

# Working Paper No. 514 November 2015

# Review of the Droichead Teacher Induction Pilot Programme

Joanne Banks<sup>1</sup>, Paul Conway<sup>3</sup>, Merike Darmody<sup>1</sup>, Aisling Leavy<sup>2</sup>, Emer Smyth, Dorothy Watson<sup>1</sup>

Abstract: The Droichead pilot programme is designed to provide whole-school support for teacher induction. The programme is innovative in being led at school level, by a Professional Support Team (PST) consisting of the principal, mentor(s) and other member(s). This working paper presents preliminary findings from a large-scale study of the programme, placing them in the context of previous international and national research on teacher induction.

Keyword(s): Education; Teacher Induction

Acknowledgements: This working paper reports preliminary findings from a large-scale study of the Droichead pilot programme being funded by the Teaching Council.

<sup>\*</sup>Corresponding Author: emer.smyth@esri.ie

<sup>&</sup>lt;sup>1</sup>Economic and Social Research Institute, Sir John Rogerson's Quay, Dublin, Ireland

<sup>&</sup>lt;sup>2</sup> Mary Immaculate College

<sup>&</sup>lt;sup>3</sup> University of Limerick

## **Table of Contents**

CHAPTER 1		6
1.1 Ind	uction, teaching quality and learning to teach	6
1.1.1	Teaching quality as a policy focus	6
1.1.2	Appeal of induction in promoting teaching quality	
1.2 Wh	at is induction? Phase, process or integrated programme	9
1.2.1	Induction as a distinct phase	
1.2.2	Induction: a socialisation process	11
1.2.3	Induction: An integrated programme for beginning teacher learning	
1.3 Ind	uction programme waves: Droichead in an international context	14
1.3.1	Induction waves in Ireland and the Droichead pilot	
1.3.2	Conclusion	
1.4 Sch	ool organisational culture and teacher effectiveness	
1.4.1	Previous research: What is organisational culture?	
1.4.2	To what extent do organisational culture and climate differ?	
1.4.3	Leadership practices and organisational culture	
1.4.4	Teachers' experiences	26
1.4.5	Early career teachers	
	pport for novice teachers	
1.5.1	Climate, school culture and teacher induction	
1.5.2	Assessment and assistance: embracing contraries or judge-mentoring?	
1.6 Co	nvergence on best practice principles for teacher induction	
1.6.1	Early research 1990s: Components of induction	
1.6.2	Recent reviews 2000s+: Induction programme intensity	
1.6.3	Intensity and Interactions matter	
	nclusion: Designing and evaluating induction programmes	
1.7.1	Rationale for induction	
1.7.2	Framing of induction matters	
1.7.3	School culture/ context matters	
1.7.4	The impact of induction	
1.7.5	Scalability of induction programmes	
	ductionious studies which evaluated teacher induction	
	Responsibility for evaluation of induction programmes: A brief snapshot of the United States	
	Shortcomings and challenges of evaluation	
	The focus of evaluations: who and what gets evaluated?	
	1 Programme satisfaction data	
	2 Teacher retention and job satisfaction data	
	3 Teacher and student learning data	
	4 luating programmes using quality indicators and exploring other school factors	
	Survey instruments for evaluating teacher induction programmes	
	1 The TELL survey	
	2 SASS (Schools and Staffing Survey)	
	3 The Teacher Follow up Study (TFS)	
	4 BTLS (The Beginning Teacher Longitudinal Survey)	
	5 Surveying New Teachers' Experiences in Schools	
	y methodology	
2.3.1	Survey design	54

	2	.3.2 Case-studies of schools	57
C	НАРТЕ	R 3	58
	3.1	Introduction	58
	3.2	Initial teacher education and teacher preparedness	58
	3.3	Teacher induction pre-Droichead	60
	3.4	Formation of the Professional Support Team	62
	3.5	The mentoring process	63
	3.4	The recommendation process	66
	3.6	Perceptions of Droichead	67
	3.7	Next steps	73
	Refer	ences	74

## **List of Tables**

TABLE 1.1	Three views on teacher induction
Table 1.2	Waves of induction in the USA: 1986-present
Table 1.3	Waves of induction in the Ireland: 1980s-present
TABLE 2.1	Types of induction programme data43
TABLE 2.2	The TELL Survey constructs
TABLE 2.3	Completed questionnaires for the wave 1 survey56
List of Figure	S
FIGURE 3.1	Principal perceptions of initial teacher education as a preparation for teaching59
FIGURE 3.2	Newly qualified teachers' perceptions of initial teacher education as a preparation for
teaching	60
FIGURE 3.2	Approach to teacher induction in non-Droichead schools and prior to the introduction
of Droichead i	n schools involved in the pilot programme (principals)
FIGURE 3.3	Criteria used for selecting mentors and other PST members (principal)62
FIGURE 3.4	Issues discussed with NQT (mentor)
FIGURE 3.5	Involvement of staff in providing feedback to the NQT (principal reports)64
FIGURE 3.6	Most important source of guidance other than mentor (NQT reports)66
FIGURE 3.7	Staff involvement in making a recommendation on the NQT (principal)67
FIGURE 3.8	Perceived appropriateness of different aspects of the process (principal)68
FIGURE 3.9	Satisfaction with different aspects of the process (principal)69
FIGURE 3.10	Satisfaction with different aspects of the process – principal, mentor and other PST
member	70

# **Executive summary**

#### The Droichead pilot programme

The Droichead pilot programme, which is currently scheduled to run until 2016, is designed to provide whole-school support for teacher induction. The programme is innovative in being led at school level, by a Professional Support Team (PST) consisting of the principal, mentor(s) and other member(s). Newly Qualified Teachers (NQTs) in Droichead schools have support from by a mentor and other members of the PST in the identification of their professional learning needs and in planning opportunities to address these needs, including opportunities to observe and be observed by other teachers. At the end of the process, the PST may make a recommendation to the Teaching Council that the Droichead condition be removed from a teacher's registration. Emphasis is placed on the progress made by the teacher in terms of his or her professional learning and practice, as appropriate to his or her career phase (that is, induction).

The introduction of the Droichead pilot in Ireland reflects a wider trend internationally toward the design of more systematic, integrated and intensive induction programmes. With the mandatory induction of NQTs is established since 2012, two conditions of registration are in place for all NQTs: (a) engagement in an off-site induction workshop programme and probation/Droichead (primary) (b) or post-qualification experience/Droichead (post-primary). These two conditions comprise what are increasingly seen as essential components of induction programmes internationally. Taking the two conditions for registration together and anchoring both in the school in which NQTs are teaching, as is the case on the Droichead pilot, in tandem with external supports through the NIPT, has the potential to significantly tilt the balance of responsibility for inducting the next generation of beginning teachers towards schools and the teaching profession.

#### Research on teacher induction

With an increased policy focus on teacher quality, the provision of high quality teacher induction is now seen as an important, if not essential, part of becoming a teacher. Induction has been framed in a number of ways: as a distinct phase in learning to teach, as a socialisation process and as an integrated programme for learning to teach. The third orientation, and the one of particular relevance in the evaluation of

Droichead, focuses on induction as a deliberate programme for sustained and systematic support and assistance for beginning teachers. Existing research indicates very considerable variation evident within and across countries in the design of integrated induction programmes, with differences in: the allocation of mentors, the duration of mandatory induction, system commitment to the intensity of induction for NQTs, links between induction and subsequent phases in the professional continuum, and the role of higher education institutions in induction. The emerging consensus from existing research is that a set of factors rather than one single factor alone is critical for effective induction.

The literature on induction illustrates the many ways in which school culture matters in the successful implementation of induction. In this interim report, we highlight a number of ways in which school culture matters: principal leadership, the critical role of both formal and informal mentoring in schools, and the professional learning culture in the school (novice, veteran or integrated). Crucially, research suggests that each of the dimensions of school culture mediates the nature and level of support for NQTs involved in induction programmes.

#### Methodology

The current study aims to assess the Droichead pilot programme and thus to inform the model of teacher induction which will be used in Irish primary and post-primary schools in the future. In so doing, it seeks to answer the following key questions:

- How effectively are the teachers who participate in Droichead supported and is the process adequately resourced?
- How useful and appropriate are the criteria and indicators of good practice developed through Droichead?
- How effective, appropriate and fair are the procedures and protocols employed by members of the Professional Support Team (PST) in making a recommendation to the Council in relation to the practice of a newly qualified teacher (NQT)?
- How effective is the Droichead experience as an induction into the teaching profession?
- What can be learned from the research findings on Droichead to facilitate the mainstreaming of an effective induction and probation process for all teachers?

Postal questionnaires were developed for school principals, mentors, other PST members and newly qualified teachers in Droichead schools. In non-Droichead schools, questionnaires were developed for principals, newly qualified teachers and teacher induction coordinators<sup>1</sup> (where evident). In autumn 2014, questionnaires were distributed to the 61 primary schools then taking part in the programme and to a matched sample of 100 primary schools. At post-primary level, questionnaires were distributed to 62 Droichead schools and 99 non-Droichead schools. These data are being supplemented by case-studies of six Droichead primary and six Droichead post-primary schools which are currently under way. Within each of the schools, interviews are being conducted by members of the research team with school principals, mentors, other PST members and newly qualified teachers. In addition, in order to capture information on teacher collaboration within the school and the potential wider impact of Droichead on the school culture, interviews are being conducted with two teachers not directly involved in the Droichead process.

#### Preliminary survey findings

Principals in Droichead and non-Droichead schools were asked about the extent to which initial teacher education prepares teachers for a number of different aspects of teaching. Principals were most positive about the extent to which initial teacher education prepared NQTs in terms of knowledge of curriculum content, planning lessons and using a range of teaching methods in an appropriate way. However, they were more critical of the extent to which ITE prepared teachers for dealing with diversity in terms of teaching students with special educational needs and from multicultural or disadvantaged backgrounds. Only a small number felt that NQTs had been prepared for working with parents. Responses were similar in Droichead and non-Droichead schools.

The findings point to the importance of pre-existing approaches in Droichead schools. Schools who participated in Droichead were more likely than other schools to have had a formalised approach to teacher

<sup>&</sup>lt;sup>1</sup> Teacher induction coordinators were identified by the school principal as the person responsible for teacher induction or mentoring in the school. They were not necessarily a trained mentor, an issue which is explored in Chapter 3.

induction prior to joining the pilot programme. This encompassed previous participation in the national induction programme and/or procedures and practices developed at the school level. Furthermore, many of the Droichead mentors had received mentoring training and/or worked as mentors prior to their school joining Droichead. The findings also indicate that Droichead takes place within the broader context of formal and informal cooperation within the school. Newly qualified teachers frequently rely on other teachers, not involved in the PST, and on other NQTs for support.

PST members and NQTs were generally clear about the recommendation process and felt it was fair. There was some variation across schools in the relative involvement of different personnel, with the principal and other PST member involved to a great extent in most schools.

Levels of satisfaction with Droichead were high among principals, mentors and other PST members, though somewhat less satisfaction was expressed in relation to resources as well as the timing and location of meetings. The benefits of the programme were seen as providing a structured support for NQTs while a very significant minority (more than four in ten) of principals felt that involvement had contributed to a more collaborative culture within the school. The most commonly reported challenge centred on the issue of time, mainly time for meetings and observations. In this context, it is worth noting that the majority of schools had used time outside their scheduled allocation for the purposes of teacher induction. Very detailed information was collected on the perceived benefits and challenges of programme participation from respondents in the case-study schools. In the final report, this rich qualitative information will be analysed in conjunction with the quantitative patterns to yield in-depth information on the operation of Droichead across different school settings.

#### Next steps

The research team is currently undertaking fieldwork in twelve case-study schools, six primary and six post-primary. These case-studies will provide rich information on the experiences of Droichead on the ground. The NQTs in the case-study schools will be contacted by email at a number of time-points subsequent to the school visit in order to trace their experiences over time in greater detail. A second wave of surveys will be issued to Droichead (and matched non-Droichead) schools in the

autumn of this year. The follow-up survey will provide more information on schools' experiences of Droichead, in particular, on the nature and frequency of meetings, observations and feedback for the larger group of schools taking part in the process over the school year 2014/15. The survey will also follow up on NQT experiences having completed the Droichead process, allowing for a comparison of perceived developmental needs over the period of a year.

# **Chapter 1**

## Introduction

For decades, education researchers and reformers have called attention to the challenges encountered by newcomers to school teaching. However traditionally teaching has not had the kind of support, guidance and orientation programs for new employees — collectively known as induction — common to many skilled blue- and white-collar occupations and characteristic of the traditional professions (Waller, 1932; Lortie, 1975; Tyack, 1974).

