2010) and a common feature of late has been the government's efforts to make savings by reducing or terminating financial

supports for schools and their students. As a result a considerable degree of uncertainty prevails in relation to government investment in education and most recently (May, 2011) saw a 10% reduction of all additional allocation to schools.

Schools, such as those in this research study, that are designated educationally disadvantaged are invited to play a role in the promotion of social inclusion by accessing a range of additional resources through the DEIS (Delivering Equality of Opportunity in Schools) action plan. The DEIS action plan provides additional financial and human resources with a particular focus on attendance, retention and post-school progression, as well as monitoring and developing literacy and numeracy skills. Students with English as an additional language (EAL) may also receive additional funding based on the numbers enrolled in each school.

Additional funding is also allocated to school programmes such as the Leaving Certificate Applied (LCA). "This programme is a distinct self-contained Leaving Certificate programme, designed for young people who do not wish to proceed directly to third level education, and for those whose needs, aspirations and aptitudes are not adequately catered for by the other two Leaving Certificate Programmes" (DES, 1995, p. 3). The LCA is a pre-vocational programme with the primary objective of preparing young people for adult and working life and the development of participants' literacy and numeracy skills. In so doing the implicit objective is to retain students in school by providing a programme that supports their academic, personal and social development.

Clearly in any given classroom, in any given school, a range of resources could be allocated. The manner in which the resources are deployed, including team-teaching, is left to the discretion of each school as is the evaluation of the impact of such deployment on the students for whom the resources are targeted. School inspection reports published by the DES inspectorate since 2006 indicate that the dominant delivery model used in Irish post-primary schools is based on individual or small-group withdrawal from base classrooms. Collaborative in-class practices such as team-teaching, despite government policy to the contrary, are identified by the inspectorate (DES, 2011) and by others (Shevlin et al., 2009) as becoming more evident but remain the least used model of support.

A number of contextual factors would appear to have contributed to an increased awareness if not application of team-teaching. Student voice and self-advocacy have altered the context and manner in which additional support is provided. Many students, though not all, have expressed reluctance to receive support in ways that may mark them apart from their peers, such as withdrawal from class. Teachers are also conscious of other difficulties associated with the withdrawal of students from class, which may result in students being overly confused by a range of teachers and teaching styles and by a timetable that is complicated and fragmented. Such realities also challenge best efforts at maintaining communication and consistency of approach among the assigned teachers. Another significant change in recent times has been the introduction of special needs assistants (SNAs) into Irish post-primary classrooms. In fulfilling their non-teaching duties SNAs have shown the benefits that can accrue by having another adult present in the classroom and have awakened anew an interest in the

potential positive outcomes of having two teachers in the classroom. At a very practical level, some schools have not sufficient space to exclusively meet identified needs through a withdrawal model and are obliged to consider other models of support such as team-teaching.

The choices schools make in determining the use of the additional resources are determined by a range of factors which have evolved in tandem with efforts to promote inclusive practices. To date efforts to ensure team-teaching obtains greater purchase in our educational system have not been successful.

1.4.4 Ignored policy in an ignored post-primary sector

The promotion of inclusive practices, in the post-primary context was given significant, if belated, recognition by the DES with the publication in 2007 of the *Inclusion of Students with Special Educational Needs Post-Primary Guidelines* (2007). This document stressed whole-school approaches throughout, placing particular emphasis on the fact that 'the mainstream teacher has a key role to play in the inclusion of students with special educational needs in mainstream schools" (p. 71). This is an important point when determining how additional hours are to be used, and in determining whether inclusion can be achieved by 'uniting teachers' in classes rather than 'splitting classes' among teachers. These were the first guidelines to be devoted to the post-primary sector and sought to provide some clarity of purpose around how optimal benefit might be derived from the resources provided. Inclusion was described as a process and not an event and a process that has declared benefits for all learners.

> Inclusion does not seek to erase or ignore differences between individuals: in its essence, inclusion implies the right to appropriate

> education. When inclusive education is implemented appropriately benefit can accrue to all students in the classroom. (pp. 39-40)

The guidelines seek to respond to diversity through inclusive practices and to acknowledge that the allocation of the resources by isolating categories or needs should not be mirrored in their deployment. Influenced by engagement with the OECD, reference is made to other resources and programmes which are funded by the DES including schemes for tackling educational disadvantage and schemes that provide additional support for vulnerable groups, particularly children from the Traveller community, disadvantaged socio-economic backgrounds and children for whom neither English nor Irish is their first language. Once again, and similar to previous primary circulars, schools were urged to allocate resources, for students with special educational needs, in more collaborative, social, and group-based arrangements.

> Schools are advised to employ the additional staff members in a manner that best facilitates the inclusion of all students and, as far as possible, not separate or segregate particular students or groups of students from their peers. (p. 19)

Of significance in the context of the Irish post-primary sector is the attention devoted by the guidelines to, not only structures and cultures at school level, but also to the interconnected classroom climate and the practices that promote inclusive learning in schools. Drawing on research published in North America and the *European Agency for Development in Special Education* (2005), the guidelines refer regularly to 'co-operative teaching' and seek to alert attention to the benefits of aligning resources with increased collaborative practices at whole-school and classroom level (Table 2). The guidelines state that co-operative teaching occurs:

> When two, or more teachers, provide instruction to a group of students with diverse learning needs. A number of terms- including 'co-operative teaching', 'co-teaching', 'collaborative teaching' and 'team teaching' – are used in the literature to describe arrangements and strategies that together are referred to here under the heading 'co-operative teaching'. (DES, 2007, p.106)

As implied by the guidelines and supported by others (McCarthy 2002; Nolan, 2005; Bates, 2005; DES, 2007; McNamara, 2010) team-teaching has not been implemented in any significant manner in Irish post-primary settings and action research has been conducted by individuals working with a colleague or colleagues in their own school. No systemic effort to work with a group of schools has been attempted and the guidelines spoke to schools as individual entities. Based on international research, the guidelines were helpful and insightful in outlining in more detail the fundamental prerequisites and benefits associated with team-teaching for both students and teachers.

Table 2. Outline of the prerequisites and benefits associated with team-teaching (DES, 2007)

Prerequisites	Benefits for students	Benefits for teachers
Managerial/collegial support	Learning enhanced	Reduce isolation
Teacher trust/respect	Individual needs met	Share decision making
Teacher parity	Full access to curriculum	Work with more students
Teacher adaptability	Range of groupings	Mutual support
Teamwork	Differentiated learning	Sharing work load
Clarity of roles	Reduce stigma of withdrawal	Reduce student discipline referrals
Time to plan/review	All students benefit	Share good practice

In declaring what is 'essential' for team-teaching to be successful the guidelines make reference to the importance of relational aspects among teachers, such as 'collegial support', 'mutual trust and respect', 'partnership'. 'teamwork', 'discretion'. Such language, which clearly recognised the relational nature of

team-teaching, was previously absent from DES publications. What still remained unclear was how these 'essentials' were to be nurtured and sustained in schools so as to promote team-teaching and student learning. Neither is their any distinction made in regard to which students' needs are best met in a team-teaching setting. As with all aspects of policy formation the role of the inspectorate in framing policy is much clearer than its role, if any, in implementing policy.

1.5 The role of the inspectorate in the twenty-first century

As referenced at the beginning of this chapter Hargreaves (2000) views, on the role of teachers as described in his 'Four Ages of Professionalism', are also useful in understanding the current and emerging role of the inspectorate. Significantly and for the first time in the history of the post-primary Inspectorate, the focus of inspectors' work is on teaching and learning. The purposeful reorganisation of the inspectorate, commenced in 2003, turned post-primary inspectors' attention towards schools, classrooms and the quality of teaching and learning, and away from other work such as being members of interview boards and managing high-stake national examinations.

With the first inspections of classrooms commencing in 2003, the 'secret garden' (Conway, 2002) of the Irish post-primary classroom was about to be revealed and many (dis)connections between stated policy and classroom practice have come into view. Some of these disconnections have helped to inform policy and new connections have helped to inform policymakers. As outlined by Coolahan (2009) "the close involvement of the inspectorate with the life of schools has

given great credibility to its commentary on the quality of the school system and to its advice at policy level" (p. 309). The contours of inspection have been well-defined in terms of evaluating the educational landscape and the quality of learning and teaching at classroom, school and systems level. What has not been so well-established, or recognised, is what exactly is meant by the other two dimensions of the inspectors' work as set out in Section 13 of the Education Act of 1998; to advice and to support schools and school personnel.

I joined the inspectorate in 2004 following 17 happy years as a post-primary teacher. At the time I applied for two positions within the inspectorate (there was no position nor competition for an inspector of special educational needs). I was offered both the position of inspector of Irish and inspector of History. I chose the former. Two years later, in 2006, I was successful when, for the first time in the inspectorate, the DES appointed two positions of inspector of special educational needs. When first appointed to the inspectorate I was completing a master's thesis on initial teacher mentoring. My interest in the classroom as a site for learning for both students and teachers continued as did emerging practitioner views of how a school's inspector for special educational needs could make a positive difference to the quality of learning and teaching experienced by students and teachers in schools and classrooms.

The triad of research, practice and policy are central to my work. They are also central to my view of an emerging 'post-modern inspector' who actively seeks to forge relationships of educational purpose in the contingent and uncertain context of classrooms, schools and the wider educational community.

1.6 Conclusion

As outlined in this chapter, collaborative practices such as team-teaching are seen by policymakers as having a central role in the promotion of inclusive learning practices in Irish post-primary classrooms. However, the evidence to date indicates that team-teaching is not undertaken in any systematic manner and that research has been miniscule, local and confined to either individual or single site initiatives. No research has been conducted to examine team-teaching at a systemic level in Ireland and, as can be seen from the work of TALIS (OECD, 2009), there is a very wide gap between the rhetoric of recent policy and the reality of practice.

As highlighted by the NCSE report (2006), the Irish educational system has 'soft' barriers preventing students from accessing mainstream education. It has a funding mechanism which is deemed to be overly based on disability deficit. It has no structured emphasis on outcomes with an almost endemic fascination with inputs with no means of ascertaining what outcomes are being achieved by students with special educational needs. Schools are described in the report as under resourced in terms of capacity to deliver inclusive education, with insufficient investment in training and development at all levels (schools, teachers, support personnel etc). The report concludes that re-orientating the system from a deficit approach to one of systemic capacity building is a fundamental requirement of the change agenda.

The focus on changed practices including the practices of teachers and school personnel is clear and important but the report only makes, on a total of four

occasions, passing reference to classrooms and classroom practices. One reference is made to possible models of support, though team-teaching is not cited as one such possibility. It would also appear that both teachers and students require creative, imaginative and responsible uses of existing resources to support student learning and sustain ongoing professional development. What place has team teaching in responding to such a challenge in the Irish context at this time?

The increased recognition of classroom actions in the overall context of inclusion is framed by NEPS (2010) staged approach and by the documented references to team-teaching to support such an approach. Consequently a renewed focus is placed upon teachers' actions and towards the importance and demand for ongoing teacher professional development and collaboration within and across schools, as well as within and across classrooms. In Ireland, as elsewhere, the inclusion debate is no longer with reference to who should be in our school, but rather, who should be in our classroom? This question in turn, is no longer directed only at students but also invites consideration regarding whether there is a place for more than one teacher in classrooms? Answers to this question are framed in a time when additional resources are contracting while our student population is expanding; when the mainstream teacher is seen as the key to achieving many of the inclusive goals but remains often unqualified in special education; and when many students ask not to be withdrawn from class at a time when teachers are realising the benefits of non-teaching assistants being in the class.

Clearly the successful implementation of team-teaching requires a deeper understanding of what the practice asks and offers in specific contexts. As a successfully implemented and sustained practice team-teaching requires that context-sensitive features need to be laid bare if we hope to explain what inhibits and enables team-teaching to take root in our schools and classrooms as normal practice. It also requires wisdom about the management of change and how school improvement can be achieved. While the role of teachers, students and other school personnel have been documented regarding change agendas, that of the inspectorate and its potential to assist with change has not been addressed.

To answer these questions requires further examination of the available national and international literature on team-teaching and related concepts such as, collaboration for inclusion, professional learning and student learning. The next chapter will address these issues.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

In his synthesis of over 800 meta-analyses relating to achievement in learning, Hattie (2009) concludes that 'there is a dearth of literature on the effects of team-teaching, which probably reflects its absence in our schools" (p. 219). His study shows that, in the past four decades, only two meta-analyses, Armstrong (1977) and Murawski and Swanson (2001) have been undertaken on team-teaching. The findings remain inconclusive with regard to team-teaching. Drawing on Armstrong's (1977) conclusions, Hattie agrees that:

> In summation, one is struck by the very basic nature of the questions for which research has failed after fifteen or more years of team-teaching, to supply at least tentative answers. Team-teaching, it is evident, represents one of those educational practices that have not been subjected to truly intensive and systematic investigation. Support for team-teaching has been more of a validation through affirmation than a validation based on empirical evidence. At this juncture, little in the research literature provides solace either for team teaching's critics or its most ardent supporters. (p. 83)

Influenced by emerging practices in the United States of America in the 1950s which were a response to teacher shortages, and not necessarily aimed at inclusive practices, team-teaching has been incorporated into stated educational policy in Ireland but not necessarily incorporated into educational practice. Consequently, what is known about team-teaching emerges from literature that is situated outside of Ireland, the majority of which is based on research conducted in the United States of America.

This chapter, in capturing what is known and what is missing from the literature will first outline the types of research undertaken to date and the types of team-

teaching witnessed. Second, it will address the documented prerequisites for effective team-teaching and the impact team-teaching is seen to have, or not have, upon student learning. To further assist with our understanding of team-teaching attention will be drawn to the various learning theories and how they influence views on the effect or otherwise of team-teaching upon student learning. The fourth section will address the impact of team-teaching upon teacher learning and will also discuss the challenges such arrangements pose for teachers. The fifth section of the chapter will examine how team-teaching can support the promotion of learning communities and how research on change management can assist with the promotion of team-teaching. The final section will examine theoretical frameworks, in particular those associated with Social Capital Theory and Positioning Theory, and how they may assist as conceptual tools in increasing our understanding of team-teaching. In reading this chapter it is best to view the four themes of team-teaching, teacher collaboration, student learning and the promotion of inclusive practices as an interconnecting network of opportunities that can co-exist, support, sustain and benefit teaching and learning in schools and classrooms.

2.2 Trends and gaps in team-teaching research

Allowing for contextual differences, the extant literature is useful in that it offers clarity regarding certain terms and practices; offers examples of good and not so good implementation practices; highlights some of the lessons learned from experience and offers advice on how best to proceed. All of the above is most useful in framing understandings around what team-teaching is or might be.

However, there are also gaps in the literature and a distinct lack of theory developed, which fails to capture what team-teaching is or might be.

Some of these missing aspects of research are recently highlighted by long-established researchers of team-teaching, Friend, Cook, Hurley-Chamberlain and Shamberger (2010) who declare that:

> Most inquiry on co-teaching has emphasised co-teachers roles and relationships or programme logistics rather than demonstrating its impact on student achievement and other key outcomes, and far more literature exists describing co-teaching and offering advice about it than carefully studying it. (p. 9)

Such cautions are useful in reviewing the available data. A similar view of the literature being too one dimensional and findings being based more on assertion and less on evidence, is expressed in a critique published by Thousand, Nevin and Villa (2007). They reviewed the results of the literature under the general title of 'collaborative teaching'. While the authors outlined the various descriptions for collaborative teaching and the methodologies used to study collaborative teaching, they also identified "the lack of theoretical frameworks for collaborative teaching" (p. 426). Gaps in the research base were identified as the need for a well-defined curriculum for preparing teachers to team-teach and the need for research relating to the necessary administrative supports required to allow collaborative teaching to prosper. Significantly, they also concluded that there was a lack of instruments to assess co-teacher actions and "a lack of agreement on how to measure the impact of collaborative teaching" (p.426).

This chapter will also highlight and address other gaps or 'missing thinks' (Bennett, 2010) in relation to team-teaching. These gaps include the failure to

align team-teaching research with understandings associated with educational and systemic change. If team-teaching is about improving learning experiences, through the promotion of inclusive practices, then it would seem reasonable to expect both learning and change management to form part of documented studies, however, this is not the case.

Theories of learning are not explicitly stated with reference to team-teaching. In fact the concept of learning receives scant attention in the literature on team-teaching. The benefits of team-teaching for students are identified in some of the research undertaken and are usually expressed in terms of pupil attainment in standardized test scores, with less attention being afforded to gains in students' social, emotional or behavioural development.

Impact measures as referenced by Thousand et al. (2007), irrespective of whether attending to cognitive or affective domains, are conducted at the end of the period of intervention. The daily or moment-to-moment activities of students and how they position students to learn in team-taught lessons are not well captured in the research. The promotion of team-teaching, as captured by and through the relationships among personnel across classrooms, schools and districts, is not very well developed in the literature. Some aspects of these relationships such as collaboration at the classroom level are discussed, but usually in normative terms such as what teachers should and should not do.

A distinct lack of attention is devoted to other related concepts, such as building professional relationships through forming networks of support, that involve

relational trust and pressure. In short the generation of social capital that may be achieved by teachers and students engaged in team-teaching arrangements are not explored in the research. Equally, the positioning and repositioning of students and teachers within the dynamic classrooms is not significantly addressed.

2.3 The appeal of team-teaching: past and present

The roots of team-teaching as a service delivery model option in special education are found in the practices which emerged in the USA in the late 1950s in response to teacher shortages (Armstrong, 1977; Friend & Riesing, 1993). The latter authors contend that by the early 1980s "the growing need for approaches to providing services for students with disabilities in general education classrooms was accompanied by recognition of the problems with traditional consultation as a special education service approach function" (p. 3). The appeal of team-teaching having a role to play in inclusive learning is a relatively recent concept (Bergen, 1994; Bittner, 1995; Latz & Dogon, 1995; Lee, Smith & Croninger 1995; Rainforth & England, 1997). Bergen (1994) highlights the importance of collaboration between teachers in meeting the needs of all students and not just students with special educational needs. This point is also made by Bauwens and Hourcade (1997) who mirror the UNESCO (2005) definition of inclusion in highlighting the benefits that can accrue, for all students in classrooms, when collaborative practices such as team-teaching occur.

Adopting a broad interpretation of team-teaching as a term and as a concept facilitates multiple views of learning and teaching, avoids an overemphasis on

only what teachers are doing during lessons and opens up the possibilities of teachers and students adopting multiple and interchangeable roles within a single lesson. The adoption of team-teaching as a term is in keeping with socio-cultural understanding that teaching is not solely the remit of the teachers involved no more than learning occurs only for the students present. The working definition of team-teaching adopted for this research study is based on the work of Welch, Brownell and Sheridan (1999) and that of Friend et al. (2010). The latter authors state:

> We define team-teaching as the simultaneous presence of two educators in a classroom setting who share responsibility in the development, implementation and evaluation of direct service in the form of an instructional or behavioural intervention to a group of students with diverse needs. (Welch, Brownell & Sheridan, 1999, p. 38)

But this definition in itself needs the caveat that 'educators' in this context refers to qualified teachers and not to the array of other personnel which may work in classrooms such as paraprofessionals, parents and student teachers. Friend et al. (2010) assist with a working definition when they speak of the *intent* of co-teaching as "to make possible for students with disabilities to access the general curriculum while at the same time benefiting from specialised instructional strategies necessary to nurture their learning" (p. 11). This brings us closer to an understanding of team-teaching that refers to the students and teachers involved in team-teaching.

2.4 A systemic review of team teaching in the post-primary setting

This section involves a systemic review of research into team-teaching at post-primary which identifies 46 relevant studies. Within the Irish context there has been little research undertaken into the practices and outcomes of team-teaching,

which in part is due to the relatively small number of teachers actively involved (TALIS, 2009). The limited research to date in Ireland has been mainly focused on primary (elementary) schools and has been undertaken in the tradition of individual teachers' action research (Riney, 2004; Keane, 2006). The existing post-primary work follows a similar tradition of individual teachers engaging and reporting on action-research based experiences of team-teaching with reference to student as well as teacher perspectives (McCarthy, 2002; Nolan, 2005; Bates, 2005; McNamara, 2010). In order to capture the research to date on team-teaching in a post-primary setting it is necessary to go to a wider international setting.

A considerable research database exists in relation to team teaching, the majority of which emerges from the United States of America and which is usually focused more on primary than post-primary settings. For the purpose of this research a systematic examination was undertaken where a wide range of studies were accessed and then rejected or included, depending on their relevance. Such decisions were determined by a number of criteria. First, given the pace of change in educational practice, a cut off point was set at 15 years or less. Second, only research that had a post-primary focus was considered unless some aspects of other sectors research (primary or tertiary) were deemed relevant, such as the methodology and design of the research or findings which were generic in nature. Third, both quantitative and qualitative studies were considered relevant with pragmatic factors dictated that only research that was written or translated into English were included.

Access to two university libraries, University College Cork and Trinity College Dublin, provided search engines to locate published articles (EBSCO, ERIC). Informed by the literature associated terms such as 'co-teaching', 'co-operative teaching', 'collaborative teaching', 'integrated teaching', and 'partnership teaching' were used to avoid too narrow a focus. Subsequent terms such as 'inclusion', 'inclusive learning' and 'collaboration' also followed similar search patterns. Search terms were served by Google Scholar which also provided links to citing of authors in other articles and to published books or chapters from books. Books and chapters were accessed from individuals' personal libraries or purchased by me in order to add to my own personal library. Access to American Educational Research Association (AERA) and Teachers College Record resulted in the acquisition of contemporary research in both hardcopy and electronically.

The sources selected comprised a number of features including the year of publication and country, the research question selected, and the characteristics of the research methods employed.

Year of publication and country where the study was carried out

The sources identified covered research carried out between 1995 and 2010. Of the 46 studies considered, 40% were published in the period 2005-2007, 30% between 2001 and 2004, 18% between 1995 and 2000, with the remainder of 12% conducted between 2008 and 2010. The majority of the relevant research was undertaken in the United States with some representation from Canada, Taiwan, Korea, Cyprus, Japan, Australia and Ireland. Of the 46 studies

examined, 34 were articles from journals, seven were papers, two were research reports and three were books.

Research questions of the selected studies

The focus of the research questions or aims, of the selected studies, dealt mainly with seven themes. The themes involved definitions of team-teaching (Friend & Riesing, 1993; Cook & Friend, 1995; Salend & Johanson 1997; Bauwens & Hourcade, 1997; Fatig & Tormley Taylor, 2008), the different types of team-teaching (Friend, & Reising, 1993; Maroney, 1995; Villa, Thousand & Nevin, 2008; Murawski, 2009), guidance on how to enact team-teaching practices including teacher and student perspectives and collaboration (Friend, Hurley-Chamberlain & Cook, 2006; Austin, 2001; Walther-Thomas, Bryant & Land, 1996; Weiss & Lloyd, 2002; Rice & Zigmond, 2000; Zigmond, 2003; Dieker & Murawski, 2003; Keefe & Moore, 2004; Rice, Drame, Owens & Frattura, 2007; Gerber & Popp, 2000; Bouck, 2007; Kohler-Evans, 2006; Mastropieri, Scruggs, Graetz, Norland, Gardizi & McDuffie, 2005; Laurence-Brown & Muschaweck, 2004; Villa, Thousand & Nevin, 2008), the benefits of team-teaching (Walther-Thomas, 1997; Scruggs, Mastropieri & McDuffie, 2007; Jang, 2006; Murawski, 2006; Weiss & Lloyd, 2002), comparative studies between team-teaching and withdrawal (or pull out) classes (Rea, McLaughlin & Walther-Thomas, 2002; McDuffie Mastropieri & Scruggs, 2009), influences on instructional practices (Pugach & Wesson, 1995; Magiera & Zigmond, 2005; Murawski, 2006;) and influences on specific content (Zigmond, 2006; Magiera, Smith Zigmond & Gebauer, 2005; Wilson & Michaels, 2006; Fontana, 2005).

A review of the relevant literature is found in Table 3, and is comprised of a number of features including the year of publication and country, the purpose of the research, the participants and duration of the studies, as well as an outline of findings.

Table 3. A review of post-primary focused research on team-teaching

Nr	Studies	Purpose	Participants and duration	Findings
1.	Welch, Brownwell & Sheridan (1999)	Review of 40 articles	1980-1997 Primary and post-primary	Positive teacher attitudes. Limited knowledge about student outcomes-performance and behaviour. More research required on outcomes, as only descriptive of teachers' experiences and attitudes.
2.	Hattie (2009)	Meta-analysis	136 studies (1977-2009)	Inconclusive findings regarding the benefits of team-teaching.
3.	Weiss & Brigham (2000)	Review of 23 articles	Primary and post-primary (1987-1999)	Considerable variety of practice was found. Needs of individual students not always met. Personalities of teachers the major variable.
4.	Scruggs, Mastropieri & McDuffie (2007)	Meta-synthesis	32 qualitative studies	Beneficial to (at least some) students with special educational needs in social and academic domains. Benefit to teacher professional development. Conditions to include planning time, teacher compatibility, training. Dominant model of teaching was 'one teach, one support', special educational needs teacher supported and often subordinate to general teacher.
5.	Murawski & Swanson (2001)	Meta-analysis	Research of 89 articles	Inconclusive findings on co-teaching. More experimental research encouraged.
6.	Jang (2006)	Effect of a split class model.	8th grade mathematic classes in Taiwan	Control group model. Station teaching and split teaching only. Requires administrative support. Final student exams higher in team teaching. Students comparing teachers i.e. teaching styles and classroom management.
7.	Murawski (2006)	Comparative analysis.	9th Grade English in one school students (n=72), teachers (n=4)	No significant statistical differences. May be due to manner of implementation i.e. lack of planning, parity and variety of instruction. Success depends on personalities and abilities. No differentiation of practice. Assistant role. High non-contact time. Students' views positive. Time constraints on studies
8.	Weiss & Lloyd (2002)	Teachers of SEN in team-taught and solo-taught classes.	1 middle school and 1 high school from same district involving 6 teachers. 1 academic year	Data collected between October and February. Scheduling, content knowledge, needs of student and acceptance by other teacher influence the role teachers take in class. Implementation is variable. Extra monitoring or person to ask a question but no group strategy and one-to-one not availed of. Need to study roles and practices not just relationships of teachers. Its about students.
9.	Mastropieri, Scruggs, Graetz, Norland, Gardizi & McDuffie (2005)	Effective practices in co-teaching that are associated with inclusion.	4 Case study data in different settings and content area. Social Studies and Science case studies 1-2 years.	Dominance of high stakes testing effects pace of lessons. Little differentiation. The major adaptation was one-to-one assistance while the special education teacher walked about. Case 4 longitudinal (2 years) use of peer assisted differentiation by task and product. High stakes pressure to move on. Content knowledge determined who the dominant teacher was. Issues raised associated with compatibility trust respect and volunteerism.
10.	Hang & Rabren (2008)	Perspectives and efficacy of this approach.	7 schools from elementary to high school.45 teachers 58 students with disabilities. 1 academic year	Positive findings in literacy and numeracy as well as attendance and referrals.Academic positive: Behaviour reported positive. Communication the key to parity. Time for planning an issue. Future research on which team-teaching models suit which students best.

Nr	Studies	Purpose	Participants and duration	Findings
11.	Nevin, Thousand & Liston (2006)	Preparation, policies & practices IT	2 secondary co-teaching teams, Florida and California, 1 academic year	Differentiation for diversity. Teacher flexibility and collaboration. Playing to content strengths of each other. Students growing in confidence. Research base is scant. Lack of research maybe due to the lack of a common definition of co-teaching and the absence of validated assessment tools.
12.	Simmons & Magiera (2007)	Determine if effective co-teaching was truly taking place	3 high schools from one district. 10 classrooms. 22 Teachers. English Social Studies Mathematics Science	Update training to apply co-teaching and promotion of classroom visits. Fidelity of implementation an issue. Keep effective pairs together. Provide common planning time. SEN departments should join with subject content departments. Recognition is given to length of experience of team-teaching which ranged from 1-6 years and to exam pressure, scheduling, intensity of content at post-primary. Student outcomes remain vague.
13.	Isherwood & Barger-Anderson (2007)	Implementation and adoption of co-teaching models	15 regular teachers and 5 spec ed. One year of observation (n=96)Middle school (grades 6-8)	Research needs to focus on how effective implementation can occur. Control groups are not advisable. Personalities and teaching styles important. Dysfunctional relationship –lack of subject knowledge, role as helper. Mutual respect and effective communication are important. Can lead to de-professionalisation if not careful. Need for administrative support and validation, visit classes.
14.	Wilson & Michaels (2006)	Students views on team-teaching	346 students (127 special education) average age 14 2 middle and 3 high schools	All favourable and all self-reported. Better grades and better literacy skills, choose these classes again, access to general curriculum, higher level of abstraction-literacy skill development-concept development. Students believed skills improved. More confident, connectedness and ready access to help, varied instructional styles, opinions, no messing, sometimes confusing.
15.	Dieker (2001)	How are teams structured? What practices do they implement? What can others learn?	7 middle schools 2 high schools 9 dyads. 4 observations over 16 weeks. Teams established between 1-3 years experience	Most successful used both lead and support and classic team-teaching. Planning time for lessons was successfully conducted 10 minutes per day. Emerging themes: 1) positive climate including natural peer supports (peer tutoring or collaboration) 2) Positive view by all including recognition by teachers of their own learning 3) Active learning evident 4) High expectations for behaviour and academic performance 5) Commitment to planning 6) Multiple assessments methods (academic and social) including IEPs. In preparation for team-teaching it is advised that preplanning session is arranged for teachers and clarity of purpose is shared with students. A continuum (menu) of models is advised.
16.	Murawski (2006)	Academic outcomes in reading and writing	9th Grade English comparative study. 4 teachers 10 week observation	Not significantly different. Implementation fidelity an issue as is planning time, parity and variety of instruction. Large group format dominant model throughout. Matters of attitude, motivation, self esteem not addressed nor use of range of configurations i.e. no use of alternative or station teaching. Positive with no discipline problems. 3 types of academic outcomes grades and standardised testing and students work. Teachers need to be trained for co-teaching to work effectively and efficiently.
17.	Armstrong (1977)	Academic achievement a review	Review of elementary and 11 post-primary studies (1960-1970)	Teachers can play to each others content strengths. It spurs creativity as teachers must teach for their colleagues as well as for their learners. Individual (personalised) learning in the collective. Better sequencing and pacing can be achieved with two teachers. Too much focus on the teachers and not enough on the learning. Too much on the logistics and not enough on instruction. Forgotten point by Hall & Rutherford (1975) that evaluation outpaces implementation with short timeframes using long-term assessment tools. Issues not addresses include integrating with other items on change agenda, issues of training, roles and duration of pairing. More detail required on the day-to-day aspects of team-teaching. How is it used?

Nr	Studies	Purpose	Participants and duration	Findings
18.	Cramer & Nevin (2006)	Survey of relationship between teachers	46 co-teachers in 22 schools (5 high, 1 middle, 2 alternative, 14 elementary)	No statistical difference between elementary and secondary teachers. For some teachers the student progress via team-teaching overrides compatibility fears. High-stakes testing at secondary level, an issue. Divide between general and special educators not evident as special educators had same subject content qualifications as general educators. Team-teaching has a role in teacher education.
19.	Rea, McLaughlin & Walther-Thomas (2002)	Comparison between co-teaching and pullout	8th grade in 2 middle schools 58 students, 36 team-taught and 22 pull out. 2 year study 1994-1996.	Very positive findings for team-teaching across grades, standardised tests, attendance, behaviour. No significant difference on standardised tests (state proficiency tests), on behaviour no difference, attendance significantly improved. Ongoing professional development for teachers and others (e.g. therapists) required.
20.	Austin (2001)	Survey of teachers beliefs about co-teaching	139 teachers k-12	No differentiation of high school issues. General educators were seen to do more than their special education colleagues in classrooms. Planning not seen as important by those who met daily to plan. Many teachers considered co-teaching worthwhile even though they did not initially volunteer. Teachers reported academic benefits to students. Teachers cited better ratio, value of another's expertise and viewpoint, value of remedial strategies and review for all students. Social development positive - the exception being among those placed for socialisation only.
21.	Walther-Thomas (1997)	Emerging benefits and persistent problems	3yr study involving 18 elementary, 7 middle schools. 119 teachers and 24 administrators	Benefits for students with SEN- improved sense of self as learner, academic performance, social skills and peer relationships. Benefits for students without SEN- greater teacher time/attention, strategies and study skills revealed, social skills and classroom community. Benefits for teachers – professional satisfaction, growth, and support. Persistent problems included: Scheduled planning time, student timetables, SEN caseloads, admin support, staff development – need for training raised. Each school is unique.
22.	Walther-Thomas, Bryant & Land (1996)	Planning issues and steps	2 6th grade teachers during 1 academic year	District level planning – change wisdom tells us it is important to have support and cohesion. Building level planning- principal support, selection of teachers, professional learning opportunities, timetabling, time for planning/reviewing. Classroom-level planning –getting to know each other, meeting up, planning together.
23.	Kloo &Zigmond (2008)	Coteaching revisited:	Describe current practice and how it is not being maximised	Reflects issues associated with special education teacher being marginalized and focuses on how configurations associated with station, parallel and alternative teaching can assist. It also raises the importance of observing learning and intervening where appropriate
24.	Zigmond (2006)	Reading and writing in co-taught secondary schools.	8 Pairs from 5 high schools 39 observations, 5 minute segments coded over 3-6 observations of each pair.	Poor pedagogy with low expectations of students and of team-teaching. Social studies taught through oral communication for 20.5 of 30 hours of lessons. Didactic style dominant. Circumvention rather than remediation with a dependency on the teacher for them to access knowledge. Strategies and scaffolding not being shown by the co teachers in the classes. Students did less writing than reading.
25.	Weiss & Llyod (2002)	Congruence of actions	Special education teachers in co taught and special education classrooms. 2 schools in one district 6 teachers, 54 observations. 1 academic year.	Team teaching format only seen in one pairing. Presence of special education teacher reduced to minor role and not maximised. It's not enough to study relations among teachers need also to study roles and instructional actions. Teachers need training, support, time and discussion on what model of support is best for students. More is required in determining student outcomes.

Nr	Studies	Purpose	Participants and duration	Findings
26.	Nambu (2008)	Teachers' perceptions on team teaching	Upper secondary schools in Japan. 2 schools (6 teams) One lesson observed and video recorded.	Little focus on student outcomes and more on teacher interaction. Some evidence of student motivation being enhanced by team-teaching. English language classes, pairings weren't seen to provide student-student interaction in English. Professional development is deemed necessary for team-teaching.
27.	Magiera, Smith, Zigmond & Gebauer (2005)	Benefits of co-teaching in mathematics	8 high schools 49 observations 5 minute windows of instruction reported on10 pairs and 8 interviews	Both teachers monitored independent practice. Only one teaching. Lead and support the dominant model even though team-teaching for 3-5 years. Only 2/49 saw co-teacher give instruction to a small group. Team teaching 9/49 and lasted only a short time. Transmission mode influenced available configurations as did asking students to solve problems individually. Problem solving in groups not availed of.
28.	Rice & Zigmond (2000)	Australia & America. Teachers' perspectives.	17 teachers observed and interviewed in 10 public schools. (2 in Australia 8 in America). Teachers' experience with team-teaching ranged considerably	Special education teacher confined to monitoring and assisting as lack of content knowledge influences parity. Personal and professional compatibility seen as crucial. Personal trump all (patient, humour, flexibility, communication skills) but 2 Australian teachers spoke of being professional rather than compatible. When well implemented students benefit in social and academic. Brings benefits to all students and all teachers. Needs admin support in terms of resources and time. Agreed standards/willingness to communicate openly/see above the big picture/ parity not a passenger/ take a chance.
29.	Magiera & Zigmond (2005)	Instructional differences	84 observations of 8 pairs of teachers (4 for the first time team-teaching). Time sampling 4 occasions co-taught and 4 solo-taught. Grades 5-8.	More one-to-one in co-taught lessons for the target students but less with the general educator when the special needs educator was present. Limited one to one interaction in both class types. More interaction between general teacher and student in solo taught class (no mention of the quality of that interaction…i.e. rushed). Across all classes 60% whole class instruction 30% small group10% one to one. Limited added value in adding a teacher, though student outcomes not factored. Teachers need to be prepared for the task and have ongoing skill training and planning time.
30.	Dieker & Murawski (2003)	Issues trends and successes	Review	1) Declares it 'ludicrous', in USA context, to think special needs educator can have same content knowledge 2) school context at post-primary (class size, caseload, learning needs, IEPs, paperwork,) need to work on timetabling when and not after been constructed. 3) assessment of - need more than standardised tests. What outcomes should be considered important? Do quantitative and qualitative results need to be considered in assessing the impact of co-teaching teams? 4) Diversity of student population asks mainstream teachers to respond diversely, including team-teaching. 5) Diverse teaching methodologies required within team-taught lessons. 6) Recognition of the stages of team-teaching such as forming storming, norming .
31.	Harbort, Gunter, Hull, Brown, Venn, Wiley & Wiley (2007)	Teacher behaviours	2 Pairing in a high school Biology / Physical science class	Less than effective model. 1% SEN teacher leading instruction Lead and support the only model seen. Differentiation through group work not happening. One of two teachers absent 25% of time.
32.	Keefe & Moore (2004)	Teachers' perspective	One high school. 8 teachers Semi structured interviews	Common themes 1) Nature of collaboration. 2) Roles and responsibilities. 3) Outcomes Sub-themed into 1) Compatibility and choosing a partner linked with communication, lack of time , planning

Nr	Studies	Purpose	Participants and duration	Findings
			Not clear on years of team-teaching experience	on the fly, 2) Some teams had formalised roles others just settled into roles 3) Positive student outcomes (stigma gone for SEN and learning more, individual help for all students) Negative outcomes for SEN as few but related to class too large for students to be seen as individuals. Outcomes for teachers varied and were closely connected to their relationship with their partner. Relationship was a key determinant. Input into selection important. Clarity on roles important. Whole school approach on inclusion. Team teaching not always the only answer – forms part of a menu of responses.
33.	Fontana (2005)	Effects of team teaching measured on standardised instruments	8th graders with special needs 1 academic year	Breadth of content versus depth of content a challenge. Academic success and keeping students in school. Findings for students: significant improvement in grades from previous year (unlike other group), significant improvement in self concept and maths as measured on standardised instruments. No significant improvement in writing scores. Findings for teachers: enjoying and maintaining team-teaching, increased use and understanding of instructional adaptations, however preferred adaptations were for the whole class rather than small group or individual. Recommendations; 1) Need support at district, school and classroom level 2) Voluntary participation 3) More training, for initial teachers on the implementation and those with experience could benefit from training targeted to specified areas of need 4) Successes and challenges in open dialogue on teacher and student outcomes and potentialities 5) Tension is inevitable when two teachers share a classroom responsibilities. Focus on the small successes and be patient and honest with each other.
34.	Zigmond (2003)	Is one place better than another	Efficacy studies on place	No compelling evidence that place is the critical factor across 3 decades of research. Not asked what is best for the individual student? Pull-out classes have a place in education as differentiation can be impractical when meeting certain needs. Learning is more the issue than setting. Either/or approach here, not mixed.
35.	Kim, Woodruff, Klein & Vaughn (2006)	Co-teaching for literacy using ICT	Middle school, 2 dyads, 1 academic year	Responsible co-teaching involves, pre-planning, establishing goals, linking with colleagues and ongoing evaluation. Instruction is more important than placement. No clear findings revealed on student outcomes.
36.	Gerber & Popp (2000)	Improving collaborative teaching	Survey of 4 elementary, 4 middle and 2 high schools administrators, teachers, students and parents	General recommendations: A continuum of service should exist (menu). Planning time, timetabling, evaluation and voluntary participation advocated. Communicate and share success with multiple audiences. Training for new personnel and information for parents. Collaborative teaching can play a key role in fostering learning communities. Intense direct services within a general classroom have not been tried.
37.	Bouck (2007)	Implications for practice	8th grade history class engaged in team-teach for first time. Study over 9 weeks at mid-point in year.	Many roles adopted. One role influenced the other teacher's role, including possibly devaluing role. Can become better at a particular role being played as partner can take on the other role. Spaces shared or divided. Space as physical, as instruction, as discipline. Tension (pressure) which enabled and/or disabled. Time for planning provided and valued as content now known by both. Student outcomes not addressed
38.	Bauwens & Hourcade (1997)	Explanation of configurations	Configurations reviewed	Successful inclusion depends on collaboration. Different configurations outlined.
39.	Laurence-Brown & Muschaweck (2004)	Collaboration and inclusion	2 schools, over 2 months at the end of the year	Quality of effective teams including we sink and swim together – relationships Time, role clarification, shared vision

Nr	Studies	Purpose	Participants and duration	Findings
40.	Friend Cook Hurley-Chamberlain & Shamberger (2010)	Complexity of collaboration in special education	Review	More on logistics than impact. Need to place team-teaching within larger school improvement movement. NCLB and 2004 re-authorisation of IDEA sees move to more blended and less dual system in USA. Gifted and talented referenced. Differentiate configurations and their uses and move away from a monolithic view of co-teaching. Only addresses summative outcomes rather than dynamic. Therapists etc. need to know more about co-teaching as they will be evaluating it too.
41.	McDuffie Mastropieri & Scruggs (2009)	Differential effects of peer tutoring in co-taught and non-co-taught classes	203 7th grade science students in 8 classrooms. Duration of study 8 weeks.	Peer-tutoring improves student performance but no added value when implemented in co-taught lessons. Lead and support dominant model of team-teaching. Station teaching for experiments and alternative teaching for assessment exercises. Teacher style trumps configuration i.e. less teacher interaction with students in the co-taught lesson. Instructional methods the same in both settings.
42.	Thousand Nevin & Villa (2007)	Collaborative teaching: critique of the scientific evidence	Critique of research	Lack of theoretical frameworks for collaborative teaching with varied definitions and methodologies for studying collaborative teaching. Two issues identified – a lack of assessment methods to assess the quality of co-teacher actions and a lack of agreement on how to measure the impact of collaborative teaching. Two gaps identified in current knowledge and research bases – a well defined curriculum for preparing teachers to collaboratively teach and the necessary administrative and logistical supports to allow collaborative teaching to thrive
43.	Salovitta & Takala (2010)	Frequency of co-teaching among different teacher categories	Questionnaires among 1117 resource teachers and then 317 teachers, in Helsinki Finland.	Used sparsely but valued by those who do use it. Lack of planning and leadership an issue. Compatibility issues also addressed. Helsinki officials see co-teaching as assisting with the inclusion of students in mainstream classrooms and schools. A merit salary payment for co-teachers is being discussed. No clarity on student outcomes.
44.	Gurgur & Uzuner (2011)	Team-teaching and station teaching	2 teachers study in 1 primary class of 35 students	Focus on the teachers not on the learning. Planning an issue as was the implementation of the 2 configurations. Station teaching divided in 3 and numbers large.
45.	Symeonidou (2002)	Introducing co-teaching	1 school during 1 school year Cyprus	Factors favouring change: legislation, initial teacher education, support teacher is seen as a teacher. Factors against change: parents don't understand, individualised support does not mean separate locations of support.
46.	Mastropieri & Scruggs (2001)	Co-teaching for inclusion	Biology lesson by 2 teachers Observed over 9 weeks.	General educator seen as content expert and special education educator seen as adaptation expert. Raised awareness of needs, held high expectations for all and nurtured mutual respect among all in the class.

Characteristics of the research methods

A wide range of research methods were employed including descriptive analysis, surveys, qualitative case studies, quasi-experimental and practitioner action research as well as meta-analysis, assessment instruments and mixed methods. Time frames for empirical studies ranged from three weeks (Magiera & Zigmond, 2005) to three years (Walther-Thomas, 1997), though the latter was by far the exception. Apart from one partial case study of two years (Mastropieri et al., 2005) and another research study of similar duration by Rea, McLaughlin and Walther-Thomas (2002), all other studies were of a year or less in duration.

Qualitative methods are the dominant method with Murawski and Swanson (2001) observing from their meta-analysis, that only six of the 89 articles they reviewed had enough quantitative information for calculating effect size[5] to show the impact of team-teaching. All six studies registered an average effect size of d = 0.31. Of the three studies from post-primary schools, the most common measure is students' classroom grades and results of standardised tests. These three studies were conducted over a period of time that ranged from one academic year to as little as nine weeks. As well as being a very small survey the benefits in relation to student academic achievement were found to be inconclusive across the three studies.

The narrow behaviourist interpretation of team-teaching, and its alignment with calculating effect size only through student academic achievement, has resulted in calls for greater clarity on what exactly may constitute an impact measure

[5] Effect size is the means for identifying the strength of the conclusions about group differences or about the relationship between variables in a quantitative study, with typical measures of small (d=0.2), medium (d=0.5) and large (d=0.8) effect sizes. (Hattie, 2009).

(Thousand et al., 2007; Friend et al., 2010). Such renewed interest has also resulted in renewed attention being given to the fidelity surrounding the implementation of team-teaching. It would appear to make little sense in drawing conclusions on the impact of a measure that was not implemented as expected or envisaged. The fact that team-teaching may not be implemented correctly, and subsequently misjudged and misrepresented, is addressed by Friend, Hurley-Chamberlain and Cook (2006) who indicate that a significant success criteria for team-teaching is for teachers to have parity of esteem where both are seen and treated as equals before, during and after the lesson. They suggest that research which indicates that the promise of team-teaching is not being realised, may reflect less on the merits of team-teaching and more on the integrity of the models under review, the context in which they are undertaken and the underlying change wisdom required to implement such practice.

In this regard an important distinction between Irish and USA team-teaching pairs is that the former has less formally qualified special educational needs personnel which is more likely to create a scenario where both teachers will be qualified in their respective subject areas, with neither being seen as more qualified than the other in the area of special educational needs. This context-sensitive arrangement of greater subject parity was kept to the fore throughout the study.

Contextual and more nuanced understandings in relation to the impact of team-teaching are being called for (Thousand et al., 2007), which are in keeping with the work undertaken by Vaughn, Schumm and Arguelles (1997). Their work in

primary schools took a broader view of the variables impacting upon students by examining the impact of team-teaching upon friendships, self-concept and peer acceptance. Bouck (2007), while not showing how it may be achieved, does uniquely flag the need for more intermediary and formative practices that capture the moment-to-moment interaction between teachers and the roles adopted. Such a view may also have implications for assessing the moment-to-moment impact of team-teaching upon student learning but no research to date has adopted such an approach. Indeed the research on the impact upon students fades compared to that devoted to teachers. Yet the attention given to teachers in the research fails to theoretically frame the interaction among teachers beyond surface commentary on what helps and hinders the promotion of collaborative practices that support team-teaching.

In an effort to share findings from practice, observation schedules have been devised by some researchers (Dieker, 2006; Basso & McCoy, 2010). Significantly these schedules focused more on what teachers were doing in relation to aspects of collaborative practice among teachers in the classroom rather than on the instructional practices being undertaken by teachers. Where instructional practices were registered, no account was taken of whether such a practice was deemed appropriate in advancing desired learning outcomes at that time. Comparative analysis, between one group of students engaged in team-teaching as compared to a group not engaged in team-teaching, have also been undertaken at primary level. While such comparative practices can be questionable in their own right, it becomes rife with difficulties at the post-primary level (Dieker, 2001; Zigmond, 2003).

The use of experimental groups was discussed by Zigmond (2003) who contends that the samples of experimental and control groups are fraught with difficulties. It is made all the more complex when the fluid nature of post-primary settings is factored into the multiple learning opportunities which cannot be 'controlled'. For example, a teacher who may be involved in team-teaching a class of students may also teach that class, or part of that class, the same or different subjects as a solo-teacher.

As can be seen there are a number of unexplored and under-explored aspects associated with team-teaching, in particular in relation to determining the impact of team-teaching upon student learning and the potential of team-teaching to link with other educational developments such as the promotion of inclusive learning communities in our schools and classrooms. One area of research that has garnered considerable information is in relation to the different configurations or models that team-teaching can adopt. The six models of team-teaching have been documented by a number of researchers and are the focus of the next section.

2.4.1 Models of team-teaching

Six models of team-teaching have emerged (Maroney, 1995; Friend & Cook, 2003; Walther-Thomas, Korinek, McLaughlin & Williams, 2000) and Table 4 briefly outlines these various models of team-teaching. The dominant model in the research literature is of 'one teach and one assist'. This can be explained in part by the preponderance of research from the USA with its focus on the engagement between general education teacher and special education teacher, a role which does not surface in the Irish context. Scruggs, Mastropieri and

McDuffie (2007) reviewed thirty two qualitative investigations, 50% of which had a post-primary basis, and found that 72% of all of the studies reviewed had 'one teach and one assist' as the predominant model of team-teaching. A combination of models was cited in only one post-primary study.

Table 4. Six models of team-teaching based on the work of Maroney (1995) Villa, Thousand, and Nevin (2008) and Murawski (2009)

6 Types	Activities of teachers	Examples from practice
Interactive Teaching (Classic team-teaching)	Both teachers actively and equally share the instruction to all students	Rapid altering of speakers and respondents (eg one teacher writing on board what the other is saying…)
Complementary Instruction (Supportive)	One teacher assumes instruction for the students while the other teacher provides follow-up instruction.	Similar to theme teaching in that the strengths of teachers are drawn upon within the same lesson (eg theoretical aspect of a subject taught by one teacher other teacher formulates questions). Opportunities for observing student(s) in action can also be used.
Station teaching	Where various learning stations are created and the co-teachers provide individual support at the different stations	Teachers may also draw upon students to 'man' such support stations (eg explaining their history project to fellow students)
Parallel Instruction	Class is subdivided and each teacher provides instruction on the same content or skills to a smaller group of students.	Teachers work with half a class on same topic (eg scientific or mathematical problem solving where comparisons can be drawn).
Alternative (Split) teaching	Division is based on a particular learning need of the groups.	Division may be based on working with student(s) who need extra help in completing a task or who may require additional learning challenges. One-to-one and small group teaching can occur within class setting
One teach, one assist	One teacher teaches and the other monitors the room checking that students are on task and supporting individuals where required.	At start of lesson one teacher teaches while the other checks homework. Reverse action at end of lesson where review and notation of homework occurs.

Magiera and Simmons (2005) cite Weiss and Lloyd (2002) who suggest that there is a gap in the research in that there is descriptive information about what co-teaching should look like in the classroom but that "research has only begun to address the issues of implementation, instruction and effectiveness" (p. 1).

2.4.2 Prerequisites for effective team-teaching

It would appear that for team-teaching to ever be successful a number of prerequisites are required. Rice and Zigmond (2000) conducted a study in Australian and American classrooms observing that the dominant teacher was the general educator and the special educator played a less significant role in the class. They state that 'most respondents saw professional and personal compatibility between co-teaching partners as critical for success" (p. 190). Barriers to the introduction of co-teaching in secondary schools included entrenched views rejecting inclusion and administrators' unwillingness to commit the required time and resources. Simmons and Magiera (2007) highlight the need for ongoing training, for consistency of approach, for common planning time. They also encouraged special education teachers to become part of subject department teams and to track student progress.

Dieker and Murawski (2003) highlight; the need for parity between the role of educators, , the need to use a range of teaching methodologies, the need for assigned planning time, and a recognition that classrooms contain a range of abilities. In addition to the above Scruggs, Mastropieri and McDuffie's (2007) analysis outlined the dominant request by teachers for administrative support with no disconfirming evidence emerging. The other dominant prerequisite

highlighted the importance of teachers' choice in opting or declining to engage in team-teaching arrangements. It would appear that particular importance to the success of team-teaching arrangements rests on both teachers involved being equal partners. Scruggs, Mastropieri and McDuffie (2007) analysis state:

> If the qualitative research to date represents general practice, it can be stated that the ideal of true collaboration between two equal partners – focused on curriculum needs, innovative practice and appropriate individualisation – has largely not been met. (p. 412)

Avoidance of compliance related reasons for teachers engaging in team-teaching and the prerequisite of each dyad being on equal footing are highlighted as central to any meaningful engagement. The importance of parity was also raised in Cramer and Nevin (2006) analysis of co-teaching and they contradict some of the findings of Scruggs et al. (2007), and indicated that successful arrangements at secondary level were in part due to the special educators being certified in the subjects being taught (science and mathematics). Villa et al. (2008), suggest that there is considerable disagreement in the literature regarding "what constitutes meaningful impact in co-teaching" (p. 15). They contend that:

> Research results could be improved and be more helpful to teachers if multiple measures were used to examine not only student achievement, but also student social, self-esteem, and friendship development as well as co-teachers development of instructional competence, confidence and self-efficacy. (p. 16)

To assist in understanding the impact, or otherwise, of team-teaching upon student and teachers it is necessary to devote some attention to our understanding of what effective teacher and student learning might look like and how it might occur. As Gerber and Popp (2000) point out the most important aspect of team-teaching is its impact upon student learning.