Ingersoll & Strong, 2011, p. 201

#### 1.1 INDUCTION, TEACHING QUALITY AND LEARNING TO TEACH

#### 1.1.1 Teaching quality as a policy focus

In the last two decades research on teaching and learning has provided considerable evidence that the quality of teaching in schools is the single most important variable in student achievement and the promotion of quality schooling (Darling-Hammond & Bransford, 2005; OECD, 2005; Hargreaves, 2003; Darling-Hammond & Lieberman, 2012). However, there is no such consensus on what defines teaching quality, nor on how to test or measure it. Despite the difficulties in reaching consensus around the exact definition of quality, a reliance on student achievement in core curricular areas (reading, maths and science) has typified and been the fallback position in operationalizing the outcomes of teaching quality - especially for governments and influential trans-national education bodies (e.g. OECD; UNESCO). One of the outcomes of this recognition of the importance of teaching quality has been an intense and unprecedented policy focus by governments worldwide on the education of teachers from initial teacher education through induction and beyond across the remainder of the professional life-cycle. In Ireland this is evident in the continuum of teacher education focus of recent policy (Teaching Council, 2011) and its focus to date primarily on the early phases of learning to teach (i.e. ITE and induction). However, the soon to be in place requirement for on-going CPD by all teachers reflects further evidence of the enactment of a professional life-cycle or continuum of teacher education policy in Ireland. Informed by the focus on quality teaching, this chapter reviews some of the key issues from the now significant literature on induction design, implementation and

evaluation which has been undertaken over the last three decades. First, we note the appeal of induction programmes in the context of efforts to promote quality teaching. Second, we outline three orientations to the conceptualisation of induction, that is, as a distinct phase, as socialisation and as an integrated programme. In framing the evaluation of Droichead, each orientation provides valuable insights on induction. However, the integrated programme orientation is central to contemporary practice on induction, and the critical issue for evaluation of Droichead evident from this research on integrated induction programmes is their intensity. Despite the absence of formal induction in the teaching profession for many decades compared to other professions, teacher induction is now increasingly viewed as a necessary and critical element in any teacher education reform agenda. The benefits of induction are seen as three fold: reduced attrition, increased teacher commitment to teaching and enhanced student achievement (Arends & Rigazio-DiGilio, 2000; Darling-Hammond & Bransford, 2005; Ingersoll & Kralik, 2004; Kelly, 2004; Youngs, 2002; OECD, 1998, OECD, 2005). Evaluations of the introduction of similar induction programmes for newly qualified teachers have been undertaken in Scotland (Draper et al, 2004; Draper et al, 2007), England (Kyriacou & O'Connor, 2003), Estonia (Löfström, E., & Eisenschmidt, 2009) and Hong Kong (ACTEQ, 2003), among other jurisdictions. There is now a very significant body of research literature on induction spanning the last twenty-five years (for reviews see Feiman-Nemser et al, 1989; Moskowitz and Stephens, 1997; OECD, 2005; Serpell & Bozeman, 1999; Smith & Ingersoll, 2004; Strong, 2009; Wang et al, 2010). More broadly, recognition of the importance of transition and induction into any work setting has a long history in occupational research (Schlein, 1968), with associated acknowledgement of the need to develop an understanding of the dynamics of quality induction and how exactly it fosters employee well-being and commitment to occupational roles (Forrester & Draper et al, 2007).

#### 1.1.2 Appeal of induction in promoting teaching quality

New teachers have two jobs – they have to teach and they have to learn to teach. No matter how good a pre-service program may be, there are some things that can only be learned on the job.

#### Feiman-Nemser, 2001, p. 1026

Internationally, as governments have become more attuned to a recognition of teaching quality in fostering educational outcomes (and hence economic advancement) and an understanding has emerged about

the complexity of teaching as a practice, the provision of high quality teacher induction is increasingly and unequivocally seen as an important, if not essential, part of becoming a teacher (OECD, 2005). In Ireland, while there have been calls to provide teacher induction for over thirty years (Killeavy & Murphy, 2006), the provision of teacher induction gathered significant momentum since the early 2000s with the initiation of the National Pilot Project on Teacher Induction (NPPTI) (see Killeavy, 2004; Killeavy and Murphy, 2006). The NPPTI sought to identify best practice as a basis for future policy in the professional education of Ireland's teachers at primary and post-primary levels. After significant investment in design, implementation and evaluation over a number of years, the NPPTI formed the basis for the development of the national induction programme for primary and post-primary teachers, a culmination of the aforementioned calls for, and efforts to crystallise, a mandatory and structured induction programme for newly qualified teachers in Ireland.

The purpose of this review of literature on induction is to frame the evaluation of the Droichead programme in a national and international context. While there is a now an extensive literature on teacher induction, and an associated and sometimes overlapping body of literature on mentoring newly qualified teachers, the literature on the design and evaluation of induction is our focus here. In particular, we note an emerging consensus on design principles for induction programmes. Furthermore, there has been a long-standing focus on three presumed benefits of induction, namely, its potentially measureable contribution to (i) promoting teacher retention/reducing teacher attrition, (ii) enhancing teacher engagement with practice and (iii) improving student achievement. In this review, we do not focus on a cross-national comparison of induction programme arrangements as this has been undertaken by many other reviews internationally (OECD, 2005) and nationally (Murphy & Killeavy, 2006; Conway, Murphy, Rath and Hall, 2009). For example, internationally the influential OECD (2005) report, Teachers Matter, compared the standing of, and provision for, induction in over thirty countries. Nationally, Killeavy and Murphy's (2006) NPPTI evaluation report (i.e. National Pilot Project on Teacher Induction: Report on Phase 1 and 2, 2002-2004) provided a description of practices in other jurisdictions, as did the Teaching Council-commissioned literature review on learning to teach, Learning to Teach and its Implications for the Continuum of Teacher Education: A Nine-country Cross-national Study (Conway, Murphy, Rath and Hall, 2009), comparing induction across nine countries. In terms of emerging policy on teacher induction, these

reviews focus on a number of key trends: wide variation in requirement for induction, with it being mandatory in a small number of settings and linked to full licensure in a small number. The now mandatory nature of induction linked to full licensure for teachers in Ireland reflects a significant, though by no means, universal policy direction internationally in the promotion of teaching quality in schools and the development of a professional life-cycle approach to teacher education. In the case of induction in Ireland, the introduction of mandatory induction occurred in 2012 comprising a workshop programme offered by NIPT as noted earlier. The Droichead pilot represented a significant re-design of induction with its move toward school-based support (observation, feedback, planning support, in-school workshops) (See section 1.3).

In many countries internationally, recognition of the role of processes within, and impact of, teacher induction has been the focus of research over the last thirty years. Much of the earlier research in the 1990s focused on the arrangements for, and process of, induction. In the last fifteen years, in addition to the continued and important focus on the process of induction, there has been a notable focus on the impact of induction in terms of three valued outcomes: teacher engagement with teaching, student achievement and teacher retention (for a major review, see Ingersoll and Strong, 2011). The appeal of, and rationale for, induction had gained very significant research and policy momentum in the late 1990s and is evident in a range of ways. First, researchers began to make a case for the potential efficacy of induction in meeting a number of valued aims in teacher learning as well as simultaneously making a case for designing the 'seamless professional continuum' (Howey & Zimpher, 1999, as cited in Feiman-Nemser et al., 1999) in the context of the early phases of the teaching life-cycle.

#### 1.2 WHAT IS INDUCTION? PHASE, PROCESS OR INTEGRATED PROGRAMME

The question of defining what exactly induction is within a professional learning framework has been a notable feature of the literature with three framings emerging (Feiman-Nemser et al, 1999), that is, induction as (i) a distinct phase in learning to teach, (ii) a socialisation process and (iii) an integrated programme for learning to teach. Each can be understood in terms of key assumptions, focus, strengths and weaknesses (see Table 1.1).

**TABLE 1.1** Three views on teacher induction

	Assumes	Focus	Strengths	Weaknesses
A distinct phase in learning to teach	Novice and expert teachers are very different and induction occurs in a specified time period	Concerns of novice teachers and group differences (novice V expert teachers)	Recognises and values different needs within career phase context	Deficit view of novice teachers and concern with teacher concerns may background reform-oriented foci (i.e. curricular and assessment reforms)
A socialization process	Central role of the school in enculturating novice teachers into the profession over time	Socialising teachers into norms and values of teaching in school and profession	Recognises the powerful and 'natural' school level enculturation that occurs for all new teachers.	The school level socialization focus may or may not foster an engaged and committed stance to teacher learning
An integrated programme	Structured and systematic support over a designated period of time (usually a year) will enhance three valued outcomes: teacher retention, engagement with teaching and student learning	Design features presumed to positively impact novice teachers and students	Recognises need for deliberate and targeted support for novice teachers focused on key supports  Recognises the complexity of teaching as practice and in some cases the role of curriculum reform in shaping induction	Wide variation in the intensity of induction programmes means overall effects difficult to ascertain in the absence of adequate research design

#### 1.2.1 Induction as a distinct phase

The conceptualisation of induction as a distinct phase assumes that novice and experienced, and presumed expert, teachers, are very different. As such, it emphasises the differences between novice and expert teachers in terms of knowledge, skills and capacities. In particular, this literature focuses on the specific quality of beginning teacher concerns as they begin their professional careers and the anxiety that characterises this phase of learning to teach (Rajuan, Beijaard & Verloop, 2008). Veenman (1984), in a review of novice concerns over a seventy-year period, ranked classroom discipline as the most serious problem followed by student motivation, dealing with individual differences, assessing student work and relating to parents. In the Irish context, a very similar set of concerns was identified by beginning teachers in the NPPTI evaluation (Killeavy & Murphy, 2006, 2008).

As a number of authors have argued (Zeichner & Teitelbaum, 1982; Buchmann, 1987; Conway & Clark, 2003), dealing solely with concerns as the major focus of induction (or during ITE) is not sufficient to help novice teachers learn the thinking skills and practices associated with adaptive expertise. In essence, the induction as a phase orientation has been criticised as overly concerned with deficit views of novice practitioners. It is important to address the specific learning needs of the beginning teacher as a unique phase and also to understand that phase's place within a broader continuum of teacher development and its connection to both pre-service and continuing professional development. Thus, defining the learning needs and goals of beginning teachers in flexible ways and relating them specifically to the context of teaching is important in developing a learning orientation towards problems of practice. In addition, beginning teachers need to learn the skills for identifying assumptions and principles underlying practices and challenging dominant practices that are not consistent with reformoriented teaching.

#### 1.2.2 Induction: a socialisation process

The second orientation sees induction as a natural 'socialisation' process that occurs, with or without a formal programme, and that beginning teachers are inducted informally into the prevailing dominant culture of teaching and learning practices in their schools and wider system. Here the focus is on the context of teaching and the importance of socialising new teachers into the professional norms, values and practices that are recognised as productive and valued - which may or may not lead to

engagement in lifelong learning practices. It recognises that 'learning on the job' without support can set beginning teachers into survival mode and thus short-circuit learning at a time when teachers are very motivated to learn. In addition, the culture of some schools is antithetical to learning and beginning teachers are left to 'sink or swim' (Moore-Johnson et al, 2006; Kardos et al, 2002), with little support or opportunity to learn from practice. In these contexts new teachers often develop safe practices that enable them to 'survive' in classrooms. Unfortunately without a structured, integrated model of teacher learning, teachers are often socialised into the culture of schools which are not set up for learning for either novice or veteran (Fulton et al., 2000; OECD, 1998; Sarason, 1996; Little, 1990; Moore-Johnson et al, 2004).

# 1.2.3 Induction: An integrated programme for beginning teacher learning

Arising out of insights from both the distinct phase and socialization orientations to induction has been the realization that more systematic support for newly qualified teachers might address the well-documented problems in the first year of teaching going back many decades (Draper et al, 2007). In some cases student NQTs have smooth beginnings (Huberman, 1989), but most describe the reality shock and struggle for survival associated with taking on full-time teaching responsibilities without assistance (Bullough, 1987; McDonald, 1982; Ryan, 1970). However, for decades systematic induction support was not available and NQTs were left to "sink or swim" on their own. Consequently, the third orientation, and the one of particular relevance in the evaluation of Droichead, focuses on induction as a deliberate programme for sustained and systematic support and assistance for beginning Recognising the assumptions, focus, strengths and weaknesses of both the distinct phase and socialization framings of learning to teach, the focus on induction as an integrated programme orientation emphasizes purposive design of induction to meet stated educational aims and objectives. As such, there is very considerable variation evident within and across countries in how exactly integrated induction programmes have been designed as illustrated by a number of reviews (OECD, 2009; Conway, Murphy, Rath and Hall, 2009) with differences in (i) allocation of mentors, (ii) teaching workload accommodation, (ili) duration of mandatory induction, (iv) system commitment to induction for NQTs, (v) perceived links between induction and subsequent phases in the professional continuum and (vi) the role of higher education institutions in induction. We address each of these six as illustrative but by no means exhaustive policy decisions which point to the scope for variation in how

systems construct an integrated induction programme. Later in this review we note the extent to which there is evidence, or not, to support these and other induction programme design features.