2.4.3 Impact of team-teaching upon student learning

The impact of team-teaching upon student learning is captured by a number of studies whose findings offer conflicting information. Students with specifically identified needs are seen to benefit from team-teaching as referenced in studies undertaken in relation to students with hearing impairment (Compton, Stratton, Maier, Meyers, Scott, & Tomlinson, 1998; Luckner, 1999), learning disabilities (Garrigan & Thousand, 2005; Klinger, Vaughn, Schumm, Cohen & Forgan, 1998; Rice & Zigmond, 2000; Trent, 1998; Welch, 2000), emotional disturbance (Dieker, 1998) and students with and without disabilities in secondary classrooms (Magiera, Smith, Zigmond & Gebauer, 2005; Mahony, 1997; Weiss & Lloyd, 2002). Welch (2002) contended that students with disabilities and their classmates all made academic gains in reading and spelling on curriculum-based assessments in the co-taught classroom. Rea, McLaughlin and Walther-Thomas (2002) found improved grades and attendance as determined by the school, but no significant difference in high-stakes testing. Other benefits accruing from team-teaching include the opportunity for students to experience and imitate the cooperative skills shown by the teachers, the increased flexibility availed of by teachers to engage in research-proven strategies (Miller, Valasky & Molloy, 1998), the reduction in student wait time and an increase in personal attention and teachers' support (Pugach & Wesson, 1995).

Wilson and Michaels (2006) surveyed post-primary aged students for their views on team-teaching and they identified a number of advantages including the fact that more help was available; there was a wider range of instruction, teaching styles and perspectives made available with more skill development being made

possible. Of note they observed that student responses indicated that team-teaching settings expanded the learning opportunities for all students.

Other reviews of student perspectives (Hang & Rabren, 2008; Dieker, 2001; Gerber & Popp, 2000) reveal similar findings including those associated with improved student self-esteem and peer relationships and a reduction in problem behaviour. Classroom social climate, according to Pugach and Wesson (1995), is improved by team-teaching where students have fun, take pride in their work, are challenged yet successful and have increased satisfaction from giving as well as receiving help. The authors give a detailed account of the benefits of team-teaching for students highlighting eight features that are strengthened by teachers collaborating in classrooms (Table 5). Among the benefits listed are the positive impact upon the promotion of a sense of community and cooperation in the classroom and the removal of possible stigmas and communication difficulties caused by students being withdrawn from class. The authors conclude that "the promise of team teaching ought to be the capacity to help teachers transform the curriculum, not simply to be more efficient with the existing one" (p. 293). In short team-teaching should ask more and not be seen to ask less of teachers and their teaching.

Table 5. Pugach and Wesson's (1995) eight effective pedagogical practices

Effective pedagogical practices supported by collaborative teaching	Obstacles to effective pedagogical practices in solo-taught Resource room settings	Obstacles to effective pedagogical practices in solo-aught General Classrooms settings
1. Flexible, small groups for work on specific skills	Pull out done through permanent group, which are stigmatising and based on global ability as opposed to specific skills	Difficult to achieve with a single teacher
2. Hands on social studies and science activities	Historical focus on basic skills, usually reading and maths	Difficult to use with larger class and single teacher
3. Cooperative learning with an emphasis on helping	Very narrow range of students with whom to cooperate	Narrow range of students with whom to cooperate
4. Caring teachers	No obstacles	No obstacles
5. Multiple teacher perspectives	Potential for conflicting and uncoordinated explanations from resource and classroom teachers	As opposite. General ed students get only one perspective.
6. Establishing strong classroom community	Community lacks participation of all; community difficult to establish when students come and go.	Classroom community lacks participation of all students; LD often not present for important activities.
7. Teachers share instructional roles and responsibilities	Usually basic skills; challenge of learning multiple curricula	Teacher is in charge of all aspects of the curriculum (primary model)
8. Cohesive instructional programme	Difficult to coordinate with time constraints and number of students	May not coordinate with one another.

However, there is no examination in the literature of what students actually do in class to the same extent as that of what their teachers do in class. While the focus on teachers' roles as identified in the different types of teaching arrangements is made quite clear, it is not so obvious as to the different types of learners students can be in such classes. This is mainly due to the research pattern which seeks to highlight academic achievement as mentioned above, or the lack of academic achievement as outlined below. Both approaches fail to capture the actual moment-to-moment activities that promote or demote learning among students

and so much of the research stands accused of failing to interrogate the process at the expense of certain more easily measurable, though not necessarily more important, summative achievements. This approach is made all the more questionable when one considers that the majority of the empirical research took place over a time span of one academic year or less. The exception being the three-year study undertaken by Walther-Thomas (1997), and the two year case study by Mastropieri et al. (2005). While length of time over which a study is conducted does not of itself ensure more robust data, the short time frame and the narrow focus on quantitative data warrants caution when determining the impact of team-teaching upon student learning.

Disconfirming evidence associated with team-teaching includes the aforementioned meta-analysis by Murawski and Swanson (2001) and the six studies between 1989 and 1999 which indicate that team-teaching has moderate benefits to student outcomes in reading, mathematics and social development, and that more research was required, which should monitor if team-teaching activities were actually implemented as intended or designed. Murawski (2006) raises this issue of fidelity of implementation once more when publishing findings that indicate no statistical difference in student achievement. Zigmond (2004) studied team-teaching arrangements in inclusive science classrooms in six high schools and found little difference in the amount of time students spent working on task, working in groups or interacting with the teacher. Magiera et al. (2005) reveal that in some pairings the general educator spent less time with students identified with special educational needs when the special educator was

in the class. Similar findings emerged from the work of Volonino and Zigmond (2007) who concluded that:

> At present the research base does not provide sufficient support to suggest it (team-teaching) be either considered or implemented as a best practice. It is important that a research base focusing on both the quality and character of instruction, as well as student outcomes, in co-taught classrooms be developed. (p. 298)

Idol (2006) found that scores on high-stake tests were little affected by team-teaching arrangements, and that this was true both for students with and without identified disabilities. At post-primary level other variables such as students' actions in team-taught classes are not featured and Vaughn et al.'s (1997) work in primary schools which attended to the impact on social variables such as measures on friendship, self-concept and peer acceptance have not been undertaken at post-primary level.

Summary

In summary, there is no unequivocal evidence to suggest that team-teaching has a significant impact upon the quality of student outcomes. This in part, may be accounted for by poor implementation of team-teaching and by a narrow interpretation of student outcomes which is limited to academic progress, usually over short periods of intervention. In order to gain a more informed understanding of team-teaching and its impact, I return to Villa et al's. (2008) twin challenge to obtain multiple measures for student efficacy including student achievement, social development, self-concept and friendship, as well as multiple measures for impact on teachers to include teacher competency and skill acquisition, confidence and job satisfaction.

For such multiple measures to occur a more fine-grained examination of student and teacher gains is required. To obtain greater insight into the impact, or otherwise, of team-teaching closer analysis of prevailing learning theories is also required.

2.5 Learning theories

Learning theory impacts upon our understanding of learning and inclusion, as witnessed in our educational structures, teacher education programmes, schools and classrooms. The uses of the phrase 'inclusive learning' in this study, as opposed to 'learning' per se, draws attention to not only what is learned but also how it is learned, where it is learned and by whom. Therefore, careful consideration must be given to the interplay of concepts such as learning and inclusive learning. How learning is viewed, be it by the widely-used terms of behaviourist, cognitive, or socio-cultural will inevitably influence views on the value and impact of team-teaching.

In this section, I shall briefly outline the history of the more dominant learning theories namely; behaviourism, cognitive and socio-cultural, and how they have influenced our assumptions and practices in relation to student, including students identified with special educational needs, and teacher learning. By way of illustration, particular reference will be made to the Irish experience. Where possible the learning for both teachers and students will be addressed in tandem. I conclude by mediating team-teaching through the lens of the three dominant learning theories and salient features of teacher learning programmes. In so doing

I will examine the role that team-teaching can play in progressing the quality of learning for all who inhabit our classrooms, teachers and students alike.

2.5.1 Behaviourism

Historically the dominant paradigm for learning, and still very real in special education, is a behaviourist epistemology (de Valenzuela, 2007). Such an epistemology plays out in classrooms in the form of drill and practice, where teachers engage in didactic transmission of information from teacher to student. Behaviourism influences the inclusion agenda by identifying and isolating skill deficits and on occasions also identifying and isolating the learner. As Bogdan and Kugelmass (1984) point out, behaviourism sees disability as a condition that individuals have which is based on rational, useful and objective distinctions. "Distinctions which require co-ordinated system of services that help children labelled disabled, and where progress is made by improving diagnosis, intervention and technology" (p. 173).

Behaviourism suggests that learning is a possibility for all learners, by decomposition into small sequential steps. Advances in the provision of formal learning opportunities for those with severe and profound learning difficulties have been supported by such a theory of learning. However, such an approach can, in turn, cause difficulties. The notion that all knowledge travels a vertical route of 'vertical transfer' beginning at a lower level and moving upwards is linked to another difficulty which is the decomposition of skills to such an extent as to miss out on the bigger picture and indeed enjoyment associated with the activity. It is also true to say that such learning theory more often resonates with

segregated practices such as special schools or withdrawal of students from the mainstream classroom for all or part of the school day. Forms of exclusion from the mainstream class or school are seen to facilitate drill and practice with checklists to determine progress. Such exclusion from the mainstream is also seen as being of benefit to others who can then attend to a more advanced hierarchy of sequenced learning within the behaviourist paradigm.

Within the context of post-primary schools in Ireland, behaviourist theory was easily recognised by the OECD report (1991). Callan (1997) outlines the reports findings by noting that school-learning can be profiled as "primarily didactic in nature, the teacher is the primary initiator and students work alone" (p. 23). Supports for students who failed to learn were in turn supported by "the 'remedial teacher' seen as a referral facility for victims of classroom failure" (Shevlin, 2000, p. 4). The OECD (1991) examiners contended that:

> The face…Irish schools present to the world is quite recognisably that of previous generations. There is a growing dissonance between it and the development of the learning sciences and modern teaching technologies that require a very different approach…Co-operative (team) teaching and non-instructional forms of learning have not been conspicuous elements in determining design and layout in the past. (p. 55)

The OECD findings are predictable when one considers the dominant behaviourist views of learning that prevailed at the time. It is only with the heightened awareness of cognitive theory does team-teaching gain acceptance and some ground in Irish education. The emergence and adoption of cognitive theory in Ireland in the late 1980s proved more conducive to the use of team-teaching as a means of attending to the needs of students in the collective setting of the classroom.

2.5.2 Cognitive

For the OECD 'design and lay out' referred to efforts to attend to student learning. It would possibly have been a bridge too far to suggest that team teaching could attend to the dual mandate of teacher learning and student learning. In Ireland the recommendations regarding cognitive theories of learning were responded to, in particular by a concentration upon the goal of active learning (Coolahan, 1994; Callan, 1997; Gleeson & Granville, 1996; Gleeson, 1998; Granville, 2005; Hyland, 2000). Team-teaching it would appear, with its focus on teachers working within the classroom, was a slower burner, particularly in post-primary settings. However as Hamill (2000) indicated, there was an increased recognition in the primary sector of the role that the 'support teacher', formerly described as 'remedial teacher', could play in supporting the mainstream teacher's learning.

Ireland's efforts to shift from behaviourist to cognitive theories of learning for students were supported by a range of support services that provided training for established teachers. Initially and ironically, much of this training adopted behaviourist approaches by providing the teachers with the knowledge they were deemed to be missing so that they could change their practices in their classrooms. As Feiman-Nemser (2001) points out "in-service training connotes a deficit model of teacher learning in which outside experts supply teachers with knowledge they lack" (p. 108).

In more recent times a constructivist approach to learning has been adopted for teachers mediated through the introduction of various national curriculum

changes (Granville, 2005; Sugrue, 2009). Such an approach is seen as more in unison with the learning theories advocated for student learning in schools and classrooms. Teacher learning is seen as constructing meaning through problem solving. Problem solving among teachers is seen to lead to enhanced learning for teachers and their students. However, such practices are sporadic, episodic and more often than not are undertaken away from the classroom and the school. Furthermore the focus is on the individual teacher with little reference to the context in which the teachers engage on a daily basis. Even where follow up does occur the conversation is distal from the classrooms where teachers have come from and to which they return. As Conway (2002) points out "the classroom in Ireland remains largely a secret garden"(p. 63). Not only is it a secret garden to those outside the school but to those inside the school as well, though the emergence of special needs assistants working with students in the classroom has identified, for some teachers, the value of another adult in the classroom.

As with behaviourist theory of learning the cognitive theory of learning has had mixed results for students identified with special educational needs. The identification of individual learning needs and strengths was interpreted in a range of ways. These practices promote getting to know students as individuals which helps to support their learning as does recognition of the heterogeneous nature of those students deemed to have special educational needs. The emergence of individual education plans can also be traced to such understandings. However, once again the stick that helps can also hurt. For example, intelligence is seen as the possession of an individual and the grouping of students based on perceived ability has become central to the Irish educational

system at both primary (Devine, 1993) and post-primary level (Smyth, 1999). As a result inclusion of students in mainstream settings take on subtle layers of distinction with soft exclusionary practices emerging in the form of limiting, for certain enrolled students, their subject choice, subject levels and programmes because of their perceived ability (DES 2005, 2006-9). As with the behaviourist interpretation those deemed more able are not distracted by the less able. Indeed even within the special school community tensions have emerged regarding the placement of individual students with special educational needs. The focus on the individual and the individual's needs have seen special schools engage in exclusionary measures. "We are a school for mild general learning disability not autism?" (DES, 2009). As Trent, Artiles, and Englert (1998) indicate, both behaviourism and cognitive theories operate and fluctuate on the twin theories of the 'child saving' theory or the 'social control' theory. Both of these child-centred theories advocate for separation and can be well intentioned in their efforts to secure supports and access to learning for students with special educational needs. However, the motive may be more in respect of those without the assessed needs than those with the needs. It is in such an environment that a deficit model thrives and drives segregated responses to identified special educational needs. Socio-cultural theory offers an alternative paradigm in which to situate special educational needs, where identified needs are used to promote rather than avoid inclusive learning opportunities.

2.5.3 Socio-cultural

Learning theories do not emerge in isolation as they impact upon and are altered by other aspects within and outside the sphere of education (Florian, 2008). This

point is no more clearly seen than in the advances from integrated to inclusive schooling which recognised the multiple elements that need to be adjusted to meet the needs of all students. Learning is complex and involves a range of enablers and inhibitors which are found within the learner and within and around the learner's environment. Attending to the learner and their surroundings has potential to benefit all learners.

Socio-cultural perspectives on learning provide a complex description of the dynamic contexts and processes through which learning and development take place (de Valenzuela, 2007). While consistent with constructivist learning frameworks, socio-culturalists adopt a more socially embedded view of learners than Piagetian/individual constructivist models. They focus more on the possibilities for change at different levels of analysis and organisation. Influenced by Vygotsky's work, which "was built on the study of diversity" (Moll, 2002, p. 265) and by others since, one can see the potential such a view of learning has in relation to inclusive practices with the emphasis upon the context in which the individual finds oneself, rather than primarily focusing on the deficits of the individual. The focus on the social, rather than the individual process, and the importance of social context is emphasised by Cole (1996) who illustrates:

> Because what we call mind works through artefacts, it cannot be unconditionally bounded by the head or even by the body, but must be seen as distributed in the artefacts which are woven together and which weave together individual human actions in concert with and as a part of the permeable, changing events of life. (pp. 136-7)

In terms of pedagogy the emphasis on socio-cultural theory is placed more on fostering communities of learners than focusing on individualised teaching

(Prawat, 1992). De Valenzuela (2007) highlights the major interpretations of socio-cultural theory that can support inclusive practices namely; instructional activities, communication and language and assessment. With regard to instructional activities it is useful to note that the focus is on development rather than simply on skills attainment. Examples of such practices include 'zone of proximal development', 'scaffolding', 'joint productive activity' and 'instructional conversations' (p. 285). The fact that learning is seen as a social activity and learning is about changed participation (relationships with others) and evolving identities (relationship with self), results in attention being given to not only academic development but also to the interdependent socio-emotional development of students. A focus on self, well being and belonging are fore-grounded also, and sit well with efforts to promote inclusive learning environments.

Highlighting the relational underpinnings of socio-cultural theory, John-Steiner and Mahn (1996) have argued that the "overarching focus is on the interdependence of social and individual processes in the construction of knowledge" (p. 191). They highlight the dialectical method with regard to interrelationships fundamental to human development, and in the process avoid dichotomies of difference in the construction of knowledge. As one might expect their views resonate with Vygotsky (1978) who stressed the need to move away from isolated and separate interventions to a more complex multidimensional approach as seen in the context of providing learning opportunities in a team-teaching scenario:

> Our concept of development implies a rejection of the frequently held view that cognitive development results from the gradual accumulation of

> separate changes. We believe that child development is a complex dialectical process characterised by periodicity, unevenness in the development of different functions, metamorphosis or qualitative transformation of one form into the other, the intertwining of external and internal factors, and adaptive processes that overcome impediments that the child encounters. (John-Steiner & Mahn, 1996, p. 73)

In the classroom this can result in the "mutuality of learning and its interpersonal and intergenerational dynamic" (John-Steiner & Mahn, p. 197). In classroom learning, the concept of 'team' occurs as the student plays an active role and constantly informs the teacher, as knowledge, for both student and teacher, is built through mutual negotiation and collaboration. This point is captured by Chang-Wells and Wells (1993).

> As well as presentation of new information, there needs to be extended opportunity for discussion and problem-solving in the context of shared activities, in which meaning and action are collaboratively constructed and negotiated. In other words, education must be thought in terms not of the transmission of knowledge but of transaction and transformation. (p. 59)

Such transaction and transformation rest considerably upon language and who uses language in the classroom. Mercer (2002) speaks of the power of 'collaborative exploratory talk' in promoting learning in classrooms. Drawing on Vygotsky, he highlights the interplay between individual development (intra-mental) and social activity (inter-mental) as supported by such talk and which facilitates learning and the appropriation of cultural knowledge and culturally valued strategies of discussion and problem-solving. Mercer concludes by recognising that 'learning' and 'teaching' cannot be seen as separate processes.

Such a view dovetails with the vision of Dalton and Tharp (2002), when they examine approaches to learning and teaching that meet the needs of children who are at risk of educational failure. They identify five standards for effective

pedagogy; teachers and students should engage together in 'joint productive activity'; that all activities should be designed to develop students' language and literacy; that school activities should make meaningful and timely connections to students out-of-school lives; that activities should stimulate the development of ever more complex forms of learning and thinking; and that task-focused conversations between students, and from students to teachers, should be encouraged across the board.

The authors believe these standards to be applicable to all students' learning and not just those identified to be at risk. These standards expand the socio-cultural perspectives and concept of the zone of proximal development to see learning as distributed, interactive, contextual and involving the learner's participation in a community of practice. They also echo the fostering of 'community of learners', of Brown (1994) who outlines a coherent set of principles and actions for its implementation.

- Academic learning as active, strategic, self-motivated, and purposeful.
- Classrooms as settings for multiple zones of proximal development through structured support via teacher, peer and technology-aided assistance of learners.
- Legitimisation of individual differences.
- Developing communities of discourse and practice.
- Teaching deep conceptual content that is sensitive to the development nature of students' knowledge in particular subjects. (p. 6)

Since Brown's seminal work, fostering a community of learners has gained considerable attraction, if less considerable traction, in schools and classrooms. Linking learning to community aligns with the movement to create not only inclusive schools but also inclusive classrooms that are effective in not only promoting a sense of belonging but are effective in promoting powerful and purposeful learning environments for teachers and students alike.

Of note in Brown's work is the examination of the way "divergent classrooms can become learning communities- communities in which each participant makes significant contributions to the emergent understandings of all members despite having unequal knowledge concerning the topic under study" (Palincsar, Brown & Campione, 1993, p. 43). In the context of team-teaching further analysis is required to examine how 'all members' interact with one another and what such interaction asks of and offers participants.

What can be stated is that the physical placement of students together in the same classroom for learning is a shift from the traditional model of withdrawal. McDermott has spoken critically of the cultural construction of disability and 'the acquisition of a child by a disability' (1996). Team-teaching has the potential to buck such a trend and set the conditions for 'the acquisition of a child by a class' in that the students form a team of learners with their teachers. McDermott, Goldman and Varenne (2006) provocatively ask:

> What are the classroom conditions that make educators desperate to label children LD (learning disability)?...Instead of more data on individual LD students, why not search for data on conditions that make LD look promising as a way to save children. (p. 13)

To support their argument the same authors make reference to Henry (1963, p. 292) when they quote:

> Schools metamorphoses the child, giving it the kind of Self the school can manage, and then proceeds to minister the Self it has made.

Team-teaching has the potential to offer students more positive types of 'self' as school organisation is altered in a manner that produces 'conditions that make LD look promising as a way to save children'. In framing this study of 'team-teaching' and 'team-learning' from a socio-cultural perspective, I draw in

particular on the theoretical frames of Social Capital Theory and Positioning Theory. Both theories will be discussed in more detail in the next section, as set against capturing the 'transmissions, transactions and transformations' that occur daily in schools and classrooms, and as set against the challenge to theorise team-teaching for both teachers and students within and across schools. For the purposes of this research study, Social Capital Theory is primarily used to examine the interaction between teachers and examines what it means to behave in an inclusive manner with students but particularly with fellow teachers. Positioning Theory is availed of to frame insights into how students are positioned to learn in team-taught lessons. Both theories are in keeping with the concept of creating communities of practice where learning, meaning and identity (Wenger, 1998) merge with human emotions including hopes and fears churned up by change.

2.6 Social capital theory

Social Capital Theory is described as being, "networks, together with shared norms, values and understandings that facilitate cooperation within or among groups" (Cote & Healy, 2001, p. 41). Its potential to provide a theoretical framework to examine teacher-to-teacher actions which aim to promote inclusion merit closer analysis. The appeal of Social Capital Theory lies in its potential to offer a framework by bridging the gap between the macro-level of policy formulation and the micro-level of teacher implementation in classrooms. It offers a meso-level of interpretation that can be framed and used in research activities relating to teacher action and interaction. It allows for a closer examination of the spaces where interactions occur between teachers as they

engage in team-teaching while also taking account of the need to retain our gaze on the interaction within and between schools in a manner not unlike that of Mercer's inter-mental and intra-mental approach to learning.

More recent work by Coburn and Russell (2008) and Penuel, Riel, Krause and Frank (2009) adopted Social Capital Theory as a lens to add depth of understanding to existing qualitative frames. The move from "pedagogical solitude" (solo teacher) (Shulman, 2005) to a part engagement with "pedagogical duet" (team-teaching) has not only been under-used to date but has also been under-theorised. Social Capital Theory offers much in the way of understanding what team-teaching entails for teachers and how it may come to pass. I contend that what is not so well understood are the ways of moving between solo-teaching and team-teaching, and even less well understood how to do so in the context of inclusion and in the context of policy implementation in different school settings.

Drawing on social capital, as developed in sociology and political science (Coleman, 1988, 1990; Lin 2001; Portes 1998; Putnam 1993; Woolcock 1998), Penuel et al. (2009) examined how professional interactions facilitate the exchange of resources and expertise that teachers need to enact curricular reforms. Penuel et al.'s (2009) socio-cultural perspective draws attention to the use of Social Capital Theory as it "directs researchers to focus simultaneously on the overall social structure of a school and on the expertise and resources exchanged through interactions among teachers that take place in meetings, staffrooms, hallways and classrooms" (p. 1). Such a theory resonates with the

literature on team-teaching and provides a theoretical base which can draw upon the four domains of social capital such as structure (teacher interactions), pressure (how engaging with another colleague created pressure which had positive and negative influences), trust (the required norms of trust that were required and emerged among teachers) and access to resources (the professional learning that emerged between teachers involved in the project).

According to Coburn and Russell (2008):

> When applied to education, Social Capital Theory foregrounds the resources that are available to a teacher through social interaction with colleagues and posits that particular features of social relations are more or less conducive to accessing appropriate resources and creating a normative environment that enables change in classroom practice. (p. 205)

Coburn and Russell's (2008) attention to teacher interaction focuses on four dimensions which lead to the creation of social capital, namely structure (including tie span and tie strength)[6], access to expertise, trust and content of interaction, which is subdivided into depth and congruence. Such a framework is useful in analysing team-teaching and its impact on both student and teacher learning taking due consideration that my focus is based on *professional interaction with colleagues* rather than on Coburn and Russell's (2008) focus on *social interaction with colleagues.* While students and teachers are both recognised as agents of inclusion and exclusion (Benjamin et al., 2003), Social Capital Theory is used in this study to focus mainly on teachers' ties as formed through engaging in team-teaching activities and so includes an examination of their personal, professional and pedagogical interactions and not just solely social relations. It would also be important to point out that my research study is

[6] Tie span and tie strength refer to social network analysis which while important are not the focus of this study.

based on research which was neither as long in time or ethnographic in design, as the work of Coburn and Lin's (2008).

Another dimension of my research study was to examine the interaction between schools and the wider educational community. Earlier work by Woolcock (1998, 2001) assists with framing the oscillating and ever-changing engagement between policy and practice, as enacted by policymakers, teachers, researchers and students. Woolcock (1998, 2001) states that social capital refers to the norms and networks that facilitate collective action and that it stems "from household and community level studies drawing on sophisticated measures of community networks, the nature and extent of civic participation and exchanges among neighbours" (p. 12). These actions, he suggests involve bonding, bridging and linking. Such a framework is particularly useful for this study which wished to examine the interdependence and possibilities associated with enacting team-teaching practices in classrooms while also determining if the enactment could be extended across schools. Woolcock (1998, 2001) supports examination of how teacher dyads interact (bond), engage with colleagues (bridge) and move outwards to other schools and the wider educational community (linking).

If one agrees that inclusion involves relations, collaboration and interactions, then Social Capital Theory also offers assistance in framing inclusive concepts and goals such as promoting belonging, participation, interdependence, sharing of resources, creating communities of learners and learning communities. It can also assist in understanding the counter-pull of exclusive practices and frame what inhibits as well as what enables desired practices.

Teacher collaboration and the movement towards more collaborative and inclusive practices are fraught with interpersonal and intra-personal demands (Hargreaves, 1994, 2007; Wood, 2007; Achinstein, 2002). Social capital provides an opportunity to appraise the subtle relational dynamics of the pressures and levels of required trust and engagement with difference that inclusive action asks of students and teachers, while also considering the learning opportunities that emerge from such action. Social Capital Theory offers an opportunity to get to the spaces between the rhetoric and the reality of inclusive practices.

The promotion of social capital and professional learning communities are valued but the good work of others reveal that both professional community, and social capital, can have a 'dark side' (Hargreaves, 1994; Achtenstein, 2002; O'Brien & Ó Fathaigh, 2005) in that they can promote practices that may not be beneficial to some school personnel and may not assist in the "process of addressing and responding to the diversity of needs of all learners through inclusive practices in learning, cultures and communities and reducing exclusion within and from education" (UNESCO, 2005, p. 13). Indeed the ties that bind may not only be exclusive ties, but indeed may be ties that blind where "increased teacher-to-teacher contact may be to intensify norms unfavourable to children" (Little, 1990, p. 524). Portes and Landholt (1996) identified three dimensions to the dark side of social capital; exclusion, conformity and downward levelling pressures. These are important points in relation to team-teaching and to any evaluation of its merits or otherwise.

Social Capital Theory is useful in understanding interactions, in this case among teachers and educational personnel. In order to build a theoretical basis to understand the impact team-teaching has upon student learning, it is necessary to look further a field than Social Capital Theory.

2.7 Positioning theory

The concept of Positioning Theory has its origins in the social sciences with Holloway's (1984) examination of women's and men's subjectivities. Building on this work Harré and others (Davies & Harré, 1990; Harré & Van Langenhove, 1999) argue that during discursive interactions people draw on narratives or 'storylines' to make their words and actions meaningful to themselves and others. As Barnes (2004) explains, "They can be thought of as presenting themselves as actors in a drama, with 'positions' assigned to the various parts" (p. 1).

These positions are described as neither fixed nor fluid and may change from one moment to the next depending on the storylines through which participants make meaning of the interaction. Storylines which "can be taken from a cultural repertoire or can be invented" (Harré & Van Langenhove, 1999, p. 30) and where positions are constituted by their "assigned, ascribed, claimed or assumed rights and duties..." (Harré, Moghaddam, Cairnie, Rothbar & Sabat, 2009, p. 8).

My stance is that Positioning Theory is insightful and informative in the study of classroom processes and can facilitate efforts at coming to an understanding of how the promotion of inclusive learning practices are played out in classrooms.

While usually focused on student discourse (what is said) and student action (what is done) my research draws on positioning theory to focus more on what is done and the positions adopted by students in team-teaching classrooms. Positioning Theory aligns with my efforts to generate understanding with regard to the moment-by-moment interactions, as perceived by students, teachers and my observations as researcher. Described by (Linehan & McCarthy, 2000) as "an analytical tool that can be used flexibly to describe the shifting multiple relations in a community of practice" (p. 441) this theory resonates with the promotion of inclusive concepts such as access to, participation in and benefit from learning (DES, 1998, 2007). Similarly, Harré, et al. (2009), in their discussion on more recent advances in Positioning Theory argue that "Positioning Theory opens up a new dimension in the psychology of interpersonal encounters, through explicit attention to the role of rights and duties in the management of action" (p. 5). Once more the interplay between rights and duties and the promotion of inclusive practices emerges and may in turn 'open up new dimensions' in understanding inclusive learning as played out by the positions that students adopt through team-teaching.

Positioning theory also offers opportunities in understanding the promotion of inclusive practices giving meaning to the social practices in classrooms that shape or prevent inclusive learning. These practices may enrich the more generalised community of practice metaphor (Linehan & McCarthy, 2001) where the production of participation or non-participation involves shifting visceral as well as cerebral engagement which requires different metrics, and not just standardised testing, as measures of improvement. As Barnes (2004) highlights

each position carries with it a range of associated rights and duties, "Being positioned in a certain way carries obligations or expectations of how one should behave, or constraints on what one may meaningfully say or do" (p. 2). By way of illustration Barnes (2004) draws on Brousseau's Didactic Contract to show how teachers and students have recognised rights and duties and to indicate the difference between role and position.

> Here 'teacher' and 'pupil' are not positions, but roles- long-term, not easily relinquished, and with profound influence on the lives of those who occupy them. But during a classroom episode in which two students are working together, one may for a short time take a position as 'teacher' with the other as 'pupil'. The 'teacher' may assume a duty to explain and a right to issue instructions, ask questions and evaluate answers. If the other student acquiesces to this positioning, he implicitly acknowledges an obligation to listen to the explanation, carry out the instructions and answer the questions. In the process, the two jointly construct a 'teacher helping pupil' storyline. (p. 3)

In turn such a scenario needs to be placed in the context of the school and the classroom in which it is set. Linehan and McCarthy (2001) suggest that teachers and students have a degree of agency in determining the positions they may adopt in interactions but "this agency is interlaced with the expectations and history of the community, the sense of oughtness" (p. 442). This 'oughtness' (Hicks, 1996) or local order (Harré, 1999) in relation to local context reminds one of the alteration, or otherwise, to the 'grammar of schooling' (Tyack & Tobin, 1994, p. 85) and the changes that may or may not be allowed to occur in schools and classrooms. These changes may be seen more clearly using positioning theory, where the individual and the individual interactions are captured in the collective domain that is the classroom setting. This oughtness aligns with teacher and students perceptions of the affordances created by team-teaching.

In sum I am asking what positions are created, accepted, facilitated, rejected or missed by students and teachers in team-taught lessons and how does this align with our understanding of effective teaching in an environment that seeks to promote inclusive learning? Brophy's synthesis of the principles of effective teaching (1999) assist in appraising the effectiveness, or otherwise, of team-teaching and the classroom storylines it supports. Such effectiveness is further contextualised for Irish post-primary classrooms, by the work of Lyons, Lynch, Close, Sheerin and Boland (2003) and ESRI-LS (2004-2011).

Summary

In concluding this section on learning theories it is clear that the type of learning that is desired will influence the type of teaching practiced and, therefore, influence views on the effectiveness of team-teaching. Learning theories do not operate in isolation, and combinations can be seen in any given school and indeed in any given classroom, at any given time. These theories offer insights into the implementation, maintenance and evaluation of team-teaching as seen through the impact upon student learning. Of particular interest is the role of socio-cultural theories and the meaningful inclusion of students with identified needs in the mainstream classroom.

As outlined above the under-theorised nature of team-teaching may be assisted by Social Capital Theory and Positioning Theory. As the next section highlights, team-teaching can also influence teacher learning and in particular offer context-sensitive learning opportunities on a daily basis in real time and in real classrooms. In short team-teaching may also offer zones of proximal development for teachers who assist each others performance as they work

beside and with one another in the same classroom at the same time. Such forms of learning resonate with the movement towards school improvement through advancing inclusive practices and learning communities as viewed through a socio-cultural perspective.

2.8 Impact of team-teaching on teacher learning

Conway (2002) makes the connection between a community of practice for students and a similar practice for student teachers. He argues that a social-cultural perspective has a lot to offer teacher learning at the initial teacher stage. Constructs such as zone of proximal development, assisted performance, cognitive apprenticeship and dynamic assessment, sit well with co-planning and team-teaching, between beginning and more established teachers. I contend that the connection of advantages could be extended through team-teaching across the continuum of teacher learning for all teachers, including induction and in-career development. Reading Brown's (1994) framework from the perspective of team-teaching supporting teacher (as well as student) learning, one can see how teacher learning could be attempted by engaging in inclusive learning activities such as team-teaching. Process and product merge for both teachers and students involved. This is in keeping with the work of Timperley, Parr and Bertanees (2009) who identify the challenge "to develop teachers' knowledge and skills in ways that respect their professionalism, while ensuring that students benefit" (p. 229). Furthermore, the apprenticeship of observation now involves future teachers observing teacher collaboration by being students in team-taught lessons.

Such a theory of cotemporaneous learning for teachers and students in the classroom setting is in line with well documented and more recent efforts to examine the place of the classroom in teacher learning (Artiles et al, 2006; Borko & Putnam, 1998; Feiman-Nemser, 2001; Little, 1993, 2003; Lieberman & Miller, 1999; McLaughlin & Talbert, 2001; Cobb & McClain, 2004; Tharp & Gallimore, 1988; Wiliam, 2008). However, in the Irish context, activities within the classroom that involve well-documented concepts such as observation and coaching are often associated with teacher accountability be it in the form of teacher education, probation, school inspection or teacher evaluation. In the Irish context, team-teaching may prove more acceptable when the purpose and focus of two teachers in the classroom is on promoting student learning and the presence of the other teacher serves a purpose that could be perceived as more worthwhile and more useful than those listed above.

Team-teaching may also assist in bridging the gap between knowing and doing which Wiliam (2008) indicates as a serious issue in teacher learning and one which may explain the view that the impact of professional learning on classroom practice has been under-whelming (Sugrue, 2009). It may be less about what teachers need to know and more about what helps them implement and sustain the implementation of what they already know. Such sentiment is in part in keeping with Roth's (2001) view on spielraum (elbow room) where learning to learn in situ becomes part of teaching and learning.

While there are mixed messages with regard to the impact of team-teaching upon student learning, there is far more clarity and agreement on the benefits to be derived by teachers from engaging in team-teaching practices.

2.8.1 Benefits for teachers

The benefits for teachers engaged in team-teaching are outlined in a number of research studies. A summary is provided by Anderson (2008) who itemised nineteen different benefits for teachers associated with team-teaching. While not stated by the author, it is clear upon analysis, that the benefits accruing are often complementary and always involve personal or professional growth, and sometimes both. Anderson's (2008) work is in keeping with that of Villa et al. (2008) when they state "Co-teachers themselves (general and special educator teaching teams) reported experiencing professional growth, personal support and an enhanced sense of community within the general education classroom" (p. 421). Anderson's (2008) findings do not reflect the Irish context which does not have such pronounced divisions between special educator and general educator. Of note also is the lack of discrimination by Anderson between primary and post-primary with regard to teacher benefits which are listed as:

- Receive personal and professional support
- Opportunities for professional growth
- Sharing of knowledge, skills and resources between teachers
- Ability to intensify instruction
- Provide a sense of camaraderie among participating teachers
- Increased job satisfaction
- Reduced discipline problems
- Willingness to try new things and be more creative
- Increased feelings of worth, belonging, fun, choice, power and survival
- Reduced student-teacher ratio

- Greater insights for both the general educator and the special educator
- Instructional repertoire of general educators is increased as is the understanding by the special educator of the general curriculum

Clearly the outlined benefits as captured by Anderson (2008) are the product of team-teaching arrangements that are working and may have had to overcome some challenges, including compatibility.

The literature in relation to teacher learning fails to place team-teaching in the context of the prevailing features of effective professional development. Desimone (2009) and Hiebert, Morris and Glass (2003) provide succinct and similar synopses of the salient features of effective professional development which are useful in understanding team-teaching and its role in teacher learning. Again the view adopted is a situated cognition perspective and is in keeping with Putnam and Borko (2000) who observed that cognition is situated, social and distributed. The potential fit between team-teaching and teacher learning is outlined in Table 6.

Table 6. Features of effective teaching as outlined by Desimone (2009) and Hiebert et al. (2003) as set against team-teaching arrangements

Desimone (2009)	Team-teaching	Hiebert et al. (2003)
Content focus is critical i.e. subject knowledge	Extension of knowledge from colleague and possibly students	Linked to curricula
Active learning as opposed to passive learning can take many forms including observing or being observed followed by interactive feedback and discussion	Observation in the classroom. Spielraum- elbow room (Roth) opportunity to learn	School based
Coherence between the learning and teachers' knowledge and beliefs	Teacher can determine (publicly/privately) what aspect of learning they wish to focus on. Allowed be the teacher they want to be? Learning tracked in various ways	Focused on student learning
Duration span of time and hours are important for learning to be established	Daily dance in and out of team-teaching and solo teaching	Long term
Collective participation that promotes discourse and subsequently learning	Happening in the act of planning, teaching and reviewing together for the same activity.	Collaborative

2.8.2 Challenges for teachers

The literature offers a range of teacher-based scenarios that challenge team-teaching arrangements, and these are sometimes accompanied by explanations and advice. A number of challenges, often interconnected, for teachers and school personnel, associated with team-teaching are identified in the literature. They include practical time-related issues such as planning and review time for teachers, and concerns about administration and scheduling of team-teaching. Attention is also given to more intimate issues surrounding teacher collaboration

and in particular teacher compatibility and to a lesser extent teacher conflict. Curiously the literature on team-teaching does not provide in-depth case studies regarding compatibility-related issues serving merely to offer advice rather than to understand through thick description. The unique challenges associated with post-primary schools are captured succinctly by Rice and Zigmond (2000), when they highlight "the intensity of the content, the tighter scheduling issues, and the pressures on secondary teachers to prepare students to perform well on exit examinations" (p. 1).

Scruggs, Mastropieri and McDuffie (2007) indicate that teachers believe that they benefit professionally from team-teaching. Among the benefits identified were increased content knowledge and improved classroom management skills and curriculum adaptation. They contend, however, that the perceived benefits "appeared to be predicated on the two teachers being personally compatible" (p. 400). Mastropieri et al. (2005) conducted a study of several long-term qualitative investigations of co-teaching and concluded that important mediating variables were identified as academic content knowledge, high-stakes testing and co-teacher compatibility. Teacher compatibility is the most frequently referenced variable in the literature and is cited in ten of the 46 studies.

In North America the context in which the special educator works in the classroom with the general educator provides its own challenges. However, much of what is experienced in such a context can be transferred to other settings as both teachers seek to provide opportunities to maximise their presence in the classroom. The literature suggests that clarity regarding roles is important so as

to avoid one teacher being demoted to that of classroom assistant (Murawski, 2006). Weiss and Lloyd (2002) speak of the need for acceptance by each teacher of the other and highlight the needs of certain students and the level of content knowledge possessed by teachers as being significant in determining the roles adopted by teachers. The lack of subject knowledge is reiterated by Isherwood and Barger-Anderson (2007) as a significant influence on the role of the teachers. The author also highlights mutual respect and effective communication as important in promoting the effective use of both teachers. Nambu (2008), in a study of Japanese team-teaching also made the connection between the roles teachers play and the type of team-teaching that is availed of during the lesson. He describes teachers as adopting a range of roles such as facilitator, bridge, assistant, and expert.

The dominant type of team-teaching configuration deployed and its potential to determine the role of teachers is highlighted by Magiera, Smith, Zigmond and Gebauer (2005) who found that 'lead and support' was the dominant model in 33 of the 49 mathematic classes observed. They contend that the lead and support model limited the actions of the teacher who was confined to a restricted support role. This point is supported by Harbort, Gunter, Hull, Brown, Venn, Wiley and Wiley (2007) who studied two pairings in high school science classes. They reveal that the monitoring role of the special educator was the dominant role and contend that "if we cannot implement co-teaching in ways that capitalise on the unique roles that regular and special educators bring to the co-teaching process, we may need to rethink this instructional format"(p. 22).

Opinion on the importance of teacher personalities in forming effective teams is divided in the literature. For some the concept of teacher personality is associated with teacher dispositions; having an open mind and a positive attitude to team-teaching. This view is also linked to whether team-teaching should be voluntary or imposed. The other aspect of teacher personality, while associated with attitude, is slightly different and relates to personalities clashing or getting on with one another in the classroom. Weiss and Brigham (2000) reviewed primary and post-primary articles published between 1987 and 1999. They conclude that the personalities of teachers are the major variable in determining successful teams. Murawski's (2006) study contends that, despite training in advance, teacher personalities have a big part to play in determining success. In both studies teacher personality is seen in the context of compatibility with one another.

The findings of a study of 17 teachers in Australia and America by Rice and Zigmond (2000) state that "most respondents saw professional and personal compatibility between co-teaching partners as critical for success" (p. 190). Teachers surveyed believed teachers should not be forced to team-teach and that qualities required from teachers included mutual respect, tolerance and perseverance. Mutual respect, combined with mutual trust, is also flagged by other studies (Tannock, 2009; Mastropieri et al., 2005; Isherwood & Barger-Anderson, 2007). It is not so clear how such concepts as trust and respect are played out in the daily interaction between teachers and others. Other qualities that teachers identified in Rice and Zigmond's study include the ability of teachers to communicate openly with one another, to be objective, honest and

willing to take risks. Some teachers in the study were of the view that the professional dimension superseded the personal and that "you are in the classroom for kids so being friends with the people you work with should not be important" (p. 194).

Summary

Team-teaching offers and asks a considerable amount of teachers. The benefits outlined are achievable but dependent upon a number of factors, some of which are personal and professional, others that are internal and external to the school. However, as Bauwens and Hourcade (1997) indicate, an understanding of the nature of change is also very important for team-teaching to gain traction in schools and classrooms. As stated earlier there is no clear view in relation to teacher compatibility though it would appear that, in initiating team-teaching, teacher choice and teacher qualities need to be factored into any new arrangements. This would suggest that understanding how to implement team-teaching also involves possession of some knowledge in relation to change wisdom, the management of change and creating collaborative communities of learners.

2.9 Team-teaching: being part of the bigger picture

As outlined in the literature team-teaching brings with it, despite the challenges and prerequisites, many benefits to both students and teachers. Yet the concept has not gained traction in our educational systems (TALIS, 2009). This may be a result of identified gaps in the literature but it may also be due to the research operating in isolation rather than in tandem with bigger educational changes associated with collaborative practices. These movements include school

improvement through 'inclusion for all', and the use of teacher collaboration to promote 'professional learning communities'. This section examines some pertinent aspects of TALIS (2009) and how team-teaching can support school improvement by promoting inclusive learning communities at classroom, school and district level.

2.9.1 Interpreting TALIS (OECD, 2009)

This research provides a view of the landscape of lower-secondary education in Ireland, as set against an international backdrop. It was undertaken in the spring of 2008 when my field work was also being undertaken among a similar profile of teachers. TALIS positions team-teaching as set against stated national and international agendas associated with inclusion and school improvement.

The purpose of TALIS was to "assist countries to review and develop policies to make the teaching profession more attractive and more effective" (OECD, 2009, p. 3). Findings are based on principals' and teachers' self-reports in response to questionnaire items. Allowing for the possible subjectivity of self-reported data, and possible cultural differences, these findings are significant in themselves and even more so when the research is set against not only the 23 other TALIS countries but based on the large number of participants from Irish post-primary schools involved, 2227 teachers (12% of total population of teachers) and 120 principals (16% of all principals) from 142 schools (19% of all post-primary schools).

The survey focused on schools catering for students in lower secondary level (age 12-16) which is the same student age group for my research. The content of the survey addressed; teacher professional development, teachers' beliefs about instruction, teacher self-efficacy, the climate in their schools and their classrooms, school evaluation and teacher appraisal, school leadership, and concluded with a list of recommendations. Some of the more pertinent aspects of the study as they relate to team-teaching specifically are outlined below.

Professional development opportunities

With an average of less than 6 days of professional development per teacher, Ireland had the lowest average number of professional development days across all TALIS countries. Irish participation in the professional development opportunities are set out in Table 7. Irish teachers are above the TALIS average for attendance at courses and workshops, and in engagement with professional networks. The percentage of teachers undertaking qualification programmes is less than the TALIS average with considerably less engagement in activities associated with observation visits to other schools. While inter-school visitations are rare in Ireland, it would appear that intra-school visitations to other classrooms in the same school are also below the TALIS average with 18% compared to the TALIS average of 35%. The secret garden (Conway, 2002) of the Irish classroom would appear to still be the norm and may explain in part the culture in which team-teaching is hoping to take root.

Table 7. Comparison between Ireland and the average participation rates by type of professional development activity (TALIS)

Participation rates by type of professional development	Ireland %	TALIS (average) %
Courses and Workshops	86	81
Informal dialogue to improve teaching	87	95
Reading Professional Literature	60	78
Professional Development Network	51	40
Educational Conferences and Seminars	42	49
Individual and Collaborative Research	26	35
Mentoring and Peer Observation	18	35
Qualification Programmes	11	25
Observation visits to other schools	8	28

The culture of little observation in Irish schools and Irish classrooms is also significant when set against the unsatisfied demand and development needs, as outlined by teachers in Table 8 below. Critically, 'Teaching Special Learning Needs Students' is identified by teachers in Ireland as the greatest prioritised need among unmet professional development needs. While the percentage of 38% is above the TALIS average, Irish teachers are not alone in this regard, as this is also the area that averages as the highest need as identified across the 24 countries surveyed.

Table 8. Comparison between Ireland, and the average, in relation to the area of greatest development need (TALIS)

Areas of Greatest Development Need	Ireland %	TALIS (average) %
Teaching Special Learning Needs Students	38	31
ICT Teaching Skills	34	25
Student Counselling	25	17
Teaching in a Multi-cultural Setting	24	14
Student Discipline and Behaviour Problems	14	21
School Management and Administration	12	9.7
Student Assessment Practices	8	16
Content and Performance Standard	6	16
Classroom Management	6	13
Instructional Practices	5	17
Subject Field	4	17

With regard to special educational needs and the area of greatest professional development, the TALIS report observes:

> Given that the TALIS target population excludes teachers who only teach special learning needs students, this is a noteworthy result. It indicates that classroom teachers in general recognise the importance of developing their competence in this area, and this may be a reflection of two trends: first, the growing calls in some school systems for greater integration of special learning needs students in mainstream schools and classrooms (OECD, 2008) and second, the growing emphasis in education policy on equity as well as quality to ensure that the learning needs of all students are provided for equally. An important message from the TALIS data is that teachers do not feel fully prepared to cope with these challenges. (p. 61)

It is also significant that the areas associated with assessment, management and instruction are not deemed by the teachers to be areas requiring development. These low responses may indicate a disconnect among teachers, between addressing special educational needs through good pedagogical practices, and

may be a result of the prevailing deficit model which focuses on students being withdrawn from, rather than drawn in to, class.

While conscious of the limitations of a self-reported survey, the findings from TALIS in relation to teachers' actions, beliefs and attitudes are of interest. TALIS use two indices to measures teachers' participation in co-operation with other staff, the index for exchange and co-ordination for teaching, and a professional collaboration index. In the national report for Ireland it was found that:

> Basic co-operative activities, such as exchanging teaching materials, are engaged in relatively more often by teachers in Ireland and across all comparison countries than activities deemed to represent more complex professional collaboration such as team teaching or observation of other teachers' classes. (p. 8)

Large gaps are found in Ireland between the two types of co-operation indicating a stronger association with co-operation among teachers that takes the form of exchange and co-ordination of teaching, rather than professional collaboration (Table 9). This stronger association was a pattern throughout all 24 countries surveyed with seven countries showing a greater gap than Ireland. Unlike many countries, teaching experience is not significantly associated with participation in co-operative activities. In Ireland, teachers who participate in courses and workshops, networks and/or mentoring activities, also report more frequent engagement in both types of co-operative activity (OECD, p. 130). Team-teaching, described in TALIS as 'teaching as a team in the same classroom', is cited by 14% of Irish teachers as occurring on a weekly or monthly basis with observation of other teachers' classrooms and provision of feedback being undertaken by l.5% of teachers in Ireland.

Table 9. Percentage of teachers in Ireland involved in various co-operative activities (TALIS)

Index of Exchange and Co-ordination for Teaching	**%**
Discuss and decide the selection of instructional media e.g. textbooks, exercise books	3.4
Exchange teaching materials with colleagues	44.5
Attend year meetings for the age group I teach	8
Ensure common standards in evaluation for assessing student progress	12
Engage in discussion about the learning development of specific students	37
Index of Professional Collaboration	**%**
Teach jointly as a team in the same class	14
Take part in professional learning activities eg year or subject area meeting	11.5
Observe other teachers' classes and provide feedback	1.5
Engage in joint activities across different classes and age groups e.g. projects	5
Discuss and co-ordinate homework practice	5.5

TALIS indicates that professional collaboration, but not exchange and co-ordination, is positively and significantly associated with the number of days of professional development undertaken by a teacher. The 6 days in Ireland devoted to professional development is relatively low by TALIS standards and may explain, in part, the lack of engagement by Irish teachers with aspects of professional collaboration as listed by TALIS.

Table 10. Percentages showing frequency of teacher engagement with team teaching and with teacher observation and feedback (TALIS)

Country	Team Teaching			Teacher observation and feedback		
	Never or less than once a year	*1-4 times per year*	*Monthly or weekly*	*Never or less than once a year*	*1-4 times per year*	*Monthly or weekly*
1. Denmark	8.47	25.18	66.36	71.91	16.08	12.01
2. Norway	26.24	15.04	58.73	68.11	18.89	13.00
3. Italy	42.50	9.11	48.39	74.74	18.57	6.69
17. Ireland	**75.51**	**10.89**	**13.61**	**94.89**	**3.59**	**1.52**
23. Belgium (Flemish)	81.03	11.09	7.88	88.50	10.37	1.13
International Average	51.26	20.28	28.46	66.62	26.90	6.48

Despite efforts to promote the practice of team-teaching it is clearly far from the norm in Ireland and indeed as can be seen from Table 10 it is not the norm in many countries. Furthermore the Irish culture does not appear to support the practice of teacher observation in any frequent manner. Significantly TALIS observes, for all countries, that there is scope to improve teacher effectiveness by extending teacher co-operation and linking this to an improved school climate.

The role of collaborative practices, such as team teaching, is recognised by TALIS as being a significant driver of change, but one that is less common than other forms of collaboration. It proposes that teachers require time and fiscal recompense to further extend such practices. The report states:

> Teacher co-operation is an important engine of change and quality development in school. However, the most reflective and intense professional collaboration, which most enhances modernisation and professionalism, is the less common form of co-operation. This creates a clear case for extending such activities, although they can be very time consuming. It might therefore be helpful to provide teachers with some

> scheduled time or salary supplements to encourage them to engage in them. (p. 122)

The report suggests that reflective and intense professional collaboration also assists with the promotion of positive teacher-student relations. These relations impact upon student learning and teacher self-efficacy.

> Positive teacher-student relations are not only a significant predictor of student achievement; they are also closely related to teacher job satisfaction – at least at the individual teacher level. This result emphasises the role of teachers' positive evaluations of the school environment for effective education and teacher well-being. Efforts to improve school climate are particularly important in larger public schools attended by students with low average ability, since all these factors are associated with a poorer school climate. (p. 122)

The TALIS (2009) report reiterates the value and paradox of the under-utilisation of team-teaching across the 24 countries surveyed. For team-teaching to become a more common feature of our schools it may be well served by examining how it can play a role by revealing its relevance to existing agendas such as those associated with inclusion for all and collaborative professional learning communities. In so doing team-teaching will need to be the focus of attention at classroom, school and district level. To achieve this ambitious goal will require change wisdom.

2.9.2 Change wisdom

Too often the research on team-teaching seems to operate in a 'bubble of intervention' that does not, either purposely or unknowingly, engage with other aspects and interventions that are present or proposed in our educational system. Nor does it, intentionally or otherwise, examine the learning offered by previous efforts to introduce change in classrooms and educational systems. Change

wisdom (Brophy, 1999; Fullan, 2007) informs that such an intervention needs to be placed in, and sustained by, the interplay within and between classroom, school and district communities.

Only in more recent times have understandings associated with the management of change being aligned with the study of team-teaching. Researchers such as Friend et al. (2010) have opened up the debate on the complexities of managing change while promoting team-teaching, and in particular the complexities and opportunities associated with the promotion of teacher collaboration in the sphere of special education. As Friend et al. (2010) highlight:

> What is clear is the strong need for a continued dialogue concerning the theory of collaboration for school professionals, its translation into appropriate practices, and its impact upon students with disabilities. (p. 21)

It seems that the presumption by policymakers that collaboration among teachers should automatically follow pronouncements of same were not restricted to policymakers only. After three decades of research the alignment of team-teaching with the larger context of school reform and school improvement is seen by the above authors as the future direction which team-teaching studies should follow.

Friend et al. (2010) suggest that team-teaching research should be recalibrated to allow a more balanced approach where team-teaching could be more carefully studied in context and within the culture of the school and the district. This view is not new and in fact only partially captures the more far-sighted observations of Walther-Thomas, Bryant and Salend (1996) who raised the issue of multilevel planning at district, school and classroom level. It is not coincidental that their

three-year study is the only long-term research study on team-teaching. It should also be noted that their multilevel planning model has echoes of Woolcock's (1998, 2001) aforementioned model of bridging, bonding and linking.

Walther-Thomas et al. (1996) were unique in that they drew on the existing literature on change, most notably Fullan (1993) to outline a number of prerequisites for the successful implementation of team-teaching. These included the development, at district level, of task force committees comprised of administrators and teachers. They highlight the need for system-wide planning to promote new classroom practices. They suggest building-level planning will require, the visible support and leadership of administrators, careful selection of willing participants, ongoing staff development including 3-5 days preparatory days before classroom implementation and a focus on instructional options, time for teachers to plan and visit other settings. At classroom-level planning issues include the promotion of a team approach with teachers portraying a team image and mutual respect. Reference is also made to teacher trust in one another and learning from one another in a recursive manner.

In many respects Walther-Thomas et al. (1996) are promoting the practical application of communities of practice in classrooms, within schools and across schools. These communities have been given many titles but they can be distilled into certain elements, many of which can be associated with team-teaching. However, what is not so clear is how these practices are instigated, sustained and developed. In conclusion Walther-Thomas, Bryant and Land (1996) argue that:

> Multilevel planning also allows administrators, teachers, specialists, parents and other interested community members to have input in the

> development of a comprehensive plan and to develop a shared commitment to support inclusive education. (p. 8)

Reference to inclusive education and the role of team-teaching in the promotion of inclusive learning environments for students offers another means to look at the management of change in pursuit of improved learning environments. The literature on the promotion of inclusion also gives insights into how best to manage change.

The alignment of school improvement with the promotion of inclusive practices implies change, as captured by Hegarty (1993). He concludes that integration spanned a wide variety of actions, ranging from total inclusion and participation in all aspects of school life, to locational integration in a special class within the mainstream school. Hegarty (1993) concluded that:

> Integration is in the end a matter of school reform. It entails creating schools that respond to individual differences within a common framework. (p. 199)

This common framework is identified in more recent times in Ireland as a continuum of support, not only between schools but also within schools, where the repertoire of responses is extended to include in-class support in the form of team-teaching (NEPS, 2010). The change associated with the promotion of inclusive practices is raised by Ainscow, Booth and Dyson (2006) where they describe:

> The task of inclusion as being essentially transformative, requiring better use of available resources to improve policies and practices. (p. 230)

However, as Artiles et al. (2006) indicate, it is not enough to look at schools as monolithic cultures, and it is necessary to also look at "local episodes" (p. 82) and "analyse inter-actional and discursive processes from micro-perspectives and

situated perspectives" (p. 85) such as classrooms, if "school cultures are to be transformed" (p. 67). Again the place that team-teaching can play in transforming school cultures needs to be brought more into focus.

The UNESCO guidelines (2005) concentrate on the 'shift towards inclusion' and pay particular attention to key players, attitudes and values, as well as curricula that is accessible and flexible. It highlights the cost-effectiveness of inclusive practice. Of note is the attention it pays to classroom practices and suggest that classrooms that are inclusive "move away from rote learning, and place greater emphasis on hands on, experienced based, active and co-operative learning" (2005, p. 23). Of particular significance is the focus on not just equality but quality in education (2005, p. 36) and the recognition that previous interpretations of inclusion failed to recognise that quality and improvement are at the heart of inclusive practices (UNESCO, 2005, 2009).

Of particular significance is UNESCO's emphasis upon change and the associated challenges as captured by Meisfjord (2001).

> Some deep changes are at stake when we realise that people's basic conceptions of the school system are involved, i.e. their occupational identity and sense of competence. (p. 21)

As witnessed in the review of literature on team-teaching, the role of occupational identity and sense of competence among teachers have not been examined in any great detail. In his preface to the fourth edition of *The New Meaning of Educational Change* (2007) Fullan succinctly observes that in our efforts to improve schools "We still have not cracked the code of getting beyond the classroom door on a large scale" (p. xii) adding a little later that "The

interface between individual and collective meaning and action in everyday situations is where change stands or falls" (p. 9). The interface of action and change is closely linked to 'getting beyond the classroom door' and team-teaching has the potential to be both a product and producer of improvement in schools and classrooms.

The alignment of inclusive learning with good teaching for all students has been well made for more than twenty years (Hegarty, 1987), while Little (1982) has shown how powerful collaborative cultures can be in promoting student and teacher learning. Research on collaborative practices and the promotion of communities of learners also assist with furthering our understandings of team-teaching and of change wisdom. In seeking answers, as to why knowledge of the power of collaborative practices has not influenced action on a large scale, Fullan cites McLaughlin and Talbert's (2006) work where they suggest that the slow movement from 'knowing' about the benefits of collaborative practices to 'doing' collaborative practices is a result of the twin factors of the complexity of school cultures and policymakers desire for quick fixes.

Fullan extends the possible causes for lack of action by stressing "teacher resistance to deprivatising the classroom" (p. 150), which brings one back to the potential for team-teaching to be in itself a product, but also a vehicle of improvement, as it develops collaborative practices among a community of learners. In short team-teaching may assist in initially creating micro-communities of learners comprising of teachers and students who share common space together on a regular basis. In bonding together, teachers may then engage

with others in their school and beyond, weaving other initiatives into their teaching and inviting others (including policy advisors and policymakers) into conversations and actions that promote inclusive learning.

2.9.3 Inclusive learning communities

Teacher collaboration and the promotion of learning communities are key facets of the literature on school improvement and therefore merit consideration when studying teacher-to-teacher collaborative practices such as team-teaching. As indicated by my research, there is an understanding that team-teaching can promote not only inclusive learning for identified students but also promote collaboration and sense of community within and beyond identified team-taught classrooms.

The role that team-teaching can play in promoting inclusive learning communities is clear when one examine work by Stoll, Bolam, McMahon, Wallace and Thomas (2006) who define a professional learning community as:

> An inclusive group of people, motivated by a shared learning vision, who support and work with each other, finding ways, inside and outside their immediate community, to enquire on their practice, and together learn new and better approaches that will enhance all pupil learning. (p. 5)

Such a definition not only sits comfortably with findings from the literature with regard to team-teaching, but also suggests that team-teaching and the promotion of professional learning communities may be closely intertwined at both the macro-level of policy and the micro-level of the classroom. Of note is neither literature on team-teaching nor on professional learning communities make

detailed reference to the potential symbiotic relationship that both concepts could share.

An examination of the literature on professional learning communities highlights the value of teacher collaboration as a means of improving the quality of teaching and learning (Louis & Marks 1998; McLaughlin & Talbert 2001; Anderson & Togneri 2002; Bolam, et al., 2005). Could it be that team-teaching, which is based on usually one class period a day (15-20% of a teacher's timetable) might dare to simultaneously address the concept of students being engaged in more inclusive learning environments while their teachers become involved in their own professional learning in their own schools, with their own students and their own colleagues within and across schools?

Context is both the disabler and enabler of teacher collaboration. In *Irish Teachers' Experiences of Professional Learning* (2002) Sugrue concludes that "even when they (teachers) are engaged more actively as participants, the absence of support at school/classroom level means learning is not sustained as it lacks appropriate support and context sensitive feedback" (p. 334). Citing (Little, 1993; Lieberman, 1995; Sarason, 1996; Cochran-Smith & Lytle, 1999; Grossman et al, 2001) Sugrue suggests that:

> Research evidence generally, particularly in relation to learning networks and learning communities, indicates clearly the active participation and dialogue that respect participants' expertise, in addition to support and constructive feedback are vital ingredients in the difficult and complex process of changing pedagogical repertoires and classroom routines. (p. 326)

For team-teaching to gain greater traction in our educational system it must speak to these agendas of change and develop with them through enactment. This is

made very clear when Fullan (2007) tracks the emergence of professional learning communities, or what he refers to as "collaborative work cultures" (Fullan & Hargreaves, 1992). He highlights the key characteristics and attending cautionary notes associated with 'purposeful interaction' and 'the deprivatisation of the classroom'. He initially cites Rosenholtz (1989) research which observed that the central focus in effective schools was "a collective commitment to student learning" (p. 68), where collaboration is linked with norms and opportunities for continuous improvement and career-long learning.

> It is assumed that improvement in teaching is a collective rather than an individual enterprise, and that analysis, evaluation and experimentation in concert with colleagues are conditions under which teachers improve. (p. 73)

McLaughlin and Talbert (2001) conducted a study of the role of professional learning communities in 16 schools and found that:

> …a collaborative community of practice in which teachers share instructional resources and reflections in practice, appears essential to their persistence and success in innovating classroom practice. (p. 22)

It is interesting to note that most high school departments lacked collaboration and there was found to be greater disparity within schools than between schools. In fact of the 16 schools only three emerged as school-wide learning communities.

Fullan suggests that we now know not only what a learning community should look like but "at the same time we are finding out how very difficult they are going to be to establish on a wide scale" (p. 149). He offers three reasons for the difficulties being encountered in promoting collaborative cultures.

- Narrow accountability schemes inhibit collaboration. (Hargreaves, 1994)

- When it gets right down to it many teachers silently play the *privatisation card*, (my italics) that is, they find privatisation a lot less risky than opening the doors of the classroom, even or especially to colleagues
- Large scale development of professional learning communities is hard-very hard because we are talking about changing culture, one that has endured for at least a century. (p. 149)

These points clearly resonate with efforts to promote team-teaching and in turn show that team-teaching, once established, can act as a support for the promotion of other desired practices. In summary Fullan reminds readers that Professional Learning Community is not a programme to be implemented but rather a "new culture to be developed" (p. 152). He further countenances that, as in most innovations, the term travels a lot faster than the concept and the concept in this case is "deep and requires careful and persistent attention in thorough learning by reflective doing and problem solving" (p. 152).

However, many authors (Achenstein, 2002; Pomson, 2005; Wood, 2007; McLaughlin and Talbert, 2001) echo Little's (1990) caution about collaboration being powerfully bad as well as powerfully good.

> Under some circumstances, greater contact among teachers can be expected to advance the prospects for students' success; in others to promote increased teacher-to-teacher contact may be to intensify norms unfavourable to children. (p. 524)

This in turn echoes the caution associated with the dark side of social capital where Portes and Landholt (1996) identified the three dimension, exclusion, conformity and downward levelling pressures. In educational terms, collaboration among teachers must be set against the quality of learning among students. Therefore, issues regarding what are deemed as legitimate and valued learning will be important in team-teaching arrangements and other collaborative endeavours.

Team-teaching may well be the missing glue that can unite these efforts to promote inclusive learning for students and teachers. Fullan (1993) offers hope to this study by assuring that:

> Systems don't change by themselves. Rather, the actions of individuals and small groups working on new conceptions intersect to produce breakthroughs. (p. 9)

2.10 Conclusion

The appeal of team-teaching rests in its provision of resources in a manner that supports inclusive practices through teacher collaboration. However, team-teaching is not widely used in post-primary schools and where it is used there are conflicting views. My review of the current literature by examining 46 post-primary related research studies on team-teaching supports Hattie's (2009) assertion that findings remain inconclusive. The literature has a number of trends, strengths and gaps which are outlined below and which assist in framing this research study.

Trends in the research include the dominance of USA-led research and the tendency to focus more on how to team-teach and less on how team-teaching impacts upon teachers and students. What might prevent teachers from engaging in team-teaching is rarely addressed, though the list of prerequisites for its success is very useful. A number of gaps in the literature centre around understanding change management and how to measure the impact of team-teaching upon students and teachers.

At post-primary level this lack of clarity is compounded by a number of research trends. First, the primary sector received more attention overtime than the post-

primary. Second the focus of research to date has rested much more on logistical aspects of engaging with team-teaching with an emphasis on supporting teachers and teaching rather than on supporting learners and learning. Third the research has usually been conducted in isolation of other aspects of educational development where the innovation has been implemented over a short period of time, usually one academic year, using long-term assessment tools such as standardized test scores. Fourth, given most of the research emerges from the USA, there is a contextual issue of the role of the 'special needs educator' giving way to that of the 'general education'. Fifth, there is a pattern of researching team-teaching as an entity in itself rather than as part of a larger school response.

Other trends observed include, since 2006, the tailing off of research being countered by an increase in studies recognising the difficulties associated with understanding educational change. The potential role team-teaching can play in supporting agreed changes for improvement and inclusion has not emerged with many initiatives undertaken as isolated interventions rather than part of the larger educational system.

Issues regarding the use of 'control groups' also continue to emerge as does frequent reference to the fidelity of implementation and whether what is being judged is in fact team-teaching. The latter point also reflects the trend in research which fails to identify the duration for which teacher dyads have been together. Finally, the trend remains where team-teaching is usually identified by teachers as being of benefit to themselves and students but is accompanied repeatedly by

statements which indicate finding ways of measuring the benefits to teachers and students has proven challenging to researchers and practitioners.

The extant literature provides a valuable resource in understanding some facets of team-teaching and what it may ask and offer teachers and students in classrooms, and those outside of classrooms who wish to support such use of additional resources. Good work has been conducted in defining what team-teaching is, the various models that can be deployed and the frequency of their use. There would appear to be a over-dependence upon 'lead and support' in team-teaching arrangements with other identified models not being adopted to any comparable extent. Some guidance has been given on how to engage in team-teaching and the role leaders can play in supporting team-teaching.

The benefits as reported by teachers and students have been identified and include socio-emotional development as well as cognitive and learning gains. Research has looked at team-teaching in comparison to withdrawal classes and has examined the influence of team-teaching on specific subject areas and key skills such as literacy and numeracy. The current literature has also given regard to the instructional practices undertaken by teachers during team-teaching. Other issues identified by the research have had contradictory views associated with them, including the importance or otherwise of; time for planning and reviewing lessons; teacher compatibility; teacher training before and/or on an ongoing basis, and the importance or otherwise of team-teaching operating in place of, or with other delivery models such as withdrawal.

This identified gap in the literature is compounded by the use of long-term measures, such as standardized tests to determine the quality of learning, over short timeframes. These measures are usually administered at the conclusion of team-teaching arrangements and do no take account of whether the teachers involved are mechanical users or refined users of team-teaching. The lack of a theoretical base compounds the challenge faced by those who seek to determine the impact of team-teaching upon learning. Team-teaching is under-theorised which may also account for it being under-used, under-valued and not always understood.

My study highlights that research to date has rarely focused on the relationship between the promotion of inclusive practices and team-teaching. Where team-teaching is associated with meeting the needs of students with special educational needs the change agenda that inclusive practices demand is not studied. Team-teaching is usually studied in isolation from the rest of the school, rarely involves other schools and never has been examined in the context of district-wide or nation-wide policy implementation. Similarly, the research on collaborative practices and the creation of learning communities has not formed part of the literature relating to team-teaching and an equal paucity of engagement has been undertaken regarding how change wisdom can inform the successful implementation and continuation of team-teaching at classroom, school and district level.

The considerable gaps in the literature are addressed in this study by engaging with teachers and students to elicit their perspectives and experiences of team-

teaching. Seen through a socio-cultural perspective it appears that there are existing theories which can help to conceptually frame team-teaching but which have not been deployed thus far.

Of note is neither literature on team-teaching nor on professional learning communities make detailed reference to the potential symbiotic relationship that both concepts could share. The interface of action and change is closely linked to 'getting beyond the classroom door' and team-teaching has the potential to be both a product and producer of inclusive practices that promote improvements in teaching and learning in schools and classrooms. This interface is also the interface where inclusion becomes the norm or not (Artiles et al., 2006).

In this research study on team-teaching, the focus is on changing practices, at classroom, school and district level, to support and promote inclusive learning for both adults and students. In particular the gaze of change focuses on 'deprivatising the classroom' (Fullan, 2007, p. 150). The change agenda has not been seriously addressed in the literature on team-teaching nor is the connection made between team-teaching and the promotion of inclusive communities of learning. This is an important oversight and when addressed may also add to our understanding of what team-teaching involves, why its intervention to date has been more a work in progress rather than a work of progress, and what it is team-teaching actually has to offer.

Fullan (2007) comforts us by saying that changing cultures is very hard but achievable when forces unite and breakthroughs are made. Shaped by both the

insights from current literature and the questions which the literature leaves unanswered, the next chapter describes the research methodology adopted in this research study.

Chapter 3

METHODOLOGY

3.1 Introduction

This qualitative study on the implementation of team-teaching seeks to determine what such a change in normative classroom practice asks of, and offers its occupants, namely students and teachers. The orientating question in this study asks "To what extent, can the introduction of a formal team-teaching programme enhance the quality of inclusive student learning and teacher learning at post-primary level?"

The key participants involved in this research are the teachers, students and researcher. Teachers' and students' purposes, practices and perceptions relating to team-teaching are central to the study. Such a focus has implications when choosing research methods and methodology. Another influencing factor in relation to choice of methodology is not only the orientating research question, but also the origin and context from which the research question emerges. The origin of this study is the stated but rarely enacted national and international policy which promotes the phenomenon of team-teaching.. The seed for this research project was planted when the DES published its *Inclusion of Students with Special Educational Needs Post-Primary Guidelines* 2007, where the benefits of team-teaching were highlighted (p. 142-144). As a newly appointed inspector I was involved in the original writing committee 2004-2006 for these guidelines, but I paid little attention to team-teaching at first and only grew to have an understanding of its central role in stated special-education policy

through being a member of the committee. My engagement as a teacher and inspector revealed the significant gap between stated policy and practiced reality.

The origin from which the study emerged was to instigate and research team-teaching where it had not systematically occurred before. Subsequent to meetings with my university supervisor between October and December 2006, I met with the Education Officer (EO) of the VEC in January 2007. I outlined the fact that team-teaching seemed to have much to offer but that it had been largely ignored and never instigated across a number of schools simultaneously. We explored the possibilities of a number of VEC schools engaging in a team-teaching project. The EO expressed considerable personal interest but explained that, while schools would be invited to show an expression of interest, there was no guarantee that such invitations would be accepted. Subsequent to our meeting ten schools expressed an interest and it was agreed that the EO and I would address principals and interested teachers in April 2007. By early May, seven schools had agreed to become involved. To facilitate commencement of team-teaching in the 2007-2008 academic year, a two-day workshop on team-teaching was arranged for late May 2007. This workshop was jointly planned and facilitated by the EO and myself.

The context influenced methodological choice as the researcher is also an inspector of schools and a policymaker. Choice of methodology in such a context required careful consideration if the research was to contribute to theory and practices associated with team-teaching.

In light of the research question and the research context, this qualitative study adopts an interpretive research paradigm where social interaction is seen as the basis for knowledge. The theoretical position is symbolic inter-actionism which assists in capturing participants' understanding of every-day actions and grounded theory is used as the specific methodology incorporating semi-structured interviewing, participant and non-participant observation and document analysis.

In the words of McNeil and Coppola (2006) this research seeks to examine 'official' and 'unofficial stories' regarding the impact of a particular policy on educational practice. The methodology adopted attempts to meet the high standards expressed by the afore-mentioned authors.

> We believe that only through research in classrooms, schools and communities that is fine grained enough to track significant and compelling narratives, sensitive enough to explore the definitional contours of the policy and persistent enough to pursue discrepant explanations can we truly understand how policies, affect the lives and learning of the children they are intended to help. (p. 681)

The chapter is divided into a number of sections. It initially outlines the research question and hypothesis, and then explores issues of design, sampling, ethics, data collection and data analysis. Particular attention is given to the balancing of the twin role of schools' inspector and researcher, and the affordances and constraints that emerged as a result.

3.2 Research question and hypothesis research

In line with international trends Ireland's educational policy supports the promotion of inclusive learning and sees team-teaching as having an important role to play in making the rhetoric of inclusion at policy level, a reality at

classroom level. However, very little research on team-teaching has been undertaken in the Irish context and no formal programme of implementing team-teaching among a number of teachers, within and across schools, has been undertaken. It is hoped that my research will provide insight, not only into team-teaching, but also offer more nuanced understandings associated with the promotion of inclusive practices by examining the relationships between policy and practice.

This study reveals some of the links, both existing and missing, between commentary and stated policy on inclusion and micro-studies on team-teaching. While set in one area in one country it is hoped that the rationale for this study will extend to include greater understandings for those in other parts of the world promoting change for the better at classroom, school, district and national level. In summary this study seeks to generate a theory-informed understanding on the implementation of team-teaching and in so doing establish what team-teaching asks of, and offers those involved, and how it can be successfully introduced, sustained and extended to others.

3.3 Design

Given that the aim of the research was to generate a theory-informed model on how teachers and students engage with team-teaching for inclusive learning, the research adopted a grounded theory approach within the interpretive paradigm. An interpretive paradigm concerned with symbolic inter-actionism and with "revealing the perspectives behind empirical observations, the actions people take in the light of their perspectives and the patterns which develop through the

interaction of perspectives and actions over particular periods of time" (O'Donoghue, 2007, p. 21).

This design suits the research questions because it is flexible, employs a complementarity of methods and honours individual and collective responses. It facilitates this research by allowing the study to move, often seamlessly across the educational landscape of personnel, roles and positions, ranging from individuals in classrooms to national policymakers. It also supports efforts to thread connections and trace networks of interaction across the educational system and to understand how the change agenda, in this case inclusion in mainstream classrooms, is set and re-set, resisted or facilitated. The research design adopted assists in revealing how a policy designed to promote inclusive learning for students, is refracted on a daily basis in the complex and ever-changing eddies and whirlpools of individual classrooms and schools, and the larger waters of districts and central government.

The research design also supports the study's rationale of seeking to understand how future policy can be supported by a more fine-grained understanding of not only how a particular policy is implemented but also how future policy can be informed by practitioners. McNeil and Coppola (2006) highlight this point succinctly.

> Research on policy impacts need to capture the voices of those affected not just because they are recipients of the policy but because they have made insights unavailable to the formal policy process; the power differential favours the policymakers, whereas the actual knowledge differential favour the professionals and families being affected. Framing the research around what the policy is doing to or for children and their education immediately takes the researcher out of the input-output mode and often beyond the assumption embedded in the policy. (p. 683)

Seeking 'to capture the voices and insights of those affected' requires an understanding of the everyday and a return to the aforementioned concept of perspective, which is a central concept within symbolic inter-actionism. Blackledge and Hunt (1985) echo Elmore's sentiment on improvement being about the everyday actions when they conclude that "everyday life is produced by people employed within the system acting together and producing their own roles and patterns of actions" (p.236). Perspectives in turn are seen as frameworks where sense is made of the world (Charon, 2001; Woods, 1983). They are not fixed and are interdependent (O' Donoghue, 2007).

> Perspectives may remain the same, may be reinforced, may be modified or may change as a result of how they respond to how others respond to their actions. (p. 33)

Power and relationships are brought into sharp relief when the policymaker becomes the researcher. Justification for adopting such a research design as outlined above is further supported by not only the research question but also the context in which the research is being undertaken. More detailed analysis of the role of the researcher will be examined later in this chapter but suffice to say that the researchers' role as schools' inspector influenced the particular use of methodology and methods. The interpretive paradigm seeks 'understanding' over 'explanation' (Husén, 1988) where "it tries by means of empathy to understand the motive behind human reactions" (p. 18).

A similar view is expressed by Bogdan and Biklen (1992), where they called for "sympathy and understanding towards those studied" (p. 4). Where the major focus is on generating a theory-informed model about process, the perspective of the participants and recipients trumps that of the policymaker and the researcher.

The power shift here between school personnel and the inspector, which the adopted methodology supports, moves teachers and school personnel from a position of accountability to one of autonomy. In so doing the researcher adopts the role of learner whose questions are generated to catch a glimpse of the reality unfolding and jointly generate understanding around team-teaching and how it might be implemented, sustained and shared.

In seeking to generate a theory-informed model, the selection of this research design is also justified as it facilitates thick description that may inform policy, our understanding of change and assists other research work. Strauss and Corbin (1990, p. 15), describe theory as an integrated framework of well-developed concepts and the relationships between them that can be used to explain or predict phenomena. While caution is urged, claims from such research " can be used in a comparative fashion to alert researchers to themes or events which might be common to similar phenomena under different conditions" (LeCompte & Preissle, 1993, p. 119). In this study the contribution to research can be applied across a number of domains and settings along the horizontal axis of policy and practice as it intersects with the vertical axis of school personnel (including students) and external personnel.

3.4 Sample

Purposive sampling (Creswell, 2008) was adopted, with two of the seven schools being chosen as case studies (Table 11). These schools were chosen as representative samples of schools in the project. Ash School had some previous experience of team-teaching while Oak School had very little experience of

team-teaching. While similar in size, these schools were located in different environments, with one school located in a suburban setting and the other in a rural town. The different degree of initial commitment, by the respective principals, to the project was also a determining factor in choice of schools as was the difference in student intake. Both schools were also part of a nationwide school completion programme that saw some schools receive additional funding under the Delivery Equality of Opportunity in Schools (DEIS) action plan for students from economically disadvantaged communities.

Table 11. Data on each case study school 2007-2008

Details	**Ash School**	**Oak School**
Location	Sub-urban / Urban	Rural/Urban
Socio-economic status	Disadvantaged (DEIS)	Disadvantaged (DEIS)
Size	Medium sized	Medium sized
Type	Co-educational VEC	Co-educational VEC
Teaching dyads	A. Rachel & Ned (Maths) B. Cathal & Peadar (English)	C. Joe & Hilda (English) D. Ricky & Laura (English)
SEN qualifications of participating teachers	None	One : Hilda
Year groups involved	Year 2 Class Nollaig (age 14-15)	Year 1 Class Pól (age 12-13) Year 4 Class Ellen (age 16-17)
Size of class	Year 2 (23 students)	Year 1 (12students) Year 4 (18 students)
Class ability	Second lowest stream	Year 1 lowest stream Year 4 mixed ability group
Subjects taught and levels[7]	English (F&O) and Maths (F&O)	Year 1 English(F), Year 4 English (O&H)

[7] English and Mathematics have three levels at junior cycle, Higher (H), Ordinary (O) and Foundation (F) level. Senior cycle has the same levels for Maths but only Higher and Ordinary for English.

It should be noted that Carrie in School Oak, also team-taught in Class Ellen with Laura but not consistently across the week and not in either English or Mathematics.

3.4.1 General profile of students

Ash School

In Ash School the student profile, with regard to special educational needs, saw an above average number of students being identified as having social-emotional difficulties. Other identified needs that impacted upon learning included development of literacy and numeracy skills, as well as specific needs relating to speech and language development, dyslexia and borderline or mild general learning difficulties. Students from the settled Traveller community were also enrolled in the school and, at the time of the study, attracted some additional teaching resources. The area around the school had benefited little with the arrival of the 'Celtic Tiger' and has been the first to suffer from its departure.

Oak School

The students in Oak School attended a school that was, though also funded under DEIS, more heterogeneous in its make-up than school A and has less socio-economic disadvantage. Students came from a variety of backgrounds, both rural and town, and included students with English as an additional language. The identified needs were less behaviour-related but otherwise were similar to Ash School and included those associated with literacy, numeracy, autism, dyslexia and borderline or mild general learning disabilities. A similar proportion of students from the Traveller community were enrolled in this school.

Principals

In both schools the enrolment pattern showed a steady increase on a yearly basis and projected figures indicate that this was set to continue over the coming years. In Ash School the principal was tremendously excited about the team-teaching project and had himself engaged in some team-teaching in the past. He also possessed qualifications in special education and believed in team-teaching. In Oak School the principal had little background experience in special education and no previous knowledge of team-teaching. His attitude was less enthusiastic about the project but was willing to reserve judgment and 'give it a shot'. One got the impression that the latter principal was motivated to be involved more for political than pedagogical reasons. An early casualty, that may or may not be attributed to the principal, was the failure to timetable the first year Mathematic class as originally planned.

3.4.2 Specific profiles of teachers

Ash School

Ned and Rachel, Mathematics, Class Nollaig, Year 2

Ned and Rachel are teachers of Mathematics and both self-selected for the team-teaching project. Both had engaged in some team-teaching with one another the previous school year and enjoyed what they described as an informal arrangement but it was 'nothing as organized as the project'. Neither held any formal qualifications in the area of special education.

Ned

Ned has a grown up family, and came relatively late to teaching. He taught abroad for a number of years and this was his second full academic year in the

school. Like Rachel he did not have a permanent contract of tenure with the school. His style of teaching reflected his personality which was very outgoing and open to new ideas. He was involved in a lot of extra-curricular activities with the students and had built up a good rapport with them. His attitude to team-teaching and teacher collaboration was very positive and he frequently drew analogies with previous work experiences regarding collaboration with fellow colleagues. He remained of the view throughout the study that team-teaching required teachers to be compatible, but he was not of the view that for team-teaching to be effective it required considerable joint planning or joint review. Ned left the school at the end of the academic year as he took up a teaching position closer to home.

Rachel

Rachel has taught in the school for a number of years since finishing college and was recently married. Before she teamed up with Ned, she had some experience of team-teaching in the school. The previous experience had not been as successful as with Ned and she felt this was because her female teaching partner was not comfortable with another teacher present in the classroom. Furthermore, the arrangement was described by Rachel, as not very formal or well organized. At the time of the study, she, like Ned, was not in a permanent position in the school. While much quieter in character than Ned, Rachel came across as more confident in her teaching and clearer about the value of team-teaching. Both regularly spoke of the fun and 'craic' they had with each other and with the students during team-taught lessons. She too was of the view that personalities were an important factor in team-teaching. Rachel continues to teach and team-

teach in the school and has secured a permanent contract of employment. As an indirect result of the project she has given some in-service to teachers on teaching Mathematics.

Cathal and Peadar, English , Class Nollaig, Year 2

Cathal and Peadar were two relatively young teachers in the school. Both were teachers of English, and neither was, at the time, in possession of permanent contracts of employment. Cathal had spent a longer period teaching in the school and self-selected himself for team-teaching while Peadar was in his second year in the school and was asked by the school to become involved. Neither held formal qualifications in special education though Cathal was later to complete a postgraduate diploma two years into the project. At times, both struggled with their team-teaching arrangement but continued because they believed that the benefits for their students, and for themselves, merited perseverance.

Cathal

Cathal was in the school longer than Peadar, and had engaged in some team-teaching the previous year. He had enjoyed the experience though his main concern this year was whether the student 'paying for team-teaching', through their particular allocation of hours being used in this matter, would benefit from the arrangement. He was class teacher to the Year 2 class and this involved a pastoral/disciplinary role. Cathal had some set views on what team-teaching should be about, was eager to make it work and in fact may have been a little over-controlling as a result. Cathal very much advocated for team-teaching both in the school and at cluster meetings with other teachers. Unlike Ned and Rachel,

Cathal believed there was a distinct need for joint planning and joint review time for teachers. However, like his teaching partner he had a busy teaching schedule, commuted across town to the school and both cited after school meetings as impractical.

Peadar

Peadar was the quieter of the pairing and he had little experience of teaching. He was relatively new to the school and the area. He very much depended upon Cathal at the initial stages of the arrangement. The lead support model was initiated by them but would appear to have been the only model used and to have gone on so long as to leave Peadar very nervous when it eventually came to his turn 'to lead'. Though learning from Cathal was deemed a powerful experience, Peadar was of the view that team-teaching asked a lot of him at a personal and professional level. In the end, he was not as convinced of the merits of team-teaching as Cathal. Like Cathal, he also was of the view that there was a need for joint planning and review time for team-teaching to be successful. Both continue to work in the school, with Cathal securing a permanent post and continuing with team-teaching, while Peadar is not as involved in team-teaching and has not secured a permanent position in the school. Cathal has since given workshop presentations on team-teaching in schools and was heavily involved in the production of a team-teaching materials that were supported by the VEC/IVEA as a result of the project and launched in March 2011.

Oak School

Joe and Hilda, English, Class Pól, Year 1

This was Joe and Hilda's first time team-teaching, though Hilda did recall engaging briefly in such practice in the past. They were very much supportive of the project and found team-teaching to be of significant benefit to their students' learning and to their learning about their students. Both self-selected to team-teach with one another.

Joe

Joe has been teaching for more than twenty years, the majority of which was in his current school. He is a permanent member of staff, has a position in middle management and has considered applying for further promotion within and outside his school. Joe is a respected member of the staffroom and the type of teacher that every student seems to want to salute on the corridor. He is married with children and he drives a relatively long commute to and from work each day. Joe had no previous experience of team-teaching and like Rachel and Ned had no issues with planning and reviewing lessons. By the end of the year Joe was such a fan of team-teaching that he said he would be willing to team-teach with any teacher, as the benefits to the students were so significant. He later completed a post-graduate diploma in special education and now guest lectures on the special education programme and facilitates workshops on team-teaching in other schools.

Hilda

Hilda was the only member of the entire teaching group who held formal qualifications in special education. Near retirement, Hilda was of the view that

her ‘best teaching years’ were behind her. Hilda found personal and professional satisfaction from team-teaching with Joe. Hilda has found mainstream solo-teaching hard for a number of years and she enjoyed the energy and fun that emerged from team-teaching. She particularly liked the opportunity to see how students learned and not to be preoccupied with disciplinary matters. Hilda was conspicuous by her absence in the staffroom whenever I called. Hilda’s near forty-year career as a teacher ended with her retirement at the end of the year following on from the project.

Ricky and Laura, English, Year 4, Class Ellen

Ricky and Laura had not team-taught in the past. Both self-selected to team-teach and by the end of it the doubting Ricky had been convinced of the value of team-teaching by his joint undertaking with Laura who was a ‘big fan’ of team-teaching from previous experience in another setting.

Ricky

Ricky is teaching for approximately 15 years since he left college, and he is in control of his subject and his classroom. Similar to Joe he commanded respect among his students but was less of an influence at staff room level. He gets involved in lunchtime activities with the students. His dominant mode of teaching is talk and chalk which works for him and as judged by state examinations, works for his students also. Ricky was dubious of team-teaching initially and was converted to its use by engaging with Laura, though he was of the view that compatibility would remain a significant issue for him and that he was not able to see himself ‘teaching with just any other teacher’. Planning and reviewing lessons were not deemed to be significantly important for him in

teaching with his colleague, though Laura did wish there could be more opportunities to evaluate their progress with the arrangement.

Laura

Laura was in her second year in the school and had only some part time hours. She studied commerce in university and had taught English abroad. Her style of teaching was different to Ricky's in that she used a lot of co-operative learning strategies to support learning. She also helped another teacher, Carrie, with the same students, once a week. This class focused on entrepreneurial projects and Laura felt more involved with the English class and a little sidelined in the other lesson, even though they were the same students and her degree subject. As a result, Laura did believe that compatibility was an issue but that it could be overcome by education and showing teachers the options available to them when team-teaching.

3.5 Negotiating entry

In April 2007 all teachers and principals were invited to attend a meeting chaired by the EO of the VEC. I presented the rationale for the project to school personnel and the implications as it related to their work and my research practices. Preparation for this meeting and presentation was a joint activity between the EO and I. Deception was avoided by stating clearly that I was an inspector and would endeavour to wear 'two hats', inspector and researcher. The worthiness and reciprocal beneficence of the project was addressed and a beginning was made in constructing an 'interpersonal bridge' (Errante, 2001)

between school personnel and myself. This bridge was further fortified by the two planning days in May 2007.

Following the April presentation an informed consent document was composed in keeping with university's procedures and protocol (Miles & Hubermann, 1994; McQuillan & Muncey, 1990; Creswell, 2008). All communication was conducted using personal phone numbers, home and email addresses, lest again any confusion might emerge between my inspectorate and researcher roles. The manner in which I dressed when meeting with teachers and students was a little more casual than I might as a 'cigire' (inspector) but not too casual as to risk being disrespectful. Signed consent forms (Appendix 1) bore the logo of the university and contained my name and that of my supervisor.

Students were first met via their class teachers and never met alone. I always strove to put them at their ease by thanking them each time for letting me into their class so that I could learn. Regular visitations helped bridge the interpersonal gap, as did opportunities to interact with the whole class towards the end of the lessons visited. In time requests were made to teachers as to when 'is Finn coming back' or indeed 'have we that dude again today?'

Ethics also influenced the methodology adopted for this research. The interpretive paradigm suited my position of researcher and inspector, in that I was determining the participants' engagement rather than directing their engagement, and the research sought to make meaning together. Respecting the day-to-day actions of the school was important. For example, any thoughts of

evaluating the project through use of a control group were sidelined once it was obvious that identified students in the team-taught lesson had some, though admittedly a very small amount, of additional support in the form of withdrawal from class. To have requested that such students should only be in receipt of support from a team-taught model would have been selfish, unwise and unethical, and as will be discussed later, methodologically unsound.

Ethics also guided early retreat from efforts to obtain agreement on video recording some of the lessons. Such requests by me were usually met with polite silences or deflections by the teachers involved. It became evident that being an inspector may not have assisted in my efforts to gain agreement on classes being video recorded. My sense of gratitude at being facilitated in such a welcoming and honest way by teachers whenever I met with them or their students, caused me to refrain from pursuing the matter too vigorously. As would transpire the video-recording of teachers did take place but at a later stage in my engagement with teachers, when trust in me and others was equally matched by trust in themselves. Ethics assisted in maintaining awareness of what the initiative and the research activities were asking of teachers, personally and professionally, and to a lesser extent of their students. Such awareness was also evident in relation to my changing roles and caused me to strive to be mindful of the emotions involved in engaging with team-teaching, with the research and with the researcher.

3.6 Ethics

All teachers received and signed a consent form outlining the purpose of the research and the proposed dates of my visits to the school over the course of the academic year 2007-08. Data-gathering procedures were stated in the consent form and teachers were informed of plans to interview school personnel, including the school principal and students. Respect for confidentiality and anonymity was highlighted in the consent form and emphasis was placed on participants right to withdraw from the study at anytime, without prejudice. Ethical issues were more pronounced given the researcher's professional position as schools' inspector. Such a role involves evaluating, advising and supporting schools in their work, as well as contributing to policy making at national level.

The reason for my engagement in this research topic, and the manner in which the research was chosen, planned, implemented, analysed and written, cannot be separated from my professional role as a post-primary school inspector for special education. Inclusive practices often involve crossing, blurring or removing boundaries. As a researcher and as an inspector the boundaries between these two roles were sometimes clearly distinguishable but were often similarly crossed, blurred or removed. As an inspector I chose to seek to inform myself about and utilise good research practices in my day-to-day work. Such a decision impacts primarily upon me and the quality of my work. By adopting the role of researcher, this inspector recognised that while the location and personnel remained the same, namely the school and its occupants, the rules of engagement would be changed. In striving to protect individuals and a range of interconnecting relationships, I was also mindful of protecting the integrity of the

research, the research institute and the inspectorate. Devising and adhering to a clear code of ethics was essential.

The foreword to *Ethical Standards of the American Educational Research Association* (2001) states that: "Education, by its very nature, is aimed at the improvement of individual lives and societies. Further, research in education is often directed at children and other vulnerable populations" (AERA, 2001, p.1). Similar views are expressed by British Educational Research Association ([BERA], 2004) and Scottish Educational Research Association ([SERA], 2005) documentation, as is the view that research should involve the minimum of intrusion. As a consequence of the inspectorate's role in schools, this researcher was keenly aware that it was, potentially; perceived or otherwise, placing other persons in vulnerable positions. At an immediate level these persons included teachers (particularly those without tenure), principals, VEC Educational Officer (EO) and, to a certain extent, the researcher/inspector himself. At a more distant level I was also conscious of how my interaction with school personnel would impact upon future work of colleagues in both the inspectorate and the university. Anderson's (2006) two key questions also help to frame ethical dimensions of the research; "Is the research worth doing?" and "Is the research explained clearly enough so that anyone asked to take part can make an informed decision about whether they want to consent or refuse?" (p. 670).

The ultimate success of the team-teaching project resulted in the teachers sustaining their involvement beyond the pilot phase. Another successful outcome witnessed teachers and VEC representatives agreeing to produce and share

materials that would support team-teaching in all post-primary schools in the country. In submitting these insightful and context-rich artefacts I'm conscious of the ethical dilemmas that it may pose. Upon reflection and discussion with my supervisor I am confident that the anonymity of the participants, as referenced in this thesis, is not compromised by such actions. I trust that the inclusion of this information will serve to add to the understandings associated with the research study and the possibilities for further practice and research.

A more detailed description of the dual role of the researcher-inspector is addressed at the end of the chapter. The next section below outlines the collection and analysis of the research data.

3.7 Data collection procedures

Overall the data collection included:

- Transcripts from 44 semi-structured interviews with teachers, student focus-groups, principals and VEC administration.
- Field notes from 20 classroom observations, 4 visits to each school, 6 cluster meetings.
- Documentation from schools including student work, IEPs and extant documentation on school policies and procedures as well as emerging documentation from the initiative.

Instruments and methods used in data collection included questionnaires, semi-structured recorded interviews, documentation (including participants' recorded reflections and student work), school and classroom observation, as well as attendance at cluster meetings. Students work was also used to form the basis for interviews with the paired teams of teachers. Data was collected, transcribed and analysed from the time of the first meeting in April 2007 through three distinct phases of interview and observation (December/January, March/April and

May/June), which ran until the end of the academic year in June 2008. Such practice facilitated ongoing analysis and subsequent development of a grounded theory approach to the experiences as stated by the participants and observed by the researcher. Interview data was digitally recorded and securely stored. Transcription of recordings was conducted by a professional transcriber who returned all data at the completion of each transcription. This facilitated the analysis of data at the completions of each phase of the research and the refinement of research activities in each wave of data collection. Such collection was informed by continuing reading of relevant literature and by the use of the *MAXqda 2007* computer package which electronically stores the responses and in turn was used to label, segment and code into themes.

In light of the themes emerging from the coding process, the use of Social Capital Theory was employed to revisit the transcripts and initial findings. Particular attention was given to four domains of social capital such as structure (teacher interactions), pressure (how engaging with another colleague created pressure which had positive and negative influences), trust (the required norms of trust that were required and emerged among teachers) and access to resources (the professional learning that emerged between teachers involved in the project). Teachers' perceptions of the impact of team-teaching upon student learning were also coded as was the questionnaire and interviews involving students.

The orientating question 'To what extent can the introduction of a formal team-teaching programme enhance the quality of inclusive student learning and teachers' professional engagement at post-primary level?' and subordinate

questions for the study, in turn determined the research methods employed (Mertens, 2005). The interpretive paradigm is adopted as it is concerned with "revealing the perspectives behind empirical observations, the actions people take in the light of their perspectives, and the patterns which develop through the interaction of perspectives and actions over particular periods of time" (O'Donoghue, 2007, p. 21).

Interview questions were piloted in my former school. In the course of this research project, due regard was given to respecting the confidentiality of the participants and the findings will be presented so as not to identify any one school or individual who participated in the project. Table 12 provides a timeline of research activity from October 2006 to the present.

Table 12. Timeline of research study 2006-2011

October 2006: Formulate Research Questions.

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October 2006-May 2007: Undertake literature review and revise research questions.

↓

February-May 2007: Co-design team-teaching programme including training workshops for principals and teachers.

↓

May-September 2007: Continue literature review and revise research questions. Develop theoretical framework for data analysis

↓

September 2007-April 2008: Pilot research questions, collect data from VEC and school personnel via questionnaire and interview. Observe classroom activities, pre- and post-lesson interaction between teachers and planning meetings (including cluster meetings).

↓

April- June 2008: Collect data from VEC and school personnel via questionnaire, documentation and interview
(Post intervention data).

↓

June-December 2009: Analyse data using theoretical framework.

↓

December 2009–August 2011 Write up thesis.

Four visits to two schools took place over the course of the year. Teachers involved in the project and their students were the initial focus of questioning and observation. Shorter interviews with the principal and with the EO were also recorded. To obtain the different perspectives use was made of Blackledge and Hunt's (1985) work on perspectives framework which examines participants' intentions, strategies, reasons and expected outcomes. Table 13 provides an outline

of the data gathering activities, the majority of which were conducted between 2007-2008.

Table 13. Summary of data gathering activities 2007-2008

	Questionnaire	Interview	Documentation	Observation
Students	September and April 2007-08	December and April 2007-08	September, December and April 2007-08	September, December and April 2007-08
Teachers involved	September and April 2007-08	September , December and April 2007-08	September, December and April. Reflective journals 2007-08	September, December and April 2007-08 in class and monthly meetings
Other colleagues not involved	September and April 2007-08	September and April 2007-08		
Principal	September and April 2007-08	September and April 2007-08	Staff meetings/new sletters 2007-08	Address to 21 principals in scheme. Launch of support material 2011
Parents	September and April 2007-08	October and April 2007-08		
VEC and SDPI personnel	September and April 2007-08	October and May 2007-08	September/December and April2007-08	Monthly meetings 2007-08

3.7.1 Questionnaires and interviews

All questionnaires and interviews (Appendices 2 & 4) were designed and distributed by the researcher. The guidelines offered in the literature were adhered to (Bell, 2003; Cohen, Manion, & Morrison, 2000; Wilson & McLean,

1994). Critical colleagues were consulted in devising the questions and the sequential logic therewith. Cohen et al. (2000) state that, "The ordering of the questionnaire is important for the early questions may set the tone or the mindset of the respondents, to the later questions" (p. 257). As Oppenheim (1968) remarks one covert purpose of each question is to ensure that the respondent will continue to co-operate. Piloting with a small number of teachers also assisted in this regard.

The questionnaire design reflected the "ecumenical epistemology" (Onweugbuzie & Teddlie, 2002) in that the quantitative closed questions interacted with the more qualitative open ended questions. The questions were subdivided into units of investigation and structured so as to ease the respondent into the exercise by beginning with the more easily answered closed questions before advancing to what Wellington (2000) describes as the "open-ended questions requiring opinions, feelings and value judgement…" (p. 104). The same author observes that "These (open-ended questions) can be time consuming and difficult to answer- and hard to analyse- so it is best to avoid too many. But they will yield fascinating qualitative data" (p. 104).

"Interviews are essential sources of case study evidence because most case studies are about human affairs" (Merriam, 1998, p. 92). The initial research questions and analysis of questionnaire data, combined with prevalent themes emerging from the ongoing literature review, assisted in constructing a number of questions for the different participants. However, it is also important to allow the participants' voice to be heard. Therefore a semi-structured interview

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. The researcher was aware that each interviewee gives their interpretation of events as they perceived them but also as the researcher perceives them.

> One of the philosophical assumptions underlying this type of research is that reality is not an objective reality; rather there are multiple interpretations of reality. The researcher thus brings a construction of reality to the research situation, which interacts with other people's constructions or interpretations of the phenomenon being studied. The final product of this type of study is yet another interpretation by the researcher of others' views filtered through his or her own. (Merriam, 1998, p. 23)

In light of the joint activity engaged by the teachers, work sample interviews were also conducted. These interviews were not as successful as wished, partly because of teachers' lack of understanding of the process but mainly due to my lack of experience in conducting the exercise.

My attendance at the initial VEC meeting and subsequent workshop days (including an early morning game of golf with some teachers) assisted in reducing the level of reactivity and allowed for more trust and rapport to develop for all concerned. The interviewer was always mindful of rapport being a stance, vis a vis the interviewee, while neutrality is a stance, vis a vis the content of what is said. Furthermore it was useful to engage in what Kvale (1996) describes as "deliberate naiveté" where "the interviewer exhibits an openness to new and unexpected phenomena, rather than having ready made categories and schemes of interpretation" (p. 88). As Yin (1994) comments:

> The specific questions must be carefully worded, so that you appear genuinely naïve about the topic and allow the respondent to provide a fresh commentary about it. (p. 85)

The use of prompts further facilitated the interviewer in his efforts to remain consistent across the interviews and obtain as much information as possible while staying on task. The interview schedule also allowed the researcher to consult with the research supervisor so that issues such as the use of leading questions open and closed questions, ambiguity, and the distinction between probing and prompting could be recognised and avoided. Wellington (2000), draws on Parsons (1984), in to distinguish between the latter two as follows:

> In essence prompting indirectly leads the respondents: 'do you mean that…….?' which may cause some bias in the reply; whilst probing is neutral: 'Could you tell me more about…?' (p. 89)

Participants were offered a variety of locations in which to conduct the interviews as it was deemed appropriate that they would be facilitated in every way given that they were giving of their free time. With the permission of all interviewees, interviews were recorded using a digital dictaphone. Confidentiality was assured and each interview was recorded separately with a back up copy. All copies were stored securely and CD versions were retrieved from the transcriber at the completion of each session of transcription. It was important to make clear that the interview was to elicit their views and not an evaluation of their role in the intervention.

The researcher designed the schedule of questions in such a way that only slight alterations took place between the different stakeholders, i.e. student teachers, school and university personnel. This allowed for a matrix of comparative

analysis to be constructed and also honoured the need to allow the 'unsolicited voice' to be heard, recorded and analysed.

Stake (1994) notes that there can be many a slip between cup and lip and that knowledge gained in an investigation "faces hazardous passage from writer to reader... the writer needs ways of safeguarding the trip" (p. 241). The trip is made all the more "hazardous" by what Miles and Huberman (1994) describe as a process where one is moving up "from the empirical trenches to a more conceptual overview of the landscape. We are no longer just dealing with observables but also with unobservables and are connecting the two with successive layers of inferential glue" (p. 261). The analysis of data was facilitated by the use of the software *MaxQda 2007* programme which electronically stored the responses and in turn was used to code them into themes. The researcher however is, mindful of Reid's (1992) view that the "computer does not analyse qualitative data, it only manages it" (p. 27). He warns that while "we may retain coding as a term for replacing full category names by brief symbols ….we should not confuse this with the analytic process of creating and assigning the categories themselves" (p. 58). Cohen et al. (2000) also urge caution:

> The great tension in data analysis is between maintaining a sense of holism of the interview and the tendency for analysis to atomise and fragment the data- to separate them into constituent elements, thereby losing the synergy of the whole, and in interviews often the whole is greater than the sum of the parts. (p 282)

Wellington's adaptation of the "Constant Comparative Method" and "Continuous Refinement" of categories proved useful in maintaining the tension and avoiding

possible pitfalls highlighted by Cohen. Wellington (2000) highlights a series of sequential steps:

- Data divided into 'units of meaning'
- Units grouped/classified into categories
- New units of data subsumed under these or used to develop new categories (assimilation and accommodation)
- Search for similar categories mindful that two could be merged into one
- Examine large amorphous categories mindful that they could be subdivided
- Check that all data covered by categories (exhaustive) and that no categories are overlapping (exclusive)
- Integrating where connections, contrasts and comparisons are made between categories. (pp. 135-136)

Aware that contrasts, paradoxes and irregularities are also informative Wellington (2000) advises the next stage is to "integrate the data so that they 'hang together' and also to begin to locate one's own data in existing work, i.e. other people's data" (p. 137). It has been the experience of this researcher that the literature review impacts from the very beginning of the analytical process and that the above steps occur in tandem with the categorisation as found in the literature review. To paraphrase Merriam, the oscillation between the two is constant and from the start. LeCompte, Preissle and Tesch (1993) states that theorizing about data equates with "the cognitive process of discovering or manipulating abstract categories and the relationship among those categories" (p. 239). While allowing for the emergence of unknown dimensions the categories were structured so as to be compatible with the initial and emergent research questions.

The dictaphone facilitated transfer of voice to computer and when the transcripts were being reread they were done so with the voices activated on the computer. This allowed for checking of any misrepresentation through omissions or typos.

An initial replaying of the interview also allowed notes to be taken on the interview schedule sheet, to account for pauses, tone, speed, emphasis, laughter, etc as well as visual recall of gestures and body language Observation as a method of data collection assists in the triangulation of data gathered via other methods such as interview and documentation. It is one thing to determine what one may think is happening by scrutinising documentation or administrating interviews, and quite another to see what is actually happening.

Observation facilitates clarification and elaboration on the perspectives teachers hold about team-teaching and the translations of such perspectives into action. Discussion around classroom activities and cluster meetings also facilitated and enhanced the quality of the interviews. Sometimes these conversations occurred immediately after the lesson and/or along the corridor and in the staffroom. Observation helped to put faces on students and allowed student learning activities to be seen, and this in turn assisted in more meaningful and fruitful interaction with the class group and with those students invited to be interviewed. Gold's (1958) classic typology offers a spectrum of four possible stances, complete participant, participant as observer, observer as participant and complete observer. Mertens (2005) statement that "In reality researchers are rarely total participants or total observers" is reassuring as is his description of "researcher participant" where "one who participates in a social situation but is personally only partially involved so that he can function as a researcher" (p. 102).

Several writers (Goetz & LeCompte, 1984; Borg & Gall, 1989; Bogdan & Biklen, 1992; Patton, 1990; Taylor & Bogdan, 1984) have addressed the question "How to record observations?" The main suggestions advise observers to concentrate on the following in observing and taking field notes.

- Physical setting
- Participants
- Activities and interactions
- Conversations Subtle factors- What does not happen?
- You are as much part of the scene as participants (Patton, 1990, p. 235).