First, in the allocation of mentors, NQTs in Poland have the benefit of a staż tutor, an experienced teacher employed in the school at Appointed or Chartered Teacher level who supports the NQT throughout the first three-and-a-half years of teaching. This deliberate focus on appointing someone already highly credentialed as a mentor reflects a wider systemwide framing of the professional continuum for teachers. Second, in relation to teaching workload, Singapore has a well-developed scheme of induction for beginning teachers. For their first year, NQTs have a reduced workload of 80%, and are mentored by experienced teachers within the school in which co-teaching is a typical feature with teachers learning through observing one another teaching, through mutual feedback and sharing of lesson plans. Third, in relation to the duration of mandatory induction, NQTs in New Zealand are given provisional registration on graduation but must undergo a two-year induction period before full registration. In the OECD Teachers Matters report, 8 of 24 countries studied did not offer induction, 8 had mandatory induction and 8 other countries had variations with some offering it at the discretion of schools or in one country depending on the status of teachers. Fourth, the extent to which a system commits to the intensity of the provision of induction varies hugely. Scotland has developed an innovative induction scheme, with guaranteed one-year teaching places in schools for participants, reduced teaching hours, time for professional development, and an experienced teacher as a probationer supporter (Draper et al, 2003; Draper et al, 2007). Given this system-level commitment, Scotland's scheme has attracted extensive interest internationally. It is important to note that the choice of features such as co-teaching, observation, mutual feedback, shared and co-planning reflects a deliberate policy decision in induction programme design. Fifth, the links between formal induction programmes and subsequent phases in the professional continuum has been infrequently structured into induction policy. However, Northern Ireland also recognises a phase of Early Professional Development (EPD) as progression from induction. This phase, extending over the second and third years of full-time teaching, provides a structured framework of professional development through planning, evaluation, reflection and discussion. The EPD phase is viewed as part of the professional continuum and the GTCNI has developed phase exemplars for ITE, induction, early professional development and continuing professional development. So, for example, a Career Entry

Profile encourages beginning teachers to develop a reflective attitude to their own professional development and ensures that the school is aware of and can make provision for the needs of the beginning teacher during and extending beyond the first year of teaching. As such, the EPD phase is intended to provide a context for teachers to further develop competences and extend them in new directions but built upon a particular vision of induction programme design. Sixth, while the central role of HEIs in ITE has been and is now increasingly conceptualised in considerable detail vis-à-vis its optimal design features, the role of HEIs in induction is typically not well articulated. While some HEIs have been involved in designing and supporting some induction programmes (e.g. Stanulis and Floden, 2010), the potential wider systemic role of HEIs in the design, implementation, evaluation and review of induction programmes has not been systematically assessed. In the case of Ireland, HEIs have had a significant role in contributing to the design and evaluation of induction over the last decade.

#### 1.3 INDUCTION PROGRAMME WAVES: DROICHEAD IN AN INTERNATIONAL CONTEXT

Recognising the importance of the continuum of teacher education, induction aims to develop a culture of lifelong learning in each teacher. The purpose of an induction programme is to offer systematic professional and personal support to the newly qualified teacher....

It is grounded in the belief that the people best placed to conduct that formal welcome are experienced colleagues who know what is involved in teaching and learning in their school.

#### Teaching Council, 2013 on Droichead pilot induction

In September 2013 the Teaching Council, building upon its mandatory induction introduced in 2012 which had been informed by a prior national pilot project on teacher induction (2002-2010), introduced a new model of school-based and NIPT-supported induction - titled Droichead and this pilot has since been undertaken across schools in regions with the highest density of newly qualified teachers — though schools outside these geographic regions have been able opt into the pilot (and some have done so). As the Teaching Council specified in developing and establishing the Droichead pilot induction programme, its main aim is "to offer systematic professional and personal support to the newly qualified teacher" (2013, p. 4).

How does Droichead compare to the various induction programmes developed over at least the last thirty years in other countries? To what extent is Droichead similar/different to programmes in other jurisdictions in terms of aims and design? To what extent can the current Droichead design be said to have been informed by developments elsewhere? What, if anything, can be learned from examining how induction has evolved in other settings? We draw on Stanulis and Floden (2009) to begin to address the above questions. In the context of the USA, Stanulis and Floden identified, what they termed, four waves of induction in the USA between 1986 and 2006:

- First-wave programmes established prior to 1986;
- Second-wave programmes implemented between 1986 and 1989;
- Third-wave programmes administered between 1990 and 1996;
- Fourth-wave programmes implemented between 1997 and 2006.

They chose the wave metaphor as they felt it helped characterize "the historical ebb and flow (initiation and culmination) of induction programs due to sporadic budgetary cuts and legislative indifference" (p. 2). Characterising overall changes across the four waves in induction programme conceptualization, they note that: "Reflecting increased understanding of teacher development, quality induction in the United States has progressed in developmental waves from informal one-to-one mentoring toward a comprehensive system of induction with multiple components. Each wave of programs has produced clearer and more comprehensive definitions, program goals, and induction components". The same overall observation can be made of induction in Ireland – albeit that the pace of progress in Ireland has been more gradual than that in other countries against whose Ireland's education system is typically compared - especially in relation to teacher education, that is, Scotland, Northern Ireland, England, New Zealand, as well as the USA and Australia. For example, Killeavy and Murphy (2006), in their comprehensive evaluation of the National Pilot Programme for Teacher Induction (NPPTI) in Ireland, provide a detailed account of the impetus behind, and start date of, compulsory induction in England and Northern Ireland among other countries. They noted that in England induction became a statutory requirement for all Newly Qualified Teachers (NQTs) in 1999, in Northern Ireland mandatory induction and early professional development was introduced in 1998 and that by 2005 22 states in the USA had mandatory teacher induction programmes (with some variation between states in the exact design). As such, given NQTs in Ireland were not required to undertake induction until 2012 (see Table 1.3), the development of

mandatory induction in Ireland has come about a very significant number of years after its establishment in some comparable jurisdictions.

Table 1.2 Waves of induction in the USA: 1986-present

Wave	Features
1 <sup>st</sup> prior to 1986	<ul> <li>Focused on the needs of new teachers and their well-being</li> <li>Largely informal, loosely organized, and often unfunded programmes</li> </ul>
2 <sup>nd</sup> 1986-1989	<ul> <li>Emergence of mentoring as key component of induction</li> <li>31 states noted they had induction – some site-based, some state-organised (latter more structured)</li> </ul>
3 <sup>rd</sup> 1990-1996	<ul> <li>More developmental and structured approaches to induction</li> <li>Added formative assessment to programme components</li> <li>More curriculum standards-based and thereby linked to wider educational reforms</li> </ul>
4 <sup>th</sup> 1997-2006	<ul> <li>Comprehensive, organized system of integrated novice teacher assistance and assessment</li> <li>Uses multiple strategies</li> </ul>

Source: Based on Stanulis and Floden, 2009.

First wave induction (prior to 1986) was typically focused on the needs of new teachers and their well-being, involving largely informal, loosely organized, and often unfunded programmes. Second wave induction (1986-1989) was characterised by the important emergence of mentoring as a key component of induction and a significant number of states, 31 by the late 1980s, noted they had induction of one kind or another – some site-based, some state-organised (with the latter being more structured). Third wave induction (1990-96) involved more developmental and structured approaches to induction; they added formative assessment to the programme component and importantly were linked to curriculum standards, thereby linking induction explicitly to wider curriculum and educational reforms. Fourth wave induction (1997-2006), building up on the standards-based and curriculum reform focus of the third wave, were characterised by a more comprehensive, organized system of integrated novice teacher assistance and assessment system using multiple strategies. Summarising fourth-wave induction in more detail, Stanulis and Floden (2009) identified nine "...somewhat consistent set of program components" which they listed in "order of prominence" and noted that,

"[q]uality induction programs usually encompass the first six components, and inclusion of the last three components is less frequent":

- (1) Educative mentors' preparation and mentoring of novice teachers,
- (2) Reflective inquiry and teaching practices,
- (3) Systematic and structured observations,
- (4) Developmentally appropriate professional development,
- (5) Formative teacher assessment,
- (6) Administrators' involvement in induction,
- (7) A school culture supportive of novice teachers,
- (8) Program evaluation and/or research on induction,
- (9) A shared vision of knowledge, teaching, and learning.

Though the scale and governance structures of education in the USA are very different with 15,000 school districts across 51 state education systems compared to the more monolithic structure of the education system in Ireland, Stanulis and Floden's framing of the evolution of teacher induction programmes in the USA in four waves is potentially helpful in our conceptualization of Droichead.

Table 1.3 Waves of induction in the Ireland: 1980s-present

Wave	Features
1 <sup>st</sup> prior to 2002  Informal:  Needs focused  with policy calls  for induction	<ul> <li>Focused on the needs of new teachers and their well-being</li> <li>Largely informal, loosely organized, short term possibly few 1-2 hour 'orientation' meetings early in first year of teaching (possibly away from school site if slightly more formal)</li> <li>Typically organised by Teacher/Education Centres (some collegecentred networks also e.g. Beginning Teacher Network)</li> <li>Reports – initially in 1984 (Report on In-service Education) and again 1991 (OECD) call for attention to and investment in teacher induction</li> </ul>
2 <sup>nd</sup> 2002-2010  Formal & pilot: Support focused	<ul> <li>Development of national pilot project on teacher induction (NPPTI)</li> <li>Emergence of mentoring as key component of induction</li> <li>Professional development for mentors, NQTs and principals</li> <li>Evaluation of NPPTI undertaken</li> </ul>
3 <sup>rd</sup> 2011-2015	Induction: non-pilot [majority of NQTs] commenced 2012
Formal & required: Support and professional standard focused	<ul> <li>NIPT provision of mandatory set of off-site workshops via the education centre network (12 x 2 hour workshops: 24hours)</li> <li>Criteria for full registration as a teacher</li> <li>Flexibility in workshop provision commenced in 2013 (NQTs choose 10 out of a suite of 12 workshops: 20 hours)</li> <li>Flexibility further enhanced in 2014 in the provision of workshops on a non-teaching day, and recognition for NQTs' school-based professional learning with an NIPT trained mentor</li> </ul>
	<ul> <li>More developmental and structured approaches to induction including mandatory off-site workshops+ in-school support including school-based workshops (20 hours)</li> <li>Multiple observation and feedback opportunities</li> <li>Comprises formative and summative assessment linked to 4 criteria for full registration as a teacher</li> <li>Comprehensive, organized system of integrated novice teacher assistance and assessment involving mentor, principal and Professional Support Team (PST)</li> <li>Cluster/regional network meetings training and sharing purposes: for NQTs, mentors and PST</li> </ul>

#### 1.3.1 Induction waves in Ireland and the Droichead pilot

Taking a similar time frame, induction can be characterized in Ireland in terms of three waves (see Table 1.3). The first wave – Informal and Needs focused (prior to 2002) - emphasized general support for first year teachers (the term newly qualified was not then used as it is today in Ireland and other neighbouring jurisdictions), was voluntary and typically experienced by many teachers within a school context with a very small minority of teachers participating in a short off-site programme (possibly organised by Teacher/Education Centres though some ITE providers also supported networks for beginning teachers, e.g. Beginning Teachers Network, see Killeavy & Murphy, 2006). In the latter case, these short induction programmes were an exception rather than a rule, with some Teacher/Education Centres providing induction where participation was voluntary and the programme most likely comprised initial orientation type support early in the first year of teaching. Anecdotal evidence suggests that many primary and post-primary teachers both experienced and benefited from support by colleagues during their first year teaching. Such support was most likely needs focused, providing general emotional support for the 'new' teacher by the 'experienced' teacher - based on the latter's memories of the challenges of beginning teaching and its 'sink or swim' learning to teach culture. As Coolahan (2002) noted, "beginning teachers are often 'thrown in at the deep end', with a full teaching load and associated responsibilities. They often have few support structures to draw upon and can feel isolated, stressed and anxious" (p. 25).

The second wave in Ireland commenced with the launch of the National Pilot Project on Teacher Induction (NPPTI) in 2002 and this ran until 2008 over a number of phases. Killeavy and Murphy (2006) undertook a comprehensive evaluation of this programme (Phases 1-4, 2002-05) leading to a number of conclusions and recommendations at system, school and classroom levels with implications for all stakeholders in the provision of induction. The role and potential responsibilities of mentor teachers with a whole school approach to supporting beginning teachers emerged as a key dimension of the NPPTI (Killeavy & Murphy, 2006). Given that Killeavy and Murphy's NPPTI evaluation was undertaken prior to the establishment of the Teaching Council in 2006 - after which the regulatory and organisational landscape changed significantly - their findings and recommendations need to be read within the context of the landscape at that time. Nevertheless, their overall findings, and in the "the recommendations and terminology used in the report, implementation recommendations" provided valuable direction for subsequent developments in the latter stages of the pilot after 2005

(phases 5 and beyond). The overall findings of Killeavy and Murphy's report were positive about the impact of the NPPTI on both beginning teachers and their mentors at both primary and post-primary levels. The vast majority of mentors involved in the pilot, emphasizing the central role of trust, in the mentor-mentee relationship did not think they ought to have a role in assessing beginning teachers. This need to address the issue of assessment undertaken by mentors during induction reflects a wider change internationally which has emphasized the importance of both the coaching/mentoring and assessment/evaluative functions of experienced teachers in schools in supporting beginning teachers (Yusko et al, 2009). The overall finding – from both the primary and post-primary pillars of the NPPTI - was the positive views of beginning teachers in relation to the support the received as well as the opportunities to engage with others' practice via observation. This finding from the NPPTI evaluation is especially noteworthy given that anecdotal evidence prior to that had noted the prevailing 'sink or swim' culture experienced by beginning teachers in their first year teaching.