3.7.2 Documentation

Schools are rich sources of documentation. Students' work samples, individual education plans and files, subject department and school planning documents, standardised exams as well as state, in-house and class-based examination results are all rich sources of information. As with all aspects of this research, documents were treated sensitively with originals remaining in the school at all times and photocopies made with individuals names removed as appropriate. Engagement with the subcommittee, formed to advance the provision of support materials and guidelines, also allowed access to a range of documentation and self-evaluation engaged in by each of the participating schools.

3.8 Data analysis procedures

Analysis of data in this qualitative research is ongoing and reflective. Miles and Huberman (1994) sequence the steps for qualitative data analysis as follows:

- Give codes to your first set of field notes drawn from observations, interviews or document reviews
- Note personal reflections or other comments in the margins
- Sort and sift for similar phrases, relationships between variables, patterns, themes, distinct differences between subgroups and common sequences
- Identify these patterns and processes, commonalities, and differences and take them out to the field in the next wave of data collection

- Begin elaborating a small set of generalisations that cover the consistencies discerned in the database
- Examine those generalisations in light of a formalised body of knowledge in the form of constructs and theories
- Continue the process of data collection and analysis until the regularities previously mentioned emerge. (p. 423)

Grounded theory was developed by Glaser and Strauss (1967) and subsequent interpretations by Strauss and Corbin (1990) and Charmanz (2000) prove useful in analysing this research as it involves asking questions of the data and making comparisons about how teachers and students engage with team-teaching in a recursive and ongoing manner. As Jackson, (1990) comments, "the interpreter is genuinely puzzled by whatever he or she sets out to study and is at the same time sceptical of what others have already said about it" (p. xviii).

Three steps (though not necessarily linear steps) are identified by Strauss and Corbin (1990) as open coding, axial coding and selective coding. These methods are consistent with symbolic inter-actionism. Open coding pertains to naming and categorising phenomenon through close examination of data. Axial coding facilitates connections being made between the categories and selective coding involves finding one core category and relating the other categories to it. For example, axial coding highlighted the relationship between 'administrative support' and 'joint activity'. This in turn led to 'the use of time in team-teaching' as a selected category with which to relate other aspects of the study. Another example is the interplay between open codes such as 'teacher compatibility' which led to the axial coding of 'teaching styles' which in turn led to the selective coding of 'trust' from which other categories could be viewed. These three steps of open coding, axial coding and selective coding then in turn allow

for any emergent theory-informed model to be validated by grounding it in the data. The subsequent questionnaire for all teachers was based on statements and disconfirming statements which emerged from the coding of the data and was useful in determining the 'groundedness' of the research.

The logic of the research was to generate a theory-informed model that would add to understandings associated with team-teaching. Grounded theory, where theory is literally grounded in the data, supported the gathering of a large amount of insightful data. This data in turn resonated with other theoretical frames, in particular Social Capital Theory and Positioning Theory.

Following the inductive engagement with Grounded Theory the emerging data was further revealed by deductive use of the aforementioned theories. Such interaction consequently assisted in having a better knowledge of the 'how' and 'why' of team-teaching. The use of these theories in a deductive manner only emerged subsequent to the constant comparative inductive coding scheme and to the theoretical saturation that occurred towards the end of the in-school phase of research activity. This in-school phase availed of memos and conversations to further learn from the data gathered and to "pattern-match" (Eisenhart & Graebner, 2007) data. In Appendix 7 examples are given of the interplay between the inductive constant comparative practices undertaken and the deductive engagement with theories that resonated with the data gathered.

3.8.1 Trustworthiness of grounded theory

Criteria for trustworthiness are identified by Lincoln and Guba (1985) as credibility, transferability, dependability and confirmability.

- Credibility is attended to by the extended period of orientation and interaction in the gathering of data and the prolonged engagement with the participants in the research. Opinions and inputs of colleagues from the start also assist. The ongoing contact with the teachers and principals in examining emerging thoughts from data analysis adds to the credibility of the study.
- Transferability, in the strictest sense is deemed by Lincoln and Guba (1985) as impossible in qualitative studies. This research has to its advantage a fixed and purposeful sample of participants within the VEC scheme. Judgements made about transferability of findings focus on transferability within and between schools in the scheme. Transferability is enhanced in this project by thick description (careful description of time, place, context and culture) to allow others to compare the conditions in which they find themselves.
- Dependability refers to rigour and consistency of the findings. Written record of every aspect of the project from start to finish assisted in this regard. As the qualitative parallel to reliability (Guba and Lincoln 1989) dependability includes documenting the unexpected and making it available for scrutiny/audit.
- Confirmability attends to efforts to ensure that the influence of the researchers judgement is minimised so as the "extent to which the data and interpretations of the study are grounded in events rather than the inquirer's personal constructions" (Guba and Lincoln 1985, p, 324). In this project the recording of every action tracks the data to original sources. The logic used in interpreting the data is audited and made explicit. Such action occurred in tandem with a dependability audit. Keller (1993) highlights that researcher's peers can review field notes and interview transcripts and so on and determine if the conclusions are supported by the data.

3.8.2 Classroom observations

The purpose of the observation is to see team-teaching in action. As well as arranged classroom observations the researcher is, from the beginning, in a position to observe informally during visits to the school, i.e. teachers interaction with each other, seating arrangements in the staff room, teacher and student interaction throughout the school. However as Kidder (1981) states:

> Observation is a research tool when it serves a formulated research purpose, is planned deliberately, is recorded systematically and is subject to checks and controls on validity and reliability. (p. 264)

The formulated research purpose in this case is to learn more about team-teaching and how it influences teacher and student learning. The extent of student learning is influenced by the learning aims and objectives of the lesson as set out in advance by the teacher. Having tracked the sequence of actions and activities, the analysis of the lesson focused on the desired outcomes as matched against the actions that take place in the lesson. In consultation with teachers particular students were identified in advance and thus their individual progress within the lesson was closely observed (Appendix 3).

3.8.3 Analysis of observation data

The analysis of the data was greatly facilitated by the disciplined writing up of the field notes the same day as the observation took place. The analysis was later enhanced by returning to the written notes and assessing if any item or critical incident had not been reported. Upon rereading the notes items of interest were invariably recalled and added where appropriate. Observation criteria were guided by DES inspection templates which incorporate inclusive concepts and by the work of Dieker (2006). It should be noted that the focus remained on the impact of all classroom activity on the quality of learning as experienced by the student. Tempting as it was, to merely focus on the teachers' interactions with one another would have resulted in an examination of the impact of the 'co' rather than of the 'team'.

Once documented, in accordance with the literature (Cohen et al., 2000), the field notes are analysed and a matrix devised. The key points from the field notes were placed in grids and this allowed for immediate interpretations of what was, or was not, taking place in the lessons. As field notes resulted in open ended scrutiny it was also necessary to recognise that notes on other issues outside the initial focus also merited inclusion. The grid format allowed the researcher to 'map' the observations and recognise patterns. This format also assisted in enhancing the reliability and validity of the observations undertaken.

3.9 Researcher's role

The researcher's role was to represent what was observed and what was said by those involved in the initiative. In seeking to achieve such a goal I was enabled and inhibited by my other role as a school's inspector. Given the relationship between schools and the inspectorate, the role of researcher would have to be clarified and revisited regularly.

3.9.1 (Re)positioning the cigire (inspector)

In Ireland an inspector's role is legislatively charged with evaluating, advising and supporting schools (Education Act, 1998, Section 13). This role has only recently negotiated entry into school classrooms and initiated the publication of reports on the quality of educational provision at both subject and whole-school level. The role of the inspector also involves policy formation and decision making at national level. The inspector has the statutory powers to inspect any particular class at any particular time and be involved in recommending the dismissal of a teacher. As with all researcher roles the engagement with the study

is strongly influenced by the methodology chosen to answer the research question.

The interpretive paradigm adopted in this study drew heavily on personal accounts from participants and on classroom and staff room observation, as well as school documentation. However, such a paradigm emphasises that "it is that which is important to the participant which is paramount, not what might be important to the researcher" (O'Donoghue, 2007 p. 49). Such a repositioning of roles from evaluation to interpretation required careful consideration on my part and on that of my employer, the Department of Education and Skills (DES). These considerations centred on issues of power and relations with school personnel, the potential for role conflict as inspector and researcher; issues relating to privileged knowledge such as the DES view of team-teaching and where future government policy may be focused.

The potential, on my part, to be biased in both action and perception was also kept to the fore. Did I want the concept of team-teaching to succeed via this project? Most definitely yes, and it was a constant to counter any temptation to perceive the project as a once-removed action research project, where schools were flying the flag of team-teaching on my behalf. In requesting my line managers' agreement it was also clear that another ethical issue was on the minds of the Deputy Chief Inspector, *"Will the schools be able to opt out/decide not to get involved with you?"* (email correspondence, April, 2007). It was clearly stated to my superiors and to those about to cooperate with my research that they were under no compulsion to participate or remain participants in the research.

As someone involved in policy formation I was now entering unchartered waters as I began the process of bridging the gap between policy and practice and watching the relationship between both unfold. Other inspectors have undertaken research (Ring, 2009; Mathews, 2010) but no inspector had combined engagement with classroom practice with advancing policy goals across a number of schools. Of initial and ongoing importance would be the ability to engage with school participants in a manner that would honour the participants and their practice.

Guidance was derived from Connolly, Phillion and He (2003), who suggests that in circumstances where the researcher may be in a position of authority over the individual concerned, it may be a good idea to arrange for a third party to seek the informed consent of those involved. Consequently the EO of the VEC acted in such a capacity with principals of schools by inviting them to consider engaging in the research project. Principals, in turn, did likewise with their staff. On all occasions it was stressed that the project was a VEC project and not a DES project. Similarly the informed consent form clarified that the school and the individual teachers were free to opt out of the project at any time. A minority of schools, which had shown initial enthusiasm, were unable to engage in the project as planned. One such school was later earmarked by the DES for a Whole School Evaluation, with this researcher nominated to play a leading role. Lest there was any tenuous link to be made between my role as inspector and researcher I absented myself from the evaluation team.

Miles and Hubermann (1994) raise another ethical question: "What do I do if I observe harmful behaviour in my cases?" (p. 288). Any researcher may be faced with this dilemma and some literature suggests that there are choices to be made with what Fetterman calls 'guilty knowledge' (1994). Anticipating harmful practice included anticipating potential complaints from students, teachers or principals who would see me as the inspector present, rather than as a researcher passing through, was useful. At a basic level some teachers were initially anxious for my views about the lesson observed and were they 'doing it right?' I would like to think that my responses were framed in the context of the research and not in the context of evaluating the work as an inspector, for to do so would have forged a relationship not conducive to the goals of the research. Issues of a more controversial or serious nature were also anticipated by me and I was clear in my head that if something of a serious nature came to my attention then I would have to act in accordance with my role as not just as an inspector but also as a citizen. Pretending otherwise was not an option. Again this would require that my role as an inspector would have to take precedence over that of researcher, even to the detriment or termination of the research.

One of the criteria for choosing the schools as case studies was that they were deemed to be 'good schools' and the likelihood of encountering untoward practices were slim. In general terms it would be fair to say that the students saw me as Finn who is interested in visiting our team-taught classes and asking questions, the teachers in the project saw me as Finn the researcher who is an inspector, the other teachers in the school probably saw me as the inspector who is in the school doing research. Principals saw me as a combination of all three

and increasingly as a confidante in whom they could ask questions on matters educational or simply express some points of view, which were not necessarily related to the research. Increased engagement, or in social capital terms, increased proximity, brought with it the time and space to develop stronger relationships between school personnel and myself.

Other opportunities for such relationship building occurred at the monthly cluster meetings where teachers met to share experiences or receive particular inputs from external presenters. These meetings were planned to be chaired by the EO Officer, but when absent I found myself taking on the role and this was a difficult space to fill as I chaired what I had initially planned to observe.

Relationships with my fellow inspectors also needed to be taken account of in positioning the research within the schedule of my daily responsibilities. While I could absent myself from being part of a WSE team or not undertake inspections in the participating schools, my colleagues continued their work and did contact me with regard to the schools and the work that was being undertaken. In this scenario I was careful to only give basic information about the research study and no information gathered, nor opinion formed through the research, was shared with my colleagues. At most I think my assistance went little beyond divulging to my colleagues where the school was geographically, but I certainly did not divulge where I thought the school was educationally. In being repositioned by the act of research I worked at building relational trust with schools. I was careful therefore, not to lose such trust by being indiscreet with my colleagues regarding what I would describe as ‘privileged knowledge’. In

talking with my colleagues I was conscious not to reduce the level of social capital that already existed among us by being seen to not trust them with any information I possessed. Reference to the ethics of research certainly assisted in one or two conversations and like a tight-rope walker the pole of ethics helped me keep my balance and keep myself and others safe.

The advantages associated with being an inspector include the comfort-levels I enjoy in visiting staffrooms, principals' offices and classrooms. Frequency of visits also helped in this regard as students got to know me from my visits and from my interactions with them in classrooms and school environs. I am very much at ease at the top of a class interacting with young people and that certainly helped to break the ice with students and made subsequent surveying exercises easier for all involved. The nature of Irish society meant that, through professional and personal association, I knew some of the teachers in the staffrooms visited. My efforts to not come across as an inspector did not always succeed as I spotted written on one staff room notice board. "Finn Ó Murchú (DES) will be visiting our wonderful team-teaching lessons tomorrow". Though, it is hoped that the impetus for the notice had more to do with impacting positively upon the visited rather than upon the visitor.

Compromised as I was in my role, such a note raised the inescapable issue of power and identity between the inspector as researcher and the researcher as inspector. In seeking to gather data on the study it proved useful to deflect focus away from the inspector-teacher relationship by focusing attention on the impact of team-teaching upon student learning. Over the first two visits the

conversations with teachers purposely focused on team-teaching as a tool, thus deflecting attention away from the teachers per se. It allowed teachers to air their views while still protecting themselves from any feared negative observation or criticism by me.

This strategy proved useful in allowing teachers to develop their levels of use of team-teaching and in a sense to comment on 'the car rather than on the driver'. In time it became clear that I was *looking with* teachers and students rather than *looking at* students and teachers. Some teachers took longer than others to become aware of this shift. When asked by one teacher of my views regarding 'how did I think the lesson went?' I purposely avoided evaluating the lesson and responded by asking considerably more questions than I answered.

In order to open up conversations with teachers, and to a lesser extent students, I purposely told self-deprecating anecdotes about moments during my teaching career and regularly referred to being a learner and a student of team-teaching. As trust and relations developed it became easier to ask more personnel questions of the teachers on how they were engaging with team-teaching. The use of work samples also opened up good dialogue between the two teachers and me, and allowed the focus to be placed on the work sample and the conversation to move towards the way the pair was engaging with one another in the classroom.

Working closely with the VEC EO introduced a new dimension to the study and it may be unique, for both EO and Inspector, to work so closely together on a project. In so doing ethical issues also had to be addressed in that I would have to

honour the confidentiality, anonymity and privacy (Sieber, 1992) of the participants while I was engaging with their immediate superiors. Such practice was a reciprocal arrangement and operated across relations with other principals and inspectorate colleagues. Unless it would result in placing an individual or individuals in danger, all in the initiative were not to be singularly made more informed of each others actions through my presence in schools. Under The Freedom of Information Act, 1997 any field notes, records etc. could become 'unconfidential' (Douvanis & Brown, 1992) and so it was important to be also aware of the possibility of such an act being invoked.

In short I adopted what Flinders (1992) describes as an ecological view of ethics where emphasises is placed on the impact of actions on a complete interdependent system "in the broadest possible context" (Miles & Hubermann, 1994). Such an ecological basis had school personnel at the heart of its design.

3.10 Conclusion

In conclusion, the methodology adopted to engage in this relationship of educational purpose was influenced by the study's orientating question which sought to generate a theory-informed model on the implementation of stated national policy of team-teaching. It was also influenced by the fact that I held, and was seen to hold, a position of authority in education. The methodology was set in the interpretive paradigm and this allowed for the context of both the research and participants, including the researcher, to be respected and facilitated. Grounded theory provided a structure to capture participants and recipients perspectives over a set period of time. While the idiographic nature

and small scale of the study may be seen as limitations it is contended that the chosen methodology gives insights to our understanding of team-teaching; our understanding of what inclusive practices ask and offer participants and recipients; how best to implement, manage and support change be it from policymakers external to the school or from decision makers within a school.

The tightrope walk of being an inspector and a researcher was very much assisted by the choice of research topic and the research design. The topic and its introduction gave the rope enough tension. All schools and the vast majority of teachers self-selected and were interested in the topic. A weak topic with a press-ganged cohort of teachers would have resulted in a slack rope and ineffective research. The research design is useful as it positions the teachers and students in a manner that gives them the power. The power to partake or continue in the study, the power to share their views or not and the power to tell their story or not. The tightrope walk was made all the easier by early engagement with, and anticipation of, matters ethical. Ethics provided the balancing pole for the research to commence, continue and complete its journey across schools, classrooms, cluster meetings, VEC head office and DES head office. The methodology adopted saw school personnel and administrators position themselves and me in a manner the promoted our collective social capital. In his address at the launch of the support materials and guidelines on team-teaching, Chief Inspector Harold Hislop stated “I am glad that my colleague, Finn Ó Murchú was able to assist with the work”.

This research methodology has potential for other inspectors to use as a frame when engaging with teachers and students in schools. As the Chief Inspector outlined to his colleagues more recently, "We work to provide high quality advice and evaluation...our advisory role must grow…we have much to do in using all your expertise fully" (Inspectorate Conference, Athlone, 2011). The interpretative paradigm offers opportunities for the inspectorate to engage in advisory and supportive roles in a manner that does not detract from the evaluation role. More than once in the course of the research, and the subsequent advice to the schools and VEC personnel, was it uttered that 'this is how the inspectorate should go about its business'. This research methodology positioned the inspector in a way that facilitated the nurturing of social capital between the inspectorate and schools. Regular engagement, proximity of interaction, reciprocal altruism and the discussion of normative practice and values are some of the dimensions of social capital that emerged from the research methodology.

The next chapters examine in a more fine-grained manner the experiences of the teachers and students involved in the project. It uses the research methodology to elicit what team-teaching asks and offers participants, and draws on Social Capital Theory and Positioning Theory to capture and explain their responses and their experiences.

Chapter 4

TEACHERS, TEAM-TEACHING AND SOCIAL CAPITAL THEORY

4.1 Introduction

Team-teaching, as a response to the efforts to promote inclusive practices in schools and classrooms, is recognised nationally and internationally but is, for the most part, under-used and under-valued. It is also under-theorised, which may explain the limited application and evaluation of team-teaching to date. Team-teaching, as with other inclusive practices, is based on relationships and interactions among and between teachers and students. These relationships and interactions involve ongoing changes in practices, beliefs, emotions and identities. These relationships require a theoretical frame if we hope to explain what team-teaching is and if we hope to show what team-teaching might be. This chapter draws on Social Capital Theory as a heuristic tool to capture what team-teaching asked and offered teachers involved in the research study.

As referenced previously the classroom and what takes place in there is still a relatively well-kept secret. Fullan (2007) has succinctly observed that in our efforts to improve schools we have failed on a large scale to get beyond the classroom door, adding that "the interface between individual and collective meaning and action in everyday situations is where change stands or falls" (p. 9). While seeking to avoid any overreach I contend that team-teaching, where two teachers teach together in the one classroom at the same time, is a possible means of 'cracking the code' of overcoming the privatisation factor and that Social Capital Theory is a frame in which to bring 'the everyday interface between individual and collective meaning into view'. In this instance change is seen in

terms of the promotion of inclusive practices by teachers through changing the way in which they support learners. As stated by Meisfjord (2001), inclusion is about changing how we think and act regarding ourselves and others. With team-teaching, teachers are offered opportunities but also challenges which include how teachers fashion their identity and sense of self as teacher and as teacher colleague.

The literature to date has isolated the interrelated but not always interconnected themes of team-teaching, inclusion, collaboration and communities of practice, change, and systemic change. These themes are brought together in this chapter through the use of Social Capital Theory described as being, "networks, together with shared norms, values and understandings that facilitate cooperation within or among groups" (Cote & Healy, 2001, p.41). The use of Social Capital Theory in educational research has gained momentum over the past decade and social capital has been associated with having significant potential in reducing disadvantage, improving educational outcomes and enhancing health and well-being (Dika & Singh, 2002; Dekker & Uslaner, 2001). More recent work by Leana (2011), as cited by Fullan (2011), highlights the widely held view that interaction among teachers and between teachers and administrators which is student-centred and student-focused makes a large measurable difference to student achievement and sustained improvement. She concludes that social capital can leverage improvement and contends that social capital (the collective) and human capital (the individual) need to combine in order to enhance learning. Fullan (2011) concludes that Leana's "findings also mean that the goal is to

develop in concert both high social and human capital…and of the two the former is more powerful" (p. 11).

However, in attempting to know more about team-teaching, it is not only the generation of social capital per se but also the use of Social Capital Theory that is of interest to this research study. As outlined in the literature review, the concept of team-teaching has been under-theorised and requires multiple measures to capture the practice. While not in a position to capture all aspects of team-teaching, Social Capital Theory does open possibilities in relation to the practical and emotional aspects of team-teaching as perceived by teachers, where the concept of team-teaching interacts with the concept of social capital described as "social networks, the reciprocities that arise from them, and the value of these in achieving mutual goals" (Schuller, 2001, p. 1).

Social capital and the concept of team are interconnected by shared practices, goals, resources and values across shared time and space. When seen as treating social relationships as a form of capital that allows people to draw upon each other as a resource, Social Capital Theory resonates with the concepts of inclusion and with a socio-cultural perspective on learning. In particular the focus on relationships and on promoting a sense of belonging among and between the adult and the student community indicates that Social Capital Theory can help in weaving a theoretical thread that brings together efforts to promote inclusive learning through team-teaching.

This thread of action is held taut by this theory as it offers a means by which to bring together the moment-to-moment interactions in the classroom with the meta- and macro- levels of change at school and systems level.

4.2 Claims

In his analysis of social capital literature, Mulford (2007) draws attention to two related, but different ways in which the concept of Social Capital Theory has been treated. The first is subjective or cognitive and describes social capital with regard to access to resources, supports and ideas that is made available to individuals through their relationships with others. The second is structural in nature and refers to where the individual forms relationships to access the subjective, such as informal networks and formal civic organisations. My study claims that Social Capital Theory can be used as a heuristic tool in understanding how efforts to promote inclusive learning impact upon teachers in a team-teaching context.

In light of the themes emerging from the coding process, the use of Social Capital Theory was employed to revisit the classroom-based field notes, transcripts of interviews and initial findings from engagement with teachers and others involved in promoting team-teaching. Particular attention was given to four domains of social capital (Coburn & Russell, 2008), structure (teacher interactions), pressure (how engaging with another colleague created pressure which had positive and negative influences), trust (the required norms of trust for teachers to act together and take risks), and access to resources and expertise (the

professional support and learning that emerged between teachers involved in the project).

In harmony with these domains, Penuel et al. (2009) addressed informal teacher professional learning moments and analysed in two schools "the role of formal and informal teacher interactions in helping teachers enact changes to instruction associated with ambitious school reforms" (p. 124). Penuel et al.'s, work is very helpful and draws attention to trends in research studies based on teacher interactions.

> These studies tend to focus more on learning that takes place as part of formal meetings rather than on discussions that take place in hallways, lunchrooms or staffrooms. They also tend to focus either on individual participants or on community as a whole and do not focus on interactions that take place within cliques or subgroups in a school. (p. 125)

Alertness to informal interactions was kept to the fore. In advancing this theoretical frame, attention was given to both the formal and informal interactions among teachers that took place within as well as outside of the classroom.

The structural nature of social capital is outlined by Woolcock's (2001) work on bonding, bridging and linking which are particularly useful, in combination with the work of Coburn and Russell (2008) as well as Penuel et al. (2009) in illustrating teacher experiences within this study. Bonding refers to the ties to people who are similar in terms of family members, neighbours, close friends or colleagues. In the context of this study, bonding refers to the teachers team-teaching in the classroom. They are a 'bonded' unit in the context of Social Capital Theory.

However, these teachers do not operate alone, they also interact and engage with other colleagues from their own school (bridging-in), and through cluster groups and presentations they interact with teachers and principals from other schools (bridging-out).

The third structure is described as linking and refers to ties with people in authority. In bridging, the movement is horizontal, in linking the movement is vertical and involves operating across power differentials. In this study the linking actions involves movement from the classroom to the wider community and includes teachers interaction with principals of other schools, members of the VEC, the Inspectorate, NCSE and third level colleges of education.

Coburn and Russell's (2008) four separate but interconnecting concepts of *structure* (ties and time), relational *pressure* and *trust,* and *access to resources* (learning) can be adapted from that of social networks to that of professional networks and weaved through Woolcock's (2001) framework (Table 14) to add depth to the examination of the development of professional learning (social capital) through professional networks (team-teaching).

Table 14. Woolcock's (2001) frame of social capital concepts of bonding, bridging and linking

	Bonding Working in classrooms	**Bridging Working in and across schools**	**Linking Working with the wider community**
Structure	Two teachers	Staff meetings, Cluster, Workshops	NCSE, DES,IVEA,
Relational pressure	Compatibility	Attendance at meetings, data gathering for submission	Strangers visiting schools, classrooms, being video-recorded
Relational trust	Confidence in partner	Opening up school practice to others in school or from other schools	NCSE DES IVEA engaging and trusting one another. Teachers trusting those in authority
Access to resources	Learning about teaching and learning in practice, in real time in real classrooms	Sharing experiences, successes and failures.	Support materials Symposium, IVEA professional development opportunities

Mulford (2007) contends that bonding practices are the most researched aspect of Social Capital Theory. He describes bridging as relationships that occur across schools, though I would contend that, in this study it also involves bridging with colleagues within school (bridging-in) who are not involved directly in team-teaching. He contends that research in the area of bridging, especially in the area of networking is limited but growing. His observations on linking 'between a school and its community' are also useful and in particular his observation of the movement away from the unidirectional view of what the community can do for the school to the multidirectional perspective. The movement away from a unidirectional perspective is useful with regard to this study and the iterative and recursive manner in which all three structural dimensions of bonding, bridging and linking are influenced by each other.

Criticism of Social Capital Theory remaining shallow and under-theorised in classroom and school contexts is also made by Allan, Ozga and Smith (2009). Their work resonates with this research study in that the authors examine how "social capital is used both as a means of understanding the complexity of these contexts and for exploring alternative forms of engagement" (p. xiii). Allan et al. (2009) are in agreement with Mulford (2007) and Woolcock (1998) in stating that "Linking social capital, arguably the most profitable kind, is established when individuals, who have different amounts of power, connect" (p. xiv). 'Profitable' in this context presumably relates to issues of scale. When two teachers share time and space in a classroom, power-related topics are not too far away. Similarly, when those outside of the classroom invite participants to partake in an innovation, it too carries with it power-related encounters.

In this research study it is always recognised that the ultimate power for change rests with teacher(s) and their actions and interactions with themselves and students, on a daily and moment-to-moment basis. The ongoing power and knowledge differential is a central theme of the study as students, teachers, administrators and policy-makers collectively seek to make more sense, in their varied contexts, of what team-teaching is and what team-teaching could be. The next section focuses particularly on the experiences as reported by teachers and observed through my research. These findings are set against Woolcock's framework of bonding, bridging and linking. Considerable data was gathered in relation to teachers bonding as team-teaching dyads and this forms the focus of the next section of the chapter. Engagement through bridging and linking will subsequently be addressed.

4.3 Bonding: The pedagogical dance

This section draws on Social Capital Theory to capture the experiences, both positive and negative, as perceived by individual teachers engaged in team-teaching dyads (bond). The reconfiguration of teaching resources altered the times and ties as well as proximity of engagement (structure) for teachers bringing with it interconnected issues associated with professional learning, relational pressure and trust. For some the analogy with marriage echoes work by Murawski (2009), while for most team-teaching was frequently described as a dance.

4.3.1 Structure: The different dances

The structure of team-teaching asks teacher dyads to work together in the same classroom, sharing equal responsibility for all aspects of the work. As outlined earlier, there are five distinct forms or configurations of team-teaching identified by researchers. Of the four dyads in the study, the dominant model among three of these was classic team-teaching in which the lesson was shared equally between the two teachers. In the case of Cathal and Peadar, lead and support was the dominant model observed where one teacher took control of the lesson and was supported by the other. While Cathal and Peadar did engage, on occasions, with split or parallel teaching, this was rare and no dyad was observed or reported to engage with station teaching.

Instructional practices and learning were influenced by the configurations, but not always in the manner one might reasonably expect. For example, it should be noted that the three dyads with classic team-teaching as their dominant

configuration, did use lead and support practices to instigate or conclude a lesson. In this regard much of the literature fails to acknowledge that various team-teaching configurations can happen across the course of a lesson and none examine why or when teachers choose certain configurations at certain time.

Another point missed by the literature is the use of certain instructional practices and beliefs, such as co-operative learning or formative assessment, were not contingent upon certain configurations. Lead and support lessons used or ignored these methods as much as classic team-teaching lessons. What is different is the (under)utilisation of the teacher when lead and support is over-used and where one teacher is typecast in the role of support. Significantly the engagement between the teacher and student is influenced by the manner in which teachers engage publicly with one another. Where classic team-teaching occurred, the students asked more questions publicly in the lesson and appeared to respond to the open conversation between teachers who availed of such configurations. This point will be dealt with in more detail in the next chapter, when an examination of the positions for learning is undertaken.

In all cases, the teaching dyads taught with one another once a day. This accounted for approximately 15% of their teaching week. Opportunities to meet outside of class time were initially factored into timetables but this time quickly fell victim to other demands and consequently teachers usually had rushed conversations in the staff room before lessons, or more often than not, at the classroom door. Time for bonding through joint productive activities before and especially after lessons was rare and this influenced the progress made among

teachers in maximising their engagement with one another in the classroom. Subject department meetings were the only formal place in the school where teachers could engage with one another and these usually book-ended the school year, and therefore were of limited value. The majority of teachers (six of the eight teachers) were not overly concerned with planning time in the manner suggested by the literature, stating that they knew their subject content, the pace required to cover the course and the outcomes they expected for their students. Planning for many became less important as teachers got used to 'the dance' of team-teaching.

> Even spotting Mrs. Dawn in the corridor and she has the *Silver Sword* (book) under her arm and I know that its fiction day. So I would understand my role in that particular class, I would have it all worked out straight away, I would be working on the vocabulary, I'll be working with certain students in the class to make sure they're up to speed, while she's reading I'll break in every so often and I'll make sure that Martin, Tom and Sarah have their paragraph to read so that they'll feel included. It's not that its blasé, it's just that it's natural, you know. The planning and the prep obviously are needed and are needed in a big way in the early stages but I'd argue that the same time isn't necessary as you develop. Having said that if I had a new partner next year, if I'm involved in team-teaching next year, well then there would be a lot of time used up again in trying to establish parameters, boundaries and what we are going to do. (Joe, Dyad C, Interview 3)

> Joe's teaching partner, Hilda, was of a similar view:

> It kind of evolved of its own accord. We seem to know what we want to do and we don't go into a great rigmarole of working out a plan or having it very theatrical but it's more we concentrate on the atmosphere and the motivation and we know our stuff if you know what I mean…(Hilda, Dyad C, Interview 3)

It appeared that clear knowledge surrounded what had to be taught and improvisation in situ was the norm regarding how it might be taught. One teacher noted the practice of informing the students of the lesson focus, aims and objectives at the start of the lesson, proved useful for the other teacher present who until that point was not sure what was to take place in the lesson. Another

remarked in a similar vein to Joe, "We know what ingredients (content) to bring we're just not sure on how we are going to cook them (methodology)." (Laura, Dyad D, Interview 3).

Cathal and Peadar had a different experience from the other dyads and spoke regularly of the need for planning and review time and they lamented the lost timetabled slot for meetings which they had been given at the start of the year.

> It was there at the start when we had forty minutes, we said twenty minutes on evaluation and twenty minutes on planning. And just that small chunk of time gave us so much room to breathe…but Peadar's timetable filled up. We both have timetables that are clashing with each other. We rarely, I don't think we have any class periods where both of us are off now. (Cathal, Dyad B, Interview 2)

The same emphasis was not placed by other dyads upon the need for joint productive review of lessons. Field notes recorded that the pressure upon teachers to make their way to the next class after the lesson, as well as having to respond to individual students who sought their time, made any immediate review after the lesson almost impossible.

> There have been times when he had to disappear to next class and I would not see him until the end of that day or the next day. You really do need to schedule a meeting or something. On Thursdays we have a double class as well and after that it is very difficult as well because I am on right though the day and Cathal might be finished early on Thursday. *There are times when you finish the class and apart from the walk to the staff room after it you wouldn't get a chance to even talk about how it went, you know.* (Peadar, Dyad B, Interview 2)

The literature speaks of joint productive activity meaning time spent together by teachers, before, during and after class. This study suggests that the focus by teachers was very much on time spent in class together, where time was seen to slow down and more teaching and learning was undertaken. Outside of class, time moved at its usual quick pace and teachers found it difficult to plan together

and not all even considered time to review together. Towards the end of the school year, the notion of using 'gained –time' in class to support planning and reviewing of lessons was discussed. Cathal and Peadar were beginning to consider the matter while Hilda and Joe had begun to tentatively implement such practices.

> Yeah, Cathal, was saying that a few weeks ago that it could be an idea, actually, to use each other in team-teaching. To use each other to actually discuss the aims of the lesson or the scheme of lessons even in front of the class and that's one way they see it in operation, …Lots of concrete examples, lots of explanations and seeing discussions (Peadar, Dyad B, Interview 3)

> Oh we have, we don't do anything official, as in we don't meet for a particular class but we've got so well versed at it at this stage that a ten minute conversation can bring us forward. To set up that drama now, it would have only taken maybe three or four short discussions and it just grew arms and legs after that. *In fact the students felt the ownership of it, we facilitate it, and it was able to fast forward the whole thing.* It was able to fast forward everything because they bounce and react the minute they saw the two of us, you know, if their doing it we can do it. (Hilda, Dyad C, Interview 3)

Differences, such as the one mentioned above, across dyads were not unusual and in examining the bonding of any two teachers who are team-teaching, the difference between the timeline of educational change and the timeframe of the research needs to be acknowledged. For some it took longer than for others to grow accustomed to team-teaching and to make their own of the practice. Table 15 uses The Levels of Use framework by Hall and Hord (2006) in mapping the evolving skill levels of teachers when implementing this innovation.

Table 15. Levels of use of team-teaching as an innovation

Levels of Use	Team-teaching	Cathal & Peadar A	Ned & Rachel B	Joe & Hilda C	Laura & Ricky D
Non-User	Not team-teaching but may have heard about it	Cathal Yes Peadar No	Informal 2006/07	Both No	Both No
Orientating	Interested in it and seeking more information	Cathal April '07	Rachel April '07	Both April '07	Both No April '07
Preparing	Getting ready to try it	Cathal May '07	May '07	May '07	May '07
Mechanical	Started on team-teaching but awkward	Both	Both	Both	Both
Routine	One configuration is operating smoothly		Both	Both	Both
Refined	Extending the use of other team-teaching configurations		Both	Both	Both
Integrative	Using new instructional practices with team-teaching			Both	
Refocusing	Searching for new ways of using team-teaching				

The speed at which teachers improved their skills as team-teachers is in part tracked by the Level of Use framework. In Dyad B Cathal had some previous experience of team-teaching with another teacher for a brief period in the previous academic year. However, working with Peadar was a new team and they started on team-teaching with lead and support being the only model used and where Cathal dominated for most of the academic year. Why this was so is

hard to determine, it may have been as a result of the responsibility Cathal felt being class teacher for the group and that one of the students was a student who attracted the resource hours that were being used. Using the Level of Use Framework it is clear this dyad remained somewhat 'stuck' at the level of routine users of lead and support, but it should be noted that they engaged students in formal co-operative practices as frequently as Ned and Rachel.

The progression of use through the different levels seems best set against what instructional practices are undertaken in concert with more refined uses of team-teaching. Otherwise the focus will once more be skewed towards teachers' actions and away from students' actions and outcomes. If a dyad work their way through all the levels in a sequential manner, which is highly unlikely, the quality of their work will still need to be determined by the learning and the learning process as experienced by the students. Ineffective collaborative practice is always a possibility.

Ned and Rachel had done some team-teaching together the year before and were comfortable in interchanging between lead and support and classic team-teaching. The other configurations and in particular the use of parallel or station teaching were not used by them or any other dyad. They continued to use more chalk and talk than co-operative practices in their lessons, but they certainly spoke more publicly to one another across the classroom including pointing out alternative views. Formative assessment practices were used very frequently by these teachers as was the use of students' questions to guide the lesson. They taught the same group of students as Cathal and Peadar but appeared to elicit

more spontaneous questions, and of a higher order from their students, than the latter dyad. The different student-questioning patterns are significant in relation to the different dominant configurations of team-teaching used. The fact that Cathal and Peadar grew to 'barely making eye contact' with each other as they relied on the lead and support model, no doubt limited students opportunities to engage openly with questions in a manner as natural as that witnessed in Ned and Rachel's class. As Ned points out it is important not to be too sensitive to comments from either your teaching partner or your students.

> Even the students might say that's wrong or the wrong size angle or whatever and you said it about average and mean and it was after the class that Ned was like you can't really say mean is the average because there're plenty of different tags. And I didn't take any offence to it and that's what's really important as well, is that he knows that I am not offended by his remarks and vice versa. (Rachel, Dyad A, Interview 1)

The same teacher added:

> And if either one of us was working with someone that was over sensitive it would stifle the kind of relationship that develops with the team because you would be afraid to open your mouth to say something. You don't want to offend and then there's bad kind of feelings. (Rachel, Dyad A, Interview 1)

The other dyads, Joe and Hilda, and, Ricky and Laura, taught in Oak School. They seemed to progress through the stages of innovation more quickly than the other school. In particular Joe and Hilda were seen 'to play' with team-teaching and were beginning to explore integrative uses for team-teaching with other instructional practices such as poetry composition and student presentation of learning. Of note was Hilda's expressed frustration with not getting to do more co-operative learning among the students, which again indicates the need to be cautious when focusing on the innovation rather than the impact.

The Level of Use framework is useful but it does not tell the whole story. It helps

to map teachers' engagement with team-teaching configurations but it would be important to be aware that the configuration does not align with the teaching methodologies, i.e. classic team-teaching or collaborative practices among teachers may not result in students engaging in similar collaborative practices in the lesson. While there are indications that classic team-teaching elicits greater student-led questioning, supporting inquiry and problem solving, more research will be required to determine if certain configurations are more conducive to certain learning and for certain learners. However, the framework does provide an opportunity for future users of team-teaching to map their structural practices or dances with team-teaching. If not the lexicon, it provides a focus for discussion on team-taught lessons.

Mapping the emotions associated with such hopes and practices is an important dimension of the study and the next section returns to the use of Social Capital Theory to highlight the relational pressure that emerged as teachers sought to bond as teams and assist one another in their teaching.

4.3.2 Relational pressure: similar goals different styles

In seeking a greater understanding of teacher (dis)engagement with inclusive practices there is a need to address how teachers respond to the pressure that new inclusive practices bring to bear on their work and on their personal and professional lives. Citing Fine (2001), McGonigal et al. (2007) remind "that Social Capital Theory operates at the intermediate level, attempting to explain the spaces and processes between the micro level and the macro level" (p. 78). In the context of a particular policy gaining traction in schools and classrooms, this

is an important point in understanding why some initiatives fail, or never even get so far as to fail.

More recent work has helped in our understanding of innovation and change which is sustained and systemic. Frank, Zhao and Burman (2004) examined the role of pressure in the context of schools' use of technology. The significance of this work is that it focuses attention, not only on external pressures placed upon schools, but also upon internal pressure from *within* the school. They conclude that the identified change in teachers' practices, centred in this case on the use of computers, is in part achieved by social pressure among teachers.

My study highlights that pressure is a fellow traveller with team-teachers. Even allowing for the self-selection of schools and schools' personnel, as well as the perceived mutual benefits for teachers and students alike, those involved speak of a range of activities which are associated with pressure. Some of these pressures had negative consequences but most were deemed to be positive. Of particular interest is the emergence of personal/professional *pressure* from within schools as a motivating factor in engaging and sustaining involvement in team-teaching.

The immediate pressure identified by teachers who were willing to open up and share their classroom with a colleague was framed around teacher compatibility. Views on this particular aspect seemed to follow a similar pattern outlined by Conway and Clark (2003) in their re-examination of Fuller's concern-based model of teacher development. Teachers views shifted, oscillated and altered over the course of the academic year as the partnership between teachers

continued. Unlike beginning teachers, these established teachers constantly, and from the start, assessed the value of their actions through their perceived view of the value of the exercise for their students. Like beginning teachers, their own 'survival' was also safeguarded, but team-teaching was seen as being there first and foremost for the students' benefit and not solely for the teachers' benefit.

> Well, I suppose, number one, I think, is that it is advantageous for the students. I mean, it's not for our own, how should I put it, advantage for the teachers. However, fortunately it does have advantages for teachers as well, because you get to know how to relate, I suppose, you get to understand what teaching is and how to operate. (Hilda, Dyad C, Interview 1)

Ultimately concern for what was best for their students would be the reason for engaging with the project and would also be the reason for disengaging. Pressure was eased by the fact that teachers were also aware that if the arrangement was not to work out then it was understood that the status quo would be invoked and the team-teaching arrangement would end. However, the public nature of the study both within their own classroom and school as well as through the monthly cluster meetings, also caused pressure in that teachers were aware that this was not just about them. It was about them and their school.

As identified by the literature the presence of another colleague, of equal footing, in a teacher's class brings with it many emotions and fears which are framed as issues of compatibility (Scruggs, Mastropieri & McDuffie, 2007; Mastropieri, Scruggs, Graetz, Norland, Gardizi & McDuffie, 2005; Cramer & Nevin, 2006; Rice & Zigmond, 2000; Keefe & Moore, 2004; Salovitta & Takala, 2010). Early teacher emotions in relation to implementation of the project focused on a range of hopes and fears which indicate perceived pressures. These included fears

around teacher compatibility/incompatibility and were voiced in a variety of ways; 'one teacher would dominate'; 'a personality clash will occur between teachers'; 'approaches to discipline may differ as may teaching styles'; 'one teacher may slack off'; 'a teacher may feel excluded'.

Struggles and pressures in team-teaching centred around issues of parity. As stated by teachers and witnessed by the researcher parity in relation to being teachers of the same subjects and in relation to parity of esteem were very important in ensuring the success of the teams. Commonly stated words and phrases used included 'respect' 'shared ownership' and 'making space'. The pressure of accommodating another colleague in a classroom is captured by Ned

> Because teachers traditionally shut the door of the classroom and they are the king. They are the boss of the whole scenario, right? And I think *to give away any authority or to yield any power* to somebody else threatens people who are themselves insecure actually, I would say. (Ned, Dyad A, Interview 1).

Other teachers commented:

> That's the kind of unusual aspect of it, you know, the power is shared very equally and that's unusual in a classroom. (Cathal, Dyad B, Interview 2)

> It's important that the students understand that it's a 50/50 business you are at. (Joe, Dyad C, Interview 1)

> I think it's very important never to upstage your colleague in the classroom… if you think of it as a stage. (Peadar, Dyad B, Interview 1)

Pressures associated with initiation of the project gave way in time and teachers spoke of compatibility in terms of similar values as opposed to similar teaching styles. Initial fears of teacher differences gave way to celebrating the fact that they were partnered with a teacher whose differences facilitated professional learning. Joe (Dyad C, Interview 2) speaks of his surprise at how smooth the

change to team-teaching proved to be and how the focus on the students allowed the partnership to operate better than anticipated.

> I would have expected it to be more tense, I would have expected more obstacles, I would have expected more debate and argument about particular facets of the course and the teaching of it but I was pleasantly surprised to find that *my team-teaching partner was very much on the same level of thinking, very similar goals, completely different style and yet we were able to deal with that in a fairly controlled way.* So the fallout I would have expected didn't happen and I think a lot of it had to do with, it's down really to professionalism. I think that if a teacher has just the one thing clear in their head that they are *here to serve and be responsible for and benefit every student* that comes under his/her wing during the day then you haven't any difficulty. (Joe, Dyad C, Interview 2)

The pairing that terminated the arrangement did so as a result of exhausting other avenues but it was decided that it was untenable to continue. In an interview with Fíona, one of the dyad, it was explained that the issues ultimately related to students. The team-teaching arrangement between this teacher who knew her students for a number of years and an older teacher, new to the school failed as the younger established teacher felt guilty by association. The newer teacher showed little respect to either teacher or students which resulted in students doubting that Fíona was the teacher they thought she was. As Fíona later reflected, the yard stick was the impact the relationship was ultimately having upon the students.

> It was the way of dealing with personalities that it came across. That sounds negative I know but it was personality in the way it was extremely condescending, very condescending and I was totally uncomfortable and it kind of kept going down and eventually it began to affect the class and the work. (Fiona, Dyad E, Interview 1)

Trust, or in this case a lack of trust, was a key feature in the decision and mistrust led to a sense of being in a classroom that was no longer safe or tolerable.

> Oh we were working away, talking to each… I was giving her work or she was giving me work but our approach was very different. Like she might say that your standard should be an awful lot better, you know that

> kind of way, and the young fella would be looking up at me kind of saying what are you going to do about this and then with the professional element I'm not going to do that to another teacher so we eventually came to a case where I would go myself and say that's very good versus another teacher and that's a very dangerous position to be in really…It got to the stage where I didn't enjoy the interaction nor trust the other teachers interpretation of the interaction that was taking place in the class. (Fiona, Dyad E, Interview 1)

Of the 20 dyads involved across seven schools, this was the only one that dissolved and again issues of pre-training and self-selection are raised, as are the support of senior management who appeared to have been of the view that 'this must succeed'. The issue in this case was around values and respect. It would be important to note that the age difference and length of time in the school were not seen by Fíona as the cause of conflict. This view is supported by teachers in other dyads who saw different ages and length of time in school as strengthening rather than weakening the experience.

Contrast in experience and years in the school were more often valued by teachers, young and old, recognizing the potential power of their engagement with one another in the classroom (and not just in the staffroom). "The contrast is a big part of the success; I can't emphasize that enough because we have different teaching styles" (Ricky, Dyad D, Interview 3). Contrast as a strength is reflected by Ricky when he also speaks of the strength of weak ties (Granovetter, 1973), in that he would have been friendly with Joe but felt that he got more out of team-teaching with Laura.

> …but myself and Joe would have similar styles, you know we would have a similar approach and I don't think the kids would have gotten the same benefit had they had myself and Joe as the team. We would have gotten on, we'd have had a laugh, had a ball, we would have had a great time, we would have thoroughly enjoyed it *but the kids wouldn't have gotten the same benefits* because they would have had the same approach

> just from two different people. Whereas with myself and Laura I think we had a very idyllic situation where you had the gender balance and you also had the different styles...Like I said, I've just been incredibly lucky**.** *I think if I had been paired off with Joe we'd be quite similar and I don't think there would have been as much in it.* (Ricky, Dyad D, Interview 3)

Again it is noteworthy that the benefits for the students are mentioned first. Ricky explains that these benefits are in part due to the professional learning that he enjoyed as a result of working with Laura.

> I just feel I've been very lucky in that I got landed with a teacher that's very different to me and that's a really good thing, you know…I would say, yeah, definitely. Definitely the paired work and the position on homework definitely I would have changed almost across the board. I'd have more people working in paired work. Now that said the paired work is more difficult and less successful on your own and you do feel that. (Ricky, Dyad D, Interview 3)

While Laura, Ricky's teaching partner, commented similarly:

> I have just learnt a lot from his teaching style, he would do a lot of chalk and talk, and I would do more group work, because of my background in TEFL, group work, class discussions, and all the rest. But I find it very interesting the way he can talk and talk for a specific period of time but yet hold the kid's attention which I kind of, I don't know, before I suppose I had this idea that chalk and talk was a teaching method that was used in the past and we had progressed from this but now I see that there is a place for it. It actually can be very effective too. So I suppose I learnt a lot from him.
>
> Oh yes, it has added to my repertoire of skills. It has reinvented some of them… (Laura, Dyad D, Interview 3)

Combined with witnessing students' progress, professional learning is central for many of the dyads' bonding, as it gives added meaning and impetus to the arrangement. For all involved, reflection of practice, and sometimes in practice, emerged.

> The very nature of being in there with a fellow professional it automatically refreshes you and gets you to think more about your job. *And how good a teacher are you?* And how much are you putting into your teaching? There's a lot of self examination goes on around that. (Joe, Dyad C, Interview 2)

For another teacher reflection occurred while simultaneously teaching.

> Yeah, there is a cross pollination of skills. There is definitely, I do, yeah. Because it's the personal faults that Rachel holds *a mirror up to me,* like when I look at her at the board when I am doing corrections I keep one ear cocked and I hear her speaking about the mean, the symbol or mean is x bar, where I would shoot it out like a machine… (Ned, Dyad A, Interview 2)

> And when you are lecturing you never check, even the homework, you don't bother. You nail them in the final exams if they are not doing the work. Like your time in college, my time in college you didn't have a professor coming up checking your homework. That is one of my faults, one of the things I learned from Rachel is that I should stop, maybe go a bit more slowly and *check that they are actually getting it.* **(**Ned, Dyad A, Interview 2)

Pressure through anticipation of lessons was highlighted by Peadar who said of team-teaching:

> I think there's more preparation in terms of like *thinking your way through the class and at the end there is more looking back* and of course you get the feedback as well…And actually I find myself talking my way through the forty minutes and kind of imagining the interruptions which can only serve to be better, you know. Because I'm better prepared for whatever does happen in the class. (Peadar, Dyad B, Interview 2)

Reflection occurred when teachers stepped out of team-taught lessons and into their more conventional single-teacher lessons and influenced the decisions made by teachers in these lessons. The after-glow effect of team-teaching upon solo-taught teaching was referred to by teachers regularly.

> Now I don't know how much of that is down to team teaching being in the school, but I find that *it's almost like that extra pair of eyes inside your head* going, no, you need to go after that one now or you need to let that one go, that is just somebody acting the twit or whatever. But that kind of thing, assessing what you are doing as you are doing it, is reinforced by having another person there but it is something you take with you when you go into the next class. (Cathal, Dyad B, Interview 3)

> Or you'd be able to say, say if something wasn't working out for you, *you'd try and remember, now how does Joe get that across* to the others and because it's not working this way for me, oh yes I know how he, you know, you can recall things that you've seen somebody doing differently that you're trying to do and it worked. Now I know it's a different group,

> every class is different, but at least you're learning how it is different. It gives you alternatives and options. (Hilda, Dyad C, Interview 2)

Teacher proximity formed by being in the same classroom at the same time, seems to encourage reflective practices. The proximity of the next lesson would also seem to encourage and sustain reflective practices. In the section below the immediacy of the solo-taught lesson and the transfer of teacher learning from the team-taught to the solo-taught lesson is addressed in more detail.

Proximity also brought another advantage, which is not raised in the literature, and involves the immediacy associated with use of the learning, and reflection, which was now not only context-sensitive but also context-transferable and potentially sustainable. In commenting on the transfer of learning to other classes, one teacher explained how he was now 'running with' group work and paired work on his own, and while informed of such practices in the past, it was only having witnessed and engaged with a teacher who used such practices was the learning now being employed.

> No, you have to experience it and see somebody else that's good at doing it, and then you can pick it up and run with it. Not as well as when you are with the other teacher though… (Ricky, Dyad D, Interview 3)

> So you become a little bit more refreshed and a bit more adventurous and a bit more confident as a teacher. …. You're going to see the positives and negatives; you're going to tailor the methodology to eventually get maximum benefit from it and once that's happening and you can see it working and your learning from your fellow professional, well you say if it works there with them then why can't it work with these people (solo-taught class) so lets bring it in here as well. So the experiencing of situations that you ordinarily might avoid lends itself to practising new methods in the classroom on your own because you saw it working there. You tried it once, you saw how it might be improved, and you tried it a second time you owned it and said yes this is how to do it. (Joe, Dyad C, Interview 1)

For another teacher the utilisation of new learning was quite simple.

> Oh say, if I'm in Ned's class and I move on my other second year class, would I pick up something? Oh yeah, definitely. Even ways of introducing topics or examples that Ned might have given and I am saying that is the best, the best ever. And I'd just transfer it. I'd walk from one class, I had second years there, I left class Nollaig and went straight into class Áine, you know? (Rachel, Dyad A, Interview 1)

And while the transfer of learning was easy for some, for others it at least raised awareness of student learning in other classes and the teachers' role in facilitating learning. The overlap between reflection and action is seen in the teacher comment below where self-questioning is an outcome of team-teaching. Such reflection is closely linked to the teacher's new found opportunity to assess student learning at the time of engagement.

> Because of team-teaching, you're bringing that along with you even though you are only one but you're after seeing in one class where the team-teaching has worked on a student who is finding something hard. You go into another classroom and see a similar student struggling as well, so you're more conscious then that there are students in the class who are not getting what you are doing as one teacher. You go into another classroom and see a similar student struggling as well so you're more conscious then that there are students in the class who are not getting what you are doing as one teacher. And you begin to question yourself as well because *you begin to say maybe it isn't them maybe it's the way I'm teaching.* (Hilda, Dyad C, Interview 3)

Many teachers identified the welcome pressure that team-teaching brought to bare on their own teaching practices in that it 'forced you to up your game' and 'prevented you from becoming a lazy teacher', 'keeps you on your toes', ' drives you on' and 'I come out of that class feeling energised'.

> I think it focuses you more as well, you know. It stops you becoming a lazy teacher because you've got no choice, you know. Like I would think of myself as conscientious anyway and I would think of myself as someone who would prepare my work anyway but it probably makes you stop since I've started leading the class and kind of go back to almost the way it might have been when I was in the Dip (initial teacher qualification), you know, the night before. (Peadar, Dyad B, Interview 2)

> Well it refreshed me in some respects. It refreshed me I'm twenty years teaching and there are times, you know, facing into another first year class you'd be saying here we go again. But this came at a very good time now with that first year class. It came at a very good time. It's nice to be part of the project and hopefully make it work and it's great to see the benefits for the kids. (Joe, Dyad C, Interview 1)

Similarly, differences of opinion were seen as challenging but also healthy and developmental. Honest talk among teachers brought with it some tension but also considerable learning about teaching, learning, collaboration and ultimately about teachers themselves. Such conflict ensured the absence of 'pseudo-community' (Grossman, Wineburg & Woolworth, 2001) either within classroom or within and across schools (cluster meetings) and offered to enhance the possibility of learning among teachers. Furthermore, conflict and the ability to deal with conflict is seen by Louis and Miles (1990) as the number-one predicator of whether or not a school becomes and stays effective.

In this case the conflict is around the optimal use of both teachers' presence in the classroom. A flavour of the range of experiences and views of teachers is outlined below between Cathal and Peadar. In an effort to circumvent their inability to meet outside of class time, Cathal and Peadar decided upon a shared diary as a means of communicating with one another. Cathal however, raises his concerns as follows:

> We communicated to each other in a diary, like, it was kind of reflecting on what had happened. And I did take issue with the way that points were phrased. I said if you are going to offer criticism with what I am doing then I would expect that maybe you would point me in the direction where I should be going. (Cathal, Dyad B, Interview 1)

The other partner Peadar, spoke of not feeling in a position to intervene in the lesson due to Cathal's dominance in the role of lead and Peadar's subservient role as

support. This is the basis of the tension and the cause of the note in the shared diary.

> Because while its working, while it has been going on like that my feelings, certainly in the first few weeks, was that I could not interrupt a lesson even if I felt, the odd time, that there was a better way to explain something. (Peadar, Dyad B, Interview 1)

Peadar's sense that he cannot interrupt the lesson is in mark contrast to the rapid interaction that takes place with Rachel and Ned, who are not only teaching in the same school but are teaching the same students as Cathal and Peadar. Peadar later explained in an interview and private correspondence, that team-teaching was 'a great force for the good of the vast majority of students, and can inspire and empower the participating teacher with a great energy and enthusiasm for the job'. Here one can see the connection between the dominant configuration of team-teaching adopted and its potential impact upon the teacher. The over-reliance on a particular model and the typecasting of a teacher in a particular role clearly generates its own degree of tension and frustration. In turn, it impacts on the forms of engagement which students and teachers undertake with one another. It should be noted also that Peadar reveals his lack of opportunity to engage in pre-training in relation to team-teaching, as he was not in attendance during the May 2007 workshops. Peadar states that training is essential for team-teaching and for the protection of his identity as a teacher. He uses the comparison with pilots, an analogy introduced earlier by me in relation to compatibility, to demonstrate that teachers need professional development opportunities in order to work with one another.

> I think the VEC do need to look at the compatibility issue at the same time though. I know it was said there that do pilots need to be compatible? But if you think about it the pilot has one button that's pressed to do one particular thing, he has another button that's pressed to do another particular thing and two pilots can't go in there and say; well I do it in this sequence and no, no I do it in the other sequence, where in English… So it's not a total analogy. With two pilots, as I've said, that's

> how they learn to do it and it's absolutely straightforward, there's no changing how you take off the plane. (Peadar, Dyad B, Interview 3)

The tension between, the drive to teach as best as possible and the lack of a declared best way, is clearly revealed by Peadar. He captures the pressure associated with striving to address the art of teaching within the science of team-teaching.

> … No, if you do it differently (piloting a plane) you crash and it's that simple. Where as in English, you can do it differently and it can be a completely successful thing. It's just when I heard you mention it the last day I started thinking and I don't think that is a great analogy for it. (Peadar, Dyad B, Interview 3)

As a direct outcome of Cathal and Peadar's conflict with conflict, they set about devising a scale of team-teaching which ranged from "our team-teaching is working perfectly" to "our team-teaching is not working at all". When the scale fell below a certain figure they both agreed that they would need to talk. A Code of Conduct on team-teaching for all in the school was also produced as a result of their struggle with implementing team-teaching.

Of note in relation to team-teaching, Cathal and Peadar did not visit any other team-teaching arrangement, nor were they visited by a colleague. Had this occurred at a relatively early stage, it may have opened up team-teaching options, that may not have been imagined at that particular time, and which may have eased the pressure caused by this change in normative practice. Ironically, team-teaching in both schools saw classes remain secret gardens in their own right, though this is understandable in the context of teachers becoming accustomed to one another and to their levels of use as an innovation in private before 'going public'. The two principals in their respective schools did not formally observe team-taught lessons which had they, may have assisted with conversations

around different models and options. Though, it may be a stretch to expect principals at that time, to be aware of such models and options.

Leadership for team-teaching rests in part with the principals. Without their consent the innovation would have not begun or survived in any systematic way. Their support for teachers who suffered the pressures associated with introducing new practices was often subtle but always present. They also clearly trusted that their teachers would be successful in implementing and sustaining team-teaching. Their trust in their teachers' ability to successfully implement team-teaching was reflected in releasing them for ongoing professional learning opportunities at cluster meetings and elsewhere. As with pressure, trust would emerge from teachers' commentary as a significant theme in the study, a theme that once more resonates with those associated with Social Capital Theory.

4.3.3 Relational trust

Similar to examining the pressures of compatibility, teacher trust of one another was important for team-teaching to commence, to be sustained and to be successful. Tschannen-Moran and Hoy (2000) are of the view that trust among teachers is a necessary condition for change in education. They add that there are incentives to develop a reputation of trustworthiness and so reap the benefits of trusting relationships (Coleman, 1990; Fukuyama, 1995; Putnam, 1993).

Such a view is shared by Hargreaves (1994) where "trust can be both an outcome of meaningful face-to-face relationships or a condition of their existence" but that "the establishment of trust is central to restructuring education" (p. 252). In

more recent times Hargreaves (2007) contends that "the backbone of strong and sustaining professional learning community is *trust*" (author italics) (p. 187). Citing Meier (2002) and Marris (1974), Hargreaves contends that change churns up many emotions including, anxiety, fear, threat and loss and that successful change does not eliminate these emotions but makes them bearable by placing them in a holding pattern. "The heart of this holding pattern is trust" (p. 187).

Bryk and Schneider (2003) value day-to-day social exchanges for building trust.

> Through their words and actions school participants show their sense of their obligation towards others, and others discern these intentions. Trust grows through exchanges in which actions validate these expectations...In this respect increasing trust and deepening organisational change support each other. (p. 43)

Trust is a key dimension of Social Capital Theory and such theory may assist in understanding how interactions among teachers in school settings and across school settings can promote the quality of learning for both students and teachers. Trust in relation to the team-teaching project took many forms and guises. In placing the project in context, trust in what teachers *already knew* (Lieberman, 1995; Fullan, 2007) was a key factor in establishing and sustaining the project and is referenced to indicate that trust from outside the school may have influenced the trust that was nurtured within the school. In designing the study, care was taken to ensure teachers were seen to be knowledge makers, individually and collectively, as well as knowledge users. Similarly, there is evidence that as teacher-to-teacher trust grew so too did teachers' expectations for and trust in their students. Such patterns of treating adults in a manner that is in keeping with how it is hoped they will treat each other and their students echoes Nias' (1998) observation that:

> The welfare of the children is intimately bound up with the well-being of the adults who work with them. If the latter did not feel accepted as people in the staffroom, they would not be fully at ease in the classroom. Besides, it is philosophically inconsistent to treat children as 'whole' and 'individual' but to ignore the personhood of their teachers. (p. 1262)

Bryk and Schneider (2003) conducted a longitudinal study and suggest that trust has a central role in building effective educational communities. They state that "as individuals interact with one another around the work of schooling, they are constantly discerning the intentions embedded in the actions of others" (p. 42). These discernments are seen in four specific considerations; respect, personal regard, competence in core responsibilities, and personal integrity. Mishra (1996) describes trust as based upon a belief or confidence that the other partner is competent, reliable, open and concerned. Similarly Tschannen-Moran and Hoy (2000) posit that "trust is one party's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest and open" (p. 556).

Such research is useful in analysing teachers and students understandings of the role trust and mistrust can play in engaging with or disengaging from new classroom practices and in determining the impact of such practices upon participants. It is also useful to keep to the fore the view that social capital domains, such as trust, are interwoven with other actions/inactions between individuals in school settings. For example, the structure of team-teaching assists in providing opportunities for trust to emerge among teaching partners if only through proximity and regular day-to-day contact alone (Coburn & Russell, 2008). Likewise 'teacher pressure' and 'reciprocal altruism' (Frank, Zhao & Borman, 2004) resonate closely with teacher trust.

Similarly, the manner and degree to which access to resources and expertise (professional learning) is achieved by teachers engaged in team-teaching is determined in part by teachers openness to learning from one another and by the level of trust that exists within a given dyad, within a given school and within a given scheme (collection of schools). Fukuyama (1999) speaks of trust as being "epiphenominal, arising as a result of social capital, but not constituting social capital itself" (1999, p. 1). He speaks of a 'radii of trust' and the possibility of viewing society, or in this case a school, as a 'series of concentric and overlapping radii of trust'. Trust was also interwoven with teachers' views as expressed through concepts such as compatibility, parity, professional identity, conflict and concerns. Trust for some teachers began with renewed trust in oneself and a renewed energy to engage with new methods.

4.3.4 Trust in oneself (confidence)

Team-teaching dyads would appear to enhance the level of self-trust or confidence that teachers have in their own teaching ability. In the literature the focus of attention is usually placed on how trust is linked to confidence in another. In this study an emerging theme is teachers' reflection upon their own ability to teach and the increased confidence-building opportunities that team-teaching provides. Being praised by colleagues also nurtured trust as well as energy. My field notes indicate that teachers praised each other frequently in class, 'as Ms Dawn. pointed out so well to you there', 'that's very interesting I never thought of doing it that way', and this in turn assisted with trust being developed among teachers in relation to their own ability and that of their colleagues.

> We give each other a bit of feedback; it might be just you know give each other a pat on the back and say that was great. It does make a difference, you think about that and you think another teacher telling you that you are doing a good job you think they are just kids there what do we care about what some other teacher thinks about us but it does make a little difference. When someone says to you after class that was fascinating, that's a bit of a gee-up and it's nice. (Ricky, Dyad D, Interview 2)

Traditional teacher learning can often suggest that teachers need to acquire new knowledge. One significant learning outcome from this study was the opportunity for teachers to revisit and hone previous learned pedagogical skills, including skills that had been perceived as of less value or out of date. As one teacher from another school in the study observed "It's not just about learning new stuff and ways of teaching it's also about returning to the ways that you no longer practice or had forgotten about" (Teacher questionnaire).

4.3.5 Trust in teaching partner

The interdependence that team-teaching requires and generates, is closely linked with one teacher trusting another teacher. Even before team-teaching occurs it requires planning and selection of teachers. Issues around compatibility are regularly raised in the course of teacher interviews and a range of responses emerged over the course of the study which frequently infers the notion of trust. For some teachers (Hilda and Joe in Dyad C, and Laura in Dyad D) issues of compatibility and trust followed a somewhat linear route, similar to that outlined by Lewicki and Bunker (1996) in Tschannen-Moran and Hoy (2000).

> At the beginning of a relationship, trust will rely on deterrents or institutional structures. As the parties gain experience with one another, trust based on knowledge of one another over the history of the relationship can develop. Finally the partners may come to have a greater understanding and empathy for one another's purposes and unconditional trust may come to characterise the relationship. (p. 570)

Trust in each other was, in part, supported by having trust in the concept of team-teaching itself. In pairings that followed a somewhat linear model the unconditional trust was not just about trusting the individual but trusting the restructuring of the classroom to the extent that unconditionality was, by years end, extended to any teacher interested in partaking in team-teaching. One teacher (Joe) said that he was now more concerned by what class he would get next year rather than who he would be paired with.

For other teachers conditionality still prevailed with veiled inferences that they would team-teach but not with everybody on the staff (Ricky, Ned and Rachel). Other teachers (Cathal and Peadar) adopted a more 'inward-outward' approach to compatibility and struggled with team-teaching arrangements but similarly continued the struggle as they saw and grew to trust the restructuring and its value to their students and in part to themselves. The failed partnership of Fíona and her colleague fell on a lack of trust. It also fell because Fíona feared losing the trust that she had developed over the previous three years with her students in the LCA class.

4.3.6 Trust in students

Teachers' trust of students seems to improve in team-taught lessons. Social capital is developed by the interactions and climate created among the teachers and their students. Trust in teaching partner and trust in students are interlinked as the comment from the teacher below suggests.

> And that's so easy because when you turn to write on the board sometimes in other classes you can hear a little chatter or mumble but when you know you have a team member behind you to back you up it makes a huge difference. You know in some classes there are a few

> ‘messers’ if you turn your back to write something on the board there’s a murmur of chat or something. Whereas she watches my back and I’ll watch hers. (Ned, Dyad A, Interview 1)

Improved classroom atmosphere and improved opportunities for engaging with students saw teachers gain in-depth insights into their students as individual personalities and individual learners with teachers noting an improved sense of trust being bestowed by them upon their students. As with teachers, greater proximity with each other assisted with nurturing trust between teachers and students. “You can sit near them…and have a word with them”. Teachers were free to move about the classroom more, and to regularly give public and private feedback to individual students. Teachers commented on knowing their students very well and much more quickly than when solo-teaching.

In engaging with their students, teachers build positive relationships which may not be so easy to achieve when alone in the classroom. Such relationships are linked to the promotion of a sense of belonging and being valued. This point is not lost on Mulford (2007) who draws attention to the findings from PISA (OECD, 2004).

> The OECD (2004, p. 127) has recently affirmed that the well-established conclusion that a general sense of belonging at school is so important for students’ life chances that it should be given equal indicator status with academic results. (p. 167)

Student learning as influenced by team-teaching will be addressed in depth in the next chapter. For now, it would seem that a general sense of belonging among the teachers in the school is also of importance. Attending issues for teachers, relating to inclusion, such as access to and co-creation of resources for learning as well as access to moral supports are discussed below.

4.3.7 Access to resources for learning

With regard to teacher learning, Lieberman and Miller (2008) speak of honouring existing teacher knowledge and that the challenge for schools is to not to rest on the assumption that best practices are *out there*, but to also consider how to "increase learning through collaboration…by mining inside knowledge….*in here*" (p. 22). Learning through collaboration is about process, a process that seeks to be inclusive (Hargreaves, 2007) if it is to maximise its effect on teachers. Wenger (1998) describes members of a community of practice who "develop a shared repertoire of resources, experiences, stories, tools, and ways of addressing recurring problems – in short a shared practice. This takes time and sustained interaction" (p. 5). Team-teaching would appear to offer both time and sustained interaction, where resources are shared, co-constructed and witnessed in a variety of applications.

Inclusive learning for teachers resonates with the previously mentioned view of Social Capital Theory. One such form of social capital is the access to resources, framed by (Frank et al., 2004), as 'reciprocal altruism' and explained by Penuel et al. (2009).

> Through one's ties to others that one gains access to particular expertise and resources (curriculum, teaching strategies, technical skills) by relying upon norms of helpfulness and obligations to others that arise among individuals who interact frequently with one another. (p. 3)

This view aligns with Armstrong's (1977) analysis that "Team teaching permits team members to take advantage of individual teacher strengths in planning for instruction and in working with learners" (p. 66). A socio-cultural perspective asks that teachers be seen as learners (Trent et al., 1998). So what indeed did

teachers learn from their frequent interaction with one another?

A very one dimensional interpretation of team-teaching is that it allows access to the material resources that a colleague may use. However team-teaching would appear to permit teachers to have access also to a colleague's knowledge, skills and attitudes and provide opportunities for both to collectively problem solve and to create new knowledge, particularly about individual students and learning. In examining the 'content of interaction' Coburn and Russell (2008, p. 207)) highlight the substance of conversations in which actors in social networks engage. The depth and potential power of these conversations is captured by one teacher's description below.

> I suppose memory would tell me that much of my conversations with staff members prior to that particular class would have been very generalised. Whereas now they've become far, far more specific about individuals within the classroom, but much of that would have been, up to now, much of that would have been in my own head. (Hilda, Dyad B, Interview 2)

Crucially, team-teaching allows the conversation not only to be based on a common language but also on a common experience which teachers have shared in the classroom together. In addition to previously mentioned professional learning, that has emerged for teachers, others commented on the aforementioned power of contrast and of weak ties. This is captured by Joe when he speaks of the subliminal and 'unsaid' learning.

> And there's lots of good modelling maybe going on subliminally… Well I know this because I discussed it with staff in team teaching situations and they've said nice and quietly in conversations how much they are benefiting from it themselves. Learning from the ways and means and methods of another teacher and a lot of this *goes unsaid, it goes unsaid,* but maybe when you probe into it a bit more you'll find that you do learn from your fellow professional. There's not doubt about it that you do learn from your fellow professional.(Joe, Dyad C, Interview 2)

Joe's teaching partner is of a similar view and speaks of the manner in which team-teaching intervenes to ask reflective questions, collectively and individually, in a low-key way. The cause of the questions is often due to a shared experience and the answers are generated by interpreting these experiences with a shared language among colleagues.

> Well you can go in and sort of fool yourself, you can say I'm doing a great job here, but when there's another adult in the room with you, it's not that you're trying to prove to them, it's that the work is there, is it being done, how am I doing it? It's out there, it becomes, you are kind of released from it in a way, the operation that's going on is out there and the other person is involved as well. Whereas you don't have that when you are on your own, you have nothing to gauge your success or your failures. And there's no big deal, there should be no big deal because if we're all working as a staff we should all be aware of what we all are, we are all meeting the same students, so it enriches staff meetings as well. (Hilda, Dyad C, Interview 3)

4.3.8 Conclusion on bonding

In concluding this section it is worth recalling that, bonding in the context of team-teaching relates to the manner in which team-teachers configure their activities in the lesson and outside. For the most part the Irish context facilitates bonding within the lesson and to a lesser extent outside of lesson-time. Teachers had to reach individual and collective understandings of what team-teaching asks and offers. Social Capital Theory helps to frame that journey of the personal, professional and pedagogical in a manner that captures the emotions, actions and interactions of teachers as they move, sometimes with difficulty, to maximising the presence of each other in the classroom.

Bonding is useful in understanding the micro-level engagement between two teachers. To understand the movement from classroom to staffroom and beyond

requires a focus on what bridges are constructed and by whom as they engage with other interested stakeholders who are not present in their classroom.

4.4 Bridging: teachers talking to other teachers

As this story unfolds it is clear that it begins with linking policy to practitioners but ultimately will only be sustained if the practitioners can bond within the classroom and build bridges of interaction with fellow teachers in schools and across schools. This is no mean feat for teachers and one which is to be achieved while still pursuing a greater understanding of team-teaching with their teaching partner and within their classroom surrounds. Social Capital Theory assists in understanding how to initiate and maximize the benefits of relationships of educational purpose and cultivate new relations through which innovations could diffuse more easily (Frank et al., 2004), and where such innovation avoid the irony of becoming exclusive among adults who seek to promote inclusion among students. Within schools "bridging social capital might be found within cross-curricular planning and development groups for teachers and other professionals, or in 'buddying' arrangements for vulnerable pupils" (McGonigal et al., 2007). The use of bridging for 'buddying arrangements' among adults through team-teaching 'vulnerable pupils' has not been explored.

My research indicates that bridging is important for team-teaching to gain traction within and across schools. As the practice moves outwards from the class, it also supports and vindicates actions among those within the class. In the context of Social Capital Theory and education, I subdivide Woolcock's (1998) use of bridging which he suggests occurs when different groups come together. I

describe this division as *'bridging–in'* and *'bridging–out'*. By this I mean that bridging-in has a focus on different groups within the same school, for example staff members not involved in team-teaching, senior management of the school, board of management members and parents. Consequently bridging-out relates to engaging with personnel from other schools, in this case teachers and principals involved in team-teaching as well as those members of the wider educational community (VEC personnel, university personnel, inspectors) who are not directly involved but have expressed an interest.

The act of bridging takes leadership and requires, on occasions, principals who recognise leaders among their teaching staff. The advantage of working with a VEC-scheme of schools is that the inter-school competitiveness that is a common feature of Irish schools, which are close geographically, is removed. Because of existing supports, bridging across VEC schools has a better chance of succeeding, though there is no automatic guarantee that this will happen.

4.4.1 Structure

The act of bridging also acts as a counter-balance to the dangers of bonding becoming exclusive rather than inclusive. Schools were alert to the potential exclusiveness that might emerge from dyads working closely together, while other teachers may have felt excluded from the practice and the praise. As described by Woolcock (2001) bonding can become exclusive unless the lateral transfer of knowledge, skills and resources occurs among other teachers in the school. Principals in particular were quick to praise the success of the project while indicating that its success would be sustained only by extending the

number of teachers involved in team-teaching and by altering the teaching dyads within each school.

Within schools, the staffroom was the location for much of the transfer of information and sharing experiences with other teachers not involved in team-teaching. Presentations relating to student progress, staff's experiences of team-teaching, students' and parents' experiences of team-teaching combined with other emerging activities, such as extending invitations to colleagues to sit in on team-teaching classes to see the practice for themselves. Of note the dyads didn't visit one another, though they did communicate with one another. This may have been a result of oversight or due to the pressures of timetables being compatible or some teachers not feeling ready. In general, readiness for public viewing by others only emerged slowly as the levels of use and levels of confidence increased among teachers. Activities akin to TALIS' 'external coordination' were initially more common as principals ensured that the initiative in classrooms was kept alive at staff meetings and board meetings. Staff members were invited to share their experiences to date and these in turn were shared with students and parents in the school published newsletter. Later, when more confident, the production of support materials also assisted bridging-in and bridging-out activities.

The monthly cluster meetings of the teachers involved, sought to bridge across schools and their teachers' experiences. Presentations by some participating teachers, to all the principals of the schools in the VEC scheme, were also facilitated. Later engagement by some school personnel in the creation of a

submission to the DES saw teachers evaluate the innovation in their own schools and return to a steering committee to share and collate findings. From this forum emerged the agreement that guidelines on how best to engage in team-teaching merited being drawn up, as the DES policy statements and existing guidelines were deemed too bland and not in-depth enough. Consequently it was agreed that support materials should be made available by teachers involved in the study. These included:

- The various configurations of team-teaching
- Advice for teachers
- Advice for senior management
- Advice for parents and students

4.4.2 Relational pressure

Bridging began to occur within schools once teachers involved became comfortable with themselves and with each other. Being comfortable with team-teaching was one thing, being comfortable with presenting to colleagues on team-teaching was another matter. Formal bridging usually occurred through staff presentations with more informal 'chats' among staff also 'bridging' the gap between those involved and those seeking more information. The pattern of bonding, bridging and linking was never neatly linear and involved individuals with different starting points and with different perspectives on team-teaching.

In the spring of 2008, at a very well received presentation to principals in the VEC scheme (district), a principal of a participating school commented on being 'blown away' by his own school but it occurred to him that those in attendance at the presentation knew more about team-teaching in his school than his own teachers. This was rectified by a similar presentation being made to his staff

shortly afterwards. However, the cameo does highlighted the pressures associated with communicating internally with colleagues in school.

Pressure to provide data to support the continuation and expansion of team-teaching caused teachers to reflect carefully on the benefits that were emerging. These self-reported benefits were collated by the VEC and focused initially on students. As referenced by the DES Chief Inspector (2011) the gains cited by schools included students being able to sit state examinations at higher levels in both English and Mathematics than previously predicted, students making significant progress with literacy and numeracy scores, students identifying English and Mathematics as their favourite subjects as well as improvements in the quality and timeliness of homework, attendance, behaviour, engagement, attitude and confidence.

Bridging-out to other schools took the form of monthly cluster meetings during the school year. These meetings took place in a nominated school and while well attended by the teachers involved, the meetings were hampered by inconsistent attendance by teachers who were not always in a position to be released from their school to attend. School personnel were encouraged to share their experiences and resources in relation to the project. Mindful to advance learning for teachers with a focus on being "a catalyst for change rather than a new infrastructure for the status quo and negative group think" (Wood, 2007, p. 699), methodologies aimed at developing students' literacy and numeracy skills were presented by members of the national support service. These presentations were deemed by teachers to be of use though the impact in the classroom was not

always evident to the researcher, though yet again short time frames may have been a factor in this regard. The pressure placed upon teachers to keep learning was a conscious one by the VEC and allowed teachers to begin to see team-teaching less as a methodology and more as a vehicle for teaching methodologies and achieving desired learning outcomes.

In relation to the interaction between schools, the VEC EO seemed aware that 'not enough attention' had been given to the monthly cluster meeting. On reflection it was commented that:

> Yeah, one I don't think I would fly by the seat of my pants in terms of the cluster meetings, I think I would have them more structured. That's born out of regret that there wasn't, in such a busy world or whatever, they weren't structured enough for me. I would have preferred to give them more support than sitting around talking about how to etc., etc., etc. I liked the one in Ballymac, where there was a presentation (local professional support provider). I wasn't at the Bob presentation which was similar, I like the 'let's give you a bit, you give us back a bit', let's share. I think that's absolutely crucial, to be honest with you, rather than just meeting for the sake of meeting. I don't think that's beneficial. And I would have attended more this year but as I've said I just seem to have lost control of it because of the workload.

Of particular regret for the EO was the lack of inclusion of principals of the participating schools at the monthly cluster meetings and in the project in general. (Only one principal from the seven schools attended three of the six meetings convened during the school year).

> … Even with the ones that had said yes, even if we took our time with them, maybe it was just a part of including them in the cluster meetings a bit more. Maybe that's what it was. Maybe to bring them along but we just left them out there so what we did was we relied on the team teachers in the school to relay it back up to them but a lot of them are just teachers.

Clearly the importance of supporting the principals in the project was recognised as an area that required attention for the initiative to continue and develop.

Bridging within and between schools saw teachers interact with one another across the VEC scheme (district) in new ways. This in turn saw teachers engage in actions of leadership at staff meetings and at cluster meetings. Visits by teachers from schools not involved in the project to witness team-teaching also promoted the concept of leadership, though some teachers were anxious to protect themselves and their students from becoming 'lab rats'. (Cathal, Dyad B, Interview 3). This is an important point in that bridging with others also needs to be kept in check so that students and teachers do not become overly exposed to visitors.

Bridging among teachers also created and facilitated the emergence of teacher confidence in themselves and their school. Described previously by their respective principals as highly effective but rather timid, some teachers emerged from the shadows onto the local and national stage as they gave presentations to not only colleagues and those from other schools but also to national conventions of teachers including the national School Development Planning Initiative (SDPI). These leadership roles, or moments of leadership, are closely aligned with Woolcock's third concept of 'linking', but they are also closely aligned to a sense of trust in oneself, in one another and in the undertaking that is team-teaching.

4.4.3 Relational trust

As with the bonding at classroom level the trust that emerged gradually among those who attended the cluster meetings added to the quality of professional learning.

> Those cluster meetings definitely, they are a benefit…You know when we spoke about the challenges and how they overcame the different challenges, I can see, yeah, I can understand that, I can relate to that. And then we can all say, oh right, well I'll remember now when I'm teaching how to read time, not to use that method because it didn't work. It's important to know the ones that do and don't work. (Cathal, Dyad B, Interview 1)

Meetings facilitated an airing of views and opinions on team-teaching which were described as 'reassuring' and nurtured a sense of being 'part of a bigger project than just my own school'.

> I think it was because to see that other people have the same anxieties but also to see that other people could be optimistic about it. I think learning about how people dealt with particular problems is very helpful. (Ned, Dyad A, Interview 1)

Frustration was sometimes expressed at the lack of sharing by teachers involved in the project.

> Yeah… And just the other thing is just getting methodologies. I think people sharing ideas is good, because people don't realise themselves what great ideas they have in their heads. People shouldn't fear. I'm very expressive at cluster meetings. I'll speak up and I'll speak out… But there seems to people who are too afraid to speak up and say, well I've done this and it didn't work. (Rachel, Dyad A Interview 2)

This latter frustration may well have been a direct consequence of teachers not always being able to attend these meetings or due to principals sending different staff members, with the intention of sharing the learning but with the result that the development of inter-school trust was not always easily realised. Bridging-out is difficult in that the basics of social capital such as trust, proximity, and reciprocal altruism are harder to maintain.

4.4.4 Access to resources (Learning)

Limited access to resources was facilitated by the cluster meetings through informal engagement with other teachers or through the presentations addressing

literacy and numeracy. One teacher commented:

> Yeah, I've built a relationship with the teachers that I am working with, not only the teachers that I am team-teaching with but also with the other team teachers as well. Because there's a common link, a bond that we can talk about and I suppose we can chat about the students. (Laura, Dyad D, Interview 1)

A significant meeting happened at the end of the first year when in May 2008 a repeat occurred of the workshop first undertaken the previous year. On this occasion the first group of teachers presented to the incoming group. The shift of expertise from the researcher/inspector and VEC EO to the practitioners was palpable. The first cohort took control of proceedings and facilitated sessions on hopes and fears and opportunities and challenges associated with initiating team-teaching. Other fringe meetings took place over the two days.

Of note at meetings was the increasing focus on teaching and learning where teachers spoke of practices that aligned with subject syllabuses and programme objectives. The growing confidence among participants culminated in the production of the aforementioned dedicated support material. These materials opened up their classroom practices to the wider community and was a significant gear shift from a local project to one that would shortly gain national attention.

4.4.5 Conclusion on bridging

Bridging is an important component for the success of any initiative. In this study teachers were able to share their experiences with fellow colleagues, both informally and formally. This in turn encouraged their continued involvement and commitment. Bridging-out to teachers and principals in other schools was

probably less successful in its execution but very powerful in affirming the work of the teachers and in assisting in extending the practice to other schools. The next section of this chapter looks beyond bridging with one's peers to advancing team-teaching to a wider audience and a national stage.

4.5 Linking

The movement outwards from the classroom and schools was matched by a desire among the group to share their learning with the wider educational community, initially with teachers and principals not involved in the innovation 2007-09, but ultimately with the DES. As trust in themselves and among themselves grew, the steering committee of teachers, EO and researcher moved from their original plan of a written submission to the DES, to the production of support materials for all to share.

In effect the policymakers were now to be informed by the practitioners in multidirectional engagement as flagged by Mulford (2007). This link 'outwards' with fellow practitioners and 'upwards' with those in authority is framed by Woolcock (2001). He describes bridging as 'essentially a horizontal metaphor' and informs that social capital has a 'vertical dimension' which also involves forging alliances and linking with sympathetic individuals in positions of power.

While this aspect of the project is in its relative infancy a range of activities and alliances have already been forged. Of note is the relative speed in which linkages were formed and the interconnection between linking people and scaling up practice. With scaling up comes the need to understand how change occurs

and what is required for change to be successfully achieved and maintained. The objective and subjective aspects of social capital are equally relevant in theorising this dimension of the innovation and bringing to the fore Leithwood and Jantzi's (2000) commentary on transformational leadership being formed by the three-stage development of, a trusting and collaborative climate, shared and monitored mission, and taking initiatives and risks.

By linking with those in authority school personnel were encouraged and affirmed for their initiation of a shared mission regarding team-teaching, that developed and depended on a climate of growing trust and collaboration where taking risks became safer and became more the norm. Much of the evidence that follows is based on observation of practices engaged in by teachers, principals and administrative staff from the district.

Thompson and Wiliam's (2008) work is useful when they speak of 'A tight but loose' theoretical framework for designing and implementing classroom-based interventions at scale. They contend that:

> The Tight but Loose framework focuses on the tension between two opposing factors inherent in any scalable school reform. On the one hand reform will have limited effectiveness and no sustainability if it is not flexible enough to take advantage of local opportunities while accommodating certain unmovable local constraints. On the other hand, a reform needs to maintain fidelity to its core principles, or theory of action, if there is to be any hope of it achieving its desired outcomes. (p. 2)

This tension between flexibility and fidelity captures some of the import of linking team-teaching to those in authority but also to existing educational practices. The authors identify three inter-related factors that are requirements for interventions to be both effective and scalable.

- A clear idea of what is to be enacted and why it is seen as a good idea
- A comprehensive understanding of what it means to scale up across diverse contexts
- A consideration for the particularities of the actual contexts into which the intervention is to be scaled. (Thompson & Wiliam, 2008, p. 30)

These factors mirror the work of Fullan (2007) in relation to change and the focus of the research study on how schools developed and expanded team-teaching within their own setting and outward to other settings. Coburn (2003) describes this as inward and outward spread in a manner similar to my description of bridging in and bridging out. Coburn's work in relation to what scaling up actually means is also useful.

> But what does it really mean to say that a reform is scaled up in these terms (expanding number of schools reached by a reform)? It says nothing about the nature of the change envisaged or enacted or the degree to which it is sustained, or the degree to which schools and teachers have knowledge and authority to continue to grow the reform over time. (p. 4)

Social Capital Theory assists at getting to the underbelly of scaling up and offers insights into what 'it really means to say a reform is scaled up'. It offers insights into the nature of change envisaged and how such change grows within a classroom while also being shared across schools and with those in authority.

The concept of linking, framed around other Social Capital Theory concepts of structure, relational pressure, relational trust and access to resources, offers a means to express how an innovation can be sustained, shared and (re)shaped.

Positions of power are a relative concept and the structure of the vertical alliances forged, and being forged, vary according to the participants involved. For some teachers vertical alliances were framed by becoming members of a steering committee that saw them meet regularly with their principal's superior,

the EO. For others, linking with those in power involved presentation at various national gatherings of teachers and support service personnel. Principals were given the opportunity to discuss progress with VEC personnel and to share their experiences, outline successes and collectively examine and plan for future development of team-teaching in their school.

The EO presented at the VEC's national conference and to the annual conference of the Inspectorate (2009) outlining, in a similar fashion to that of the principals, the benefits of, and possible future directions of, the project. In a similar fashion I have addressed colleagues in relation to team-teaching and a DES document on team-teaching has been agreed and circulated to relevant staff (2010).

Contact was also made between VEC personnel and the National Council for Special Educational Needs (NCSE), which is responsible for the allocation of provision for students identified with special educational needs. They in turn visited schools and classrooms, and met with VEC personnel to examine how team-teaching can facilitate the best use of decreasing resources. Other activities associated with linking and scaling up saw the recent decision (May, 2011) by one college of education, following my presentation at the annual Educational Studies Association of Ireland's (ESAI) conference, to collaborate on organising a national symposium on team-teaching in 2012. The IVEA, in turn, have pledged to set up a national professional development programme on team-teaching at its national headquarters, while the NCSE now wish to review practices and to examine the role of team-teaching as part of their review.

The VEC invited the DES Chief Inspector, Dr. Harold Hislop, to launch the team-teaching support materials in March 2011. By accepting this invitation the Chief Inspector endorsed the good work that had been undertaken to date. The linkages and scaling up aspect of the work were not lost upon him and he made reference to the use of team-teaching to support other DES policy objectives, such as teacher professional development, the promotion of literacy and numeracy in our classrooms, and the further extension of school self-evaluation practices that included classroom practices being made more visible and open. In his speech, Hislop notably draws attention to the power differential now at play and to the multiple sources of 'reciprocal altruism' where those within, and outside the classroom, can engage in relationships of educational purpose that can be of benefit to all involved in learning and teaching.

This is an important point in the change agenda where those in authority recognise that, for change to succeed, it is essential for those in schools to retain ownership of their practices as they share them with others, including those in authority. Teachers' commitment to team-teaching is because of the benefits accruing to their students, and while other benefits may emerge for themselves and for others' agendas, the concept will stand or fall on the engagement with students, not with linkages to authority. Getting the balance between tight and loose (Thompson & Wiliam, 2008) will be with us for a while and will bring with it the relational pressures, some of which are outlined below.

4.5.1 Relational pressure

In the alliances formed, pressure was an obvious dimension to the teachers engaging with one another. Initial and ongoing engagement with team-teaching brought its own pressure. Presentations to the principals and district officials was a considerable pressure point for those teachers involved as was the production of support materials which put certain pressure on teachers as their practices, their students and themselves were 'vulnerable' and 'accessible' in a public manner (Hargreaves, 2000) and became exposed to potential scrutiny by a wider and invisible audience. In a similar fashion, the interest of the NCSE personnel, while no doubt affirming, also brought new pressures to bear.

As the project moved from the participating schools to the national arena the relational pressure shifted as teachers engaged with others whom they did not know but with whom they were willing to meet and to whom they were willing to reveal their classroom practices. A willingness born out of their belief in the project and out of their trust in their work, their EO and, I would like to think, myself. My own social capital among the inspectorate and personnel from national services would appear to have assisted linkages being forged and developed relatively quickly.

Linking with authority results in exposure of practice and this brings with it the pressure of the value of the work being recognized by others in authority or being misinterpreted, overly altered or dismissed. Others, who have expressed opinions, would be powerful in supporting, skewing or suppressing the initiative. In my role as inspector I felt under pressure to ensure that the work would be

acknowledged by my colleagues. I wasn't sure if the type of inspector I was trying to be by forging advisory and supportive lines of communication were in tune with the corporate notion of what an inspector is supposed to be. I particularly feared that the importance I bestowed on the work may be ridiculed under the inspectorate gaze and I was also concerned with the response my colleagues would make when, during the course of their inspection work, they encountered team-teaching in our schools. The Level of Use framework was useful in linking with colleagues as it protected teachers from being evaluated by standards that outpaced implementation, which would inhibit rather than inspire the initiative.

4.5.2 Relational trust

Teachers' trust of sympathetic individuals in positions of power does not appear to be as intense or important to them as when compared to the initiation of team-teaching in their own schools and particularly their own classrooms. In a sense the interaction with 'sympathetic individuals in positions of power' was conducted on behalf of teachers and principals by the EO who liaised regularly on the national stage with other representatives, including the Minister for Education and Skills. Teachers saw this relational trust as being more of a quasi-political pitch for possible additional funding (from the NCSE) and recognition (from the DES) rather than an interaction that would significantly affect their day-to-day practice. For teachers the extension of the radii of trust (Fukuyama, 1999) grew less intimate and less intense as the engagements with others moved further from the epicentre of the classroom.

Relational trust between the VEC personnel and national representatives from the NCSE and DES continues to be a factor. Professional trust among these individuals and the inspectorate has seen the promotion of team-teaching in our schools (DES, 2011) and a recognition of the role team-teaching can play in promoting inclusive practices in our schools (Value for Money Review Relating to the Special Needs Assistants Scheme, DES, 2011; Circular 0037/11; NEPS Continuum, 2011). Ongoing developments and educational goals that may be nurtured and fostered by team-teaching are not lost on the DES. The linkages being made are a testimony to the good work being done but all will need to be mindful of the lessons of change wisdom or else we will find ourselves close to where we once were with team-teaching, touched by the story but not moved (McDermott et al., 2006). Linking is all very well, but teachers must continue to be allowed to retain ownership of their (team)-teaching practice.

4.5.3 Access to resources

As the project sought to up-scale, the access to resources was seen in a number of different ways. Again the linking actions were predominantly conducted between VEC and national personnel.

What is of interest is the excitement expressed by VEC personnel in engaging with pedagogy rather than the more mundane administrative duties associated with their work. The EO commented that it was "wonderful to have conversations around instruction and instructional leadership". Similarly, teachers in the VEC scheme were beginning to be seen by district office in a new

light, or indeed were simply being seen for the first time. This allowed VEC personnel to learn about individual teachers and their leadership potential.

The words of the EO were echoed by the Chief Inspector who also appreciated the opportunity to engage in conversation around teaching and learning, as well as focusing on the leadership skills of teachers and VEC personnel. In this regard there was clear evidence that the linkages being formed generated social capital among representatives of the VEC, NCSE and DES, including myself.

The linking with the Chief Inspector did my kudos no harm in the local educational environment and again I was able to 'capitalise' professionally on the good work being undertaken by schools which saw my role as researcher return to that of agitator for change and DES inspector.

Crucially, the learning opportunities for administrators in the NCSE and the Chief Inspector were not lost upon them either, as the wheel turned full circle and allowed them to return to the classroom from where the study emerged and from where they now were informed more about team-teaching. It also allowed the Chief Inspector to graft his aims and objectives onto a successful innovation. "This team-teaching initiative has significance far beyond special needs education or inclusion activities. The sort of practices that the support material advocates and demonstrates is just as relevant for many other priorities in our school system……teacher professional development, improving students' collaborative and other skills (literacy and numeracy), and school self-

evaluation" (Chief Inspector, 2011). In concluding the Chief Inspector alluded to the power of social capital.

> Your work can be described in many positive ways, but I'd like to return to some Irish words to describe what has occurred. 'Gaisce' or significant achievement is one such word that springs to mind, but for me, your actions are best captured by another Irish word, MEITHEAL- where all form part of a team for the greater good of each and everyone. (Chief Inspector, 2011)

Linking conceptualises the change agenda as it moves outwards from local contexts to a larger national stage. Social Capital Theory helps to monitor what it is we wish to implement, what it asks of individuals personally, professionally and pedagogically, and how they might be supported by others, both near and afar, in sustaining and optimizing team-teaching in their local and wider environment.

4.5.4 Conclusion on linking

Linking brings scale to the initiative and enlists the support of those in decision-making positions. The development of trust and reciprocal altruism among different representatives from different stakeholder groups was primarily achieved because the common denominator in all conversations revolved around the positive learning experience for students and teachers. An additional outcome was that the IVEA and myself embarked on another initiative which was born out of the links now made and the new found awareness that teachers team-teaching would have to be supported by other initiatives including a language for team-talking. This latter point will be addressed in the concluding chapter.

4.6 Conclusion

This chapter has outlined how Social Capital Theory can be used as a powerful heuristic tool in understanding efforts to promote inclusive practices in our schools and classrooms. Inclusive practices such as team-teaching, ask our teachers to change their practice and the theoretical framework of Social Capital Theory with a focus on trust, reciprocal relationships and identity, helps to understand and explicate what that change asks and offers those involved. Social Capital Theory offers a theoretical frame for understanding the teacher-to-teachers aspects of team-teaching and how such action shapes what teachers do, who teachers are and how they interpret what they do.

The starting point of this study was a number of classrooms where teachers adopted team-teaching, but the end point was to look at systemic change and how team-teaching could become more embedded in post-primary schools. By starting with classrooms the study placed the teachers against a backdrop of school and national systems. In turn, the classroom practices and efforts to share them with others, bring the classroom, school and national systems into view. As Fullan and Crevola (2006) and Elmore (2002, 2004) advocate, all aspects of the system have to align with the goal of improving teaching and learning. Social Capital Theory offers a framework on which such alignment can be viewed at micro-level (classroom bonding), meso-level (intra- and inter-school bridging) and macro-level (national linkages with policymakers and others). It also offers opportunities to attend to the emotions, conflicts and benefits that are associated with the implementation and sustained development of innovations that are begun, or begun anew, in the area of teacher collaboration.

In framing the aspects of bonding between two teachers, it is clear that emerging concepts of compatibility, planning, parity, access to resources and to learning are similar to that of previous research. Contrary to the literature, compatibility is viewed as less about teachers having similar teaching styles and more about teachers having similar values in relation to their engagement with students. Planning time was also not an issue for three of the four dyads and this, as with parity issues, runs contrary to the extant literature of which only one (Austin, 2001) says that planning among teachers was not an issue. The contradictory position adopted by teachers in my study may be explained by teachers sharing some preparatory training in relation to team-teaching and by the fact that both teachers are qualified in the subject area. The latter point is a significant difference to the North American model of balkanised special education departments who are described as 'special needs educators' who work with 'general educators'. In Ireland, the vast majority of teachers, including those employed through the provision of additional teaching hours, are 'general educators'.

Grafting other frameworks with social capital, such as Levels of Use, allows the execution and progressive quality of new initiatives to be recognised across both educational timelines and the research study's timeframe. Of note is the fact that the configuration of team-teaching deployed did not result in foreclosing or engaging in particular methodologies, i.e. lead and support configurations used co-operative learning among students as much as more collaborative configurations such as classic team-teaching. However, over reliance on lead and support arrangements did bring pressure to bare on the team-taught arrangements

as one teacher typecast in a supporting role. The bonding of teacher dyads involved varied levels of pressure, some of which were positively associated with professional development and 'raised teachers' games', and other aspects that were negative and caused conflict and uncertainty for some. The latter outcomes included issues associated with shaping teachers' identities in collaborative classroom work. These conflicts and uncertainties led to insights that Social Capital Theory help to conceptualise and explain.

The concepts of bridging and linking tracked the movement outwards from the classroom and how such movement supported and sustained practice in the classroom. It highlighted the networks of reciprocal relationships that began to grow from engagement within and between schools, and the networks that saw those with more macro-roles engage with one another and with teachers to further develop the mutual goal of team-teaching becoming the norm rather than the exception in our educational system. It also highlights the fact that sharing local practices with national figures acts as a catalyst in nurturing relationships and building trust among those figures themselves, in a manner that may not have been achieved had their not been such a project undertaken and shared. Team-teaching is, in part explained by Social Capital Theory. Team-teaching creates and is sustained by social capital across the continuum of bonding, bridging and linking with others.

Mindful of Portes' (1998) caution that 'excessive extensions' of the concept of social capital may jeopardise its heuristic value I contend that, with a focus on the structure of professional relations and networks, combined with attention to

behavioural dispositions such as trust, pressure and reciprocity, Social Capital Theory can provide insight to not only why past actions occurred but insight into how future actions may succeed. These actions are interlinked across micro- meso- and macro-levels of unique, contingent and shared contexts.

Social Capital Theory helps to get at the underbelly of what is understood by and expected of teachers as they collaborate with others. However, it does not tell the whole story. While alert to the danger of social capital promoting exclusion or causing harm instead of good, Social Capital Theory does not capture all that team-teaching asks and offers. Bonding, bridging and linking, as identified in this study, and as expressed in the contextualisation of structures, relational pressure, relational trust, and access to resources and expertise, forms part of an ecological system of interactions. This system is based on interactions which are engaged in by interdependent actors, who draw strength from one another and are united by the common goal of improving the quality of learning experienced by students in our schools and classrooms. To fully understand the learning that team-teaching offers our students and teachers, requires an examination of not just the associated outcomes but a deeper analysis of the processes involved. To do so calls for an examination of how students and teachers are (re)positioned for learning. Such positions are the focus of the next chapter.

Chapter 5

CLASSROOMS, TEAM-TEACHING AND POSITIONING THEORY

5.1 Introduction

The success or otherwise of team-teaching will be determined not by the collaborative practices undertaken by teachers but by the learning achieved by students. In adopting a socio-cultural perspective, this chapter focuses upon the learning that is available to be learned by students through the positioning and repositioning of learners in team-teaching arrangements. The previous chapter focused on teachers' experiences and learning, including their emotions and perceptions, while engaged in team-teaching arrangements. Framed in terms of Social Capital Theory it centred on what collaboration among teachers meant, asked and offered within classes, between classes, between schools and within the wider educational community. This chapter, for the most part, returns the reader to the classroom. While student learning is the ultimate yardstick by which team-teaching is measured, sight will not be lost of what it is we mean by learning. Nor will sight be lost of how teachers are positioned, by interacting with team-teaching, to promote their students' and their own learning.

Given the focus on inclusive practices, it is worthwhile to clarify and distinguish between 'learning' and 'inclusive learning'. To illustrate this point I draw on the work of Fenstermacher and Richardson (2005). They argue that any effort to determine quality in teaching must encompass the worthiness of the activity (good teaching) as well as the attainment or realisation of intended outcomes (successful learning). They contend that being taught successfully does not guarantee that what and how they have been taught is morally defensible.

Determining what is effective practice and what is morally defensible practice is useful in the context of understanding inclusive learning. Learning can occur in a manner that is exclusive and indefensible for those with, as well as those without, special educational needs. Legislative practices and government policy continue to promote inclusive practices, but to paraphrase Fenstermacher and Richardson (2005), it is important to remain focused on the fact that learning successfully needs to be viewed in the context of what has been learned, where it has been learned, with whom has it been learned and, in the context of contributing to an inclusive society, how the learning will be applied. As summarised by Conway et al. (2009), Fernstermacher and Richardson's argument "questions a widely shared assumption underpinning contemporary educational policy: that the only good teaching is that which results in measurable learning" (p. 23).

In short this chapter highlights some aspects, of what is made available to be learned and how it is learned, in team-taught lessons. In determining the impact of team-teaching upon the key players (teachers and students), and in particular upon the students, it is useful to draw on (McDermott, 1996) view that learning 'acquires people'.

> It probably makes more sense to talk about how learning acquires people more that it makes sense to talk about how people acquire learning. Individually we may spend our time trying to learn, but this phenomenon pales before the fact that however hard we try we can only learn what is around us to be learned. (p. 277)

If you are in a streamed class, or withdrawn for small group or one-to-one support, the learning that is around you is different. For some that is the very reason to withdraw students, for others such a situation leaves lingering questions and doubts about the ethics and efficacy of such action. The dilemma facing

teachers and principals is to determine how best to use the limited resources available. This thesis does not adopt an either/or approach between team-teaching and withdrawal. To do so would shift the focus away form the learner and the learning. What my research does is highlight the practicalities and possibilities of team-teaching which will assist schools in making more informed decisions about what is best for their students and the place of team-teaching in their students' learning.

All seven schools that were involved in the initial phase of team-teaching were asked to document, in writing, the learning outcomes for students that were deemed achieved as a result of team-teaching. These teacher-based attributable outcomes were documented and shared with the researcher. Teachers surveyed in this research identified some key aspects of team-teaching that supported student learning. In particular they highlighted that they now had more time to engage in a range of activities that supported student learning including developing productive relationships with students at a whole-class and individual level.

Teachers identified a range of benefits that accrued for students from team-teaching arrangements. Of immediate value to student learning, as deemed by their teachers, was the enhanced opportunities for dialogue and feedback between teachers and their students. Teachers were also quick to recognise the significant increase in the number of students who would be sitting state examinations at a higher level than previously predicted. Similarly there was a notable improvement recorded by teachers in literacy and numeracy scores through pre-test and post-test analysis. Teachers spoke of students possessing

more positive attitudes towards themselves and their learning, with frequent reference to students having greater pride in their work. Student attendance at school increased while, in general, misbehaviour was reduced in most classes and non-existent in the team-teaching classes. English and Mathematics (team-taught subjects) were identified by students as being in their top three favourite subjects for that academic year. Progress in social and emotional development was also indicated with teachers commenting on students being more confident in themselves, helpful to others and generally happier in class than hitherto. The benefits to students identified as exceptionally able and gifted and to students on the fringes, but not in receipt of additional resources, were not lost on teachers who were able to personalise the learning for individuals and small groups of students within the class setting.

Such findings are very significant and merit being highlighted, but at this point it would be unwise and somewhat of an overreach to attribute these achievements solely to team-teaching. This study did not, could not, nor did it wish to create a control group from which to determine the causal influence of team-teaching arrangements upon student learning. For the purposes of clarity around the research undertaken it must be remembered that context-specific and other potentially influential factors cannot be ruled out, such as the use of withdrawal lessons in combination with team-teaching, as well as taking cognisance of the general quality of teaching and learning experienced in solo-taught classes. Furthermore, it is important to avoid the very common and very dubious practice, found in the literature review as noted in Chapter 2, of using long term assessment tools, such as improvements in grades or standardised scores, for

interventions which are studied over relatively short time frames, lasting as little as three weeks to, as in this study, one academic year.

To determine the learning dividend of team-teaching is not to ignore the findings, nor indeed the passionate and enthusiastic manner in which teachers conveyed these findings. Rather it is necessary to support such assertions by looking at more nuanced understandings to establish the impact of team-teaching upon the quality of student learning. In particular focus is given to the affordances offered by team-teaching to position and reposition teachers and students, in a manner that promotes teaching and learning in the classroom. In this regard Positioning Theory, as a conceptual tool, offers an opportunity to capture day-to-day and moment-to-moment interactions that help or hinder learning in classrooms by drawing attention to the multiple dynamic interactions that occur. These interactions attend to the interdependent affective, as well as cognitive domains, of both teachers and students. To determine how team-teaching helps or fails to support learning, use is made of a number of studies on effective teaching (Brophy, 1999; Pianta & Hamre, 2010; Gore, Griffith & Ladwig, 2001; Darling-Hammond, 2006). These studies assist in appraising team-teaching's influence or otherwise on student learning. My research data is also set against the backdrop of more recent studies on Irish post-primary classrooms as undertaken by Lyons et al. (2003), and the longitudinal study conducted by Smyth (ESRI-LS, 2004-2010). Lyons et al. (2003) focused on classroom observation relating to the teaching of Maths and to a lesser extent English, while the ESRI-LS study surveyed students' opinions and tracked their progression through school. These two post-primary studies combine to assist in determining what team-teaching can offer in the current context of Irish post-primary schools and classrooms.