The third wave in relation to teacher induction in Ireland commenced with the introduction of mandatory induction for all newly qualified teachers (NQTs) as of September 2012. The introduction of mandatory induction for all NQTs reflected wider initiatives being undertaken by the Teaching Council to regulate and support professional standards across the continuum of teacher education from initial teacher education to induction and beyond. Consistent with Stanulis and Floden's (2009) observation about the move toward increasingly systematic approaches to induction, both the NIPT induction programme (i.e. the programme available to NQTs in non-pilot schools) and the more intensive supports available through Droichead (pilot schools) resonate with the wider trend toward more coherent and integrated teacher induction. In particular, the Droichead pilot represents an approach more consistent with the move toward integrated and intensive mentoring. Indicative of the more intensive approach to mentoring in Droichead are the expectations around: (i) observation (NQTs observing and being observed), (ii) professional conversations between NQTs and mentor/PST on indicators of good practice, and (iii) NQTs' identification of their own professional learning needs following on from observations and associated feedback/professional conversations with mentor teacher and PST teachers. As such, these practices exemplify the meaning of 'intensive' in the context of the Droichead pilot and distinguish it from what NQTs in non-pilot schools are likely to experience in terms of support in learning to teach. The two dimensions - assistance and assessment - built into

conditions for registration add a further dimension to the meaning of 'intensive' vis-à-vis induction. In the case of Droichead, the involvement of the school-based PST in this aspect of induction introduces a new and potentially challenging dimension to the teacher induction landscape. Its introduction is consistent with wider trends internationally.

#### NIPT Induction workshops: Non-pilot and Droichead pilot

Since 2012, all NQTs have been required to undertake 24 hours of induction programme workshops (see Table 1.3). The workshops take place in the late afternoon or evening time and each workshop is two hours in duration. They take place in education centres and/or outreach venues around the country. Greater flexibility in the provision of workshops was introduced in 2014. Induction workshops are themed as follows:

- Working as a Professional
- Planning and Preparation
- Classroom Management and Organisation
- Working with Parents
- Child Protection
- Assessment
- Behaviour Management
- Literacy
- Numeracy
- Differentiation
- Gaeilge (primary teachers) / Transition from Primary School (postprimary teachers)
- Inclusion.

An additional pathway of school-based professional development is available to NQTs in all schools (Droichead and non-Droichead) with an NIPT trained mentor. Up to six hours of such school-based induction activities may be recognised as part of the required 20 hours required for registration.

#### The Droichead pilot programme

In order to optimize the regional clustering, the pilot focused on primary and post-primary schools in those counties "which normally have the highest concentration of newly qualified teachers" with a facility for schools outside of these geographic regions to "make a case for inclusion in the pilot, and some have done so already". The Droichead pilot programme provides support over and above that for non-pilot schools

(i.e. the majority of schools and NQTs nationally). Whereas the NIPT induction workshops are available to all NQTs, Droichead pilot schools have additional in-school supports for NQTs in the form of a Professional Support Team (PST), comprising the principal, a mentor or mentors and other support teachers as well as supports external to the school comprising cluster meetings at which participating schools receive training, share their experiences of the pilot, and receive support from the National Induction Programme for Teachers (NIPT) and an inspector assigned to that cluster. Ongoing email and phone support is available from the NIPT and the Inspectorate.

#### Criteria that the NQT is expected to meet before completing Droichead

The Teaching Council's document *Droichead*: *Teaching Council Policy on a New Model of Induction and Probation* specified four criteria which NQTs are required to meet in order to successfully complete the Droichead process. The four criteria are having:

- 1. completed a required minimum period of professional practice
- engaged professionally with the school-based induction activities as established by the Teaching Council
- demonstrated a satisfactory commitment to quality teaching and learning, and
- 4. demonstrated an ability to practice independently as a qualified, fully registered teacher.

The Council identified the latter three criteria as "high-level criteria" and in order to explicate these developed "indicators of good practice, which may be considered by PSTs in making a recommendation to Council" about whether an NQT had or had not met the required standard of professional practice. The Council's specification of these standards along with the facility for their adaptation to meet individual school understandings of practice can be seen as an important feature in contextualizing professional standards.

#### Conditions of registration for all NQTs: assistance and assessment

With the mandatory induction of NQTs established since 2012, two conditions of registration are in place for all NQTs: induction and probation (primary) or post-qualification experience (post-primary). These two conditions comprise what are increasingly seen as essential components of induction programmes internationally (Stanulis & Floden, 2009; Wang et al, 2010) and represent a step beyond earlier induction

designs which focused solely on assistance/support systems. The induction workshop programme is provided by the National Induction Programme for Teachers (NIPT) in Education Centres with the support of the Centres' national association (i.e. ATECI). In response to demand by NQTs, some changes were made to the NIPT Workshop Programme delivery in 2013 (requirement for NQTs to complete 10 out of the 12 workshops) and 2014-15, whereby, in addition to the evening workshops, day-time workshops and school-based professional development "may also be recognised as part of the required 20 hours" (Teaching Council, 2014). The Teaching Council is informed by the Education Centre once the minimum of 20 hours have been completed by each NQT.

#### 1.3.2 Conclusion

The introduction of the Droichead pilot in Ireland reflects a wider trend internationally toward the design of more systematic, integrated and intensive induction programmes. With the mandatory induction of NQTs established since 2012, two conditions of registration are in place for all NQTs: induction and probation (primary) or post-qualification experience (post-primary). These two conditions comprise what are increasingly seen as essential components of induction programmes internationally. Taking the two conditions for registration together and anchoring both in the school in which NQTs are teaching as is the case on the Droichead pilot — in tandem with external supports through the NIPT — has the potential to significantly tilt the balance of responsibility for inducting the next generation of beginning teachers onto schools and teaching profession.

#### 1.4 SCHOOL ORGANISATIONAL CULTURE AND TEACHER EFFECTIVENESS

Schools involved in programmes such as Droichead cannot be regarded as a 'blank slate'. Each has its own distinct organisational culture, different levels of formal and informal collaboration among teachers, and varying approaches to inducting new teachers. There is now an extensive research on organisational culture in schools and teacher effectiveness. Researchers have put forward various definitions of organisational culture, generally recognising that it is a system of shared values and norms that give it a distinct identity (Schein, 1985). All schools have their own distinctive identities and culture that is shaped by their history, context, staff and students, and that is also influenced by the external context of a school (Stoll, 1998). Closely linked to the organisational culture is school climate. Both are found to have impact on the work and well-being of individuals who work and study in these establishments.

Exploring organisational culture and climate is important for understanding the experiences of early career teachers who often feel overwhelmed by the work involved and meeting the expectations of their more experienced colleagues (Cherubini, 2009). Furthermore, in order to prepare new teachers attention needs to be paid to factors in teacher effectiveness such as teacher preparation and subject matter knowledge (Darling-Hammond, 2006). To assist new teachers, various induction programmes have been implemented across jurisdictions in order to help the socialisation of novice teachers (see above). The following subsections present a short overview of the existing literature on organisational culture and school climate and its impact on novice teachers.

#### 1.4.1 Previous research: What is organisational culture?

Organizational culture can be seen to take many forms. According to different theorists, it can be *uniform/integrationist*, i.e., it can be expressed in terms of a distinct "collective consciousness" (Hofstede, 1980), "underlying shared assumptions" (Schein, 1984) or "group values" (Sackman, 1991). A *differentiated perspective* acknowledges cultural heterogeneity and plurality within organizations, as well as the potential for conflicting sets of values or beliefs (Martin 1992). According to Johnson (2000), individuals may have varying beliefs about many aspects of their organisation, but there is some level of agreement on core sets of assumptions, without which an organization could not function. The *fragmentation perspective* conceptualizes culture as a continuously changing reality. Martin and Frost (2004) contend that *any organization has aspects of integration, differentiation and fragmentation*, and argue that researchers should therefore take all the three perspectives into account to understand the dynamics of culture more fully.

Most authors refer to the concept as the set of values, norms, standards for behaviour and shared expectations that influence the way in which individuals, groups and teams interact with each other and co-operate to achieve organisational goals (Jones and George, 2003; Hargreaves, 1992). Different inter-related elements are seen to create a pattern that is a distinctive part of any organisation (Hellriegel et al., 2004). Organisational culture is individually and socially constructed and can manifest itself in a conscious (e.g. physical setting, rituals, history) or subconscious way (unwritten rules, norms of behaviour)(Rousseau, 1990). Exploring the effect of the culture of an organisation, Keup et al. (2003) argue that culture clearly affects the way the members of the organisation perceive

and attempt their work. A strong organisational culture tends to be cultivated by management, learned and reinforced by employees and passed on to new employees (Hellriegel et al. 2004; Kruger, 2003). Consequently the organisational culture has the potential to enhance organisational performance and individual satisfaction. As with other organisations, the organisational culture of schools is a multi-layered phenomenon which refers to the beliefs, perceptions, relationships, attitudes, and written and unwritten rules that shape the school climate. To what extent school culture and climate differ is discussed in the next sub-section.

#### 1.4.2 To what extent do organisational culture and climate differ?

Existing research on school culture and school climate reveals different perspectives held by researchers. Some authors have highlighted for a conceptual distance between school culture and climate (Hoy and Feldman, 1999). For example, the former is seen as comprising the shared values and norms of the school, while the latter refers to behaviour within the organisation and shared perceptions (Hoy, 1990; Heck and Marcoulides, 1996; Hoy and Feldman 1999). Hoy *et al.* (1991) further contend that school or organizational climate is generally viewed from a psychological perspective whereas school culture tends to be viewed from an anthropological perspective. Other authors, however, argue that norms, values, rituals and climate are all manifestations of culture (Schein, 1985, 1996; McDougall and Beattie, 1998; Schneider and Reichers, 1983).

School culture is a multi-layered concept. It is influenced by the interplay between three factors: the attitudes and beliefs of persons both inside the school and in the external environment; the cultural norms of the school; and the relationships between persons in the school. A growing body of evidence indicates that the success of individuals within the school relies heavily upon how the school functions (Deal and Peterson, 2009). The prevailing culture in a school can assist school improvement efforts, or act as a barrier to change (Deal and Kennedy, 1982). To foster teaching and learning a collaborative school culture that supports high levels of collegiality, teamwork and shared vision is essential (Edmonson, et al. 2002). It is important to note that culture in a school can also be counterproductive and an obstacle to educational success; it can also be oppressive and discriminatory for various subgroups within the school (Patterson, et al., 1986). Over time, school culture may become internalised, i.e., teachers become comfortable with the standard

operating procedures of the school's culture (Davis, 1988). In such cases, any change in the school may be accompanied by feelings of discomfort and resistance.

#### 1.4.3 Leadership practices and organisational culture

There is now an extensive literature on the development of organisational culture in education (Kruger, 2003) and the role of the principal in this process (Singh and Lokotsch, 2005; Waters and Kingston, 2005; Kapp, 2000). Hallinger and Heck (1998) argue that the principal's impact on learning is an indirect one, as it is mediated through the climate and culture of the school. At the same time, school principals have an important role to play in establishing a positive school culture (Barnett et al., 2000; Sahîn, 2004). The activities of a school principal that impact on the culture of the school include building a vision and setting direction, supporting the staff, redesigning the organisation, and leading teaching and learning in schools (Leithwood et al., 2008). Other school improvement activities include providing opportunities for teachers to develop as leaders in the school, and providing teachers with opportunities for high quality professional development (McLeskey, 2011). As a leader of an organisation, a school principal's actions and leadership style is likely to have impact on the work and behaviour of the teachers in the school (Mintzberg, 1983). It is important to note that while the role of school leader is important in improving the culture of the school, a whole school approach in implementing any change is essential (Deal and Peterson, 2009).

#### 1.4.4 Teachers' experiences

During their career teachers develop an 'interpretative framework', one that is shaped and reshaped through interaction with the social, cultural and structural conditions which impact on their everyday work (Kelchtermans, 2009). A supportive organizational culture is crucial to the enhancement of teacher job satisfaction.

Considering the new and multiple pressures that teachers are increasingly facing, it is important to understand and manage the balance between the 'dissatisfiers' and 'satisfiers' that keeps teachers resilient. 'Satisfiers' or positive features of the job (the work itself, responsibility, recognition, achievement) are essential to teachers' sense of professional fulfilment. 'Dissatisfiers' refer to interpersonal relationships,

administration, salary, and working conditions (Edwards, 2002). In order to increase teacher satisfaction it is necessary to enhance the teaching experience, autonomy and initiative in the classroom regarding subject delivery and pedagogy.

Over time some teachers become disillusioned in their job. In the Netherlands, Koffeman (2011) noted that after the initial five years some teachers seemed to lose their drive. The reasons for their diminishing motivation included lack of stimulus and new challenges accompanied by external pressure for compliance. Hargreaves (2000) argues that the market perspective, and the rules and regulations associated with it, diminishes teachers' sense of autonomy and confidence in their classroom judgment. Teachers are increasingly likely to be burdened with excessive expectations from society at large, caught between high expectations and low professional esteem (Punch and Tuetteman, 1996). In order to increase teacher motivation and job satisfaction, the school's commitment to employee participation in goal setting, planning, and decision making is paramount. Understanding the sources of satisfaction and dissatisfaction is crucial for teacher effectiveness and is particularly relevant for improving induction and the early years of teaching.

#### 1.4.5 Early career teachers

Florio-Ruane (1989) highlights the importance of understanding the social organisation of schools and how it impacts on early career teachers. An increasing body of work has considered the experiences of novice teachers and difficulties they encounter when starting work in schools. An encounter with an established school culture often means they need to revise many established assumptions they hold about the nature of schooling - its norms, activities and social roles. In addition, novice teachers have also been found to be concerned about discipline in classroom, personal and institutional adjustments, and personal interactions, teaching methods and strategies, and working with special needs students (Smith, 2000); the emotional effect of teaching upon beginning teachers, the pervasive influence of school administrators, the perceived inequity of status, and a sensitivity toward school culture (Cherubini, 2009). These teachers may also come under pressure as a result of a heightened desire to meet the needs of students and the demands of fellow teachers (Pajares, 1993). One of the persistent problems is that student teachers' views of teaching are shaped by their own experience which in turn shapes their practices within classroom, often irrespective of the approaches and methodologies

learned in college (Hoy and Murphy, 2001; Pajares, 1993). Taken together, these studies highlight multiple issues that impact on the work of a novice teacher.

Existing research also shows that not all novice teachers manage to negotiate their start of the career successfully. Retention of new teachers is one of the driving forces underpinning formal induction programmes in the USA and some other countries. According to many authors, up to half of all new teachers in the USA leave within the first five years in the profession, with almost 30% leaving within the first three years (Joiner and Edwards, 2008; Ingersol and Smith, 2004; Smith and Ingersol, 2004). The reason for leaving has been associated with weak socialization structures in schools, sometimes characterised by a "sink or swim" mentality (Maciejewski, 2007; Smith and Ingersol, 2004) as well as the quality of their pre-service education (DeAngelis, 2014). The issue of teacher retention has not emerged as a concern in the context of primary or post-primary teachers in Ireland (Conway, Murphy, Rath and Hall, 2009). However, anecdotal evidence suggests that retention may be an issue for some categories of teachers who leave teaching due to poor employment opportunities at post-primary level (i.e. 'leavers') and that turnover (i.e. 'movers') of teachers may be an issue in some urban schools designated as disadvantaged. The distinction between 'leavers' and 'movers', albeit based on anecdotal evidence, points to the complexity of retention at both a local and system level. Regardless, of the distinctions between movers and leavers evidence has accumulated about the need for formal induction for all newly qualified teachers.

#### 1.5 SUPPORT FOR NOVICE TEACHERS

Various authors have referred to the importance of encouragement and support of novice teachers at school level (Fives et al., 2007), as the lack of collegial support may lead 'feelings of ineffectiveness or unaccomplishment [which] are accompanied by a growing sense of inadequacy' (Friedman, 2000, p. 595). School culture has important implications for the induction of a new teacher with effective/supportive schools more likely to create school-wide conditions to support teaching and learning and to develop a supportive professional culture (Tait, 2005). Common feature of induction programmes for new teachers include the incorporation of a mentoring element (Barrett, et al. 2009). In order for this to work, willingness to participate among partners (Zachary, 2005) and appropriate professional development for, and support of, mentors (Moir, 2005) are essential. Fives et al. (2007) found in their study

of beginning teachers, those who benefited from 'high guidance' from their mentors demonstrated lower levels of burnout and were less likely to leave teaching than their colleagues who experienced 'low guidance'. An inadequate or badly structured/organised mentoring process can actually have negative impact on the experiences of novice teachers (Ehrich, et al., 2004). Components that could lead to dysfunction include "lack of time for mentoring, poor planning of the mentoring process, unsuccessful matching of mentors and mentees, and a lack of understanding of the mentoring process" (Ehrich, et al., 2004).

Socialization practices, including induction programmes, are a crucial component in supporting novice teachers. It is imperative that rather than providing generic programmes, the induction provided should reflect the needs of the teachers (Mandel, 2006), which at a basic level include security, affiliation and self-esteem while other concerns are more job specific (see above). Without practical and relevant support, new teachers are more likely to experience burnout, struggle to cope with the daily stress and pressures and eventually end up leaving the profession (Kelley, 2004).

Effective collaboration between higher education institutions and schools in providing induction programmes benefits both novice teachers and more experienced colleagues who work with them. In the United States a longitudinal study on the effectiveness of an induction programme showed that 94% of the novice teachers that participated in this induction program had remained in the classroom after four years (Kelley, 2004). The programme was individualized to meet the needs of the teachers within the schools and was not a general 'one-size-fits-all model'.

Joiner and Edwards (2008) argue that induction programmes must be tailored to address the true needs of the teachers within individual schools. An initial evaluation must be conducted to determine what is causing teachers to leave the profession or transfer out of specific schools. Just as one programme model or collection of induction activities will not work for all schools, all teachers are not leaving the classroom for the same reason. Commonly named reasons are: lack of instructional support, lack of emotional support, feeling of being isolated from colleagues, unrealistic expectations of what classroom environment includes, inadequate and poorly timed professional development, no support or induction programme, no formative observations and

feedback, an ineffective school climate and culture which leads to animosity among faculty members when trying to implement new ideas (Angelle, 2006; Curtner-Smith, Hastie, and Kinchin, 2008; Ingersoll and Smith, 2004; Maciejewski, 2007; Mandel, 2006).

In Smith and Ingersoll's (2004) study of formal induction and mentoring programmes, it was found that while there is a relationship between beginning teachers receiving support and their retention rate, the strength of that relationship depends on the type of support and the number of supports received. The challenge for teacher educators is to use knowledge about the social organisation of schooling to help novice teachers see classrooms in a new light to deal with the dissonance between their own lack of agency as a student and the authority of the teacher (Florio-Ruane, 1989).

#### 1.5.1 Climate, school culture and teacher induction

There is a significant correlation between the success of the induction programme and the climate and culture of a school. If the climate and the culture of a school do not support the induction activities of mentoring, collaborating and growing professionally, then new teachers will not be successfully socialized into the school organisation (Gruenert, 2008). Even if the new teacher survives the first year of socialization practices in an ineffective school, it does not mean that he/she has been socialized into becoming an effective teacher (Angelle, 2006). This teacher will either continue the 'sink or swim mentality' and foster ineffective practices among future novice teachers, or leave the profession in the long run (Angelle, 2006). Therefore, the quality of the culture and climate within a school can determine whether or not socialization experiences are going to be positive or negative.

The type of organizational socialization that is utilized at the school level is one factor that affects the level at which the new teacher will implement the teaching model. For example, a *custodial culture* is one that is more conservative and less accepting of new teaching practices and change. In contrast, an *innovative culture* is one in which the beginning teacher would be encouraged to try a new teaching model and take risks (Curtner-Smith *et al.*, 2008; Hoy et al. 2007). Kelchtermans and Ballet (2002) in Belgium note that the 'praxis shock' of novice teachers not only has to do with issues at the classroom level, but also with teacher socialisation in the school as an organisation. Understanding

novice teachers' micro-level experiences is important both for improving the quality of teacher education and induction as well as developing the theory of lifelong (career-long) learning of teachers (Hoy et al. 2007).

The above emerging lessons from organisational socialisation as well as the wide variation in the degree of support experienced by beginning teachers has prompted researchers to study the interface between school cultures and induction to ensure that schools are both work and learning places for beginning teachers (Conway et al, 2014). Moore-Johnson's conceptualisation of professional learning cultures, even though based on a study of newly qualified teachers during their induction, is especially informative. Here we draw upon a large-scale study of induction in the USA - the *Project on the Next Generation of Teachers* (Moore-Johnson, 2004) - which identified three professional learning cultures in schools, based on interviews with 50 second year teachers, that had very different implications for the types of support offered to novice teachers:

- Novice-oriented professional culture: beginner teachers support each other with little or no mentoring or opportunities to observe and share practice;
- Experienced/veteran-oriented professional culture: experienced or veteran teachers are supportive in a general way, yet by and large provide no mentoring, observation opportunities or feedback on classroom teaching;
- Integrated professional culture: learning to teach is seen as a task
  for all in the school. Support for newly qualified teachers is
  generally widespread across the school, with peer observation,
  feedback and a coaching culture centred around sharing
  professional practice and a deep focus on pedagogy.

As Feiman-Nemser (2012b) summarized the lessons from the *Project on the Next Generation of Teachers,* "Some new teachers found themselves in veteran-oriented cultures, where independent work patterns isolated them from their experienced colleagues. Others found themselves in schools with novice-oriented professional cultures, where their energy and commitment could not compensate for a lack of guidance by more experienced colleagues". The optimal setting for what she terms the "most fortunate" beginning teachers was "in schools with integrated cultures that promoted professional exchanges across experience levels and ongoing support for all teachers (Kardos & Johnson, 2007)" (p. 14). Crucially, as Kardos et al (2004) note, "Principals proved to be important

in developing and maintaining integrated professional cultures where the particular needs of new teachers were both recognized and addressed". In the context of the evaluation of Droichead then, we might hypothesise that the 'school cultures' within which Droichead is being implemented will matter significantly vis-à-vis the opportunities to learn to teach afforded to NQTs.

# 1.5.2 Assessment and assistance: embracing contraries or judgementoring?

The separate functions and optimal as well as viable relationship between assistance and assessment in induction programmes has been prominent in the induction literature. Some have argued, based on empirical studies of induction programmes in the USA, that principals, mentors and newly qualify teachers can embrace the contrary imperatives of assistance and assessment despite some inherent challenges in doing so (Yusko and Feiman-Nemser, 2008). However, on the other hand, others have made a strong case, again based on empirical studies of induction programmes in England, that the judgment function will inevitably overwhelm the mentoring function resulting in judge-mentoring (Hobson & Malderez, 2013). Hobson and Malderez sought to "examine root causes of the failure of school-based mentoring to realize its full potential". Their study drew upon two major mixed-method empirical studies carried out in England and focused on data generated from interviews with beginner teachers and mentors in both primary and secondary schools. Their study attributed the difficulty of embracing the contrary functions "to a failure to create appropriate conditions for effective mentoring in England at the level of the mentoring relationship, the school, and the national policy context" (p. 89). Discussing their findings they emphasized the need to create a much greater "degree of informed consensus on the meaning and purposes of mentoring in teacher education"(p. 89), in order to forestall the "practice of judgemental mentoring or 'judgementoring'" (p. 89), which they saw acting as an obstacle to the optimal professional learning of NQTs.

Although the induction literature has traditionally recommended separating assistance and assessment (i.e. "a 'coach' can't also act as a 'judge'"), there has been growing recognition that assessment is integral to promoting and gauging teacher quality. This has led to increased interest in approaches to new teacher induction that meld support, development, assessment and accountability. Yusko and Feiman-Nemser (2008) undertook a in-depth study of the "images of mentoring in two

well-regarded induction programs that integrate assistance assessment to promote quality teaching" (p. 923) (i.e. Peer Assistance and Evaluation Program (PAEP) in Cincinnati, and the Santa Cruz New Teacher Project), in order to understand "the possibilities and pitfalls of each approach" (p. 923). Using a mixed-method qualitative case study design, they undertook interviews with programme leaders, analysed programme documentation and observed staff meetings and mentor training. Their findings are noteworthy in the context of the school level NQT 'sign off' function being undertaken in the context of Droichead. Yusko and Feiman-Nemser found that "assistance and assessment can coexist. Participating in assessment and evaluation did not prevent mentors from forming trustworthy relationships, although it sometimes made that more challenging" (p. 923). They documented how mentors not only addressed NQTs' concerns, but they also assessed supported new teachers in meeting the learning needs of their students. Significantly they concluded that "Mentoring can be most educative when mentors engage in assistance and assessment structured by appropriate frameworks and processes, get support from a professional community that upholds professional teaching standards, and receive training and ongoing professional development to carry out their important responsibility".

How can we, if at all, reconcile these apparently contradictory findings? First, while the conclusions offered are different, embrace contraries (Feiman-Nemser, 2008) and the inevitability of 'judgementoring' (Hobson & Malderez, 2013), both studies highlight the wider system level structuring that led to very different constructions of mentoring and induction. Second, both studies highlighted the inescapable tensions between assistance and assessment – though these were resolved in very different ways in the respective case-study settings. Third, the differential outcomes point to the fact that either outcome is not necessarily inevitable, rather than combined influence of school and system level factors may lead to a situation whereby assistance and assessment can be combined, or not. Finally, in terms of the tensions between assistance and assessment, while induction is not probation, nevertheless the cooccurrence brings a number of tensions to the fore. Increasingly in latter years, assessment has been added on to the induction phase and in the USA assessment and licensing of beginning teachers is increasingly the case with states linked to the INTASC standards. In the case of Droichead, the school is being called upon to not only provide an important assistance role but also plays a very significant assessment function in signing off on the NQT's readiness for full licensure as a teacher. As such,

research suggests this dual role is likely to be challenging in some respects, but at least from Yusko and Feiman-Nemser's findings a challenge that holds potential for significant professional learning for all involved.

### 1.6 CONVERGENCE ON BEST PRACTICE PRINCIPLES FOR TEACHER INDUCTION

## 1.6.1 Early research 1990s: Components of induction<sup>2</sup>

The emerging consensus that a set of factors rather than one single factor alone is critical for effective induction reflects findings accumulated from significant research on induction over the last twenty-five years (Ingersoll and Strong, 2004; Ingersoll & Strong, 2011). For example, illustrative of both the focus and policy salience of induction in studies in the 1990s, Moskowitz and Stephens' (1997) cross-national study (primarily Japan, New Zealand and Australia) of induction programmes, undertaken for the USA Department of Education, identified a number of best practice principles:

- In general, new teachers are viewed as professionals on a continuum with increasing levels of responsibility and experience.
   Novice teachers are not expected to do the same job as experienced teachers without significant support.
- Typically, new teachers are nurtured and rather than left to struggle in a 'sink or swim' situation
- More often than not, teacher induction is a deliberate, purposeful and valued activity. In Japan new teachers, they noted, must have no fewer than sixty days per year of in-school training and thirty days out of school.
- In general, schools possessed a culture of shared responsibility and support for induction. As such, a school's staff as a collective are expected to contribute to the nurturing of the new teacher.