The opening section of this chapter examines the repositioning of teachers in classrooms as a result of team-teaching and as a result of the alterations to the temporal, and to a lesser extent, spacial dimensions of classroom life. The second section of the chapter is devoted to how team-teaching positions and repositions students and its impact upon their learning and the learning processes, as reported by teachers, students and as observed by the researcher. The chapter concludes with an examination of what team-teaching has to offer in promoting inclusive practices and what may need to happen to ensure future optimal use is made of team-teaching in classrooms.

As outlined earlier, Positioning Theory affords opportunities to examine the moment-to-moment interactions in classrooms in a manner that goes beyond more rigid and fixed constructs such as roles. When learning is seen as social and situated, Positioning Theory helps to theorise team-teaching. It facilitates efforts to capture and examine inclusive learning practices by attending to the positions afforded to teachers and students by the constant configuration and reconfiguration taking place on multiple levels in classrooms. In capturing and understanding how positions for learning and teaching are provided, accepted or missed, Positioning Theory helps to better understand what team-teaching is and what team-teaching might be, for both students and teachers. Positioning Theory brings into sharp relief the impact of inclusive practices within any given classroom over any given period of time, in a manner that facilitates formative and dynamic assessment as well as more summative assessment and evaluation. I hope to return to this point later in this chapter and in the concluding chapter.

5.2 Teachers positioned and repositioned

In the previous chapter attention was given to the influence of teacher proximity upon their interaction with one another and their learning from one another as seen through the lens of social (learning) capital. One of the dominant perspectives shared by teachers involved in the study is the alteration to time, and to a lesser extent space, within the classroom and how such alterations positioned and repositioned teachers continuously.

5.3 Temporal and spatial alterations

The structure of team-teaching asks teacher dyads to work together in the same classroom, sharing equal responsibility for all aspects of the work. A consequence of such action was the perceived alteration in the rhythm of time within such classroom settings versus the more traditional solo-taught lesson. Teachers speak of now being placed in positions where they have more time to think and act than they would in solo-taught lessons. What follows are examples which seek to capture this commentary. The daily classroom routines and interruptions are not removed by team-teaching but are diffused by team-teaching.

> Time is the big one. Time and flow are the two big things. Time is far better used inside in the team teaching one because there are far fewer interruptions and there are a lot of nitty gritty bits being done for them anyway and on top of that then the flow of the class. Your concentration isn't broken by x, y and z, in the classroom. Somebody else is watching that or maybe it's me watching that, depending on whose more in control on the day…the ball is always in play. (Joe, Dyad B, Interview 1)

Here we witness a teacher capturing the importance of 'time' and how alterations in teaching arrangements also influence 'flow'. Acting together within classrooms would appear to alter the physical space within the classroom as well as the rhythm of behaviour and the use of time (Mathiot & Calrock, 1982). The

above quote states ‘time is better used inside in team-teaching’ a view which resonates with Jackson’s (1977) observation that “the real key is to make better use of the time we have” (p. 38). So how exactly is time, so often cited by teachers as preventing desired action (Hargreaves, 1994), better used in team-taught lessons?

5.3.1 Time to see and act in the classroom

Many authors (Jackson, 1990; Weistheimer, 1998; Ben-Peretz & Bromme, 1990; Hargreaves, 1994; Hargreaves & Shirley, 2009) bring attention to the spatial and temporal characteristics of school life and how they impact upon both teacher and student. A key feature of team-teaching is that it facilitates a reconfiguration of the “physical, temporal and social limits of the classroom” (Jackson 1990, p. 13). Physical and social alterations that occur in team-teaching classes appear to change the temporal limits with a push for stability, consistency and continuity. Sharing the space with another colleague results in teachers being ‘freed up’ to engage in a range of actions which promote their own learning and releases them to engage with students.

> If you were teaching that class as a mainstream (on your own) you’d lose an awful lot of the insight. Nelly there now even you know Jonathon, you’d lose so much you just wouldn’t have the time. You would not have the time. (Rachel, Dyad A, Interview 1)

In this case the teacher is positioned to firstly have a better understanding of the student by being engaged more with Nelly on a regular basis and more importantly positions the teacher to act upon this insight. It is in acting upon the insight that learning is maximised (Hegarty, 2007). In this regard the same teacher later commented that team-teaching reduced her stress levels, not just from a discipline perspective, but it reduced the previously encountered

stress/frustration by allowing her 'to get' to students and assist individual student's learning during the course of the lesson. This point was reinforced by the frequency of one-to-one attention during lessons, as observed during my field-observations of this and other teachers' practice.

Teachers speak of 'going down to students' or 'moving in' to where students are located. While the temporal dimension is the dominant theme, the spatial was very clear from the twenty classroom observations. Teachers' mobility and circulation was a feature of team-teaching as they monitored and engaged with their students and with their learning. As will be seen later in this chapter, such mobility may also have influenced students' interactions and movements in the team-taught classroom.

Teachers were also positioned as providers of insight to each other, insight which may be gleaned from the team-taught lesson or elsewhere. As one teacher stated, it speeds up what you know and allows you to respond to what you now know.

> It would have been my own, my own planning as regards how I'd get through to different individuals but now I can think out loud, run it by an individual, bounce ideas about what would be the best way to develop him or her. Things would be pointed out to me that I mightn't have been alerted to for a lot longer by another professional that's looking at a situation. So all that, I suppose, your getting a far greater in-depth understanding of the individual and I suppose *more importantly you are able to respond to it because you have the time.* (Hilda, Dyad C, Interview 2)

Similar to earlier comments regarding accessing students, another teacher commented on the new opportunities that teachers have to engage with students, who otherwise may have been left on the margins or 'fringes' of the lesson. This point attends to the oft remarked 'extra pair of eyes' brought to the lesson.

During the course of observing team-taught lessons it was evident that the researcher in the classroom 'while at the edge of the clearing' (Jackson 1990) was not always the only one on the fringes of the classroom and the lesson. The two teacher lesson did much to bring students physically and emotionally in from the margins so as to promote student engagement and participation in a manner that respected them as individuals.

> Many of us understand the problem but very, very often you haven't got the time or the energy to respond. I suppose in the traditional setting you'll respond to your three or four crisis cases, those that need more help and more attention, but *you're leaving out then the thirteen or fourteen that are on the fringe because you just simply haven't got the time to get to them.* You wouldn't have the insight into their situations that you can have now with team-teaching. The eleven that are inside in that class, you can half imagine, I know fairly inside out now and upside down. (Joe, Dyad C, Interview 2)

This teacher also makes reference to the alteration in time providing opportunities for teachers to not only now act, but also to have more energy to act. It's as if the energy-sapping routines of classroom life are reduced and team-taught lessons generate rather than burn energy. This point is also raised by teachers in the previous chapter as they reported that they left team-taught lessons more energised. Lortie's (1975) 'psychic nourishment' may now include 'a feel good factor' that is generated by teachers being able to engage more with their students and with each other as professionals. The reduction in the 'fuel-burning' distractions of classroom life and how teacher dyads support a more purposeful learning environment are referenced by another teacher.

> Well you see if you are one teacher sometimes you are teaching to the group and individuals all kind of get into the one mix but with team-teaching you *are able to concentrate more on them as individuals* so I would imagine as one teacher there I wouldn't have had time to involve him if it wasn't coming from himself. Whereas now I can encourage or Joe can encourage*, you can see them, it's like a lens more closely on a camera, and you can zoom in or zoom out.* (Hilda, Dyad C Interview 2)

The ability to personalise learning in a group setting by 'zooming in and zooming out' is significant and highlights how individualised learning does not have to always occur in one-to-one settings. Reaching the students was also achieved by having a better understanding of the zone between what the teacher wished to teach and how the students were learning. In being able to 'go down' to the students, this same teacher states:

> *You can get in touch a lot more with their own work rather than your work.* Because I could have a beautiful thing planned out but it might never…, my job is to try and deliver it and get them to understand what I'm trying to do so I can see better that idea about teaching. That it is filtering down to where they're at. (Hilda, Dyad B, Interview 1)

A similar observation by another teacher stated how team-teaching caused a shift in practice by providing individual time to engage with students in a manner that would not be possible for one teacher to accomplish.

> It is a shift, it is, and I think maybe either myself or my colleague could have done that on our own with that particular group. But the one advantage is that we do have time. Even yesterday now they were drawing pie charts and some of them were having difficulties in putting the angles on the pie charts. So we could actually take half of the class each and go down in this room, I was down one side, my colleague was down the other side and we're able to correct their homework using the protractors and so on. So they have that individual time though it is a small group at the same time. (Carrie, Dyad F, Interview 1)

The expansion in time and reduction in physical space gave the teacher an opportunity to check for understanding and to respond where it was seen that the lesson plan and pace was not appropriate and required a differentiated approach to some or all of the students' learning at that particular moment.

Observation of a more natural type allowed for teachers who were team-teaching to 'step back' and watch what is taking place and the insight it gives to teachers on student actions is captured below. "The student is listening to the teacher and

focusing on the teacher as are the other students as well but I can distance myself from the teacher and look at the student and just see".

> I'm watching. I'm watching how students react to different things inside in class. *And you're free to see*, like, are they even taking down the homework. What energises them? What interests them? When do the students switch off and how can we switch them back on again. The enthusiasm of students, I can gauge that. And that's only a little five minute exercise every so often but it's very handy. To get that insight into students is good. (Joe, Dyad B, Interview 1)

5.4 Instructional time and time for instruction

The positions which the alteration of time and space offer teachers are significant. Of particular significance is the belief among teachers that they now have *more* time to think, act and reflect in their classroom. As Hargreaves and Shirley (2009) highlight, this is an unusual occurrence.

> Time has always been a tyranny for public school teachers, who often feel they are racing against the clock (Adelman, Walking-Eagle, & Hargreaves, 1997) with insufficient time to plan, prepare, reflect deeply or think ahead (Campbell, 1985). (p. 2508)

Drawing on the seminal work of Lortie (1975) and that of Jackson (1968), these authors contend that schools are constrained by a triad of conservatism, individualism and presentism. The latter born out of the endemic immediacy of classroom and school life which positions teachers to focus on the immediate, both within and outside the classroom, which forecloses a range of teacher actions "including long-term planning to develop cultures of inquiry and instructional modification that might enhance the quality of learning for all children (p. 2508)". Could it be that team-teaching, offers an alternative to such a scenario? If so, efforts to improve inclusive learning to 'enhance the quality of learning for all children' will ultimately be judged by what happens within classrooms, and so instructional time and its use merit closer analysis.

Berliner's (1990) description of instructional time assists in examining how positions in team-teaching are influenced by alterations to the rhythm of the lesson. He contends that instructional time is best seen as a superordinate concept which encompasses 'allocated time', 'engaged time', 'time-on-task', 'academic learning time', 'transition time', 'waiting time' and of interest 'aptitude', 'perseverance' and 'pace'. Some of these aspects and their pertinence to team-teaching are discussed below.

5.4.1 Allocated time

Allocated time in the context of team-teaching centres on the use of additional teaching hours for identified needs, in the collective setting of the classroom, and how it positions teachers and students. Schools can gain cumulative benefits to allocated time where, in the case of two students with an allocation, the team-teaching arrangement may result in 'spare capacity' for additional instructional time. This also points to the ethics of team-teaching and the importance of establishing who it is benefiting when allocating time. Team-teaching also offers opportunities to address the needs of students who are not deemed 'lucky enough to receive allocated time' and so places the teacher in a better position to help those not formally identified as in need, but certainly identified by their teachers as being in need.

Models of support such as withdrawal from the mainstream lesson do not take account of the time required for teachers to meet and discuss the progress of the student(s) relative to that of the mainstream group. As such, team-teaching makes use of the time allocated and also reduces the necessity for teachers to find

time in order to know what each is doing in their separate locations. As one teacher indicated 'you find that you now have time to talk about not only a shared experience but also the student(s) involved in that experience' (Hilda, Dyad C, Interview 2).

Another important dimension to time is that the students recognize that the absence of one teacher does not result in a loss of allocated time as the lesson still proceeds. This point will be raised again when examining how team-teaching arrangements can position students.

5.4.2 Engaged time

As a subset of allocated time, engaged time focuses on the time that a learner appears to be paying attention. Teachers are positioned with team-teaching to move about the class, to observe and to determine more freely if students are attentive. Likewise, time-on-task is about engagement in particular kinds of tasks, which are more easily monitored and responded to when teachers are 'freed up' by collaborating with one another in the classroom. If students are off-task, because of unintentional misunderstandings or intentional poor behaviour, the teacher can intervene. Similarly, when there is evidence of significant misunderstandings teachers communicate to one another that it may be wise to consider a different approach.

5.4.3 Transition time

One of the big gains in team-teaching is reported to be the reduction in the amount of time lost to transition time; the time when the routine 'nitty gritty'

activities of classrooms take place. These may include activities such as students entering the classroom, providing notes or making requests, putting away jackets, opening up textbooks, as well as transitions within a lesson that are teacher led as well as those outside of teacher control such as students arriving late. In all of these cases the time lost is less when two teachers are in the room. For one teacher to be somewhere else may result in additional time being lost 'in transit' as those students withdrawn from class make their way to the other room. It was also witnessed in team-taught lessons that teachers were able to greet or take leave of students in a manner that gave that nano-second to say a word that promoted students sense of being valued and respected. This could occur in the form of a word of praise for work done, or a sensitive comment on the student's absence that may be as powerful as saying the student was missed by the teachers. In attending to the 'nitty gritty' of classroom life the teachers found they had more time on their hands to be the teacher they wanted to be.

5.4.4 Waiting time and wait time

Waiting time is associated with Jackson's (1968) 'waiting in traffic' where students have to wait in line or with their hand up until the teacher is in a position to address them. Such delays are not totally removed by team-teaching but there is a better flow to engaging with students when two teachers work the room and engage in classic team-teaching. Configurations such as 'lead and support' or 'station teaching' can be less successful in this regard as students may not always access the teacher as quickly as they may wish. However, these models of team-teaching have other advantages, not least the model of station teaching and variations of, where discrete and differentiated learning may take place. This

model was noticeably absent in my research study, though used regularly in Irish primary schools (Keane, 2006; Riney, 2004).

Teachers report being under less stress in relation to classroom management and this offers opportunities for teacher decision-making and judgment to be more carefully considered and actions less rushed, including providing appropriate time for students to respond to teachers' requests. Wait time is an important component of learning and team-teaching can support this practice by promoting a classroom atmosphere that is more relaxed and one which encourages student composure.

Before concluding this aspect of time it should be stated that the trade off with other modes of delivery that create individual and small group withdrawal may result in waiting time being increased by being in a larger class than if withdrawn. However, the quality and amount of learning taking place in the team-taught lesson should be measured against the slower pace of the more traditional withdrawal model. Students in team-taught lessons are also exposed to a greater range of questions and responses which can assist learning.

5.4.5 Aptitude

Aptitude for learning is defined as "the amount of time that a student needs, under optimal instructional conditions, to reach some criterion of learning" (Berliner, 1990, p.6). Team-teaching asks if the ' amount of time needed' to learn can be reduced when two teachers are in the classroom, as opposed to the more common view that the student can 'catch up' with learning by being withdrawn

from class. Teachers' commentary on their surprise at their students progress in team-taught environments points in the direction that aptitude can be positively influenced by team-taught arrangements as can teachers perceptions of students having fixed aptitudes. Teachers speak of students, producing work of a higher quality than previously expected and of students sitting state examinations at a higher level than previously thought possible. As outlined by Dweck (2007) there appears to be a shift among teachers from a fixed mindset to a growth mindset.

5.4.6 Perseverance

Within the time metric, perseverance entails the amount of time a student is willing to spend on a learning task, be that time spent in the classroom or elsewhere. Team-teaching lessons, irrespective of configuration, usually began with an examination of the homework from the previous night. Students reported that assignments for their team-taught lessons were always complete as they knew that they were going to be asked. As witnessed by my observations of lessons, time to engage in checking and discussing homework is facilitated by team-teaching, which no doubt influences students efforts away from class to engage and persevere with the assigned tasks. Within classrooms, perseverance replaces frustration as the teachers monitor progress by students and can intervene to support, encourage and guide students where necessary.

Linked to perseverance was the notion of pride. Teachers reported that they engaged more in dialogue with students regarding assignments and their students' learning in general. Such dialogue and time for dialogue positions teachers to engage in more detail with students resulting in students taking

greater time and pride in their work.

5.4.7 Pace

Pace is described as the amount of content covered in a set period of time. Teachers unanimously spoke of the significant increase in the amount of content covered. Some spoke of tearing up their yearly scheme of work early in the year as the improved classroom atmosphere and ethic of work had 'made a mockery' of their planned work. Success in 'covering the course', whatever about the quality of learning, is a common feature of post-primary schools where high-stake state examinations loom on the horizon at the beginning of each school year. The improved pace of the work covered reduces the associated stress for teachers who are positioned to respond to students in a more relaxed manner than otherwise is the case. This is an important point as the removal from the teacher of the anxiety associated with covering the course opens up opportunities for teachers to determine what will happen in the lesson and offers greater choice in deciding how it might happen.

It is clear that time is expanded, or at least has the potential, to be expanded in team-taught lessons. We have seen how teachers have availed of this 'added time' to engage with students and their work. However, it is also important to see how teachers used such time to instruct their students. The next section looks at the instructional practices undertaken and reported to be undertaken by teachers. Time facilitates many aspects of what Pianta and Hamre (2010) describe as the emotional and classroom management domains of interaction. But what about the opportunities to enact instructional practices?

Positioned by working with one another in the classroom, teachers spoke of being able to do things in class that they would not, could not or had forgotten to do on their own. The didactic lecture mode at the top of the class by the single teacher was not removed entirely, nor should it be, by the arrival of the second teacher. As outlined in the previous chapter, a less experienced teacher gained insight into the value to learning of the measured use of 'chalk and talk'. However, the over reliance upon the model of 'one lead and one support' in the team-teaching by Cathal and Peadar proved counter-productive. Their experiences often left them feeling that less rather than more took place in their lesson and frustration was a regularly summoned as a result of opportunities lost. Team-teaching does not carry an automatic guarantee of better teaching and learning.

The instructional practices adopted by teachers influenced the positions that they and their students were afforded. Furthermore the frequency and benefit of these actions was also influenced by the speed at which teachers came to be comfortable with each other in the class, the manner in which they planned their lessons and the repertoire of team-teaching configurations they felt comfortable in attempting to adopt. The next section examines how teachers involved in team-teaching were able to engage in effective teaching practices which positioned and repositioned students as learners.

5.5 Positioned and positioning: Classroom discourse patterns

A significant question being asked in this research study is the impact upon learning when students remain in classrooms as opposed to being withdrawn

from classrooms. This study asks, what other positions for learning are put on offer in classrooms when the physical positioning of the hitherto withdrawn student and receiving teacher are altered and they are now included in the class? Finding credible answers to this question, over a given timeframe of one academic year, is important as is formulating an appropriate theoretical framework and a theoretical tool for implementing, evaluating and progressing team-teaching. This is especially so, given there is no guarantee that a student, no longer *withdrawn for learning* from a classroom, will not be *withdrawn from learning* within a classroom, even in a classroom with two teachers.

In examining the impact of team-teaching upon student learning Brophy's (1999) syntheses of the generic aspects of effective teaching are useful in foregrounding good teaching practices and in determining team-teaching as a mode of enacting such practices. Other work that has proven useful in this regard includes Pianta and Hamre (2010) who identify 'domains', 'dimensions' and 'indicators' that provide a framework for examining classroom interactions while earlier work by Gore et al. (2001) speak of productive pedagogies that focus on 'intellectual quality', 'supportive classroom environment' and 'recognition of difference'. Both of these more recent studies combine with Brophy (1999) to bring rigour to the appraisal of team-teaching.

These studies also assist in focusing on the social and relational understandings of learning where participation as a metaphor of learning, replaces the previously dominant acquisition metaphor. As outlined in a recent cross-national study on

learning to teach (Conway et al., 2009, p. 44) commissioned by the Teaching Council of Ireland:

> Participation as a new metaphor for learning draws attention to the different ways in which teachers provide students with access to knowledge through their interactive and discussion-orientated teaching. This involves more opportunities for pair and group work (Cohen, 1994), high quality feedback to promote learning (Black & Wiliam, 1998; Gardner, 2006) and a focus on the development of learning communities in classrooms, rather than on the psychology of learners individual differences (Prawat, 1992; Guttierez & Rogoff, 2003).

With regard to changes in participation or new ways of being in the team-taught classroom a number of patterns emerge across the classrooms researched. As referenced earlier team-teaching asks the teacher to enter the room, and the student(s) who normally left to meet this teacher, now remain. Historically 'extra help' is associated with external help away from the classroom. This alteration to the 'grammar' of special educational needs provision has the potential to place students and their teachers in new positions of learning and for learning. These positions are often contingent and possess the potential to influence the quality of learning experienced by all students.

In synthesising over forty years of research Brophy's work is chosen as it adopts an eclectic and generic view of effective teaching that aligns with the view that inclusive practices involve effective teaching and that inclusive learning involves many outcomes. His synthesis of research (Table 16, p. 248) is chosen as it introduces and sets out in practical terms the multiplicity, speed and potential overlap of interactions that each principle can have with one another in any given setting at any given time. Brophy's mutually supportive principles adopt a broader interpretation of learning than more traditional process-product models of effective teaching as emerged in the 1960s (Conway et al., 2009; Seidel &

Shavelson, 2007). While still not addressing what may prevent or enable teachers to implement the practices associated with his twelve principles, nor regularly identifying neither age-group or class group, nor types of subjects or students, Brophy's work is still very useful in locating my research evidence from Irish schools and classrooms. Of note, any claims in relation to the value of team-teaching in promoting inclusive learning can be set against such findings, in a manner that recognises both national and international contexts.

The team-teaching witnessed over the course of this study is appraised by drawing on Brophy's (1999) principles of effective teaching which are interwoven with the national context as captured by the work of Lyons et al. (2003) and Smyth et al. (ESRI-LS, 2004-2010). In adopting such a strategy the potential for team-teaching to bridge some of the gaps between the rhetoric and the realisation of effective teaching and classroom practices.

Table 16. Brophy's principles of effective teaching (1999)

Principles	In the classroom
1. A supportive classroom climate	Atmosphere, learning community
2. Opportunity to learn	Time, Curriculum-related activities, Classroom management and engagement, communicate purposefulness
3. Curricular alignment	Knowledge, skills, attitudes, values and dispositions Valued learning, meaningful learning, life application
4. Establishing learning orientations	Sharing intentions/safety/motivation
5. Coherent content	Pace, Authenticity, Enthusiasm, Checking for understanding
6. Thoughtful discourse	Questioning that engage sustained discourse around powerful ideas
7. Practice and application activities (including feedback)	Practice but not in isolation from context, timely feedback, peer feedback
8. Scaffolding students' task engagement	Productive engagement, ZPD, modelling-coaching-fading
9. Strategy teaching	Modelling learning strategies Cognitive modelling /apprenticeship of the covert thought processes Learning strategies
10. Co-operative learning	Skill-set pre-taught, accountability, monitoring
11. Goal-orientated assessment	Formal and informal, summative and formative. assessment components are aligned with the curriculum's goals, and do they are integrated with its content, instructional methods
12. Achievement expectations	Consensus among teachers All students can learn Student and Teacher accountability Teacher forms and projects expectations (floors of minimal expectations on homework) Struggling students will be assisted in meeting expectations

As stated at the outset, this research study sought to capture the perspectives and actions of teachers and students who occupy team-taught classrooms. This section focuses on the students and how team-teaching supported or impeded their learning. A substantial number of the 42 students who returned a questionnaire (22 second years from a class of 25 in Ash School, with 8 first years from a class of 12, and 12 fourth years from a class of 16 from Oak School) spoke very positively regarding the promotion of effective learning through team-teaching. Such positive findings with attending reservations were echoed in the subsequent discussions with the students at the end of some of the lessons observed and in the focus-group interviews.

Compared to solo-taught classes students spoke of being able to ask more questions of their teachers because of team-teaching (83%) with a similar figure registered for opportunities to talk more with their teachers (86%). When asked if team-teaching helped them to participate more in lessons the positive response was at a little over 90%. Students in my study echoed the views of those identified in the ESRI-LS report where the interaction between the interdependent affective and cognitive domains helped them to learn; 'the teacher explains things clearly' and 'the relationship between teachers and students within the classroom environment is also crucial in enhancing student learning' (p. 194). Relationships among students were seen as important by the ESRI-LS, and reiterated Smyth's (1999) earlier conclusion of the "strong relationship between the quality of teacher-pupil interaction and academic and personal outcomes among pupils" (p. 223). This point is supported by my research and by that of others including Mulford (2007) and the OECD (2004).

The next section of this chapter will show in more detail how these and other findings were expressed by students and witnessed in the lessons observed. With team-teaching students also placed significant value on fun and banter in a manner similar to their team-teaching teachers and to the students in the ESRI-LS study. Of note is the placement by all students of English and Mathematics, the two team-taught subjects, as their favourite subjects. This finding is very much in contradiction with the subjects identified by their peers in other studies (ESRI-LS), and is significant in light of the current attention being devoted to the promotion of literacy and numeracy skills.

The criticism levelled at team-teaching by students, were minor in number and impact, but merit close attention in progressing team-teaching in the future. Of the 42 students surveyed less than 2% declared that they did not like team-teaching and 100% found that they learned more easily and more quickly because of two teachers in the room. Students' negative commentary focused mainly on the confusion that can occur when two teachers are talking or when learners become confused by two different approaches.

In subsequent discussions with students it emerged that confusion emerged in classic team-teaching arrangements where some students are confused by the rate of interchange among teachers. This has implications particularly for students who may be hearing impaired, visually impaired, and deaf or blind and for students who may need time to process information. Confusion for others was based on teachers providing different approaches. This confusion may be less about team-teaching and more about students' usual experiences with learning,

where only one right method is proffered. This point will be discussed later in relation to team-teaching and mathematics. Close proximity when classroom space is limited will also need to be taken into account where students, for cultural or other reasons are not comfortable with a teacher being 'too near'.

Confusion for many students was seen as the space between teaching and learning. This space became more comfortable once supports were in place to assist with progressing away from confusion and towards learning. More spurious student commentary on the negative aspects of team-teaching related to the fact that 'you always have to have your homework done' and 'you can't get away with anything in class'. Of note was the fact that students counterbalanced the later point by stating, as their teachers did, that the presence of two teachers created a safer learning environment. Lessons supported students as well as teachers to contribute and be themselves. In a similar fashion, the fact that the lesson always went ahead, even if one teacher was absent, caused dismay for some while for others it meant that the material was covered. A slightly different advantage related by one student, suggested that knowing that the lesson was going to be taken by at least one teacher, brought a reassurance and predictability to each school day. It was clear that such consistency and predictability was valued by the young man who spoke from the heart.

In this section I have taken some first steps to capture the practice and potential of team-teaching for dynamic student learning and to respond to the clarion call from more recent literature that seeks more nuanced and multiple measures to

determine the impact such arrangements have on students as learners and as human beings.

As previously discussed, team-teaching positions and repositions teachers to have more time in which to teach and observe, and more freedom to move into spaces where productive dialogue, in private and public, takes place between teachers and students. Viewed from a socio-cultural perspective, team-teaching can also position and reposition students to engage in productive dialogue and activities with one another and with their teachers. What follows are a number of vignettes and examples, drawn from classroom observations and interviews, which indicate the potential value of team-teaching as set against understandings associated with effective teaching and set against the contextual backdrop of more recent research findings regarding the experiences of Irish post-primary students (Lyons et al., 2003; ESRI-LS 2004-2010). I propose that team-teaching can facilitate effective teaching and provide a possible counter-narrative to some of the negative findings from Lyons et al. and from the longitudinal study conducted by the ESRI-LS.

The research on team-teaching is overly focused upon teachers' engagement with team-teaching and the manner in which teachers maximise or under-utilise each others presence. When attention is given to the outcomes for students invariably the gaze of research is focused more on summative rather than dynamic measures of progress. As a result, what team-teaching allows students to do and what team-teaching allows students to be in their lessons is not always understood, which in turn may account for the practice being under-valued and under-

theorised. A shift in focus to include an examination of the dynamic, moment-to-moment learning opportunities that team-teaching can offer to students, merits closer attention. To support this shift in focus, reference is made to Brophy's 12 principles of effective teaching and in particular those aspects associated with:

- co-operative practices
- questioning
- feedback
- classroom dialogue (opinions)
- community/team

Other principles framed by Brophy including 'Opportunity to learn' and 'Curricular alignment' are favourably positioned by team-teaching arrangements which, as discussed previously, facilitate maximum use of the learning time and avoid undue fragmentation in delivery of the curriculum. However, for the purposes of this study, the focus of attention is on specific aspects of classroom practices, which are significantly supported by team-teaching.

While each of the five aspects of effective teaching, listed above, is discussed individually, they need to be seen as co-existing, interdependent and not mutually exclusive. As Brophy (1999), highlights:

> The principles are meant to be understood as mutually supportive components of a coherent approach to teaching in which the teacher's plans and expectations, the classroom learning environment and management system, the curriculum content and instructional materials and the learning activities and assessment methods are aligned as means of helping students attain intended outcomes. (p. 33)

In invoking the principles of effective teaching, as set against the backdrop of Irish post-primary classrooms, the concluding section of this chapter will address some aspects of effective teaching that were less dominant in the lessons observed and in the conversations recorded.

5.6 Co-operative practices

Brophy's work pays particular attention to the creation of a 'supportive classroom environment' (principle no. 1) and later speaks of the benefits of 'co-operative learning' (principle no. 10) where, under teacher direction, students work in pairs or small groups to construct understandings or help one another master skills. What follows in this section are two examples, from one team-teaching dyad, of contingent events that positioned and repositioned students in a team-taught lesson. The first example is recalled by two teachers in an interview with the researcher. The second example describes interactions witnessed by the researcher and discussed later with both teachers and with one of the students involved. Both highlight the value of team-teaching in creating supportive learning environments that allow for and legitimise co-operative learning to be student-led as well as teacher-led.

In the first example the contingent event involves one of the teachers asking one student to help another. The setting for this encounter is a second year co-educational class of fifteen year olds, studying mathematics. It's February and the teachers have been engaging in team-teaching on a daily basis since September. The assisted performance (Tharp & Gallimore, 1988) that is team-teaching is reflected in the assisted performance that is team-learning as captured in this vignette. Denis' identity in the class has 'thickened' from that of 'needy' and 'poor performer' to that of 'successful student of Mathematics' and 'helper'. His mathematics teachers report that he benefits from team-teaching, particularly the added attention he receives during class and the opportunities to engage in brief conversations with the teachers at the end of the lesson. Ritchie is described

as a quiet student who has difficulties with literacy and numeracy. Framing questions or responding to teacher-led questions is difficult for Ritchie, especially when done in a public manner within the lesson. His progress in team-teaching lessons is not as obvious as that of Denis' but teachers speak of Ritchie as a student who is growing in confidence.

5.6.1 Vignette 1: Rachel and Ned distribute cognition

With this dyad, teaching was reported, and witnessed by the researcher, to be mainly in the mode of classic team-teaching where each teacher shared time and space equally. Students in these lessons saw teachers alternate speakers rapidly and fluently in a manner that set these teachers at the level of refined users of team-teaching. Students witnessed their teachers help them and their peers in a manner that was often publicly visible and audible across the classroom or on other occasions more private and less audible with individuals or small groups of individuals. Teachers (Rachel and Ned, Dyad A, Interview 3) actions supported the promotion of the class as a learning community.

Rachel:	Ritchie got all his homework wrong on Monday. And Denis who was sitting beside him got all his homework right. And I said would Ritchie sit there beside Denis and Denis try and explain to Ritchie where he is going wrong. When I was walking down through the class I heard Denis saying, he made up an example in his head, and said you try it now and see if you can get it right.
Ned:	Yeah that was brilliant on Monday, yeah.
Rachel:	He had no problem then. He moved over back to his own spot.
Ned:	They learn from their peers a lot quicker then they do from us. There's less of a barrier there for them.

In this contingent event the teacher initiated the learning moment by asking Denis to help Ritchie. Of note is that Denis' positioning as helper and later

teacher, is contingent upon Ritchie accepting Denis' help. The classic team-teaching mode adopted by their teachers assisted in creating the atmosphere which encouraged students' helping one another and being helped. Teachers regularly moved about the classroom, monitoring or assisting students. Dialogue with students was often initiated by students who caught their teachers' attention either by raising their hand or by waiting for the teacher to be within range to register a signal for assistance.

In the example above the act of cooperation was instigated by the teacher and the learning is sustained by Denis when he framed other questions for his classmate to try. Positioned by the trust of both his teachers and of Ritchie, Denis is allowed to be a teacher and a helper. Ritchie in turn is positioned as a recipient of differentiated help while the teachers, in distributing teaching and learning, work with other students in the class. The benefits of this learning opportunity are captured by the teachers who speak of peer-explanation being useful if students continue to have difficulties after the teacher has made a number of efforts to explain. Furthermore, teachers note that the student providing the assistance is also learning from witnessing the potential pitfalls in relation to the mathematical task at hand.

5.6.2 Vignette 2: Legitimising an ethic of help

In the second example associated with cooperative learning the teachers did not formally instigate the cooperative act and in fact it had begun without them realising it. In this example I observed the contingent event involving two female students who have been absent and a male student who takes the initiative to

intervene. While the teachers individually worked with different groups within the class the student spotted that his classmates were waiting 'in traffic' (Jackson, 1990). Unbeknownst to both teachers, and without permission, the male student came to the assistance of his classmates and worked with them for approximately four minutes. Upon completion of the intervention he then returned to his seat. Later, when asked by the researcher, the student said he assisted because he knew the classmates had been absent and needed help. When the teachers were asked, Ned commented that they had seen the student move from his seat but let it go because they guessed the intention behind the action. A more mutually trusting relationship between teachers and students was often commented upon and this influenced students' engagement, participation and ultimately their achievement.

Rachel:	Like there was one day now when Jonathon got up, remember we were up in D06 or whatever, and Jonathon got up and he walked over, he got up out of his seat and walked over to Margaret, one of the traveller girls, and he was over helping her because she said I can't do it, what am I doing wrong?
Ned:	Yeah, he did and he didn't get permission for that.
Rachel:	No he just got up and walked over and it was fine by us.
Researcher:	And if you had been on your own ?
Rachel:	Sit down, what are you doing? You would feel like ok if he gets up well…if he gets up it is out of control.

The ESRI-LS (2004-2007) longitudinal study references relationships in classrooms as the most dominant feature of classroom life that influences student learning in Irish post-primary schools. From the two examples cited above where students' actions and their positioning as 'helper' or 'teacher' are legitimised, emerge student positioning that is associated with concepts such as 'trust', 'reciprocal altruism', 'proximity' and 'normative values and practices'. These concepts are at the very heart of Social Capital Theory. To return to Brophy's

principles, the 'supportive classroom environment' is co-created by teachers and students who in turn sense that the manner in which teachers engage in team-teaching legitimises and allows them to 'co-operate' and behave in similarly supportive ways. Joint-teacher actions that assist with student achievement are generated and are supported by the classroom participants where learning is the dividend from the social capital belonging to the learning community that is the class. Other learning dividends that emerged in team-taught lessons include the learning associated with engaged dialogue through questioning.

5.7 Classroom talk: Questions and conversations reconfigured

One of the central features of teaching and learning is the questions asked during class time and the responses that follow. Brophy references questioning across a number of principles including 'students being taught to ask questions without fear of embarrassment' (p. 9), and what he describes as 'thoughtful discourse', where "questions are planned to engage students in sustained discourse structured around powerful ideas" (p. 19). Developing classroom talk around questioning is a key feature of learning, and of learning how to learn, but the evidence from Irish classrooms is less than encouraging. In the ESRI-LS study it was disclosed that 20% of teachers do not ask students questions, 15% reported that their students do not ask questions in class, while only 13% said that they regularly question their students in most/every class (ESRI-LS, 2004, p. 122). Similarly worrying findings are found in Lyons et al.'s (2003) study of Mathematic lessons. In their study overall teacher initiated interactions accounted for 96% of all interactions that took place in the twenty lessons they observed and by contrast student initiated interactions accounted for just less than 4% of

all interactions. Of note is the fact that the student-led interactions refer to student-teacher interactions with no record being made of student-to-student initiated interaction as found in team-taught lessons and referenced in the previous section.

5.7.1 Vignette 3: You get help faster

As a counter narrative to previous research findings, in relation to student-teacher questioning, team-teaching would appear to provide students with opportunities to ask questions in ways that are more difficult to achieve in solo-taught lessons. Of note is the distinction that students make between the private and the public act of questioning. In team-taught lessons students availed of teacher mobility and proximity to position themselves to avail of opportunities to ask questions in a more private manner.

Such private conversations in turn informed the teacher as to the learning being achieved or not being achieved. In so doing teachers were able to gauge progress and determine whether material needed to be revisited or supplemented. The quality of the teachers' relationships with one another determined how such was to be achieved. In more open partnerships that employed classic team-teaching configurations one teacher would openly consult with the whole-class, or with the teacher in front of the class. In less open relationships less open conversations took place or no conversation took place. The less open conversation saw the teachers consult in whisper during the lesson or in private at the end of the lesson. This lead-support model does not appear to lend itself to promoting open dialogue in the manner that classic team-teaching has to offer. Where there was

an over-reliance on the lead-support model the opportunities to use individual students' questions to inform teaching were not as easily achieved as compared to configurations that promoted parity among teachers and open dialogue across the classroom.

The value placed on 'private time' where teachers are consulted by individual students as the lesson progressed extended beyond receiving instruction, guidance or clarification. For one student it was 'nice to know the help is available even if you don't use it'. Another student extended this point to reference the importance of asking a question while not disturbing the lesson;

> My favourite thing is knowing, knowing that when you are stuck that there is one of the teachers there to help you….you get help faster and the class isn't stopped. (Student 3)

This view emerged in a number of focus interviews with students and in small questionnaires which surveyed their views. Time and flow which previously was referenced in relation to teachers is also important to students who did not wish to interrupt the lesson by drawing attention to themselves with a question. Similarly, students also spoke of quicker responses from teachers.

5.7.2 Vignette 4: Eddie in his shell

In discussing Eddie, their first year student, one dyad of team-teachers observed the benefits team-teaching was having upon him. Of note is the positioning of the student relative to the combination of supports delivered through team-teaching and individual withdrawal. During the course of discussing work samples of students' written work the following conversation took place between both teachers about Eddie who is diagnosed as being on the autistic spectrum. Here

the positioning of Eddie and that of team-teaching are interwoven as a vignette which depicts the choices available to schools in choosing which modes of delivery or combination of modes best suit students.

Joe: Eddie? Flying! Eddie in an awful lot of other environments wouldn't have got as far as he is now, you know, asking questions. Eddie will always ask questions, he'll keep asking, he'll keep asking. But in another scenario with one teacher where discipline mightn't be as good as it is *Eddie would probably be inside in a shell now not saying a word.* Probably might have suffered a bit of bullying even.

Hilda: Oh yeah, sure he talks a lot more. He wasn't opening his mouth… I don't know if I would have got through to Eddie all the year.

Joe: Well literally up to this year now, before we had the resource room, you were inside in a small little room, one to one, now you have contact with the remainder of the class and you are dealing with that as you go through your schooling. Now Eddie is inside in that English class, is part and parcel of it, proud to be there, holds his own…

Hilda: Well the one-to-one small group is very important too.

Joe: Yes, but the point I am making is the two of them can never be taken in isolation. Like the way forward in schooling and education isn't that we abandon one-to-one and we go team-teaching for the rest of our days. They complement one another, there's no doubt about that, but rather than Eddie spending fifteen classes a week inside in one- to-one, it now might be six or seven. He is getting excellent benefit from that and bang he is inside in the class as well, you have to get the balance, the balance is crucial.

Like long term with Eddie in his forties and fifties and you know a fella reflecting back on his schooling, you'd see the fella on television there reflecting back on when he was bullied, the fella who reflects back when he was beaten by the teacher, a lot of those Eddies in their forties and fifties will reflect back to when I was the dodo. I was the dodo who spent an awful lot of time on my own with the teachers helping me, separate from the rest. Team-teaching gives you a way of watering that in a very nice way, a very decent way…

The view that team-teaching and one-to-one withdrawal can complement each other is important if we are to find the best ways of using resources to maximise the learning experience of our students. In this vignette the anticipatory positioning of the student influences the immediate decisions of the teachers in relation to what is best for Eddie and what team-teaching has to offer that cannot be achieved solely by one-to-one withdrawal. The emerging identity of Eddie travels, using team-teaching as a vehicle, across a thickening identity trajectory (Wortham, 2006) away from 'in a shell not saying a word' towards 'now Eddie is inside in that English class, is part and parcel of it, proud to be there, holds his own…' . Eddie's reputation as learner (Wortham, 2006) among his peers and his teachers is upheld. As a form of prolepsis (Cole, 1996), Eddie is positioned by his teachers, to be included in the present so as to avoid becoming isolated in the future.

5.7.3 Vignette 5: Nelly the student with or without a label

In a separate setting, in a different school, Nelly is described as a student with significant behavioural concerns and may be dyslexic. She is not in receipt of any additional support and performs poorly academically and socially in class. As the ESRI-LS report indicates she is one of the many students (42%) who perceive that they would benefit from additional support but is not one of the 13% who actually attract support. In short, without team-teaching as a mode of delivery Nelly would have received no additional support. Nelly's Mathematic teachers recount how team-teaching positioned both teachers and Nelly to open up a space for dialogue and for questioning between them. Such openings saw Nelly move from being an 'invisible and silent student' to 'positively engaged and angry' as

she grappled, with the support of her teacher, with the learning challenges before her. Her teacher, Rachel, outlines below how team-teaching allowed her to perceive Nelly in a different way as a result of the insights that team-teaching facilitated.

> She can't read. She can't, like I asked her one day, I don't know if I said this to you, but we put rules up on the board and we drew brackets and we wrote '( )( ) means multiply' so we had a couple of different rules and then there was a question put on the board and we were kind of floating around the room helping. And I was down with Nelly and said, follow your rules now. What was rule number one? What does rule number one say? Because I didn't want to be answering the question for her, she had to figure it out herself. And she said that she could read the symbols brackets, she could just about read the word 'means' but she couldn't read the word 'multiply'. So she was not able to start the question and if I didn't realise at all that she had that severe difficulty, and it's only with team-teaching because I was floating around. If it was a mainstream class, if there was only one teacher in that class and I was the teacher I would not know for months down the line, I would say that she is very weak and is not doing her homework so, you know, that's why she's getting such poor results. (Rachel, Dyad A, Interview 2)

Nelly's reputation (Wortham, 2006) as a student, according to her teacher Rachel, would have been significantly different was it not for the opportunities that Rachel availed of through team-teaching. Towards the end of the academic year the improvement in Nelly's performance in class is described in terms of her ability to develop a trusting relationship with her teacher which manifests itself in Nelly asking questions and not being afraid to be involved in the learning process in the classroom.

> Yes, she's challenging herself and she's challenging the world. She's questioning it and she's involved and she has the courage to be involved whereas before she was too afraid to say anything. ((Rachel, Dyad A, Interview 2)

Nelly as originally viewed by her teacher 'poor-learner' and 'angry young girl' moved towards that of 'more confident' and 'engaged learner'. Her principal spoke of the new found confidence Nelly displayed when in conversation with

him, and her mother also spoke of the increased confidence she displayed in conversations at home. Of note was her mother's story which recounted the day that a teacher asked Nelly a question in front of the whole class. It was, according to Nelly, the first time that she had been asked a question publicly by a teacher. The teacher was Ned and he confirmed that the team-teaching arrangement facilitated the opportunity to position Nelly as successful learner as in 'floating' about the classroom he had noted that Nelly had the correct answer to the particular question. Nelly as 'contributor' was later mentioned in the focus group setting when she stated that she enjoyed team-taught lessons as the pair-work and group-work positioned her as contributor and not always as receiver of help. This latter point is in keeping with the work of Palincsar, Brown and Campione (1993) where "divergent classrooms can become learning communities- communities in which each participant makes significant contributions to the emergent understandings of all members despite having unequal knowledge concerning the topic under study" (p. 43).

5.7.4 Vignette 6: Bridgie gets involved in her learning

Of note in the lessons also was the interdependent nature of questioning as linked to feedback. Here teachers used prior engagements in the course of the lesson to call upon students to give their already discussed and possibly rehearsed answers for all the class to hear and see. Similarly, students spoke of the advantage of being able to ask questions in relation to their work, when the work was being returned on a one-to-one basis. Crucially immediate and ongoing questions are answered in the course of the lesson where students can receive guidance, clarity, direction and the encouragement to persevere.

> Cathal might be at one side of the classroom, I might be at the other side of the class, checking over the homework and things and Bridgie in particular is a good example of someone who really gets involved in it, really gets into it. And like I said whenever she has a question one of us is always nearby to answer her and I think she feels more involved in that class because of the team-teaching, if you were to ask me about the link between team-teaching, I think she feels more involved because she isn't isolated there. She's being catered for and is being taken care of and she gets more involved from that point of view then. (Peadar, Dyad B, Interview 2)

Brophy (1999) correctly contends that feedback and questioning are interdependent as teachers respond to students' efforts with further questions. Of note in the team-teaching arrangements are the opportunities for teachers and students to enhance the quality of feedback by engaging in more meaningful dialogue than might be facilitated in solo-taught lessons. As observed in one lesson the student commented that he liked the way that the homework was corrected in front of him, on a one-to-one basis, as he was able to ask questions and later able to recall the teacher's written comments. He was still unable to read the teacher's handwriting but could recall what was said by the teacher as she had wrote her comment.

Classroom talk is facilitated by team-teaching at a number of levels with a number of benefits. Teachers can be more themselves and give more of themselves in an environment that is naturalised by interactions that are less fraught or hurried. Teachers are positioned to teach better by being able to listen and learn better from what they see their students do and what they hear them say. Feedback for learning is built on such activities and the next section will examine feedback, particularly homework, in more detail.

5.8 Feedback for learning

Feedback can take many forms, oral, written or a gesture, and is usually associated with teachers' responses to students' efforts as initiated by teachers. Homework by students is one area which can not only inform teaching but also support learning. Feedback in relation to homework can be effective for learning, but such effective feedback does not always occur (Brophy, 1999; Hattie, 2002, 2009; Black et al., 2006). Reference to homework is made on two occasions by Brophy (1999), under the principle of practice and application activities. He states that:

> Opportunities to learn in school can be extended through homework assignments that are realistic in length and difficulty given the students abilities to work independently. (p. 22)

By inference Brophy suggests that homework should not be only assigned but should also be personalised where necessary and differentiated by length and difficulty. He adds that the assigned work can be started in class and completed at home and that:

> An accountability system should be in place to ensure that students complete their homework assignment, and the work should be reviewed in class the next day. (p. 22)

Whatever about research on differentiating the homework assigned, the issue of accountability in Irish post-primary schools has emerged from the ESRI-LS study and to a lesser extend from that of Lyons et al. (2003). The latter authors' observations of classroom practice suggest that homework, irrespective of level being studied, was assigned by most teachers of Mathematics in each lesson. Teachers were seen to facilitate homework being commenced at the end of the lesson which allowed teachers to ensure that the students were placed to complete the homework on their own at home. However, the research by Lyons

et al. (2003) did not examine whether the homework was completed or not, nor the quality of the work when produced. Their classroom observations did shed some light on teacher-student engagement subsequent to the homework being produced, showing that there was a distinct lack of discussion, either private or public, with a focus on "drill questioning with an emphasis on obtaining the right answer and moving quickly through the problem" (p. 126), rather than on problem-solving and investigation. Furthermore, higher-order questioning accounted for only 5% of teacher-student questions, and not all such questions were met by higher-order student responses.

A more detailed analysis by the ESRI-LS studies indicate that homework is unevenly distributed across classrooms in the Irish post-primary sector. Significantly the ESRI-LS (2006) report that homework, or rather no homework, was a particular issues among those students, similar in age, perceived ability and class groupings as those in my research study. These students were placed in lower classes in second year where the phenomenon emerges of students stating 'we don't do the homework' and teachers declaring not assigning homework as expectations would be that it wouldn't be done and would lead to negative interaction

> The lower stream classes emerged as a distinct group in their attitude to homework. Most students in these classes reported that they did not get homework on a regular basis, a pattern that was seen to reflect their lower academic achievement and their unwillingness to do homework. (p. 139)

This finding is echoed in my research where one teacher declared that:

> The biggest concern here at the moment would be homework not discipline. Discipline overall is under control but homework would be an issue. Why aren't they doing enough of it, why don't they put enough effort into it? (Joe, Dyad C, Interview 2)

However, significant differences occurred in relation to homework as emerged from my study of team-taught lessons and research previously conducted in Irish post-primary education (Lyons et al., 2003; ESRI-LS, 2004-10).

5.8.1 Vignette 7: Quality and timing of feedback

The above-quoted teacher saw team-teaching as having a positive influence on homework for a variety of reasons, echoing the view of the student earlier who enjoyed seeing their work being corrected and commented upon in front of them, thus placing students as respondents and participants.

> I'm not saying that teachers aren't correcting homework but it's the quality and it's the timing. It's instant, it's constant and as well as that it's your response to them…The correcting of homework is a crucial aspect of teaching and by collecting the copy books, taking them home, marking them, signing them, dating them, just to make sure that you are giving them feedback on their work is good. But it's better if it is immediate and that is something I have introduced into a number of classes…That I have found to be very worthwhile, very worthwhile. It's that discussion within the class and listening to others is probably I think the best way to deal with the homework. And it's not; number one, it's not as time consuming as people might think… (Joe, Dyad C, Interview 2)

Consistency of action and immediacy of action is described by students as homework being corrected and discussed 'there and then.' Similar views were also highlighted by another teacher who saw team-teaching as a means of getting to that 'quarter of the class'. Speaking with regard to working alone, this teacher commented that:

> Yeah, survive and it's the cream of the crop and you're carrying maybe three quarters of the class and the other quarter… It's impossible to get around every day to them. You might get to them or check their homework or whatever, maybe twice a week or three times a week, but they don't get the attention that they need to bring them up to the same level as everybody else. (Ricky, Dyad D, Interview 3)

The personalised response in the classroom setting where students 'get the attention that they need' is important for students and for teachers. This goes

deeper than the commentary made by students, and some teachers, with regard to students 'not being able to get away with' not doing their homework. While not being able to get away without doing the homework assists in its completion, the quality of engagement with the work and with the teacher also merits consideration. For one teacher, 'the silent play' regarding written work being corrected and returned to students was broken by engagement and dialogue that added to the reciprocal learning which emerged from engaging in conversations about assignments. These conversations are either at whole-class or one-to-one, for all to hear and learn from, or on an individual and more private basis.

> Ironically what you're doing with your normal classes is you're writing that silent play where you're, the child is giving it to you, your writing something, they're writing something, you're writing something back but it's never played out, it's never discussed. While I think the piece here is that you have time, but you have time to talk so it becomes a conversation and as you say it's incremental then, you build on that conversation as you go through the year rather than… (Joe, Dyad C, Interview 3)

5.8.2 Vignette 8: Feedback is a two-way street

Reciprocal feedback, and not just feedback as in formative assessment, is highlighted by Hattie (2009) in his more recent observations. Hattie declares, from his synthesis of research studies that the most powerful single moderator that enhances achievement is feedback with an effect-size as high as 1.13. However, while he still contends that, "the most simple prescription for improving education must be 'dollops of feedback' " (p. 172), he adopts a more nuanced approach to feedback which he deems most effective when it comes from the students to the teachers and therefore requires opportunities for dialogue between students and teachers.

> The mistake I was making was seeing feedback as something teachers provided to students—they typically did not... It was only *when I discovered that feedback was most powerful when it is from the student to*

> *the teacher that I started to understand it better.* When teachers seek, or at least are open to, feedback from students as to what students know, what they understand, where they make errors, when they have misconceptions, when they are not engaged—then teaching and learning can be synchronized and powerful. Feedback to teachers helps make learning visible. (p. 173)

Making learning visible and learners visible also includes, in team-taught lessons, making feedback visible. One teacher can keep an eye on the student's reaction to the feedback being given by another teacher.

> Now you have, Mrs. Dawn can be dealing with Ian and I can be over working on the copy book but still keeping a peek on Ian just to see how he is reacting to all this information or questioning or whatever. So there is that room to manoeuvre. (Joe, Dyad C, Interview 2)

With attention, dialogue and engagement around homework comes pride. Students speak of the value of having their homework corrected in a timely and detailed manner, and how this influences the amount of time and detail they put into their homework.

> There's no work that goes to waste so if you spent about two hours on an essay it's definitely going to be corrected by those two teachers whereby if there's one he could forget or she could forget. (Year 4 students)

Pride in one's work was, in part, the result of teachers and students taking more time over the feedback conversations. This time could occur on a one-to-one or by teachers working the room and harvesting students' efforts. Filtering information back to teaching colleague in the course of the lesson allows for learning to be progressed based on mistakes and different ways of reaching an answer.