Addressing the appropriate balance between assessment and support was a challenge in all three countries, and in general they observed that assessment was downplayed, though there is an attempt to filter out

An international research project IGNATIUS - Induction and Guidance of Newly Appointed Teachers in European Schools - aimed to improve induction and guidance of newly appointed teachers – highlighted the differences across countries regarding systems of teacher education and teacher induction. The project focuses also on those responsible for their guidance and induction in the schools where they are employed.

incompetent teachers. Drawing out the implications of their review for the USA at that time, they noted that teacher induction in the USA focused (in the mid 1990s) primarily on assessment, and assistance when it existed was purposefully linked to aiding new teachers achieve assessment criteria.

After the implementation of integrated induction programmes since the late 1980s, Wong, Britton and Ganser (2005) reviewed induction programmes in five countries: Switzerland, France, New Zealand, Japan and China. Crucially, they found that there were three noteworthy similarities across the countries studied summarising these as follows:

- Induction was well-structured based on the assumption that induction is a crucial component of the continuum of teacher education.
- Induction was underpinned by a focus on professional learning opportunities for both the 'new' teachers and mentors.
- Programmes emphasised collaborative learning among beginning teachers.

A central question posed in both the empirical studies and reviews has been the exact combination of factors that underpin effective induction. We now turn to this issue in the context of recent reviews on the effects of induction programmes.

### 1.6.2 Recent reviews 2000s+: Induction programme intensity

In the last fifteen years, a number of different kinds of reviews of research on induction and mentoring have been undertaken including those that focus on: (i) the theory, rationale and conceptualization of induction (e.g., Gold, 1999; Hegsted, 1999; Feiman-Nemser & Schwille, 1999; Feiman-Nemser, 2001 Ganser, 2002a; Ganser 2002b; Strong, 2011; Feiman-Nemser, 2012a), (ii) the dynamics of specific teacher induction reforms and initiatives (e.g., Fideler & Haselkorn 1999; Scherer, 1999; Serpell & Bozeman, 1999; Wang & Odell, 2002; Kyriacou & O'Connors, 2003; Draper et al, 2007; Forrester & Draper, 2007; Desimone et al, 2014) and (iii) the dynamics of teachers' experiences with induction (e.g., Wang, Odell, & Schwille, 2008; Youngs 2007; Johnson & Birkeland, 2003; Saka et al, 2013; Ruohotie-Lyhty, 2013; Risser, 2013). In addition, two recent books by Strong (2011) and Wang et al (2010) provide valuable overviews of key aspects of the now very substantial literature on teacher induction programmes.

Over a decade ago, Ingersoll and Smith's (2004) review of the effects of mentoring identified practices and supports that had a positive effect on the retention of teachers. They found that the strongest factors or elements that influenced teacher retention included: having a mentor from the same subject area, collaborative planning time with teachers on the same grade level and subject, having common and consistent planning with other teachers, and participating in networking activities with other novice teachers (Ingersoll and Smith, 2004). According to Angelle (2006), formal and informal class visits by the principal, reflective feedback, and the principal's promotion of best instructional strategies were the most effective elements that retained teachers. Other researchers have also concluded that effective components are: personalizing mentor programmes to the location and subject area, intensive mentor training and support, release time for observing experienced teachers, common time to share and develop problemsolving strategies with other new teachers, well-timed professional development and novice teacher directed information sessions and discussion (Ganser, 2002; Kelley, 2004; Maciejewski, 2007; Mandel, 2006; and Robinson, 1998). Ingersoll and Smith (2004) found that is it not the use of one single element that reduces attrition rates but the bundling of multiple activities and supports that makes the difference. The greater the number of supports included in the induction programme, the lower the predicted probability of leaving the profession prematurely (Ingersoll and Smith, 2004).

In the most comprehensive review of induction programme impact to date, Ingersoll and Strong (2011) observed that despite the accumulation of a number of significant reviews of induction "...there have been few efforts to provide comprehensive and critical reviews of empirical studies that evaluate the effects of induction on various outcomes" (p. 229).<sup>3</sup> Their 2011 review built upon their earlier work in 2004 on the effects of mentoring and Strong's (2009) book which reviewed induction and mentoring research. In Ingersoll and Strong (2011), the authors initially identified 500 studies on induction of which 150 were empirical. They then assessed these 150 studies and found that only 15 studies met their

Further information on the kinds of methods used in previous studies is presented in Chapter 2.

three selection criteria: evaluation of outcomes, comparison within the study design and explicit description of data and methods. Ingersoll and Strong's findings are both very informative and important for a number of reasons. First, they demonstrate that despite the proliferation of studies on induction, most of the literature does not provide a sufficiently rich and rigorous description of programmes researched for the purposes of research meta-analyses. Second, while there was general consensus on the effectiveness of 14 of the 15 programmes in terms of the three focal outcomes, the fifteenth study, with its randomized control design, provided equivocal results, prompting the authors to question the other overarching findings of their study. In doing so, they pointed to the general need for higher quality research designs in evaluating induction programmes for teachers. Third, echoing previous research, they found that the intensity of programmes mattered.

### 1.6.3 Intensity and Interactions matter

However, the data also tell us that the kinds and amounts of support greatly vary, and research suggests the effects depend on how much induction one gets and for how long.

### Ingersoll, 2011

The issues of induction programme intensity and programme interactions with other aspects of beginning teachers' experiences together highlights the complex nature of induction programmes and the limitations of general unqualified claims about the 'impact' of induction programmes, notwithstanding some of the emerging findings from systematic reviews of induction programme impact discussed above (i.e. Ingersoll & Strong's major critical review).

First, the intensity of induction programmes can be understood in a number of ways: the combined effect of initial formal orientations for NQTs along with whatever bundle of activities and supports are designed to support their work as teachers, the intensity of mentoring support afforded NQTs (i.e. both formal and informal mentoring, e.g. Desimone et al, 2014) or the role only of formal mentoring opportunities afforded NQTs (Hopkins & Spillane, 2014). For example, Desimone et al. (2014) undertook a study premised on the idea that informal mentors likely play a significant role in NQT learning, "yet we know little about them, especially in relation to formal mentoring, which is the cornerstone to most induction programs" (p. 88). In a study of 57 first-year mathematics

teachers (across 11 districts in the USA), they investigated the characteristics of formal and informal mentoring, and found that that informal and formal mentors "sometimes serve similar functions but often provide compensatory and complementary support" (p. 88). In the context of Droichead then we might hypothesise that in some schools informal mentors as well as designated Professional Support Team mentors might together play a significant induction role and/or that Droichead may act as a catalyst for the activation of informal mentoring. Were either or both of these outcomes the case, we might then ask about Droichead's capacity to animate wider professional learning communities in schools in support of teacher education.

Despite the emerging awareness of the important role of informal mentors, there has been a continued focus on the contribution of formal organisational structures and arrangements vis-à-vis the intensity of induction programmes and how they do or do not meet the learning needs of NQTs. Hopkins and Spillane (2014), using a mixed methods design (i.e. social network and interview data analysis), examined beginning teachers' advice- and information-seeking behaviours related to mathematics and literacy. They found that "formal organizational structures inside schools were critical for shaping beginning teachers' opportunities to learn about instruction, including grade level teams and formal leadership positions". In terms of Droichead, then we might consider the ways in which formal organizational structures (class level planning at primary; subject departments at post-primary) support and possibly amplify the intensity of the overall Droichead experience.

Second, in terms of understanding the impact of induction a number of recent studies have pointed to the ways in which beginning teachers' experiences prior taking up their first teaching position interact with formal induction programmes. DeAngelis et al. (2013), in a study examining perceived preparation quality and leaving teaching (evidenced in previous research findings), found the "comprehensive support moderates the relationship between preservice preparation and intentions to leave" (p. 338).

### 1.7 CONCLUSION: DESIGNING AND EVALUATING INDUCTION PROGRAMMES

The theory behind induction holds that teaching is complex work, preemployment teacher preparation is rarely sufficient to provide all of the knowledge and skill necessary to successful teaching, and a significant portion can only be acquired while on the job (see e.g., Gold, 1999; Hegsted, 1999; Feiman-Nemser 2001; Ganser, 2002).

## Ingersoll & Strong, 2011, p. 228

### 1.7.1 Rationale for induction

Taking up a prominent theme in teacher education policy and research internationally, various reports and reviews in Ireland going back over thirty years, as noted by Killeavy and Murphy (2006) in their NPPTI evaluation, have recognised the need for a structured and integrated induction process within what was initially termed the 3Is and now the continuum of teacher education. These long-standing calls for induction have been underpinned by an emphasis on it being "demarcated, interconnected and related to a holistic view of professional practice" (Conway, Murphy, Rath and Hall, 2009). As such, the design, evaluation and implementation of the National Pilot Programme of Teacher Induction (NPPTI), starting in 2002, was an important step at a system level toward realising a more integrated and extended view of learning to teach. In particular, it recognized that the transition from student teaching to becoming a practising teacher is a phase worthy of deliberate support recognizing its underpinning in a reconceptualisation of what it means to learn to teach (Killeavy & Murphy, 2006). Crucially, a consensus has emerged internationally that learning to teach effectively cannot happen in ITE alone. Rather, learning to teach must occur within a context of a continuum of teacher education. As we have noted this insight has been a feature of reports and incremental moves toward system wide teacher induction in Ireland since the early 1990s. For the purposes of this Droichead research, we can summarise a number of key ideas that have emerged in our review of the now extensive literature on teacher induction.

# 1.7.2 Framing of induction matters

The framing of induction in terms of phases, a process of socialization and an integrated programme provides a typology for thinking about the ways the term 'induction' is used in policy and in practice. In terms of the evaluation of Droichead, it also draws our attention to ways in which each orientation can help us understand important aspects of induction. The distinct phase and socialization orientations are reflected in the attention in the questionnaire and school case-studies to novice teacher concerns and experience of the dynamics of enculturation in their schools (see Chapter 2). The orientation toward induction matters for both design and evaluation, given Feiman-Nemser's observation that conventional mentoring programmes have historically emphasised emotional support

and induction into the social mores of the setting within hierarchical relationships with little attention given to the development of teaching and learning (Feiman-Nemser et al., 1999).

### 1.7.3 School culture/ context matters

The literature on induction illustrates the many ways in which school culture matters in the successful implementation of induction. In this review we have highlighted a number of ways in which school culture matters: principal leadership, the critical role of both formal and informal mentoring in schools, and the professional learning culture in the school (novice, veteran or integrated). Crucially, research suggests, that each of the dimensions of school culture mediates the nature and level of support for NQTs involved in induction programmes.

### 1.7.4 The impact of induction

Case studies of thoughtful mentors at work show that they act as cothinkers and coplanners, helping new teachers reframe challenges, design and modify instruction and assessments, and analyze and promote student learning. Mentors also deliver difficult feedback and strive for a balance between supporting new teachers and challenging them to grow

### Feiman-Nemser 2012

As we noted, the recent and most comprehensive review of induction programme impact to date, undertaken by Ingersoll and Strong (2011), observed that despite the accumulation of a number of significant reviews of induction the actual number of studies that employed research designs to ascertain programme impacts has been limited to date. In the context of this research on Droichead, the approach being taken is consistent with the three essential criteria identified by Ingersoll and Strong (2011), that is, evaluation of outcomes, comparison within the study design and explicit description of data and methods.

### 1.7.5 Scalability of induction programmes

The issue of 'scale' is a key challenge for educational and school reform in every country. As Coburn (2003) notes, "definitions of scale have traditionally restricted its scope, focusing on the expanding number of schools reached by a reform" (p. 3), thereby masking "the complex

challenges of reaching out broadly while simultaneously cultivating the depth of change necessary to support and sustain consequential change" (p., 3). The Droichead induction programme meets the criteria for a system-wide reform initiative and as such it is important to consider the issue of scalability of reform. Coburn, for example, argues that we must move beyond a numbers approach and consider the depth, sustainability, spread, and shift in reform ownership of any educational initiative.

# **Chapter 2**

# Research methodology

### 2.1 Introduction

This chapter outlines the methodology used in this research on the Droichead pilot programme. Chapter 1 has outlined the findings from previous research on teacher induction internationally. Section two of this chapter looks more specifically at the research instruments used in such studies. A review of these instruments provided a basis for developing questionnaire items to be included in the survey of schools for the current study. Section three of this chapter outlines the specific research approach taken in this study while preliminary findings from the first wave of survey data are presented in Chapter 3.

### 2.2 Previous studies which evaluated teacher induction

# 2.2.1 Responsibility for evaluation of induction programmes: A brief snapshot of the United States

In the United States, evaluation of induction programmes is the remit of the state within which the school district is located. State programme accountability systems serve to ensure that programmes meet four features of programme quality (Goldrick et al. 2012): to assure programme compliance with state laws, regulations and policies; to create linkages and lessen the disconnect between policy and practice; to place a focus on programme improvement; and to assess the influence of induction programmes on student and teacher outcomes.

Monitoring and evaluation of induction programmes are undertaken by a variety of agencies. Individual states within the United States carry out evaluations in partnership with universities. The state of Alaska evaluates its State Mentor Project through its partnership with the University of Alaska, and Delaware undertakes its evaluation of induction programmes in partnership with the Institute for Public Administration at the University of Delaware. Other states require the State Department of Education to carry out evaluations as in the case of Oregon, whereas West Virginia and California carry out evaluations through their state education accreditation systems. The frequency of evaluations also varies with California using a seven-year cycle of activities, North Carolina

carrying out evaluations every five years, and Delaware and South Carolina undertaking annual evaluations of induction programmes.

# 2.2.2 Shortcomings and challenges of evaluation

Research indicates that evaluation of teacher induction programmes has been neither conclusive nor rigorous (Borman & Dowling, 2008; Ingersoll & Kralik, 2004) (see also Chapter 1). Research has focused on the variety and outcomes of induction programmes. Research that is large in scale and based on nationally representative statistics (Shen 1997; Smith & Ingersoll, 2004) has been criticized in that it has limited capacity to capture the intensity of induction supports and in the range of outcomes that can be examined. Conversely, evaluations that yield more detailed description of teacher supports (Youngs, 2007) tend to be at the local level and rely on non-experimental approaches. These approaches focus data collection solely on participants involved in induction programmes with the absence of control groups (Smith & Ingersoll, 2004). These and other research design shortcomings, such as the lack of random assignment to treatment and control groups, results in difficulties in drawing inferences about the effects of an induction programme. Another limitation of evaluation research is that many studies do not control for other factors which may account for differences across induction programmes (Smith & Ingersoll, 2004), for example, school level differences.

### 2.2.3 The focus of evaluations: who and what gets evaluated?

Five types of data are generally collected during programme evaluations (NAE, 2002): programme satisfaction, teacher retention, job satisfaction, teacher learning, and student impact (see Table 2.1).

**TABLE 2.1** Types of induction programme data

Programme Satisfaction:	Are participants content with the induction programme and the level of support offered?	
Teacher Retention:	Does the induction programme help to retain new teachers?	
Job Satisfaction:	Does the induction programme increase confidence and job satisfaction among new teachers?	
Teacher Learning:	Does the induction programme improve new teachers' skills and knowledge?	
Student Impact:	Does participation in the programme result in improved student learning?	

### 2.2.3.1 Programme satisfaction data

Who is engaged in the evaluation? Satisfaction with induction programmes is most often measured by collecting data from beginning teachers and mentors. Evaluations analyse the activities mentors engage in as part of an effort to identify impacts on beginning teachers. Surveys have become increasingly used as a way to gain insights into programme satisfaction. Surveys of mentors locate and explore factors that influence the effect of mentor training on the mentor's practice and in turn the outcomes for newly qualified teachers. These surveys also gather information on basic mentor demographic characteristics, previous mentoring experience and professional background of the mentor. Other data collection methods used are case analysis (Achinstein and Barrett, 2004), discourse analysis of conversations between mentors and beginning teachers (Stron & Baron, 2004; Wang, Strong & Odell, 2004), surveys and interviews (Achinstein and Barrett, 2004). Wang, Odell & Schwille (2008) review three studies which explore the effects of mentors' beliefs and practice and in turn provide guidance for evaluation of the mentoring components of induction programmes. They report on a comparative study of mentor teachers across three countries (Wang 2001) and conclude that being able to teach in reform-minded ways is not sufficient in enabling mentors to guide beginning teachers to teach in a similar manner. The authors also contend that effective mentoring practices can be identified by research focusing on mentors' beliefs and skills that are consistent with teaching and learning (Athanases & Achinstein, 2003; Feiman-Nemser 2001

Evaluation studies utilise a variety of research methods when gathering data from beginning teachers. Many studies use interview data to gain insights into the effects of various induction components (Moran, Dallat & Abbott, 1999; Oberski, Ford, Higgins & Fisher 1999; Williams, Prestage & Bedward, 2001). Surveys of beginning teachers (Moran, Dallat & Abbott, 1999) focus on demographic characteristics and professional credentials such as college exam results and participation in teacher preparation programmes. College exam results are often used objective measures of a beginning teacher's cognitive ability and are used in descriptions of the types of teacher that stay or leave the teaching profession (Greenwald et al. 1996). Surveys also examine beginning teachers' local conditions such as teaching assignments and class sizes. Perceptions of the teaching profession are also a focus as are personal background characteristics which are hypothesized to affect career decisions and hence retention (salary at the start of the first year, marital status, spouse's occupation and number of young children).

What gets evaluated? A focus of programme satisfaction evaluations is on induction activities with an emphasis on identifying both the activities delivered in induction programmes and beginning teachers' engagement in those activities. This research usually takes the form of a survey administered at the end of the induction process or in some cases involves the administration of multiple surveys in an effort to capture the changing nature and intensity of induction activities across the school year. Surveys of teacher induction programmes ask questions relating to the source of mentoring (i.e. 'who' mentors), the frequency and duration of mentoring and other induction activities, such as professional development workshops, observations of teaching and feedback on instructional practices (see details of the TELL and SASS surveys which follow in the next sub-section).

What data is used for the evaluations? In addition to the use of survey data mentioned above and outlined in detail later, many studies use qualitative methods to explore the impact of activities provided as part of teacher induction programmes. Studies have examined the effects of workshops on conceptions and practices of mathematics teaching (Barret, Jones, Mooney, Thornton, Cady & Guinee, 2002) and use of children's mathematical thinking (Franke, Carpenter, Fennema, Ansell & Behrend, 1998) using lesson observations, field notes and interviews. Other research has examined the effects of content-focused teacher induction and compares them to induction programmes focusing on general pedagogy. Interviews, short surveys and lesson observations formed the data collection approaches for these studies of induction programs tailored towards reading instruction (Maloch & Flint, 2003) and secondary science teaching (Luft, Roehrig & Patterson, 2003). The focus of the induction programmes themselves also serve as the foci of evaluation studies. Historically, teacher induction programmes focused on the comfort levels and feelings of beginning teachers (Feiman-Nemser et al., 1998) and how they were adjusting to new school contexts (Huling-Austin, 1992). Evaluation of the specific foci of these programmes focused on these programme characteristics.

### 2.2.3.2 Teacher retention and job satisfaction data

Teacher retention data is difficult to gather; however, recent survey efforts follow up on reasons for leaving schools (See section on SASS survey).

Surveys are used generally to measure overall job satisfaction among new teachers. Formal and informal conversations with new teachers, mentors, and induction programme staff are also sources of data. Another approach is to examine the experiences of beginning teachers with their colleagues and mentors and use these experiences as measures of the effectiveness of the induction programme. A study by Kardos, Johnson, Peske, Kauffman & Liu (2001) characterized a number of professional cultures that new teachers encounter in schools: veteran-oriented cultures, novice-oriented culture and integrated cultures (see Chapter 1). Integrated cultures, they contend, recognize and address the needs of new teachers and have structures in place which provide sustained supports involving frequent interactions with colleagues across experience levels. The researchers used an interview protocol, informed by analysis of the literature on teachers' work, to gain insights into new teachers' description of their work. Specific questions focused on the beginning teachers' experience of teaching and whether their experience of teaching met their expectations. Interviews also explored the types of support beginning teachers receive at school, if they had a mentor and whether the support met their needs. Other questions focused on the nature and frequency of interactions with other teachers, the presence of shared norms and expectations and their feelings in relation to being a member of the school teaching staff.

In addition to specifically tailored teacher induction programmes, there are other factors present in schools that may support newly qualified teachers. For example, research has explored the working conditions in schools which contribute to supporting teacher retention. These factors that contribute to teacher satisfaction, and in turn retention, may also be supportive to newly qualified teachers. These studies reveal that it is the working conditions (Boyd et al. 2911) and social conditions of schools (Johnson, Kraft & Papay, 2012) - the school's culture, the principal's leadership, and relationships among colleagues - that contribute significantly towards job satisfaction and teacher retention. Studies have indicated that working conditions serve as powerful predictors of attrition (Borman & Dowling, 2008), in particular, working conditions such as school facilities (Horng 2009) and school leadership (Ladd 2011). Conversely, poor teacher retention is associated with schools where the social conditions are not positive and the school work environment is not favourable. As a result, many survey instruments assess general factors such as school culture and working conditions in addition to the actual induction programme in place for beginning teachers.

### 2.2.3.3 Teacher and student learning data

The literature highlights a growing focus on investigating the effect of induction on teacher outcomes. Teacher outcome measures often include teacher attitude, teacher efficacy and teacher retention and are measured through an analysis of teaching, the analysis of student records data and teacher mobility surveys. Direct observations of beginning teachers as they teach are among the more useful types of data to help educators understand the relationship between participation in induction activities and improvements in pedagogy. Classroom observations of beginning teachers (Achinstein and Barrett, 2004) are a relatively common practice and focus on pedagogical practices and classroom management. A variety of different instruments are used to conduct classroom observations, all of which in some way incorporate indicators of good practice in their observation protocols. Other insights into the effect of induction on classroom teaching are gleaned from self-report data gathered through survey methods (Luft & Cox, 2001) and analysis of beginning teachers' journals (Hall, Johnson & Bowman 1995). Qualitative studies exploring the effect of mentoring on teachers' conceptions and practice of teaching using pre- and post-surveys (Holahan, Jurkat & Friedman., 2000) and a combination of interviews, observations and lesson discussions (Pourdavood, Grob, Clark & Orr, 1999; Wang & Paine, 2001).

It is difficult to link teacher induction activities to changes in student achievement. The influence of induction on student achievement is examined using student scores, linked to teachers, on standardized tests in relevant content areas. Collating and linking these type of data on improved student learning to beginning teachers' participation in induction activities, even if possible, is time consuming and costly. Where available, student scores provide one indication of teacher quality (Darling-Hammond, 2002; Goldhaber & Brewer, 1997) but need to be examined alongside the teacher induction practices associated with those outcomes.

# 2.2.3.4 Evaluating programmes using quality indicators and exploring other school factors

Various frameworks and criteria have been proposed as features of 'quality' induction programmes. These *characteristics of quality programmes* could be used to inform the design of research instruments. This approach is predicated upon the identification of characteristics of

effective or 'quality' induction programs. Similarly, evaluations of specific programmes are often tailored to examine the effects of formally structured components of teacher induction programmes such as mentoring and professional development activities.

### 2.2.4 Survey instruments for evaluating teacher induction programmes

Published research on induction studies in the 1980s focused predominantly on descriptive studies of mentors' roles (Gehrke & Keys, 1984; Gray & Gray, 1985) and the needs of beginning teachers (Veenman, 1984). Research from the 1990s through 2001 shifted focus to qualitative studies of local induction programmes (Feiman-Nemser & Parker, 1992; Moir & Stobbe, 1995). There were a few quantitative studies prior to 2000 and a mix of internal and external programme evaluations of existing state-initiated teacher induction programmes (Fideler & Haselkorn, 1999). Recently there has been a focus on evaluation using survey instruments that attempt to capture the multiple components of induction programmes and additional factors that contribute to supporting beginning new teachers. There are an abundance of studies where the authors have developed surveys for the purpose of a specific study. In many cases the survey has not been used beyond the original study (e.g. Richardson, Glesser & Tolson 2007) or the survey items are not reported (Kelley 2004) - these surveys are not described in the remainder of this sub-section. The surveys described below are those larger in scale and used to evaluate multiple teacher induction programmes.

### 2.2.4.1 The TELL survey

Several states use the TELL survey (Teaching, Empowering, Leading and Learning), an anonymous on-line survey about teaching conditions. The TELL Survey originates from extensive work by the North Carolina Professional Teaching Standards Commission (NCPTSC) initiated in 2001. The NCPTSC conducted a literature review and analyses of state and national survey data from the National Center for Education Statistics' School and Staffing Survey in order to better understand the factors contributing to teacher satisfaction and future employment plans.

The TELL survey is produced by the New Teacher Centre (NTC) [http://www.newteachercenter.org/] and consists of a core set of questions exploring teaching conditions, one of which is *New Teacher Support*. The survey is administered across several states (nine states in

2012-2013) and the use of core questions allows for cross-state comparisons. Response options for core area questions use a four-point Likert scale and range from strongly disagree (1) to strongly agree (4). In addition to items on "New Teacher Support', the survey provides questions on the following topics which provide insights into leadership and school culture: Instructional Practices and Support, Managing Student Conduct, School Leadership, Teacher Leadership, Community Engagement and Support, Use of Time, Professional Development and Facilities & Resources. Table 1 provides details of the eight TELL survey constructs.

In addition to examining the effectiveness of teacher induction, the TELL Survey data is also used to explore any possible relationships between teaching and learning conditions and student learning. Drawing on TELL survey data, research by Ladd (2009) shows that teaching and learning conditions predict student achievement in mathematics, and to a lesser degree, in reading. Similarly research by Johnson, Kraft, and Papay (2011) used TELL data in their study which revealed that positive conditions contribute to improved student achievement.