> Or you know, the lads made the same mistake so we will show that mistake now and correct it so Cathal is gathering information around the class filtering it through to me and then I'll put it on the board and we'll talk about it and stuff you know? But again it's a fluid thing, like, we're seeing what works. (Peadar, Dyad B, Interview 2)

Teachers speak of student pride manifesting itself in homework as students engage with teachers on a consistent and immediate basis. With immediacy comes motivation and application.

> And there was maybe two or three in the class who didn't have their homework done. And just talking to them in general about homework, they said, you know Miss, last year, because I'm only team teaching two out of their five or six periods, last year we didn't really do much of our maths homework. One fella said it and then there was about five or six other people to corroborate what he was saying, he said last year we didn't really care about Maths and didn't really do much. He said I go home now and it is the first subject I do when I am studying. When I go home to do my homework it's Maths that is the first subject I do for my homework. It's Maths and then whatever. (Rachel, Dyad A, Interview 2)

Note that team-teaching the previous year was not as consistent and therefore deemed not to be as effective. Teachers speak of students being more responsible for their homework and taking pride in their work as the engagement with the students indicates that teachers place value in the work and in their students.

> Well it ties in with the pastoral side of it as well in that from my own experience that if you like Bridgie is taking more responsibility in presenting homework and a responsibility I know myself that level of support when it comes to 'did you do your homework for tomorrow?' doesn't exist at home. So she is taking on that responsibility herself and it is a slow process. (Cathal, Dyad B, Interview 2)

As referenced earlier, Bridgie a second year student is seen as a student who thrives on the conversation and attention associated with the work she and others in her class are producing. The routine of doing homework would not have been very strong in Bridgie's home but the team-teaching seems to be influencing what she is doing, and in particular the opportunity to receive *immediate feedback* and, as Hattie (2009) points out, to engage in conversations in relation to the feedback and avoid the silent written play alluded to earlier. Bridgie's teachers speak of the work that has been completed over the course of the year.

> Like when I look at all the work they did, now that's this year's work, the size of the folder for the class last year over three years. I think its more

> pride in what they are actually doing as you can see from Bridgie. (Peadar, Dyad B, Interview 3)

> I think for her in particular, because she is very outgoing, her needs are being met. And I think that's the thing, like her opinions and things I think she feels are valued. Even this morning when we were in smaller groups for reading the play she has more opportunity to talk to an adult but to get immediate feedback on what she is saying from somebody, like when a student makes a point you can give it back to them but in different words, you can say what you are saying is this, she gets a lot more of that. I think that's down from having the two teachers. (Cathal, Dyad B, Interview 3)

While the authenticity of the work is in part determined by the content, it could be argued that the authenticity of the experiences is enhanced when teachers give time to engage in dialogue that is based on the work produced. Feedback makes the work authentic. Such work does not always need to be teacher-led. The following example illustrates many of these points in the context of engaged participation by students.

5.9 Engaged participation

Learning is supported when students take ownership of their learning and learning occurs through initiation and participation in a range of social practices, both within and outside the school (Dewey, 1933, 1993). Brophy (1999) speaks of three main ways in which teachers help their students learn.

> First they present information…Second they ask questions…Third they engage students in activities or assignments that provide them with opportunities to practice or apply what they are learning. (p. 21)

The vignette below captures some aspects of the opportunities that team-teaching can afford to students to practice and apply what they are learning and to make their own of their learning and to make their own learning authentic in a social setting.

5.9.1 Vignette 9: Martin makes his own of his learning.

Martin is a first year student who is struggling during his first term in his new school. He is literally on the fringes. One of his team-taught teachers states that:

> Hilda: His attendance can be a bit erratic and he can come in without the work being done. We have to work on him really, to involve him a little bit more. He's inclined to be on the edge or the fringe, more than the others really. He's very quiet.
>
> Researcher: And socially would he have friends and that in the class?
>
> Hilda: Not really, you see because he's here today and kind of gone tomorrow, that type of thing. It's harder for him to integrate rather than some of the others who are there all the time. And I'd say he's shy that way. But he can come up with good ideas, though. Because I'm doing the Silver Sword book with them now as well. We have ten chapters done and they're getting some questions in the Christmas test. (Hilda, Dyad B, Interview 1)

By spring, teachers have noticed a significant improvement in Martin's attendance and behaviour. He is much more part of the class, self-confidence has increased and he is physically at the centre of the classroom.

> Martin would have started out in a corner on the edge…near the door…He's now taking a far more central role and quite happy to do it. Not a bother on him, very relaxed, very comfortable and happy in himself. The confidence is growing daily. (Joe, Dyad B, Interview 2)

Being at the centre is in part as a result of his engagement with the class, as illustrated by the production of his self-generated and authored play, *'The Match'*. In this vignette Martin's learning identity in the social setting of the school is intertwined with his academic learning and with the feedback he receives from the teacher and his classmates. In effect the feedback from his teachers was a significant moment for Martin.

> It's fabulous. He claimed ownership of that, silent ownership in his own way but he was so proud. Unbelievably proud, but funnily enough the pride came from our reaction to the piece when it arrived on our

> table…We were reading through it and I was fascinated by it… and what was said and what happened, he was thrilled. (Joe, Dyad B, Interview 2)

Another significant moment was when the play, written by Martin, became the artefact that allowed others to engage in roles that also merged their academic learning with their personal development. As observed during my visit to the class, modelling of certain parts was initiated by the teachers, who reverted to Martin to clarify that they were correct in their interpretation. Martin as author and authority clearly revelled in his new position. Eddie, referenced earlier, was cast as the referee in Martin's play and once more 'came out of his shell' as he was encouraged to roar and blow the whistle in a manner that took him 'out of his character and into another one'. Eddie and Martin, exemplify Wortham's (2006) 'joint emergence of social identification and academic learning'. However, Eddie and Martin are positively positioned while the participants in Wortham's study are negatively positioned with their reputation among peers and teachers on the slide rather than on the rise.

While Wortham (2006), correctly states that "identities become consistently pre-supposable across a series of events, not usually on one pivotal event" (p. 48), Martin's play, and its production, was one such pivotal event. Here was the culmination of a series of interventions, including one-to-one interventions, which advanced Martin's learning and learning identity. Again the interplay between withdrawal support on a one-to-one basis and team-teaching is of interest as team-teaching appears to give credence and authenticity to one-to-one engagement. Calibrating the different modes of delivery is an ongoing balancing act, and having the option of team-teaching opens up combinations of support. Feedback that was authentic and that allowed the play become even more

authentic by performance certainly positively influenced the learning trajectory and identity formation of Martin within himself and among his peers and teachers. Martin's 'reputation as learner' (Wortham, 2006) as perceived by his teachers, peers and himself was significantly enhanced.

Authentic feedback is also linked to the team-teaching arrangements and the teachers' subject knowledge. In the case of fourth year students studying English in Class Ellen, they stated that the expertise of the teacher should influence who engages in the feedback. Drawings of team-teaching by students illustrated this point with one fourth year student sketching images of his teachers with the comment 'Ms Media and Mr Poetry'. Students positioned teachers according to their area of strength in relation to the subject being taught. In the junior classes the students did not make such a distinction among their teachers in relation to feedback, though it should be noted that the teachers in all classes were both qualified in the subject area.

Missed opportunities in relation to feedback were witnessed in one lesson where the 'lead' teacher 'took the lesson' and the other teacher worked silently, moving crab-like across the rows of seats from student to student, jotting down comments on the work handed-up but not engaging with the students and subsequently placing the work face down on the desk. When I asked why this was so the teacher correcting said he didn't want to interrupt the flow of the other teacher by engaging in conversations with the students. It could be argued that the lead and support model does not lend itself to feedback, but this is countered by disconfirming examples of lead and support facilitating feedback. The

relationships between the teachers influence what happens in the lesson and what happens in the lesson cannot always be solely explained by the particular models of team-teaching that are adopted. This is a salient point for any preparatory curriculum regarding team-teaching.

Clearly questioning, feedback and thoughtful dialogue are interdependent actions that are found in effective learning environments. The vignette featuring the teacher publicly asking Nelly a question is a case in point. The positioning of Nelly to answer a question publicly (for the first time in her two years in the school) was a result of the earlier private feedback which allowed the teacher to see what Nelly now knew. Team-teaching appears to create time and space in which to position students as question-makers and position them as recipients and providers of feedback. Such interaction has not been found to be always prevalent in research conducted into Irish classrooms. The next section examines how thoughtful discourse emerges in team-teaching lessons as teachers and students interact at multiple points in the lesson and move not only from initial questions and feedback but towards more 'sustained and thoughtful development of key ideas'.

5.10 Thoughtful discourse: developing ideas through talk

Brophy (p. 19) speaks of thoughtful discourse where "questions are planned to engage students in sustained discourse structured around powerful ideas". He refers to questions which support 'sustained and thoughtful development of key ideas'. He associates such discourse with teachers who promote student collaboration and teacher-student interaction.

> Their classrooms feature more time spent in interactive discourse and less time spent in solitary seatwork. Most of their instruction occurs during interactive discourse with students rather than during extended lecture presentation. (p. 11)

The level of questioning is determined by the instructional goals, with close-end and factual questions used to assess prior knowledge or review new learning. More open-ended questions are framed for the most significant learning goals which call on students to analyse, synthesise or evaluate what they are learning.

Brophy (1999) also suggests that 'because questions are intended to engage students in cognitive processing and construction of knowledge they should ordinarily be addressed to the class as a whole' (p. 20). Such action, he suggests, will assist in engaging the whole-class and not just the respondent. The use of wait-time is also referenced by Brophy (1999) as is a range of classroom activities to sustain learning; predictions, debate, alternative approaches, probing questions by the teacher and encouragement by the teacher for students to elaborate on their own answers or to comment on classmates answers. He concludes by stating that:

> Frequently, discourse that begins in a question-and-answer format evolves into an exchange of views in which students respond to one another as well as to the teacher and respond to statements as well as to questions. (p. 20)

Brophy (1999) makes only passing reference to students' voicing their opinions, but this is very much a dominant theme among the students surveyed and is linked to 'an exchange of views in which students respond to one another as well as to the teacher and respond to statements as well as to questions'. Opinions fill the air in team-taught lessons as both teachers and students are allowed air their opinions which in turn supports learning. Students commented that:

> Because in previous years there's always one student that always gets picked on whereas with Team Teaching they go around and they pick everyone to give a chance. *They notice that you're there.* (Student 5)
>
> My favourite bit is when they do a sum different ways and one way might be easier for you. (Student 2)
>
> It's kind of more open. You can have more of an opinion on something. (Student 4)
>
> Yeah, like if we are having a debate you feel more comfortable saying your own opinion because one of the teachers might be on your side, you know that way? (Student 1)

The classroom as a place of dialogue for students is supported in team-teaching by creating an atmosphere that welcomes questions, which again is in contrast to the findings from the ESRI-LS research.

> A key thing I think is that, the fact that they are in such a disciplined environment when there are two teachers there it gives them the confidence to speak out. To question things, to put forward their opinions, they feel in a very safe environment at that stage, because it's not a bit intimidatory and once there's a positive environment created by both teachers it lends itself to students expressing themselves more and more and more. There's no such thing as the head down and fearful of students intimidating others with even a stare when you have your back to the board. You have two people there all the time and they're watching, watching, watching. (Joe, Dyad B, Interview 2)

Team-taught lessons also stimulate students to ask questions in a safe environment that is supportive of effort and learning. To illustrate this point I refer to a second year Mathematics class I observed

5.10.1 Vignette 10: Knowledge transformation and transaction

In this vignette students were encouraged to form their own conceptual understanding of the key mathematical idea. Here, team-teaching facilitated learning by going outside the classroom to give practical application to review Pythagoras' theory and with strategic teacher placement facilitated better inclusion for some students when outside. Upon returning to class, problem-

based and open-ended teacher questioning facilitated higher order thinking and a new strategy emerged as jointly forged between teachers and students.

These teachers spoke of the value of going outside and the impossibility of going outside alone as it would become too disruptive. They also spoke, in direct contradiction to Lyons et al.'s (2003) findings, of opening up conversations around Mathematics and finding various routes to solving problems.

> I think the benefit of it, well for Maths, is that they have two different methods for approaching it. And like as, I have said to you before, they realise then that they can come up with another approach themselves. There are different ways of doing maths. You don't have to do it Ned's way, you don't have to do it my way, and you might like to do it the way your primary teacher does it and if you get the same answer share it with the rest of us. (Rachel, Dyad A, Interview 1)

A point reinforced by her teaching partner who said:

> Yeah. There isn't always just one method. Sorry I just have to rewind there for a second, there aren't two answers to one question there are two methodologies to get the one answer to every question because Mathematics is very exact science so we will say there are two methods to get the same answer…Yeah, which is great because it gives them their own choice then and it gives them empowerment. Yes, I can choose whichever one I like. 'Which one should I do sir?' It's up to you, you decide. It involves them in it as well. I don't like that method, I like this method. (Ned, Dyad A, Interview 1)

> And what we have always said to the lads in the class, and the girls, we would say, right, this is one way of doing it and this is another way of doing it. You decide which one you like the best and then that's the one you can do. It doesn't matter which one you choose. So some of them choose her method and some of them choose my method. It's fantastic. It's great. It gives them other options. It's multi dimensional. Really dynamic. (Ned, Dyad A, Interview 1)

The above interaction illustrates the socio-cultural view as previously outlined by Chang-Wells and Wells (1993), where:

> As well as presentation of new information, there needs to be extended opportunity for discussion and problem-solving in the context of shared activities, in which meaning and action are collaboratively constructed and negotiated. In other words, education must be thought in terms not of

> the transmission of knowledge but of transaction and transformation. (p. 59)

Teacher-dialogue is not always visible for students as it usually occurs away from the classroom and earshot of students. In team-teaching collaborative dialogue among teachers seems, as already suggested, to influence student engagement with one another. Using Hargreaves (1994) words, 'back-stage' dialogue becomes 'front-stage' dialogue and a sense of belonging is inculcated by valuing what others are thinking and have to say.

> Yeah, I find that very good, you know, they can respond then, because when they see us talking to each other in a relaxed way, they're kind of more forthcoming with ideas as well. And if we make comments about them, like I'd say, 'What do you think about that Mr. O'?', it gives them an idea that, oh there's more than just writing and reading going on here, you can actually have an opinion and it's valued. (Hilda, Dyad C, Interview 1)

Having an opinion that's valued also has implications for lesson planning and for motivating students by giving them a voice in classroom planning. If time is used so well in class then is there a place for students to be involved in the planning schemes of work and how learning is to be achieved in future lessons? There is some emerging evidence which indicates this to be the case, but at this point it would be premature to make any claims that team-teaching is facilitating student participation in relation to planning or reviewing of lessons, schemes of work or other similar practices.

Eliciting students opinions will in part be determined by the quality of teacher questioning and the four dimensions (Bennett & Rolheiser, 2008) of safety, level of thinking, framing questions (including who students should talk to before answering) and responding to the 7 categories of student responses (none, correct, incorrect, partially correct, silly, guess and convoluted). Team-teaching

would appear to very much support the safety dimension (wait time, sharing with a partner, confidence to ask and respond) but requires specific attention in relation to the level of thinking associated with initial and supplementary questions, and with responding to students' responses. This is an area that team-teaching can support and be supported by other professional development activities.

5.10.2 Vignette 11: The gift of confidence

When speaking of thoughtful discourse Brophy (1999) makes no specific mention of confidence but speaks of student efficacy. These concepts will need further attention from teachers, as students already recognise that confidence allows for constructive engagement and state how team-teaching:

> It gives me an opportunity to ask questions, but also the confidence to ask, as I don't have to interrupt the class and can ask the teacher that is closest. (Student 8)
>
> I was a bit shy from the start but team-teaching helped to build my confidence up. (Student 3)
> The other teacher can stay with you and help you when you are lost ….you don't have to stop the class. (Student 2)
>
> My confidence has improved as I know there is a teacher on the floor who I can ask for help from. (Student 7)

Borrowing from Jean-Paul Sartre, Mahn and John-Steiner (2002) speak of the gift of confidence in relation to the joint activities engaged in by teachers and students in classrooms. "There is a dynamic interplay between their interactions and the ways in which they appropriate the emotional support" (p. 48). The authors reference Vygotsky's concept of *perezhivanie* which describes the ways in which participants perceive, experience and process the emotional aspects of social interaction.

> A teacher's awareness of students' ways of perceiving, processing and reacting to classroom interactions- their *perezhivanie*- contributes significantly to the teacher's ability to engage the students in meaningful, engaging education. (p. 53)

Teachers Cathal and Peadar teach Ray and while they are aware of his identified needs they engage with the student based on what they know about Ray and what they are getting to know about Ray. In short the teachers are moving from labelling to knowing, and through his interactions with his teachers, Ray is becoming visibly confident.

> Cathal: His hours are based on speech and language (needs), but he's very expressive in the team-taught class. He has no problem in putting his hands up and going I know the answer or how about this or I question that. Or he will challenge, 'why did you do that now because that doesn't make sense?'
>
> Researcher: Which he may not have done irrespective of how much one-to-one he got?
>
> Cathal: His confidence in his own ability has increased so he has the confidence to put up his hand and say, I think I might know the answer or I think I can come up with a different method of doing that question. And only because his confidence is greater he has the confidence in his ability to ask the question and not look like a fool. (Cathal, Dyad B, Interview 1)

According to Cathal, his class teacher, the physical positioning of this student in the team-taught classroom allows Ray to be a learner that is more suited to his personality and learning style than one-to-one sessions.

> Seeing how they benefit from it is one thing but Ray is the person who is providing the hours, is my main concern because I am his resource teacher as well. I have to stand over any progress he makes or any lack of progress. And I think from the point of view of self-esteem because that was something specifically mentioned in his report that his self-esteem kind of suffered towards the end of primary school and I think in my own experience that individual withdrawal is not always the best thing. (Cathal, Dyad B, Interview 2)
>
> And for many students it would stigmatise them and make them feel kind of isolated and unusual. Now he is such a popular young fella I can see it,

> that he is benefiting more from this. He makes such a good effort as well that you can trust him to an extent that he will do his share of it. A lot of individual withdrawal is made from pushing students who are disinclined to work and kind of disenchanted with the system and because you kind of have that to work with, with him, I can see that he felt like a grown up. And he does with two adults in the room as well I think he gets a chance to talk more. But from talking to himself he can be a small bit shy one to one but he appreciates the class that is more of a discussion. (Cathal, Dyad B, Interview 2)

An examination of the student's written work samples, towards the end of the year, reveals how his learning has progressed over the course of the academic year where his teachers commented:

> Like you said at the start of the year, obviously he still has certain issues with certain work we are doing, vocabulary, some punctuation, things like that. Let's be fair everyone can suffer from being in the class but what I have noticed is that his reading has improved. From today now as well, like six months ago or a few months ago I might have been reticent about putting him on the spot. Today he was able to handle it. I think he even put his hand up. (Cathal, Dyad B, Interview 3)

> Ray still has difficulty constructing sentences but nowhere near what it was like at the start of the year. His stuff was incoherent at the start of the year. Now I can see, even from what he did there last night, you can see he's still struggling with expression but the ideas are emerging. His problem now seems to be repeating himself but his core idea is able to emerge. At the start of the year it was total nonsense, you were kind of saying what is Ray trying to say? (Cathal, Dyad B, Interview 3)

> He has the ideas. He is always one of the first, like you always know that Ray will be one of your saviours if you are trying to get something, he will have something. (Peadar, Dyad B, Interview 3)

The school's journey away from withdrawal is captured by Ray's story as the teachers commented late in the year that withdrawal would exist but under different criteria. McDermott's view (1996), that you can learn only that which is around you interlocks with the view, as expressed here, that you can only practice what you've learned with those around you.

> We talked about this on the staff day and our general feeling is that withdrawal is not going to be the norm. We will still hang onto it, but that it would have to be very, very focused, that you would withdraw a student for a very specific purpose. Like I'd give you an example now,

> we have it over in the resource room, like for Ray I'd be looking for withdrawal for him next year, for one period in the week to do a speech and language programme. It's a set pack that a Speech and Language Therapist has given to us and it's just exercises and you'd get through it in the whole year with just one period in the week but the rest of his time inside in the class. Now the difference between that now and what resource was like when I started here now over three years ago, we had like twenty-two periods a week, one to one tuition with four separate students and that's two-thirds of my timetable, exhaustion for the students, exhaustion for the teacher and actually not much benefit from it. Socially more than anything else… (Cathal, Dyad B, Interview 3)

Evidence suggests that students, as with their teachers, develop social capital among the community of learners that is the class through interaction that creates and sustains a learning environment. As with Hattie's (2009) observation, learning is made visible, not just by the teacher-student questions and answers but by the conversations, questions and opinions that are undertaken by the student with the teachers and with one another. Such a learning environment requires and promotes student confidence and in the next section a closer look is taken at how team-teaching creates and sustains that confidence as students and teachers see themselves as part of a team.

5.11 Being a team member: Belonging

A feature of the positioning of students in team-taught lessons was their strong sense of being part of a learning community that worked together as a team. This sense of team, is in part related to Brophy's (1999) principles including a supportive classroom climate, but my research study shows how it manifested itself in a variety of ways which supported individual and collective learning. In theorising this sense of team we return to the concept of Social Capital Theory and examine how the development of trust, normative practices including raised expectations of oneself and each other, reciprocal altruism, pressure, frequency

and proximity assist in creating learning capital within any given classroom at any given time.

Students often speak of being part of a team. Earlier examples have shown how spontaneous peer support emerged as a result of the climate generated by teachers and students in team-taught lessons. Other examples of the spirit of team and learning are found in the numerous comments, by teachers and students, in relation to banter, fun and craic. One first year classmate stated that 'if you stay in class you have the craic'. The socio-cultural dimension of learning together was stated in a variety of ways. A student from a second year class identified the collective role of all involved in the class.

> I've learned that my class can work as a team. If you can't do teamwork then you're not a class. It's something you do with your friends, with other students and with your teachers. (Student 10)

Being a class is associated with teamwork and that a class involves teachers as well as students denotes a nuanced understanding of what it means to be part of a learning community where you 'work as a team' and work with not only your friends but other students and teachers who may not be necessarily your friends.

> And also just like Cathal is saying there as well, I think with a lot of them when there's two of us in there, there's almost a, this might not be the right word to use but, we're in this together kind of mentality. It kind of develops sometimes that when the two of us are there working with them. (Peadar, Dyad B, Interview 3)

A better relationship among students was mentioned in all lessons observed with one teacher commenting

> You know in weaker classes they can be very down on each other, that's gone now. They still have a go off each other over personal things or whatever from time to time but it's more like when somebody writes something good; they go, oh yeah. And they see that it's achievable for them because we give them the structure and they just go off and write what they want. (Joe, Dyad C, Interview 2)

This point was made in another class when teachers spoke of preventing a negative atmosphere from developing and then maximising the positive environment being created. For this teacher being in it together was not enough as it could be a negative as well as a positive togetherness and this required attention. As with social capital it can generate negative as well as positive outcomes and must be measured carefully.

> Sometimes that strength can be a negative one. And I have a little theory in that in streaming. That for the top stream, we'd say for example, they'd get fantastic strength from one another and they'll drive each other forward and they all work out very well. But the strength that the bottom stream class can get from one another can lead to massive indiscipline and misery. And I'd be a very strong advocate of not streaming. (Joe, Dyad C, Interview 2)

For one principal an organised reading of poems produced by the students of the above mentioned class gave him an insight into the power of team-teaching as it related to building a team of learners among the students of one class. A class that had been described as 'the class from hell' the year before was now seen not only reading out their own poems, but also reading out the poems of some class members who weren't comfortable standing up to recite their work but were comfortable with their peers doing it for them. An expression of team was seen in the pride to be found not only in their own individual work, but pride in each other's as well and in the collective of the class as a whole.

> I did go down to the class for poetry and that certainly struck a chord. I mean here we were talking with Rang Nollaig and even the poems that they wrote but as I was saying at the meeting it was the way the other children bought in and were so proud. I could see it, you can't hide these things and you could see how proud they were of their own. And I thought that was probably for me a kind of key point in the whole process…..That really struck me that day with the poem because I felt they all bought into this. It wasn't, I know Zara won it and I think Rian and Alan would have got prizes, but I felt that they all thought that the class has won the prize as such. (Principal, Ash School)

Much of social capital is generated by and sustained by trust. Teachers make specific reference to the team in the classroom growing in trust with one another which, from a student's perspective influences how they see themselves as young adults and how they perceive what others may think of them. This is an important point as it influences student's sense of self as a learner and how they interact with learning. Unlike the examples given by Wortham (2006) in relation to Positioning Theory, students in team-taught lessons saw positive identification being linked to academic practices and learning. An example was when two English teachers worked with a group of second years.

> They were doing an activity, that cloze exercise at the very start when we switched over, where they were then turning to each other and correcting each other but not in that negative way that they can correct each other. It's like we have moved beyond the sort of thing like can you read it, can you understand it and I even found this morning the thing that I am finding when we are doing the drama with them that it is far more the higher questions that are flying around the place. There's a lot more speculation going on and they're engaging with the idea that literature is a thinking process, but also a way into literature having something to say to them about what it means to be a human. (Cathal, Dyad B, Interview 3)

For older students the together mentality is often expressed by the fun and banter that they have with the 'other two adults in the classroom'. Again the back-stage informal talk and fun comes to the fore and students respond favourably to being exposed to adult behaviour and in turn being treated as adults.

> Even just the interaction, they love the banter between the two teachers, if there's banter, you know. Especially the seniors and they chip in on it. Total adult, they think it's a dream. (Ricky, Dyad D, Interview 3)

In a sense the bonding that occurs in public with the teachers is played out in the classroom and seems to assist in bonding students as team players in team-teaching.

> I think that's one of the things that is coming through from the students in the school here that are involved in team-teaching, it's the banter, it's the playing off one another, it's the different teaching styles merging in a

> class situation, it's the novelty at the moment as well of two, it's the continuity that's there, the momentum that's in the classroom, they'll comment that the forty minutes flies. All of that is leading to a better class atmosphere and environment and a learning process which is very refreshing for everybody involved including the teachers and it has a knock on effect on to the other classes that you are teaching as well because of the refreshing nature of it and what you learn from it yourself when you are reflecting you want to pass on other things onto other classes as well. So there's a novelty in it not only for the students but for the teachers as well. (Joe, Dyad B, Interview 3)

The descriptions above in relation to a sense of belonging to a community resonate with Rogoff, Matusov and White's (1996) description.

> In a classroom functioning as a community of learners…the organisation involves a community working together with all serving as resources to the others, with varying roles according to their understanding of the activity at hand and differing (and shifting) responsibility in the system. (p. 397)

However, inclusive practices are often more messy, complex and idiosyncratic than Rogoff et al. would seem to suggest. As highlighted by Linehan and McCarthy (2001) and this research study, Positioning Theory is useful in capturing the more dynamic aspects of learning and the development of individual's identity in collective settings.

5.12 Conclusion

In determining the quality of inclusive learning it is clear that Positioning Theory provides a very informative lens to assist in responding to that challenge by capturing the 'small gains' that occur over time. In a similar vein to Hegarty (2001, 2009) and Artiles et al. (2006) scholars of team-teaching such as Thousand et al. (2007) have suggested that:

> Research results could be improved and be more helpful to teachers if multiple measures were used to examine not only student achievement, but also student social, self-esteem, and friendship development as well as co-teachers development of instructional competence, confidence and self-efficacy. (p. 16)

The contribution of Positioning Theory as a conceptual tool is that it can shed light on team-teaching so that practitioners and others can adopt theoretical stances that will support inclusive practices in a manner that is more consciously competent than accidentally adequate (Bennett, 2010). In brief, it facilitates an opportunity to look at team-teaching with a more critical eye, an eye that will guide the interventions required so that we can avoid naïve views of team-teaching being equated with inclusive learning in a manner similar to past misguided views of integration being equated with inclusion and learning.

Thompson and Wiliam (2008, p. 1) in asserting the central role of classrooms in any improvement effort contend:

> Learning-at least the learning that is the focus of the formal educational enterprise-does not take place in schools. It takes place in classrooms, as a result of daily, minute-to-minute interactions between teachers and students and the subjects they study. So it seems logical that if we are going to improve the outcomes for educational enterprise- that is, improve learning- we have to intervene directly in this black box of daily instruction (Black & Wiliam, 1998; Elmore, 2002, 2004; Fullan, Hill & Crevola, 2006).

Positioning Theory can further assist in examining the black box of daily instruction while team-teaching can advance many aspects that are being increasingly associated with improved learning environments for students.

The time and space that team-teaching affords teachers results in many principles of effective teaching being invoked in classrooms and in a manner that may not be so easily achieved by teachers on their own. Acting as a counter-narrative to our limited knowledge of classroom practice in Ireland this research highlights questioning, feedback, thoughtful dialogue, classroom climate and sense of team,

as dominant aspects associated with learning in team-taught lessons. Viewed through a socio-cultural perspective where learning is a social activity that involves participation, team-teaching allows and makes legitimate, actions by students and teachers, which are conducive to learning but are not always seen as conducive to single-teacher classrooms.

Similarly the work of Brophy (1999) and others on effective teaching can provide a scaffold that frames actions which seek to maximise the presence of another teacher in the classroom. Of note in this study is the general absence of certain principles of effective teaching including more effective questioning, modelling, scaffolding and more extended and sophisticated use of co-operative learning as a pedagogical tool. Future developments will require giving these opportunities more serious consideration. Likewise the configuration of team-teaching has gained much attention with little thought for how one may be more useful than the other at certain times.

In this study the 'lead and support' model is adopted by the mechanical user while the more refined user deployed a range of configurations that best fit the learning purpose of the lesson. Though, it was noticeable that the dominant models were either the aforementioned lead and support or the classic team-teaching model. In this regard it may prove more profitable to attend to which configuration is most effective and when, rather than presuming one is always more effective than another. Such debate requires the extension of other configurations such as station teaching and parallel teaching into the repertoire of users.

As this chapter has highlighted, team-teaching allows teachers and students adopt momentary and contingent positions that support learning. 'What is around us to be learned' in team-teaching is considerable and only emerging. Positioning Theory assists in answering this question, especially when the impact of team-teaching cannot nor should not be separated from other contextual factors in schools and classrooms and when short timeframes make a mockery of some practices which employ more traditional and long term metrics to gauge learning over relatively short periods of intervention.

The findings from this study offer a counter-narrative to the existing 'grammar of schooling' (Tyack & Tobin, 1994) where teachers work in isolation and students in need of additional support receive such support in isolation from some or all of their peers. The study also offers possibilities in relation to findings from recent research into Irish classrooms, where not all was found to be as one would wish it to be for our students and for our teachers. The next section will set out in more detail how this study can inform research, practice and policy in relation to team-teaching and other attending aspects.

Chapter 6

TEAM-TEACHING: RELATIONSHIPS OF EDUCATIONAL PURPOSE

6.1 Introduction

The purpose of this research study was to generate a theory-informed understanding on team-teaching in the context of promoting inclusive practices in post-primary classrooms. This research project's origins are found in the DES published *Inclusion of Students with Special Educational Needs Post-Primary Guidelines* (2007), where the benefits of team-teaching were highlighted (p. 142-144). I was involved in the original writing committee 2004-2006 for these guidelines, but paid little attention to team-teaching at first and only grew to have an understanding of its central role in stated special-education policy through being a member of the committee. My engagement as a teacher and inspector revealed the significant gap between stated policy and practiced reality. The central role that team-teaching can play in the wider remit of teacher education has emerged as a result of this research study. The evolution of the study was progressed by working with the Education Officer and seven VEC schools, where the aim of the project was to understand, in greater detail, what team-teaching asked, and offered, teachers and students in these schools.

Primarily, the study sought to represent the views and experiences of teachers and students involved. The orientating research question posed was 'To what extent, can the introduction of a formal team-teaching initiative enhance the quality of inclusive student learning and teachers' learning at post-primary level?' This question was first framed at a time when resources in schools were expanding and is now being considered at a time when resources in schools have

begun to significantly contract. Shifting economic fortunes influence schools and classrooms and therefore the significance of this research must be measured against the additional variable of 'our darkest hour' (Government of Ireland, 2011, p. 1). In short, is the placement of two teachers in the one classroom at the same time, a wise or wasteful use of scarce resources? I argue that it is wise to do so, but only on condition that we remain wise about how to do so and about how best to measure its impact.

The triad of research, practice and policy are interlinked in this study, and as a result, I contend that team-teaching offers hope, insight and opportunities to those who seek to promote the quality of learning and teaching experienced by students and teachers in our school. First, this research study provides evidence of what team-teaching asks of, and offers to teachers and students. Some of the contextual findings are in keeping with the extant literature while other aspects of the study have given new insights and posed new questions. Second, it places team-teaching in the context of responding to diversity through inclusive practices. It brings attention to what is meant by inclusive practice, as a daily and moment-to-moment experience, and how this experience can align with the more macro-based discussions relating to inclusion and transforming schools through collaborative practices. These collaborative practices need not be confined to the area of special education and team-teaching can have a broader remit that extends across the continuum of teacher education and includes other educational goals. Third, this study shows how team-teaching can be theorised using Social Capital and Positioning Theory as conceptual tools to capture the experiences and learning opportunities it offers, as well as understanding how it might be

extended and sustained for optimal benefit in the future. Fourth, this study provides insights into the affordances and constraints associated with changing teachers' classroom practice and how engagement between teachers and other stakeholders can assist in creating and achieving shared goals that remain loyal to basic principles while responsive to local conditions. Finally, this research study shines a light on the potential role of the school inspector in *working for improvement with school personnel*, rather than the more traditional view which casts the inspector as *working school personnel for school improvement.*

Repeated policy statements that encourage change and moves towards the use of team-teaching have not translated into practice. TALIS (2009) reiterates what was noted 20 years ago (OECD, 1991); classrooms are occupied by many students but very rarely by more than one teacher. Little action and less research have been conducted to date on team-teaching. There is a paucity of information on how it can be best initiated and sustained, and on how it impacts upon the students and teachers involved. Consequently, team-teaching remains under-used, under-theorised and usually not very well understood.

As I write this concluding chapter, Circular 0037/2011 from the DES, issued on 31st May 2011, informs that in compliance with EU/IMF Agreement for Financial Support for Ireland, the DES has agreed an Employment Control Framework (ECF) which translates as fewer teachers for more students. This circular returns us to previous circulars (Sp.ED 02/05 & 23/03) and to the beginning of this thesis when once more, though now for more pressing economic reasons, schools are reminded that:

> The overriding principle is that the resources be deployed in the manner that best meets the needs of pupils with special needs in the school. This can be achieved by supporting pupils in the mainstream classroom or teaching in small groups. The purpose of the allocation is not necessarily to provide individual teaching support. (DES, 0037/2011)

Given that team-teaching is a stated aim of our educational system, how does this study significantly contribute to making team-teaching a reality in our post-primary classrooms? This question needs to be answered with regard, not only to team-teaching, but other interdependent aspects of educational reform including, change wisdom and its interaction with the promotion of inclusive practices, and our understanding of teacher collaboration and what is meant by student outcomes. These key concepts; team-teaching, change, inclusion, collaboration and student outcomes are threaded through this study. This chapter argues for the significance of the study with regard to each concept and the contribution each has and can have in furthering efforts to understand and improve the learning experience for all students and teachers in our schools. These efforts ultimately rest upon relationships of educational purpose.

The next section addresses the possibilities and practicalities associated with team-teaching. The extant literature and the findings of this study are compared from the stand point of confirming existing knowledge, extending our understanding, and examining the emergence of new insights and new questions. It begins with an examination of the prerequisites as stated by previous research and as compared with my research study.

6.2 Prerequisites

The literature is strong on advice and prerequisites in relation to team-teaching. These multifarious guidelines address issues associated with administrative support, parity, compatibility, planning time, training and models of team teaching. My research concurs with the importance of administrative support (Jang, 2006; Isherwood & Barger-Anderson, 2007; Walther-Thomas, 1997; Rice & Zigmond, 2000; Gerber & Popp, 2000; Thousand, Nevin & Villa, 2007; Walther-Thomas, Bryant & Land, 1996).

6.2.1 Administrative support

This research study confirmed the existing views on the importance of the school principal in supporting change agendas. Deeper understandings with regard to the importance of administrative support manifested itself in a variety of ways in my research. Principals' conscious efforts to ensure team-teaching was not fragmented by an incomplete pairing across the week was important for continuity as was resisting the temptation to dissolve pairings in order to provide supervision in other classes for absent colleagues. Placing both teachers' names on the students' timetable and facilitating both teachers attendance at the parent-teacher meetings also proved useful.

Administrative support at district level is only addressed by Walther-Thomas, Bryant and Land (1996). The authors rightly suggest that a more cohesive engagement with team-teaching is best achieved when classrooms, schools and districts plan collectively. The success of this initiative in the seven schools was aided by the VEC-led support mechanism of cluster meetings and principal

meetings, which also showed to teachers that their work was valued and part of a larger picture than just their class or just their school.

The extant literature does not address the importance of administrative support in explaining the use of the resources to those not directly involved, or those less than enthusiastic with the arrangements. Leadership from the principal was important in explaining and re-explaining to colleagues, and on occasions, students and parents, that team-teaching was founded on the principles of inclusive practices. Previously expressed teacher-based doubts and concerns regarding the selection of, and benefits to, those students previously withdrawn for additional support were also used to keep a focus on the purpose of team-teaching. Reminders regarding the practicalities of lack of space for withdrawal and students expressing their lack of enthusiasm were important. It was also the principal who kept the project alive at various internal and external meetings where progress and updates could be communicated and those involved acknowledged for their efforts.

Teachers involved required other supports and while neither of the two principals in the case-study schools observed team-teaching in action, they did regularly engage with staff and students involved. On occasions students and their parents also required reassurance. Of note was the student preparing for final high-stake examinations who ‘wanted his hours back’ so that one-to-one preparation for the examination could occur. This clash of old cultures with new was where leadership was required and also highlights the important role students have to play as agents of change and inclusion in their own schools and classrooms.

As alluded to above, another gap in the literature relating to prerequisites concerns the need for alertness to the potential misuse of team-teaching. While this did not occur in the study it was raised as a potential issue by principals and teachers alike. Scenarios outlined included concern about the potential for a principal to place an under-performing teacher in a team-teaching partnership for the wrong reasons. Similarly, the potential for a teacher to declare an interest in team-teaching for less than honourable reasons was also raised i.e. avoidance of teaching a particular group of students or because team-teaching is perceived as an easier option with the balance of work being placed on the other teaching 'partner'. As schools move to the benefits associated with mixed-ability groupings it would also be important to disassociate team-teaching from streaming and see team-teaching as an opportunity to bridge the gap between streaming and mixed-ability grouping.

The extent to which a principal needs to be an advocate of team-teaching is obviously context-sensitive to the school and the teachers involved. It is interesting to note that the principal in one of the schools was not initially 'a fan of team-teaching'. The programme was implemented and sustained successfully in this school because the principal trusted the staff involved and didn't interfere. Support, including emotional and motivational support from the principal is helpful but it seems that showing belief in the initiative is less important than showing belief in those implementing the initiative. Indeed, the over-enthusiastic and under-trusting principal may inadvertently unnerve as opposed to assist those seeking to implement team-teaching in their classrooms. From the outset, the focus of this research study was on learning together from practice. As will be

discussed later in this chapter, support for and not just from the principal is a prerequisite not addressed in the literature but important in the context of change wisdom.

6.2.2 Teacher parity and teacher selection

A prerequisite which dominates the literature is that of teacher parity (Rice & Zigmond, 2000; Murawski, 2006; Hang & Rabren, 2008; Friend, Cook, Hurley-Chamberlain & Shamberger, 2010). The shift in the 'grammar of schooling' (Tyack & Tobin, 1994) that is team-teaching hinges considerably on teachers being treated by others, and by each other, as equals. As mentioned above, the principal can assist in this regard, but ultimately the issue of parity rests with the teachers. Leadership can support the view that teachers are, initially at any rate, best placed to volunteer or not for team teaching dyads. While no doubt 'arranged marriages' (Dieker, 2001) in team teaching can work, the parity of esteem is enhanced when teachers have a role to play in selecting themselves and/or their partners (Mastropieri, et al., 2005; Austin, 2001). Change wisdom suggests it is best at first to engage with the 'coalition of the willing' and not to 'water the rocks' (Fullan, 2007).

As Joe (Dyad C) observed, it is later that one can be more professional and less personal about with whom to team-teach. Levels of use and timeframes are important factors in determining selection of teachers, as is the content knowledge possessed by these teachers. In this study's context all teacher-dyads purposely involved both teachers being qualified in the subject area. This is an important distinction as the literature is dominated by a North American

educational culture that references pairings as the 'general educator' and 'special educator' often with distinct roles outside of team teaching that remain distinct within team-teaching. However, when pairings do emerge in the Irish context that may involve teachers not having the same content knowledge, the extant literature is useful in countenancing against the positioning of one teacher as the assistant and the other as the 'real teacher'. Indeed, as this research has shown Positioning Theory can assist in determining where parity can be maintained and lost among teachers and students in the milieu of the classroom. Similarly, levels of trust can be informed by Social Capital Theory.

Self-selection by teachers is also important for another very practical reason. Fullan (2007) reminds us of the 'privatisation card' that teachers play and the view that teachers "find privatisation a lot less risky than opening the doors of the classroom, even or especially to colleagues" (p. 149). However, it would equally be important to remember that privatisation may be for very good context-sensitive reasons. Teachers may seek to protect their students, and their valued time with them, from new or not so new ideas, and from actions and individuals who may inadvertently be detrimental to the quality of learning and teaching in their classrooms; classrooms that have to already take account of a range of factors which are sometimes viewed as competing with one another. For example, any new action in a post-primary setting would be obliged to take cognisance of the importance of high-stake examinations and must be seen to support students and teachers in meeting the demands as stipulated by such examinations and subsequently by society in general.

6.2.3 Teacher compatibility

Linked closely to the issue of parity is that of teacher compatibility. Rice and Zigmond (2000) argue that compatibility is crucial although two Australian teachers involved in their research also stressed the importance of professionalism. This view that professionalism should prevail is also recorded by Cramer and Nevin (2006) and echoes comments made in relation to selection and pairings made above. According to some authors it would appear that compatibility is important to teachers (Scruggs et al., 2007; Mastropieri, et al., 2005; Keefe & Moore, 2004; Salovitta & Takala, 2010).

Teachers in my research study raised the issue of compatibility with their teaching partner at the very beginning of the initiative and it featured regularly throughout the course of the research. The initial fears around teacher compatibility/incompatibility were expressed in a variety of ways; 'one teacher would dominate'; 'a personality clash will occur between teachers'; 'approaches to discipline may differ as may teaching styles'; 'one teacher may slack off'; 'a teacher may feel excluded'. My research findings suggests that the importance placed upon compatibility is in part linked to how pairings are selected. Significantly, the teachers involved in the research study came to uniformly form the view that the issue of compatibility was less about similar teaching styles, as initially anticipated, and more about similar values and beliefs. Of note, teachers placed importance upon how teachers treated one another 'on and off stage' and in particular how they treated the students in their class. Guilt by association was a major cause for the one dyad that did discontinue (Fíona, Dyad E). Fíona was

no longer comfortable with the manner in which her teaching partner was treating her students.

6.2.4 Planning time and time for planning

Planning time, a key concern among teachers in the literature to date, was less of a concern for three of the four dyads, and became increasingly less of a concern as the year progressed. Eleven of the 46 research studies make specific reference to planning time before lessons and only two studies (Symeonidou, 2002, Walther-Thomas, Bryant & Land, 1996) make reference to review after lessons. This imbalance towards pre-planning over post-review was also reflected in the teachers' commentary. Planning time was an issue for Cathal and Peadar who struggled to move out of the one-dimensional use of lead and support, while for others it was not seen as a problem. This may be as a result of the context in which Irish teachers plan or don't plan their lessons, and in the context of being comfortable with their partners and with pedagogical content knowledge. It may also reflect the TALIS (2009) finding that teachers do not see instructional issues as a concern in Irish post-primary schools.

Of note in the study was the emerging practice of planning and reviewing progress *in class* and in the company of the students (Dyad C & D). This practice offers promise with regard to not only planning and reviewing among the adults, but team planning and reviewing which engages students in the process. It is too early to indicate the extent or value of this practice but it does merit inclusion in any professional development programme that may be devised for teachers wishing to team-teach.

6.2.5 Training programme for teachers

Training for teachers is seen as important by many researchers (Simmons & Magiera, 2007; Armstrong, 1977; Walther-Thomas, 1997; Weiss & Llyod, 2002; Magiera & Zigmond, 2005; Fontana, 2005; Gerber & Popp, 2007) though not necessarily by the majority of teachers in the research study. The teachers who attended the two day pre-training days (May, 2007) and the relevant cluster meetings, throughout 2007-2008, valued the opportunity to listen, learn and share, but in general they did not stress the importance of training. They were of the view that the right attitude with the right administrative support was sufficient to take full advantage of two teachers in the classroom.

I differ and believe that training needs have emerged as an issue from this study, and are an issue if we wish to consciously maximise the potential of team-teaching in our classrooms. Thousand, Nevin and Villa (2007), speak of the gaps in the literature in relation to "the lack of theoretical framework… and the lack of a well-defined curriculum for preparing teachers to team-teach" (p. 426). This curriculum, from my experience needs to attend to a number of issues specific to team-teaching, to a theoretical framework and to transforming normative practices, in general. A curriculum for training would benefit from attention being given to the following, though not, exhaustive list of topics.

- Hopes and fears of all associated with team-teaching (students, parents, teachers and principals)
- Benefits of team-teaching; for students and teachers and other educational goals of the school and wider system
- Purposes and potential dangers of team-teaching
- Prerequisites for success
- Joint-planning and joint-review of lessons
- Types of learning and teaching that team-teaching can facilitate
- Models of team-teaching and suggested alignment with certain needs
- Instructional practices

- Student outcomes
- Assessment practices
- Understanding key concepts; change, communication, levels of use, conflict, identity, collaboration and inclusion.

In response to Thousand et al. (2007), a theoretical framework based on Social Capital Theory and Positioning Theory can act as a scaffold to support and explain such a curriculum. An overriding guiding question for all aspects of such a training curriculum might be framed as: What is added to learning when another teacher is added to the classroom? Such a training curriculum would also be of use for teachers who felt sidelined or de-professionalised by the experience. Explanations of the range of options available to teachers in team-teaching should be neither over-simplified nor over-mystified. Over-simplified explanations may lead to less than optimal use of the arrangement and over-mystified explanations will prevent teachers from even trying. Ultimately, decisions on when and how to engage with team-teaching are determined by the identified needs of the students and, in particular, for the students to whom the additional resources have been allocated.

In my research study there were a number of students, with and without identified needs, who benefited from team-teaching. All teachers involved in the initiative could not find an identified need that could not be met through team-teaching, while all also agreed that one-to-one and small group withdrawal still had a place in their range of responses to support learning. Once more the quality of the teaching and learning experience is the determining factor and any training programme for team-teaching will need to address the interplay between team-teaching and other models of support. Measuring success can take many forms and, as shown in this research study, the positions for learning that team-teaching

can provide need to be taken into consideration. Evaluating the benefits of team-teaching will be determined by what teachers, students and parents value. Consciously calibrating support will require regular review and engagement with students and parents.

Parents are not referenced in the research literature apart from Gerber and Popp's (2000) suggestion that they be informed of team-teaching and Symeonidou's (2002) view that parents may not understand the use of resources in a collective rather than individual setting. Any curriculum training programme will have to take cognisance of the role of parents and of personnel from external agencies who may visit the school. Similarly, the non-teaching roles of the special needs assistant (SNA) requires attention in the context of how many adults are in the one classroom at the one time. Team-teaching owes a debt of gratitude to SNAs who have shown how another adult in the classroom can enable rather than inhibit learning. As initiated in the SNA review (DES, 2011), future conversations regarding the role of the SNA will have to include conversations around team-teaching.

6.2.6 Models of team-teaching

A fundamental prerequisite, and one not conducted sufficiently at the beginning of this research, nor identified in the research literature, relates to what model of team-teaching to use and when to do so? The literature is replete with descriptions of the models that can be used in team-teaching, but little recognition is given to the sequence and purpose for which they can be used. In particular, there is a distinct lack of connection made between the models

adopted by teachers and the needs presenting by their students in their class. At times the choice of model appears to be more in response to the perceived needs of the teachers than the actual needs of the students.

Team-teaching is not a teaching strategy, and like co-operative learning or formative assessment, it is a concept that allows for good practice to be supported. Unlike the latter two concepts, team-teaching is not as well researched. The findings from this study, which are in keeping with the literature, indicate that two team-teaching configurations of 'lead and support' and 'classic team-teaching' were used most frequently by the four dyads involved in the study. Teachers require more support in understanding the potential role that other models can play in supporting learning. In particular, the use of station teaching merits attention, especially when it is seen as a common model of team teaching among primary teachers and one with which students may already be comfortable. The choice of model adopted may also reflect the lack of planning time which could be used to determine what models to be used, though this can only be achieved when teachers are made aware of the potential of the under-used models.

Insights from this study would indicate that a number of cautions need to be attached to the good work undertaken in identifying the models of team-teaching that prevail. It is clear from my research that cooperative practices among teachers do not transfer automatically to formal cooperative practices among students. Formal pair- and group-work organised by the teachers was not as prevalent as one might expect. Indeed it was more common to witness informal

cooperative practices among students, as they seemed influenced by the cooperative learning climate that emerged from team-teaching. Equally it should be noted that the model of team-teaching does not automatically align with the instructional practices of the teacher and the learning experience of the students. For example, 'lead and support' can be used to promote formal cooperative learning experiences just as well as any other model. However, 'classic team-teaching' has the benefit of promoting such practices by creating an atmosphere of cooperation that allows for more natural and student-initiated forms of cooperation. Similarly, the latter model facilitates opportunities for questions to be asked in an atmosphere where inquiry and clarification are the norm.

While a 'lead and support model' was a dominant model for Cathal and Peadar (Dyad B) it was used by all dyads in the course of all lessons observed. Teachers played to their own strengths (Armstrong, 1977) and lessons often opened, and sometimes closed, with this model. The danger occurs when the model is over-used and teachers are typecast as either 'lead' or 'support' to the extent that students will label teachers as teacher or helper. For Cathal and Peadar, they got stuck in a rut with this model and opportunities to revisit training, receive additional training or witness other dyads in action may have assisted.

However, deployment of all known configurations will be determined by the context for learning and will only influence learning if they draw upon effective teaching and learning practices. It is not enough to expect teaching and learning to improve because two teachers are in one room. Indeed, as outlined by Woolcock (2001) and Portes (1998), there is the danger of negative outcomes

emerging as a result of 'groupthink' with the danger of a lowering of standards and efforts by teachers. It would also be erroneous, for example, to adopt the view that observation through team-teaching removes the necessity for teachers to have a shared lexicon of teaching. Being in the same room opens up opportunities for conversations that are made easier by a shared space and time, but one cannot presume that such conversations will automatically take place. Similarly, pedagogical skills such as questioning and facilitating thoughtful discourse require ongoing attention by teachers as part of their professional learning. As with bonding, bridging and linking with others at the subjective and cognitive level, there is a need to bond, bridge and link with pedagogy. As outlined, the success of team-teaching will be in part determined by the ability of participants to graft old and new pedagogical knowledge onto their new and emerging collaborative practices. Otherwise the benefits of team-teaching will not be achieved nor the practice maintained. The next section examines the benefits to students, reported in the literature and uncovered in my research study.

6.3 Benefits of team-teaching for students

As Hattie (2009) reminds, the benefits or otherwise of team-teaching remain unclear. This is, in part, due to the wide range of practices associated with the collective title of team-teaching and because there is a lack of agreement and a lack of nuanced assessment tools relating to how to capture the benefits that are associated with team-teaching. A review of the literature indicates that the focus of attention has been deflected more to how to engage in team-teaching (with

teachers' experiences dominant), as opposed to how engaging in team-teaching supports students, and their teachers, with learning.

This section examines the documented benefits or otherwise for students. The emerging findings from the team-teaching project are matched against the existing literature and indicate that team-teaching has a part to play in extending and enhancing the repertoire of supports for learning available to both students and teachers. While not a teaching strategy, team-teaching can facilitate a range of teaching strategies, interventions and learning opportunities for students which simultaneously promote professional engagement, experimentation and adaptation in real time in real classrooms. The benefits or otherwise, for teachers will be addressed in the next section under the heading of deepening collaborative engagement with pedagogy.

The many benefits to students, as captured by themselves and by their teachers in this study, both cognitive and affective, are in keeping with the research literature as outlined in Chapter 2. However, uncertainty still prevails. Can one genuinely say that team-teaching in one or two class periods across a nine-period day has a direct influence on so many aspects of student learning? Equally can disconfirming evidence (Murawski & Swanson, 2001; Zigmond, 2004; Volonino & Zigmond, 2007; Idol, 2006) of a lack of teacher differentiation or engagement be dismissed by simply invoking the fidelity of implementation clause? (Murawski, 2006; Friend et al., 2010), though it may well be that team-teaching is not being implemented beyond the level of mechanical use?

In order to determine the success or otherwise of team-teaching upon student learning, and notwithstanding the claims made by school personnel, my study drew on Positioning Theory to highlight the moment-to-moment interactions that supported learning and to reveal the process by which such learning took place. Research to date has repeatedly looked at summative and usually academic outcomes for learning. The use of Positioning Theory acts as a bulwark against standardised tests results which are conducted over short timeframes of one academic year or less (Murawski & Swanson, 2001; Idol, 2006) and often indicate that team-teaching makes no appreciable difference. The theory also responds to those researchers who have recognised the difficulty, especially in a post-primary setting, of the fluid nature and multi-group formations that prevail in most schools in that sector. The appeal of the theory also rests with its ability to examine classroom interactions and answer questions relating to student identity and what kind of learner can a student be in team-teaching? It also assists in accepting the challenge of McDermott et al. (2006), in "searching for data on conditions that make learning disability look promising as a way to save children" (p. 13).

Under different research conditions the use of Social Capital Theory also offers potential in capturing the emergence among students of greater confidence (self-trust) and trust in others, as well as having a sense of belonging, of helping and of being helped. Reciprocal altruism and other concepts associated with social capital may prove useful for future research studies, particularly those of an ethnographic nature.

Missing from the research literature, apart from work by Keefe and Moore (2004), is the positioning of team-teaching in relation to other efforts to assist students. Of note in my research is the finding that schools are not seeking to dismiss practices such as individual and small group withdrawal. All school personnel are of the view that the older practices are reframed and repositioned by team-teaching but not removed. With a focus on student learning the participants contend that team-teaching should now be the first and dominant model with withdrawal models feeding in and out of team-teaching. It also emerged that these withdrawal models do not carry the same stigma as when seen to be part of a team-teaching culture. Team-teaching repositions withdrawal in a more favourable light among students and offers future possibilities of mixing and matching responses as students' needs demand. In one of the two schools team-teaching also reframed teachers' views of the streamed 'special' class which has now been removed with team-teaching bridging the inclusion of such students into mainstream classrooms.

Teachers reported the interaction that team-teaching allows with all students is a significant benefit. Doubts about the selection of who is withdrawn and the ability to attend to the needs of some who remain in class have been appeased. The student with no label who needs help and those with labels but with no resource allocation (including those described as gifted and talented) have their learning mediated in a personalised manner by the teachers present. Further training on observation skills by teachers, including attending to IEP goals would be useful in optimising team-teaching. Other developments to benefit students could include the use of work samples (Blythe, Allen & Schieffelin Powell,

2008) as a means of reviewing progress. Intentional use of modelling by teachers (Cooper, Heron & Heward, 2007; Daly & Demetry, 2009) also offers potential in teaching students a range of skills.

Relationships of educational purpose were a significant finding and benefit to students from this study. Relationships between teacher and learner, both formal and informal are recognised as powerful influences upon student learning and teacher actions. The interplay between cognitive and affective domains appears to be a powerful force in learning and in team-teaching. To date, the literature on team-teaching has only given passing reference to such interaction and the benefits accruing for students as human beings and as learners. Positioning Theory helps to capture such interactions that foreground dimensions of learning such as motivation, pride, confidence, self-esteem and sense of belonging. In the context of inclusion the latter point is all the more telling when aligned with the OECD view (2004, p. 127) that a general sense of belonging at school is so important for students' life chances and success that it should be given equal indicator status with academic results. Such a view resonates with Brophy's (1999) work on effective teaching and with Emer Smyth's view (1999, 2004-2010) that the quality of relationships in schools is a key factor in determining the effectiveness or otherwise of schools.

Set against an Irish backdrop as described by Lyons et al. (2003) and the ESRI-LS (2004-2010) the counter-narrative in relation to students' and teachers' experiences of teaching and learning in team-taught lessons is quite striking and compels one further to understand why team-teaching has been under-used and

under-valued to date? Part of the reason may lie in the research gaze focusing more on what teachers should be doing and less on what is preventing them from doing what they wish to do. The pursuit of such a line of thought requires an examination of the wider environment of school and nationally funded supports.

Before that can be addressed, an initial focus on team-teaching and what team-teaching asks of teachers as well as offers teachers is required. The next section concentrates on such considerations by focusing on the benefits for teachers that are associated with team-teaching. The subsequent section of the chapter will examine issues outside of the classroom which are seen to inhibit or enable teachers in changing their practices.

6.4 Benefits to teachers

The improved relationships with students and the improvement in student learning add to the 'psychic nourishment' (Lortie, 1975) of teachers. This section compares the benefits of team-teaching as identified in the literature with the findings of my research study. Better understandings have emerged in relation to some of these identified benefits and these, as well as new insights, will also be discussed.

The benefits to teachers as gleaned from literature and captured by the DES published *Inclusion of Students with Special Educational Needs, Post-Primary Guidelines* (2007) are listed as:

- Reducing isolation
- Sharing decision making and workload
- Working with more students
- Receiving mutual support

- Reducing stress-related issues such as discipline
- Sharing and witnessing teaching.

The findings from this research study concur with the view that team-teaching can bring additional benefits for teachers. Teachers themselves, even those who found team-teaching difficult, speak positively about team-teaching in relation to the benefits accruing to their students and themselves (Murawski & Swanson, 2001; Welch, Brownwell & Sheridan, 1999; Wilson & Michaels, 2006; Dieker, 2001).

Walther-Thomas (1997) echoes the views of other researchers when he refers to 'professional satisfaction', professional growth' and 'professional support'. Cautious recognition by Rice and Zigmond (2000) suggest that when well-implemented, team-teaching can be of benefit to all students and all teachers. Austin (2001) reveals that teachers valued the opportunity to review together. Opportunities to observe and intervene were highlighted by teachers in a study conducted by Kloo and Zigmond (2008). Such views echo the findings from my study which indicate that teachers benefited from the time and flow that occurred in team-taught lessons. Teachers could reflect in practice and share common experiences after practice.

Development of instructional skills, both new and anew, which emerge from my research is significant. Teachers value the learning opportunities presented by team-teaching. The diversity of teaching styles once feared as a potential negative are now seen to provide professional learning opportunities. This is an important point in the context of creating an environment that embraces

diversity. Teachers who appreciate each other's teaching diversity may also appreciate their student's learning diversity.

Of significance with team-teaching is the opening up of the secret garden that is the classroom. Team-teaching provides for teachers to learn from each other in real classrooms in real time. Barber and Mourshed (2007) have stressed the importance of instruction and have identified, among high-performing systems, three things they do well; they get the right people to teach, they develop teachers' instructional practices, and they attend to the learning of all students. Curiously the authors, while valuing efforts "to enable teachers to learn from each other" (p. 31), do not make reference to team-teaching. This point and other related issues will be discussed in more detail in the next section.

6.5 New territory for conceptual tools

Changing teachers' classroom practice has proven to be notoriously hard. Jackson (1968), Weatherly and Lipsky's (1977) classic analysis of 'street-level bureaucrats', to Cuban (2008), Hargreaves and Shirley (2009) and many in between, speak of the pressures that teachers encounter in their classrooms. These pressures reduce the opportunities teachers have for reflection, learning and implementation of what has already been learned. These pressures are associated with the time and space afforded to teachers in single-teacher classrooms; classrooms which are increasingly occupied by diverse needs and growing demands. These pressures result in well-intentioned policy, at worst being rejected and at best refracted in the ebb and flow of school and classroom life. While it is acknowledged by many that classrooms contain a greater

diversity of students, and in some cases a greater number of students, they are still invariably found to contain only one teacher.

A central feature of the research was to examine the dividend that emerges from teachers collaborating with one another in classrooms. Greater understandings in relation to inclusive practices and collaboration have been underpinned by availing of Social Capital Theory and Positioning Theory. While both theories are not new to education they have not been used simultaneously to theorise the twin goals of inclusion and collaboration. Neither have they been used to move beyond the classroom and to look at how the promotion of inclusive practice through collaboration can be initiated and sustained at the micro-level of the classroom, the meso-level of the school and the macro-level of the district, region or state.

6.5.1 Social capital theory: capitalising on the social

My research has focused on what happens not only in team-taught classrooms, but when a more systemic approach is adopted in implementing team-teaching. The literature on team-teaching is most useful but as Thousand, Nevin and Villa (2007) and Friend et al. (2010) correctly state, it has failed to move from the 'clinical trials' model that sees team-teaching as an isolated event to viewing team-teaching as only being successfully embedded when it aligns with other aspects of the system and with other change agents such as district administrators, researchers and policymakers.

Team-teaching seeks to promote inclusive learning through collaborative practices among teachers at classroom level. However, for team-teaching to survive and develop requires collaborative and inclusive actions in schools and between schools. Change wisdom informs that such action in itself is in turn not sufficient and that schools need to link, not only with each other, but also with decision-makers outside the school. In forging such links with schools, those outside are better informed about what policy decisions need to be made and how they can be successfully implemented.

Drawing on Social Capital Theory, this research has shed light on the reasons why team-teaching merits implementation and on some of the obstacles that explain why it has not been implemented in any significant way to date, either in Ireland or elsewhere. Social Capital Theory reaches the corners of change that policy statements, intentionally or otherwise leave unmentioned and untouched. Concepts such as trust, pressure, reciprocal altruism, access to resources, normative values, and networks of engagement, provide an opportunity to get a more fine-grained view of actions and interactions both within and outside the classroom. These self-same concepts can inform how decisions are made and policies formulated and implemented across a range of educational settings for a range of educational purposes. These concepts add depth of meaning and support to Fullan's (2007) subjective and objective dimensions of change, providing a basis on which policies can be framed, implemented, reviewed, tweaked, abandoned, repaired and sustained.

In short, Social Capital Theory offers insights into many aspects of collaborative practice as witnessed in this research study. Teachers, no more than students, are not a homogenous group and their practice is played out in different settings. A socio-cultural perspective asks that we focus on teachers as learners and therefore that we focus on the questions teachers ask. Social Capital Theory informs the degree to which school and classroom cultures allow teachers to ask and answer hard questions, of themselves and each other, about how effective is their teaching and the learning of their students? Team-teaching supports how questions are framed and considered by sharing the classroom space, identifying and responding to individual and collective needs of students, engaging in responsible professional experimentation and risk taking, and by encouraging constructive yet critical professional dialogue on how teachers' practice and students' learning can and should be improved. While team-teaching also supports measuring and tracking students' progress and capturing student success, a common criticism of team-teaching is the lack of information on whether it actually makes a difference or not to student outcomes? Social Capital Theory, as used in this study, assists in examining what team-teaching asks and offers teachers. Questions relating to the impact of team-teaching upon students are not easily answered in light of research timeframes and multiple contextual influences. However, Positioning Theory does offer much in the way of capturing the moment-to-moment experiences of students in team-taught lessons.

6.5.2 Positioning theory: put in a position to learn

While the previous section examined how teachers are put in positions to teach and the type of teachers they can be, Positioning Theory assists in capturing how

students are put in position to learn and the type of learners they can be. Similarly, the theory offers those who observe teaching and learning the opportunity to view the learning experience through the more fluid and natural lens of positions as opposed to the more fixed and deterministic lens of roles.

Positioning theory helps to examine the impact of team-teaching upon students' academic and personal development. It reveals the moment-to-moment interactions in class that enable or hinder learning, and it tells us more about the impact of our actions as teachers, researchers and policymakers. In so doing, Positioning Theory facilitates efforts to capture the ebb and flow of learning on a daily basis across cognitive and affective domains. It should not be interpreted that summative assessment practices are in opposition to Positioning Theory, but rather that such a theory opens up the world of dynamic assessment which can help, in tandem with summative practices, to determine if team-teaching, or indeed any form of teacher intervention, is succeeding in making a difference to student's progress as bothe learners and as human beings.

Special educational needs has until recently been very much associated with, and some would argue created by, an over-reliance on a deficit model that attribute learning and behavioural problems to deficits that reside within the student. In such a paradigm the notion of 'fixing students' outside of the mainstream class, or indeed outside of the mainstream school emerged and was until recently sustained. With the increased numbers of students identified with special educational needs attending mainstream and with increased doubts about the effectiveness of deficit-based models a "paradigmatic shift" (Trent et al., 1998) has emerged in more recent times. This shift has adopted a socio-cultural

perspective on learning which has seen the focus turn to students' strengths rather than deficits and to situations rather than minds (McDermott et al., 2006). The same authors contend:

> We must seek data showing children more skilled than schools have categories or time to notice, describe, diagnose, record and remediate. (p. 15)

I have argued that team-teaching changes the rules of engagement and teachers have shown that team-teaching makes the need for labels less relevant. Team-teaching allows teachers to see their students in a different light. Positioning Theory helps to capture what the teachers see and helps to honour what teachers value and cherish. Student progress may emerge in the form of quantitative data such as, state examinations and levels taken, summative in-house examinations standardised testing and retesting, homework, attendance, discipline referrals etc. Progress and development in social and emotional domains which are interlinked with more academic gains can also be tracked and shared and celebrated. Positioning theory affords opportunities to enhance and to measure other valuable learning outcomes such as the quality of student participation, cooperation, engagement, teamwork, perseverance, self-esteem, sense of belonging, sense of self and other gains that all involved in education cherish. Positioning theory assists with measuring what is most valuable to students and teachers rather than simply valuing what is most measurable. As Cuban (1996) outlines:

> What standards for judging success do most teachers use? Of course teachers seek improvements in students' performance and attitudes, but what teachers count as worthwhile results are seldom scores on standardized tests but rather, actual observed behaviour and performance on academic and non-academic tasks in and out of the classroom…teachers judge an innovation successful if they can put their personal signature on the mandated change and make it work for their students and for themselves. (p. 80)

This research study has shown how Social Capital Theory and Positioning Theory can occupy new territory on the educational landscape. In particular, it indicates their contribution and future potential in the field of special education and the promotion of inclusive practices in our schools and classrooms. Their presence on the landscape also facilitates some deep-shaft mining to reveal what we understand about elusive treasures such as team-teaching, inclusive practice, collaboration and student outcomes. At a personal level, both theories have also assisted in making sense of my dual role as researcher and school inspector. This point will be addressed in the next section and the chapter will conclude with an examination of the contribution team-teaching can make to other aspects, proposed changes and developments in education.

6.6 21st Century educational imaginaries

It must always be tempting as a researcher to confer an astute timeliness and a cutting-edge importance to the publication of ones findings on any particular topic. While I hope to avoid such temptations I am also aware of the growing interest that teachers, researchers, educational personnel and policymakers in Ireland are showing towards collaborative practices within schools and within classrooms. Why this interest is emerging at this time may be for many reasons, some of which have been already mentioned and some which have not yet been imagined. But imaginaries are important if school improvement is to be achieved, or at the very least, if options are to be framed and discussed. In this section I examine the potential role and positions that the inspectorate can play in progressing the quality of learning and teaching in our schools. I concentrate on

some aspects of our educational system with which this study and team-teaching may assist. These areas are outlined below in Table 17.

Table 17 Policy implications: Policy themes and team-teaching

Policy themes	**Team-teaching and 21st Century Imaginaries**
Inclusion	In adopting a broad interpretation of inclusion, team-teaching adds to the repertoire of responses that teachers and students can use in providing inclusive learning opportunities for each other in schools and classrooms.
Teacher Education Continuum	Initial, induction and continuing professional developments can all be supported by practices associated with team-teaching and by theoretical frames offered by Social Capital Theory and Positioning Theory.
Literacy and Numeracy	The proposed additional year of teacher education asks schools to play a key role in delivering policy objectives related to literacy, numeracy and teacher education. Schools, as sites for learning for teachers are central to this policy. In tandem with summative assessments, dynamic assessment practices will be assisted by Positioning Theory in measuring students' knowledge, skills and attitudes.
School Self-Evaluation	Schools self-evaluation practices, which promote and sustain school improvement, can be supported by team-teaching. Classroom-related practices such as joint-planning, joint-implementation and joint –review are central to school self-evaluation. Self-evaluation *of* practice can be supported by team-teaching as can the promotion of self-evaluation *as* practice.
Collaboration with others within and outside the school	Collaboration can be understood in the context of Social Capital Theory and Positioning Theory, where a range of personnel engage collaboratively with teachers and students – SNAs, Visiting Teachers, SENOs, pyschologists, welfare officers, speech and language therapist, occupational therapists…

6.6.1 Deepening collaborative engagement with pedagogy

Change wisdom (Fullan, 2007; Cuban, 1996; McLaughlin, 2008; Wiliam, 2008; Hargreaves & Shirley, 2009; Barber & Mourshed, 2007) informs that for practices to move beyond being episodic and short-lived interventions, they need to interact, support and be supported by other school improvement efforts and initiatives. Change wisdom, also informs that policy engagements that seek quick fixes will not always be successful. Team-teaching requires time and it requires training. It also requires more attention being given to its potential contribution to enhancing the quality of provision for all learners (including teachers) in all schools. Curiously, the potential contribution of team-teaching in relation to other aspects of desired educational change, are not seriously addressed by either scholars of educational change or policymakers seeking educational change.

In their analysis of the 'world's best–performing school systems' Barber and Mourshed (2007), highlight the quality of instruction as one of the three key areas for effective school systems. They also highlight the exception that is teaching, relative to other professions:

> …despite the evidence and the fact that nearly every other profession conducts most of its training in real-life settings (doctors and nurses in hospitals, lawyers in courtrooms, clergy in churches, consultants with clients) very little teacher training takes place in the teacher's own classrooms, the place in which it would be precise and relevant enough to be the most effective. (p. 31)

The authors list cooperative practices from around the world including the use of school sites and coaches for initial teacher education (USA, UK, Japan) or for particular projects such as literacy coaches (USA) and stress the importance of principals as instructional leaders. They add "that some of the best systems have found ways to enable teachers to learn from each other" (p. 31) and reference the

Finnish models of supporting teachers and Japanese practice, including Lesson Study. They conclude by stating that the latter models are important in that they also create cultures of collaboration that sustain improvement. I agree that cultures of collaboration are central for changed practice to be sustained and evaluated but would suggest that team-teaching can also play a part in supporting effective school systems make real, on a daily basis, the notion of lifelong learning for teachers as played out in real classrooms in real time.

This point resonates with the work of Wiliam (2008) and his contention that the creation of teacher learning communities is the most promising and practical method for changing day-to-day classroom practice.

> Aside from individual coaching for every teacher, which would be beyond the budgets of most schools, the most promising approach we have found for focusing on teacher actions is teacher learning communities. (p. 38)

I contend that the job-embedded professional development opportunities offered by team-teaching need to be taken more seriously and that they can offer much to support the views and comments expressed above. They can also add to the movement towards the inclusion of students as aligned to overall school improvement, by facilitating 'assisted performance' (Tharp & Gallimore, 1988). In their study of Irish teachers' perspectives on creating inclusive learning environments Shevlin et al. (2009) surmised that one of the most important factors for teachers to engage with inclusive practices may well be "the experience of success with inclusion itself" (p. 7). As witnessed in this study such experiences have influenced how teachers teach, not only with one another, but also when teaching on their own. Team-teaching can allow and show teachers that they can succeed with inclusive learning.

The impact of team-teaching upon the pedagogical practices of teachers when they taught lessons on their own is not clear from this study and will require further research. What is clear is that teachers stated that they were influenced at a personal, professional and pedagogical level when they went into their solo-taught classes. In response to Wiliam (2008) there may be merit in invoking the Pareto principle, or law of the vital few, where 80% of effects come from 20% of the causes. Where team-teaching occurs on a daily basis for teachers (c.15-20% of a teachers' class contact time) can it have significant influence upon the quality of learning and teaching that occurs for the remaining 80% of the day?

The place of team-teaching in the context of teacher professional development may also be of interest to the Teaching Council of Ireland and their recently published Continuum of Teacher Education (2011). Continua can take many forms; in special education the continuum of provision is regularly referenced. In combining inclusive practices with the Teaching Council's continuum, team-teaching opens up possibilities across the continuum and can support in a very practical way the concept of lifelong learning among teachers.

In the context of continuing professional development, the aforementioned Continuum of Teacher Education (2011) describes the continuum as " the formal and informal educational and developmental activities in which teachers engage, as life-long learners, during their teaching career" (p. 5). The document references "team teaching/co-teaching situations" only in the context of initial teacher education. I contend that team-teaching has the potential to play a significant role across the entire continuum of teacher education, where daily

learning can take place in real time and in shared contexts that include shared classrooms.

As well as catering for the needs of those commencing their learning as teachers, induction practices can draw on team-teaching as a means of introducing new teachers, or reintroducing returning teachers, to classroom life. Such practices can be informed by the literature on team-teaching and by the theoretical frames provided by Social Capital Theory and Positioning Theory.

In a similar fashion continuing professional development among teachers within or across schools can be facilitated by team-teaching arrangements. Of note is the emerging potential of team-teaching to support innovations that teachers may wish to implement, upon returning to their classrooms, following external professional development activities. Teachers can now experiment and implement new learning with a fellow colleague and in the process generate new learning for each other that is context-sensitive and context-focused. Fusing team-teaching with practices such as work sample analysis and in particular Japanese Lesson Study (Sloane & Kelly, 2003) offer much potential for teacher education at both individual and subject department levels.

In all aspects of teacher education, the measurement of the impact of teachers' actions upon student learning can be undertaken and discussed by both teachers, before, during and after the lesson. Team-teaching can support the Teaching Council's "vision for teacher education under the banner of a new "three I's": innovation, integration and improvement" (p. 22).

By opening up conversations and possibilities for teachers, irrespective of their place on the teacher education continuum, team-teaching has potential to add to the concept of 'teaching as a learning profession' and attend to the "complexity of teaching in 21st Century Ireland" (Teaching Council, 2011, p. 6).

Hutchinson (1993) states that the "lines of observation and the limits on observation of the activities of others have consequences for the knowledge acquisition process" (p. 52). Extending the lines of observation and the quality of the conversations that emerge is a worthwhile task but one which, to date, has rarely taken place in the Irish context where, as TALIS highlights "the dynamics of autonomous teaching and professional collaboration focused mainly on coordination issues" (Conway, et al., 2011, p. 91).

As TALIS (2009) informs, observation of teaching in Irish classrooms is the preserve of the few and rarely undertaken by teacher colleagues. However exhortations by Elmore (2004) and others to engage in teacher observation and other associated practices such as peer coaching or assisted performance activities (Darling-Hammond & Richardson, 2009) do not always nestle nicely into the Irish post-primary educational landscape. As Barth's (2004) honest words indicate, observation is very worthwhile but isn't easy.

> Making our practice mutually visible will never be easy, because we will never be fully confident that we know what we are supposed to be doing and that we are doing it well. And we are never quite sure just how students are going to behave. None of us wants to risk being exposed as incompetent. Yet there is no more powerful way of learning and improving on the job than by observing others and having others observe you. (p. 4)

In addition to Barth's thoughts, there may be other reasons why such beneficial but risky activities have not taken root in Ireland. Observation by colleagues may be deemed contrived and/or too teacher-focused being more associated with teacher accountability than learning. Furthermore such actions do not always appear to meet the immediate needs of either students or teachers in the classrooms visited. On the other hand team-teaching, with a focus on student learning, offers opportunities for teachers to engage in a range of joint activities, including joint in-class activities, in a manner that is in keeping with Department circulars (2003) and guidelines (2007), and in a manner which may be deemed more natural, helpful, meaningful, regular and less threatening than the above mentioned observation practices.

Opening up classrooms can open up conversations about pedagogy and about supporting one another in continuing to improve the quality of the learning experience for students. Team-teaching is not a teaching methodology but offers opportunities for other aspects of pedagogy to be (re)introduced and developed. These observations and conversations can span the continuum of teacher professional learning and as suggested link in a bi-directional manner with what both policymakers and practitioners agree is important and of value to the school system.

6.6.2 Consciously competent or accidentally adequate

It is not enough to leave team-teaching to fate, either as a policy or a practice. Neither is it wise to assume conversation and learning will flow from collaborative practice. Bennett (2010) references a colleague of his, Pauline

Lang, who once said "Our goal is to make sure that as educators we become consciously competent and not simply accidentally adequate" (p. 89). It would be naïve to suggest that conversations born out of team-teaching activities will automatically transfer into learning, or that such conversations would even occur as a result of interaction through team-teaching. As witnessed from my evidence, teachers found team-teaching to have multiple benefits for their students and themselves. Some teachers struggled with team-teaching and all found many 'unsaid' benefits. In all cases, teachers spoke of many aspects of team-teaching, but in no case was there a lexicon of teaching clearly evident. The teachers in this initiative have shown that they are instructional leaders, but instructional leaders need to articulate if they are to lead. Joint review of lessons rarely occurred and was rarely seen as being required by teachers. Could it be that the lack of a common language to deconstruct the lesson, as opposed to the frequently referenced lack of time to jointly review the lesson, causes teachers to shy away from team-review of the lesson? This point will require further attention with regard to any proposed training programme and is briefly discussed below.

In short, being unconsciously skilled is important in practice but being consciously skilled is important if we wish to discuss and learn, with others, about practice. As Bennett and Rolheiser (2008) state; being consciously skilled requires a common language.

> If the lesson does not work, how do you deconstruct the lesson to find where it went amiss? How do you efficiently and effectively communicate with others about what you attempted, what worked and what did not? If you have a student teacher, how do you assist in the deconstruction of a teaching moment to talk about why it did or did not go to well? (p. 14)

In the above scenario replace ‘student teacher’ with ‘team teacher’ and it is clear that deliberate and purposeful efforts will be required if the potential of (team)-teaching is to be realised. Conversations among teachers need to be supported by a shared language. The work of Barber and Mourshed (2007) has shown how teaching, unlike other professions, does not “conduct most of its training in real-life settings” (p. 31).

In extending the above authors’ observations, it can be added that nearly all professions also have a common, and sometimes cryptic and secret language associated with their practice. Without such language it is difficult to conduct business. For teachers to maximise the benefits of team-teaching and to become more consciously competent in their everyday practice requires support.

This point was not lost on the IVEA who, as a result of the team-teaching initiative and the social capital networks developed, have secured DES funding to progress an Instructional Leadership Programme. This programme is now entering its third year of a five-year cycle, and addresses some of the issues relating to a shared language among teachers. Team-teaching is seen as benefiting from such engagement and in turn is recognised as being supportive of the programme’s focus on instructional practices in classrooms.

6.6.3 Team-teaching, special educational needs and inclusion

Team-teaching in the context of this research study focused on the use of allocated resources to provide for the inclusion of students identified with special educational needs. To say that inclusion is a contested concept is somewhat of an

understatement. This research did not set out to serve doctrinaire interests in relation to inclusive practices, but did set out to examine how team-teaching can assist efforts to create inclusive learning experiences.

Team-teaching has the potential to extend schools' repertoire of responses and the quality of these responses to meet individual needs in the collective setting of the classroom and to align inclusive practices with school improvement. Hegarty (2009) argues that:

> Inclusion may have served as a useful function in dispatching the naiveties of integration, but its focus on the location of education rather than its quality requires that it too be set aside and that it becomes no more than a footnote in the history of special education… It is of secondary value and must cede place to the imperative for good education. (p. 21)

In adopting a socio-cultural view of learning and inclusion this research study shows how team-teaching can assist with the 'imperative for good education' but in a manner that I believe will also see special education become, in time, 'no more than a footnote in the history of education'. As long as we need to refer to special education we will not have achieved an inclusive education system. The focus needs to be on the education of the students and what needs to be special is the responses from teachers and those who support teachers with their work.

The agenda being set nationally and internationally (Lyndsey, 2007) is based on the premise that an inclusive education system is the best way forward. I concur with Lyndsey, when he states that the creation of an inclusive education system is "more than simply a question of mainstream versus special school, or that inclusion can only mean full-time education in a mainstream class" (p. 24). A socio-cultural perspective on special educational needs rejects much of the deficit

thinking on special education and focuses on knowing rather than simply labelling students.

Unwittingly or otherwise, unhelpful polarised debates about inclusion continue, and in many cases these debates are about what schools should or shouldn't be doing with little insight or assistance being offered as to how schools should go about doing what they should do. A socio-cultural perspective on special educational needs is just that, a perspective. Practical application and manifestation of a socio-cultural learning community can be supported by team-teaching.

The movement from segregation, to integration, to inclusion continues with a renewed focus on the quality of what is being learned and how, rather than solely on where and when. The quality of the learning experiences hinges on the interaction between students and teachers, it's as simple and as complex as that. Artiles et al. (2006) correctly inform that:

> The process is the product and thus future research must transcend the documentation of outcomes as the only legitimate proof of effect… Such a process requires considered definitions of what is being studied and nuanced ways of collecting and interpreting data and ongoing discourse within communities to purposefully explore and understand the nature of what an inclusive education can be. (p. 102)

Anomalies and contradictions abound in seeking to promote inclusive practices. One such example is the manner in which resources are frequently allocated on an individual basis while schools are asked to use these resources (sometimes hard fought for by schools and parents' of individuals) in the collective setting of the classroom. Team-teaching alone will not consign special education as a

footnote in the history of education, but in combination with other factors it will assist in promoting a better quality of learning for students and their teachers.

6.6.4 Team-teaching supports other educational goals

In describing the key drivers for whole system reform, Fullan (2011) says that "the heart of the matter" (p. 17) consists of four systemically related big drivers that work:

- the learning-instruction-assessment nexus,
- social capital to build the profession,
- pedagogy matches technology
- systemic synergy.

Successful initiatives, such as team-teaching, sustain and are sustained by other work. Other initiatives and policies have aligned and continue to align successfully with team-teaching. The web of development that has been undertaken by the VEC administrative body, IVEA, has seen the provision of team-teaching professional training modules and the alignment of team-teaching with the aforementioned IVEA's Instructional Leadership Programme where professional learning is conducted over a three year period by three members of staff, including the principal, with a view to building capacity within and across schools. Clearly the fidelity required in implementing the learning from other aspects of professional learning is enhanced when teachers return to schools where a culture exists of two teachers collaborating together in the same classroom at the same time. Such alignment will assist in generating new and context-sensitive knowledge and help in overcoming the age-old dilemma of the

disconnection between teachers' professional development and their day-to-day classroom experiences (Fullan et al., 2006).

Review and discussions centred on teaching and learning are integral to the more recent promotion of school self-evaluation and the development of a literacy and numeracy plan. The connection between team-teaching and an extended time in-school for initial teacher education, as forms part of the National Plan for Literacy and Numeracy (DES, 2011), is clear. Less clear, but also of importance, is the role team-teaching can play in developing the literacy and numeracy skills of our students, and the understandings associated with same among teachers. As outlined by the Chief Inspector (2011) when launching the support materials for team-teaching.

> A legitimate focus on literacy and numeracy does not have to mean that students' broader skills are neglected. In fact, as these materials show, the development of students' skills in literacy and numeracy is closely linked with growth in their self-esteem, their self-confidence and their overall personal and social development. You have shown how the individual needs of students, including those deemed exceptionally able, can be met in a personalised manner within mainstream classrooms. (p. 6)

Self-evaluation is seen as a key driver of school improvement and with it the central question: How effective is our teaching and the learning of our students? Team-teaching supports efforts to answer this question by:

- Sharing the classroom space with fellow teachers and principals.
- Expressing hopes and fears.
- Engaging in responsible professional experimentation, including taking risks.
- Tracking student progress both quantitative and qualitative.
- Challenging, in a constructive manner, what we do/don't do in our classrooms and staff rooms.
- Capturing student successes and seeking to explain where we might improve.

It offers potential to view schools through the lens of 'learning capital' where all activities and all those involved can determine the learning that is on offer, to whom and by whom. Team-teaching gives expression to policy which seeks to create school cultures that can speak not only *for* themselves (MacBeath, 1999), but also *to* themselves. The ultimate judgement on school self-review is determined by what happens in classrooms. The focus on classroom practices and the use of resources to maximise instructional time is central to self-review as is the sharing of data not only at intra-school level but also at inter-school level.

As outlined in the description of vertical transfer of information and the 'linking' (Woolcock, 1998 & 2001) involved, this research study has been disseminated over-time and across a range interconnecting arenas. My own immediate contexts include working with colleagues in the Inspectorate and in sections of the Department of Education and Skills, including the Teacher Education Section and Special Education Section. Engagement with schools, including my formal evaluation of their practices, has also resulted in invitations to present on team-teaching to staff and to present to teachers attending conferences or enrolled on courses such as the Postgraduate Diploma in Special Educational Needs. My work with the Special Education Support Service (SESS) and the European Agency for Development in Special Needs Education has also facilitated dissemination of this research.

To complement my article published by the Irish Learning Support Association in 2009, I plan, in conjunction with my supervisor, to write academic papers for

the Irish Educational Studies Association, and for international journals such as Teaching and Teacher Education. Ongoing work with the IVEA and the NCSE will include not only action in relation to provision of professional development for team-teaching, but the inverse role of team-teaching for professional development. The planned national symposium on team-teaching to be held in March 2012, and hosted by one of the colleges of education, will also assist in disseminating the findings of this research.

My efforts, and the efforts of others involved in this research study, have always sought to define the relationship between research and educational improvement in an interactive and productive manner (Hubbard, Mehan & Stein, 2006) where 'reform is learning' and where the centre of gravity is placed with the practitioners. However, the researcher/inspector axis also raises questions about the social capital that can be generated for the benefit of learners when the inspector is repositioned to look with, rather than simply at, school practices and classroom activities.

6.6.5 (Re)positioning the cigire (inspector)

Of note in this research is the role of cigire as researcher/learner in understanding the content and implementation of change. In the Irish educational system the cigire is given statutory powers to evaluate, advise and support schools in their work and to contribute to policy formation at national level. That an inspector would engage in conjunction with school personnel in actions that move policy from mere rhetoric to multiple context-based realities and adopt research that is transformative and born of moral purpose, is relatively new. That school

personnel would facilitate such action is also new. Since the establishment of the reorganised post-primary inspectorate in 2002, the role of the inspector as charged with evaluating the quality of learning and teaching in a school or classroom is relatively clear for both inspector and school personnel (Coolahan, 2009). What is not so clear is the other statutory-based advisory and supportive roles that an inspector can play, as deemed by not only the inspectorate but also by other members of the educational community.

In engaging with school personnel on a journey of discovery regarding their purposes, practices and perceptions of team-teaching I entered unknown territory as did those who accompanied me. One could make too much of this point but because of the lack of clarity in relation to my supportive and advisory role as an inspector, I wasn't always sure of my place or position, as either an inspector or researcher, nor as an inspector 'doing research'. Expressed views from academics at conferences and elsewhere didn't always help either as I was rather sadly feted for 'being the only inspector to attend the conference'. Being greeted in similar settings as 'the subversive inspector' or 'the man from UNCLE' also left me rather bemused. I believe closer reciprocal engagement between members of the DES and the research community is essential if improvements are to occur at classroom, school and systems level. Studies such as this offer a pathway to create and nurture reciprocal altruism among teachers, researchers and the inspectorate.

I trust that the work I have undertaken in conjunction with school and university personnel will assist in shaping future endeavours where the inspectorate can take up positions in shaping how policy is not only formulated but also in

shaping how it is enacted and altered among teachers and students. Such '(re)positioning' in the narrative of this research, opens up the potential for inspectors in their role as policy advisers, if not always policymakers. It offers a means to assist in policy delivery by engaging with school personnel who in turn inform future policy decisions through sharing of their context-sensitive insights, experiences and concerns. This is not a trivial pursuit but is in fact essential in ensuring the quality of the inspectorate's work. If inspectors are not learning then one has to ask how can they continue to evaluate, advise or support?

An examination of how one is positioned, by oneself and by others, as a cigire engaged in classroom-based and school-based research is also assisted by the use of Social Capital Theory. In this instance the emergence of trust, reciprocal altruism, pressure and normative values between school personnel and the inspectorate merges with Woolcock's framework of bonding, bridging and linking. Here the inspector/researcher bonded with the EO, school staff and students, bridged a number of school settings through individual visits and cluster meetings, while also linking vertically and horizontally to others within the inspectorate and those in the wider educational community.

The latter point is of interest when the cycle of this initiative witnessed the Chief Inspector launch the support materials produced by those involved in the project. In short, future engagement between the inspectorate and school personnel can be framed and supported by both Positioning Theory and Social Capital Theory. The Chief Inspector's stated aim is to maximise the advisory role of the inspectorate for the benefit of student learning. The work of New Zealand's

Iterative Best Evidence Synthesis Programme (Alton-Lee, 2007) offers insight to the collaboration that can take place between a range of stakeholders and the New Zealand Ministry of Education. What may have hampered the adoption of such a role to date is the falsehood that one is not 'in a position' to advise and support when obliged to evaluate. My experience, combined with others both national and international, would suggest otherwise and this research design opens up a range of possibilities for developing other policy goals and aims. Such collaborative engagement will facilitate the creation of a learning community that, not withstanding the non-teaching aspect of their work, involves rather than accommodates the cigire; where the cigire is positioned as an agitator of change rather than simply being perceived as the one who agitates others to change.

6.7 Conclusion

The promotion of inclusive practices in Ireland, as elsewhere, is an ongoing debate among many but also an ongoing activity in many schools. This study, rather than speaking to what should be practised, focuses on what could be practised in terms of inclusion. It doesn't take sides in relation to the debate on inclusion but the study does take stated policy in relation to the promotion of inclusive practices through team-teaching and examines how it might be successfully implemented and sustained across a number of post-primary schools in Ireland.

For too long, team-teaching has remained dormant on the pages of policy and largely ignored in the classrooms of post-primary schools. The intent of this

research study was to bring to light some of the purposes, practices and perceptions involved in promoting team-teaching for inclusive learning. It positions team-teaching in the context of an ever-changing educational system and offers insights into what team-teaching is, what it asks and offers, how we might implement it, capitalise on it, and how we might assess its impact upon students and teachers? Each student and each teacher, as with the dynamics of every classroom, school and district, is ever-changing and ever-evolving. In such a context this research is offered to support those in education who wish to make a difference through team-teaching. The weight of evidence emerging from this study, in favour of what team-teaching has to offer, including the delightful diversity of interpretations and idiosyncrasies, indicates that team-teaching can no longer be ignored. We know a little too much about it now to allow that to happen in the future.

APPENDIX 1

Consent Form
Team Teaching for Inclusion Study

7th December 2007

Dear Colleague,

Thank you for agreeing to support my research study. The purpose of my study, which is funded and supported by a President's PhD Scholarship, University College Cork (UCC), is to research your experiences of the VEC *team-teaching for inclusion* project during the academic year 2007-08. In order to complete my research, I plan on visiting the school on three occasions. The first visit will occur in December 2007/January 2008, the second in March 2008 and final in May/June 2008.

My plan is to gather responses and information by way of interview and through classroom observation (one class period per visit) of *team-teaching for inclusion* in action. An opportunity to view supporting documentation would also prove useful. I intend to interview the principal of your school and to give a brief questionnaire to the whole staff. With your cooperation I would also like to ask students some questions around their experiences of team-teaching. At no point will I interview students without the presence of you or one of your colleagues.

Confidentiality and anonymity will be respected at all times during and after the research is completed. Neither individual schools, nor teachers/students will be identified in any writing based on this study. My research findings will be shared with you and will assist in understanding how best *team-teaching for inclusion* at post-primary level can play role in future educational developments in Ireland.

If you are happy to consent to this research please sign below. It should be emphasised that participants can withdraw from the study at any time without prejudice. I value any suggestions you may have and look forward to working with you.

Regards,

Finn Ó Murchú

Participant Signature:_____
Date: _____

Researcher: Finn Ó Murchú **finnomurchu@gmail.com**

Research Supervisor: Dr. Paul Conway, Education Department
Pconway@education.ucc.ie

APPENDIX 2

Teacher Interviews

Thank you for supporting my research. I have a number of questions which I hope to ask over the next 40 minutes or so. Not all of my questions might be suitable. There is no right or wrong answers - this is your story. This is my effort at catching a glimpse at what you do and not an effort at catching you out. I'm evaluating the project – NOT YOU.

If you have questions for me I'm more than happy to discuss those also. Feel free to say so. Please let me know if I've left anything out that I should have asked or that you wish to add.

Introductions	
Q1: Can you give me a brief description of this school?	
Q2: Can you briefly outline your teaching Career?	
Q2: How long are you teaching here? -Have you had experience of team-teaching in the past? Where did you first hear of it or try it?	
Q4: Have you particular interest/qualifications in the area of special education?	
Q5: Who do you team-teach with? -who decided, when…..? -how does it work in practice?	
Team-teaching perspectives	
Q6: How would you define team-teaching? -What does it ask you to do? -Emotions involved?	
Q7: What reasons have you for engaging in team-teaching? What is it you want team-teaching to do? -motivation, intentions, advantages	For you For students
Q8: How do you make sure it works? -strategies for realising intentions	
Q9: What are the top 3 significant/important factors for team-teaching to work? -significant factors	
Q10: What outcomes do you expect to emerge from team-teaching? -what has emerged to date? -any surprises?	
Advantages of Team-teaching	
Q11: What are the advantages of team-teaching for you? (What's in it for you?)	Does t-t promote / If so how so?

	Collaboration among teachers Collaboration among students Identification of practices that improve learning Inclusive learning?
-what's the advantage of the advantage ALWAYS A GOOD THING?	
what's your understanding of Inclusion? Collaboration among teachers?	Are the advantages listed always a good thing? What about your identity as a teacher in a team context?
Q12: What are you learning? -about teaching, teaching strategies, about yourself, about others, about your students Any UNLEARNING occurring?	Have they transferred into single teacher lessons?
Q13: What are the advantages for the students? Participation, engagement, cooperation….	Does it benefit all learners? Does it benefit all students with SEN? What type of learning is being learned? (knowledge, skills and attitudes to subject and to learning) What extras do students learn from observing two adults?
Assessment	
Critical Incident for your learning	Eureka moment/success story to date
Critical Incident for student learning	Eureka moment/success story to date
Q14: In general how do you propose to assess the impact of team-teaching upon your students learning?	
Disadvantages/limitations/dangers of team-teaching?	
Q14: What are the disadvantages of team-teaching? -limitations, dangers, pitfalls	Clarify has this occurred already or anticipated
Q15: For you	Compromise, identity,
Q16: For the students	
Q17: What can team-teaching NOT DO?	
Q18: What might you now do differently?	
Management and Implementation of Change	
Q 19: How supported have you been in	Colleagues

implementing this work? Single most important support to date? Single least important support? What support do you perceive as missing? Do you sense you have a voice in this project? Do you sense the project is part of a bigger picture?	Principal VEC What sustains you in light of such difficulties?
Q 20: How have your colleagues reacted?	
Q 21: How have parents reacted?	
Q 22: How have other students reacted?	
Q 23: What advice would you give to the VEC about this project if it were to start in another scheme? TIME	How might it be done better? How much more time would you require? If you had more time how would you use it?
CONCLUSION	
Q24: What are your hopes and fears around team-teaching at this time?	
Q25: Have you any questions for me? - queries around research, t-teaching	Did I leave anything out? Is there anything you wish to add?

APPENDIX 3

Classroom Observation Sheet

Class:_____
School:_____
Teachers: A,_____ **and B,** _____
Subject: _____ **Time:** _____
Date:_____

Teacher Activity	Student Activity

Teacher questioning

Student questioning

Teacher feedback

Student feedback

Diversity of ability

Discourse

Motivation and Purpose

Participation, Benefit

Belonging

Group work, turn taking

Critical Incident in Class

Additional Notes

APPENDIX 4 TEACHERS' SURVEY

Strongly agree	Agree	Don't know	Disagree	Strongly Disagree	STATEMENT	Scale of importance for me 1-5 (1=least important…)	Scale of importance for student learning 1-5 (1=least important…)	Comment / Example
SAMPLE								
x					Today is Tuesday 26th May 2008	*5*	*5*	*It is very important as it indicates that the summer holidays are imminent.*
					Team-teaching allows me focus more on teaching and learning and less on discipline and survival			
					I trust my students more to do the right thing in team-teaching lessons			
					I can be more myself in team-teaching lessons.			
					I know more about my student's strengths and weaknesses in a team-teaching class.			
					Team-teaching is dependent upon teachers having the same teaching styles			
					Teachers need to be friendly with each other for team-teaching to succeed			
					Team-teaching increases teacher-student dialogue			
					Team-teaching promotes			

					teamwork among students		
					Team-teaching allows me to plan lessons with my teaching partner		
					Team-teaching allows me to regularly review lessons with my teaching partner		
					Team-teaching allows me to regularly review individual student work with my teaching partner		
					We often plan the lesson in front of the students		
					It would be nice to have more time to plan and review but its no big deal		
					Just 40 minutes a week to meet with my teaching partner would make all the difference		
					Students can be themselves in the team-teaching lesson		
					My ability to collaborate with colleagues has improved		
					I am comfortable in giving and receiving praise from my teacher partner		
					Team-teaching allows for mature discussion on differing viewpoints about teaching and learning		
					I like the way we team-teach.		
					Team-teaching should replace all		

	withdrawal lessons			
	Team-teaching allows me to explore teaching and try out new methodologies			
	I have learned more about classroom management than about teaching methodologies			
	I have been allowed to revisit and use teaching methodologies I've forgotten about			
	I have brought my learning on classroom management into other lessons			
	I have brought new teaching methodologies into other classrooms			
	Team-teaching lessons are my favourite lessons of the week			
	Teaching is stressful enough without team-teaching			
	You need to be trained to do team-teaching			
	I am a refreshed as a teacher because of team-teaching			
	I know more about teaching because of team-teaching			
	Team-teaching allows for personal and immediate feedback to students			
	Being able to observe students' reactions to my partner teacher informs how I learn			

					I feel obliged to prepare well for my team-teaching lessons			
					Another teacher in the room puts too much pressure on me			
					Team-teaching makes me realise I'm good at what I do			
					I praise students a lot more in my team-teaching lessons			
					Team-teaching allows me observe how particular students respond to teachers (my teaching partners) actions			
					My skills as a teacher are fully utilised in team-teaching			
					My teaching partners skills are fully utilised in team-teaching			
					There is greater participation from all my students in my team-teaching classes			
					Students are more engaged in what is going on around them in the team-teaching lesson			
					Diversity of student learning styles is seen as an opportunity rather than a threat to learning and teaching.			
					Team-teaching encourages students to help each other			
					As a teacher it is now easier to ask for help from another teacher			
					Team-teaching has, for my			

	students, removed certain barriers to learning			
	My students seem more tolerant and appreciative of one another.			
	Even the weakest student in my class can contribute to the lesson because of team-teaching			
	Team-teaching is only for the junior classes.			
	Team-teaching does not meet the needs of students with dyslexic/dyscalculia tendencies			
	Team-teaching is best for what traditionally we called the 'slow learner'.			
	The pilot project makes me feel, to a greater extent, part of my own school.			
	The pilot project has given me a sense of belonging within the VEC scheme of schools.			
	Our behaviour towards each other is a model of collaboration for our students.			
	As teachers we model out how to be respectful towards one another			
	Team-teaching can play a role in inducting new staff into the school			
	Students are more consulted about how best they learn			
	My expectations for all my			

	students has increased as a result of team-teaching			
	Students have far more pride in their work than before			
	Students literacy scores have improved because of team-teaching			
	Students numeracy scores have improved because of team-teaching			
	Students are far more confident in themselves			
	Student self-esteem is much improved because of team-teaching			
	Students are attempting subject levels that would not have been possible but for team-teaching			
	Discipline referrals are down in number in the team-teaching class			
	Students favourite subjects are the ones that they receive via team-teaching.			
	Learning occurs more naturally for students in a team-teaching lesson			
	I have a better insight into how individual students learn			
	Team-teaching promotes literacy as it allows students lots of opportunities to talk			
	I have learned a lot from my			

	team-teaching partner about how students learn.			
	Team-teaching makes my students too dependent upon my colleague and myself.			
	Team-teaching promotes independent learning among students			
	Team-teaching benefits all students			
	Students are appropriately challenged in their learning			
	Students ask a lot more questions in team-teaching lessons			
	The quality of how I frame questions is improved because of team-teaching			
	I reflect a lot more on my teaching (in all lessons) because of team-teaching			
	I have a greater insight into how students learn.			

APPENDIX 5

HOPES AND FEARS OF TEACHERS NEW TO THE PROJECT 2008/09

HOPES

1. I'd like to see it go onto senior classes
2. I'd like to see the philosophy behind team-teaching reflected in the teaching used.
3. We can come back in a year's time and say we are now teaching with even more appropriate methodologies that meet our students' needs
4. That inclusion becomes normal practice and the word is made redundant
5. Inclusion will be something that will benefit all students
6. It will improve staff relations and collaboration
7. To learn new skills, strategies and extend existing resources
8. To enjoy it
9. Hope that the chemistry between us works and that we will get along
10. That it will improve and increase student participation
11. It will extend to more subject areas
12. I will have a second pair of hands
13. That it will be a self-motivated team that will support professional development
14. We will have time to plan
15. That we will try different methodologies
16. That while the weaker get more attention, that all will be challenged
17. There will be less disruptions
18. That I will learn teaching strategies from my partner teacher
19. That the classes will be more interesting, sociable and enriching for students
20. That there will be enough students/teachers to make it work

FEARS

1. That there will not be enough time for planning
2. One teacher may dominate
3. Management may have a hidden agenda for putting two teachers together
4. May lose the focus on a student who hitherto was withdrawn
5. Another adult looking at you teaching
6. A personality clash will occur
7. Fine line between who gets the attention and who may benefit/suffer
8. IEP targets will not be reached
9. Compatibility around subject, approach to discipline, teaching style…
10. Other staff members' may express negative views towards team-teaching
11. That there is consistency throughout the week in time-tabling arrangements
12. One teacher may slack off or be excluded
13. It may not be of benefit, may be counterproductive, for students with severe behavioural difficulties
14. The fear of the unknown given that we have no experience of this
15. Fear of staff laughing at us

HOPES AND FEARS OF SAME TEACHERS NOW COMMENCING YEAR 2, 2008/09

HOPES

1. It has been a success, with no stigma attached and it is hoped that it will continue to be
2. Once a term cluster meetings – full day to include planning
3. Place it on the agenda at BOM, VEC
4. Make a submission to DES for additional resources
5. That staffing levels will allow and meet expectations among students, parents and teachers that team-teaching will continue
6. A mentoring approach would develop where all can benefit from sharing experiences
7. Match teams as per subjects
8. Maintain the menu of options (withdrawal ….)

FEARS

1. That it would be seen to take over from the role of the SNA
2. That a teacher would be 'boxed in' in terms of levels, classes, subjects….
3. Logistics of timetable may prevent suitable pairings, especially in small school/departments
4. If formulate an 'opt out' clause fear of it being invoked too late or too early

APPENDIX 6

Questionnaire to be completed by students

1. What has been your favourite part of team-teaching and why have you liked it?

_____
_____
_____
_____
_____
_____
_____

2. What has been your least favourite part of team-teaching and why?

_____
_____
_____
_____
_____
_____
_____

3. Have you found that having two teachers in the classroom has helped you learn better? How?

_____
_____
_____
_____
_____

4. Is this approach different to the way you are usually taught? Yes__ No___

5. If different please state why it is different?

_____
_____
_____
_____
_____

5. Do you like having two teachers? Why?

_____
_____
_____

6. Are you allowed ask more questions because of team-teaching ?
Yes___ No___

7. Do you find that you talk more with the teacher than in other classes?
Yes___ No___

8. Do you find that you are able to talk more with your fellow students during the lesson? Yes___ No____

9. Does team-teaching help you to participate in the lesson more?
Yes___ No____

Please comment
_____
_____
_____
_____

10. What is your understanding of the concept of inclusion?
_____
_____
_____
_____

11. Have you seen team-teaching promote inclusion? If so how so?

_____
_____
_____
_____

If you wish to tell a brief story or draw an image that sums up team-teaching for you please do so in the box below.

THANK YOU FOR YOUR TIME AND YOUR COOPERATION. Finn

APPENDIX 7

GROUNDED THEORY

What follows are examples of the interplay between the inductive constant comparative practices of Grounded Theory and the subsequent deductive engagement with Social Capital Theory and Positioning Theory which resonated with the data gathered. By way of illustration one example of each is provided below.

Beyond teacher compatibility

Teacher compatibility is referenced in the literature on team-teaching. My research saw 34 separate references by teachers to teacher compatibility. In coding compatibility 19 references occurred in the first of the three rounds of data gathering. Initial findings related to personalities and teachers having similar teaching styles. Round two interviews referenced compatibility on eight occasions and revealed more nuanced understandings of compatibility and introduced concepts such as values and trust. These concepts informed the final round of interviews where compatibility was referenced on seven occasions and where trust and values formed part of the final round of questioning. With theoretical saturation achieved, the emergence of such concepts as values and trust, and to a lesser extent those of pressure and teacher proximity, resonated with Social Capital Theory. The data in turn was re-interrogated to reveal other inter-related dimensions, such as reciprocal altruism and professional learning, that prospered more on teacher contrast rather than on teacher compatibility.

Positioned to learn

In a similar recursive manner, the theory emerging from the data gathered on students in team-taught lessons was framed over the course of the study. Initial coding of positions, or being positioned for learning, numbered 217 references in total. These included both teacher and student references and emerged from observation, interview, work samples, memos and conversations with my supervisor and colleagues. Following the inductive engagement with the data, the student learning experience came into sharp focus when Positioning Theory was used deductively to draw on individual student's storylines. The critical moments in determining the value of Positioning Theory emerged from classroom observations and the engagement with teaching dyads and their student work samples. Teachers' views of their students, as revealed in discussions relating to students' work, were seen to change over the course of the year and engagement with team-teaching and concepts such as student's learning trajectory and student's evolving identity resonated with Positioning Theory. As with Social Capital Theory, this theory proved very practical when used deductively to reveal the positions for learning that team-teaching facilitated students.

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