**TABLE 2.2** The TELL Survey constructs

Construct	Descriptor	
Time	Available time to plan, collaborate, provide instruction, and eliminate barriers in order to maximize instructional time during the school day	
Facilities and Resources	Availability of instructional, technology, office, communication, and school resources to teachers	
Community Support and Involvement	Community and parent/guardian communication and influence in the school	
Managing Student Conduct	Policies and practices to address student conduct issues and ensure a safe school environment	
Teacher Leadership	Teacher involvement in decisions that impact classroom and school practices	
Professional Development	Availability and quality of learning opportunities for educators to enhance their teaching	
Instructional Practices and Support	Data and support available to teachers to improve instruction and student learning	

An exemplar: The MassTeLLS (Massachusetts Teaching, Learning and Leading Survey)

The TELL is modified to meet the characteristics of specific states. The majority of items relating to New Teacher Support on the MassTeLLS (Massachusetts Teaching, Learning and Leading Survey), for example, focus on the mentor/mentee relationship in terms of the nature and frequency of support provided by the mentor to the mentee and the degree of fit between the mentor and mentee (i.e. content and grade level coherence). The first seven items focus predominantly on the experience of the beginning teachers and explore the assignment of a mentor (item 1), nature of the support provided by the mentor (item 2), degree of fit with the mentor (item 3), frequency of interactions with the mentor (item 4), and impact of the mentoring experience on retention at the school (item 5). Characteristics and effectiveness of the induction program are evaluated (items 6, 7). The remaining items focus on the experience of the mentor and examine the number of mentees (item 8), frequency of meetings (item 9), fit with mentee (item 10), the nature of the engagement (item 11) and the support received by the mentor to support them in their mentoring role (item 12).

School working and social conditions, in addition to other factors that support effective teaching, are also components of the 87 item MassTells survey. They are organized as: Community Engagement and Support, Teacher Leadership, School Leadership, Managing Student Conduct, Use of Time, Professional Development, Facilities and Resources and Instructional Practices and Support.

### 2.2.4.2 SASS (Schools and Staffing Survey).

The Schools and Staffing (SASS) Survey [https://nces.ed.gov/surveys/sass/overview.asp] is developed administered by The National Center for Education Statistics (NCES). The survey has been used in induction evaluation research to examine the distribution of effective assistance to new teachers and in turn, the impact of this support on teacher turnover (Ingersoll 2000, 2001, 2004). The SASS is a system of related questionnaires that provide descriptive data on the context of elementary and secondary education in the United States. A wide range of topics are covered from teacher demand, teacher and principal characteristics, general conditions in schools, principals' and teachers' perceptions of school climate and problems in their schools, teacher compensation, district hiring and retention practices, to basic characteristics of the student population. The SASS has four core

components: the School Questionnaire, the Teacher Questionnaire, the Principal Questionnaire, and the School District Questionnaire (previously known as the TDS Teacher Demand and Shortage Questionnaire).

The *School Questionnaire* examines general information on the schools (e.g. school size, type, attendance rates), school admissions procedures and special programmes, students and class organisation (e.g. multi-age groupings, block scheduling), staffing (e.g. number and type of full and part time staff) and special programmes and services (e.g. special needs programs).

The Teacher Questionnaire gathers general information on the school and the teachers' teaching experiences (e.g. number of years teaching, number of schools), class organization (subject and grade levels being taught, number of students), education and training (e.g. degrees awarded, field of study, details of student teaching experience, involvement in an induction programme, supports during first year of teaching), certification (e.g. teaching certification held, additional teaching credentials or merits/awards - PRAXIS or HQT), professional development (e.g. participation in PD, types and duration of PD), working conditions (e.g. pay, voluntary activities, evaluation), school climate and teacher attitudes (influence of teacher on school policies, control over planning, problems in school, intention to remain in teaching) and general employment and background information (e.g. additional income, pension plan, union membership, gender, marital status, race). The Teacher Questionnaire has undergone substantial revisions in the past decade to incorporate items that elicit information on the types of induction, mentoring and other supports available to beginning teachers. The revised version examined specific supports for beginning teachers such as teaching load, number of preparations, opportunities for collaborative planning time with other teachers, additional classroom assistance, professional development seminars or lectures and the assignment of a mentor.

The *Principal Questionnaire* addresses principal experience and training (e.g. years of experience, other positions), principal education and professional development (e.g. degrees held, area of expertise, participation in PD), goals and decision making (e.g. perceived influence on decision making), teacher professional development (e.g. support provided for PD, nature of PD), school climate and safety (e.g. suspensions, safety, uniforms, programmes to acknowledge students

achievements, problems at school, parental involvement), instructional time, working conditions and principal perceptions, teacher and school performance (e.g. dealing with incompetent teachers, formal and informal classroom observations for expert and beginning teachers, teacher evaluation methods) and demographic information.

## 2.2.4.3 The Teacher Follow up Study (TFS)

Evaluation studies of teacher induction programmes have used the SASS in conjunction with the TFS (Teacher Follow up Study). The Teacher Follow-up Survey (TFS) (Marvel et a. 2007) is used to determine how many teachers remain at the same school, moved to another school, or leave the profession in the year following the Schools and Staffing Survey (SASS) administration. Questionnaires are administered to teachers who left teaching since the previous SASS (Former Teacher Questionnaire) and teachers who are still currently teaching either in the same school or in a different school (Current Teacher Questionnaire). The topics for the Current Teacher questionnaire include teaching status and assignments, ratings of various aspects of teaching, information on decisions to change schools, and ratings of various strategies for retaining more teachers. The topics for the Former Teacher questionnaire include employment status, ratings of various aspects of teaching and their current jobs, and information on decisions to leave teaching.

## 2.2.4.4 BTLS (The Beginning Teacher Longitudinal Survey)

The BTLS is a study of a cohort of beginning public school teachers in the United States initially interviewed as part of the 2007–08 SASS (Schools and Staffing Survey). The research was developed by developed and administered by the National Center for Education Statistics (NCES) and the intent was that this longitudinal study would follow the experiences of the cohort of first-year teachers for 5 years. The BTLS explores the life events that impact teachers' careers in addition to how school and/or district characteristics and policies affect teacher satisfaction, and how teachers respond to transitions in their lives and careers (such as moving to a different school, changing the grade levels or subject taught, becoming a mentor, transitioning into a K-12 administration position, or exiting the teaching field). The BTLS consists of a number of interviews and surveys developed as part of the SASS (see details above of the surveys) to provide an in-depth examination of the career development of these teachers as they continue with teaching or transition into a different career.

### 2.2.4.5 Surveying New Teachers' Experiences in Schools

Kardos and Johnson (2007) used the concept of integrated professional culture (Kardos et al. 2001) to frame an inquiry into new teachers' experiences in schools and with their colleagues. The researchers designed a mail survey containing general information question and 92 items about professional culture. These latter items, the majority of which were presented on a 6-point likert scale, included questions on formal and informal mentoring, classroom observations, official and informal meetings, teacher interaction, novice status, collective responsibility, and the principal. The concept of integrated professional culture was used as a lens through which to interpret experiences (see also Chapter 1).

#### 2.3 STUDY METHODOLOGY

The current study aims to capture the learning from the pilot project *Droichead* and seeks to inform the model of teacher induction used in Irish primary and post-primary schools. In so doing, it seeks to answer the following key questions:

- How effectively are the teachers who participate in Droichead supported? Is Droichead adequately resourced?
- How useful and appropriate are the criteria and indicators of good practice developed through Droichead?
- How effective, appropriate and fair are the procedures and protocols employed by members of the Professional Support Team (PST) in making a recommendation to the Council in relation to the practice of a newly qualified teacher (NQT)?
- How effective is the Droichead experience as an induction into the teaching profession?
- What can be learned from the Droichead project to facilitate the mainstreaming of an effective induction and probation process for all teachers?

The study is complex in a number of respects. Firstly, it covers primary and post-primary schools, sectors which differ in their initial teacher education, management and school structures. Secondly, it needs to measure change in school practice regarding induction and probation and the extent to which this can be attributed to the Droichead programme. Thirdly, the findings need to be generalisable to the population of schools but at the same time need to yield insights into the processes at the school level in sufficient detail. As a result, it was decided to adopt a mixed methods approach, which would combine information from a

quantitative survey of primary and second-level schools with in-depth qualitative information collected from principals, newly qualified teachers, mentors and members of the professional support team in a set of case-study schools. In order to measure change over time, surveys are being be administered at two time-points (school year 2014/15 and 2015/16).

Section 2.2 has outlined how many studies of teacher induction focus on evaluating a particular induction programme without comparing processes and outcomes to those in other schools not participating in this programme. Given that participation in the Droichead pilot programme requires opt-in on the part of schools, we would expect that participating schools may differ from the total school population. For this reason, the survey phase of the study includes a set of non-participating schools matched to Droichead schools in terms of gender mix, DEIS status, school size, location (Dublin, other city, elsewhere) and, in the case of post-primary schools, school sector.

### 2.3.1 Survey design

Postal questionnaires were developed for school principals, mentors, other PST members and newly qualified teachers in Droichead schools. In non-Droichead schools, questionnaires were developed for principals, newly qualified teachers and teacher induction coordinators (where evident). The questionnaire items drew on a number of items from previous studies of teacher induction in Ireland and elsewhere (see Section 2.2). New questions were also developed to reflect the specific nature of the Droichead pilot programme. Questionnaires were revised in response to a pilot survey of a small number of schools and to comments from the Teaching Council and NIPT.

The questionnaires, copies of which are presented in the appendix, focus on a number of topics:

- The resources and supports available to NQTs, including:
  - i. The respective roles and responsibilities of different personnel;
  - ii. The kinds of support provided through the Professional Support team (PST) and other in-school activities;
  - iii. Arrangements for in-school support, including the use of release time for NQTs and PSTs and the timing and nature of meetings;

- iv. Access to external supports;
- v. The extent and nature of between-school clustering in support; the frequency of contact between cluster schools;
- vi. Factors impinging on the implementation of the programme, including capacity issues;
- vii. School approach to teacher induction prior to the implementation of the *Droichead* programme.
- The role of the mentor and PST member, including:
  - i. How teachers become mentors or members of the PST;
  - ii. Their perceptions of their role and the degree of clarity around this role;
  - iii. Access to, and perceptions of, information material on teacher induction:
  - iv. Their interface with the principal, other members of the PST and staff members more generally;
  - v. Degree of formal cooperation (e.g. team teaching) and informal cooperation among teaching staff;
  - vi. Perceived adequacy of preparation for the role and development needs.
- Feedback to and on NQTs, including:
  - i. The extent and nature of observation of the new teacher's practice; who is involved in the observation;
  - ii. The extent and nature of observation of other teachers' practice by the NQT;
  - iii. The frequency and nature of feedback to the NQT from the mentor, principal and other staff;
  - iv. The mechanisms for recording and reflecting on professional experience and learning for NQTs;
  - v. Perceptions of the standards required for NQTs to demonstrate readiness for probation.
- The experiences of NQTs, including:
  - Reflections on their preparedness for teaching; selfefficacy;
  - ii. The main challenges as a beginning teacher;
  - iii. Perceived adequacy of the support given by the mentor and other colleagues;
  - iv. Access to, and perceptions of, information material on teacher induction;
  - v. Perceptions of the quality of out-of-school supports, including workshops;
  - vi. Perceived development needs;
  - vii. Teaching and assessment methods used with students; perceived influences on the approach used;

### viii. Overall satisfaction with the induction programme.

Because of the small number of schools taking part in Droichead in 2013/14, the first wave of the survey phase was delayed until November 2014 in order to include schools which joined the programme in the school year 2014/15. Questionnaires were distributed to all of the 61 primary schools then taking part in the programme and to a matched sample of 100 primary schools, selected to be similar to the Droichead schools in terms of size, location, DEIS status and gender mix. At postprimary level, questionnaires were distributed to 62 Droichead schools, all of the post-primary schools participating in the programme at the time of the survey. In addition, questionnaires were sent to 99 non-Droichead schools, selected to be similar to the Droichead schools in terms of size, location, DEIS status, gender mix and school sector. Because of the lack of a database on mentors, PST members and NQTs, questionnaires were distributed by post via the school principal. The number of completed questionnaires for the first wave of the survey is presented in Table 2.3. The second wave of the survey will be conducted in autumn 2015 and will examine (a) changes in the Droichead process within schools between 2013/14 and 2014/15 for those schools who joined the programme at an early stage; (b) more detailed information on the Droichead process for schools who joined the programme in 2014/15; and (c) changes in the experiences of newly qualified teachers before and after completing the Droichead process.

TABLE 2.3 Completed questionnaires for the wave 1 survey

Staff member	Number of completed questionnaires
Droichead schools	
Principal	75
Mentor	84
Other PST member	69
Newly qualified teacher	91
Non-Droichead schools	
Principal	111
Teacher induction coordinator	44
Newly qualified teacher	89

### 2.3.2 Case-studies of schools

The two waves of survey data will provide important information on induction practices and perceptions of Droichead across schools. These data are being supplemented by case-studies of six Droichead primary and six Droichead post-primary schools which are currently under way. The survey data were used to select the case-study schools, with the main criteria for selection centring on length of time in Droichead (for post-primary schools), school size and number of NQTs. In addition, efforts were made to ensure a geographical spread of schools as well as a mix of DEIS and non-DEIS and single-sex and coeducational schools.

Within each of the schools, interviews are being conducted by members of the research team with school principals, mentors, other PST members and newly qualified teachers. In addition, in order to capture information on teacher collaboration within the school and the potential wider impact of Droichead on the school culture, interviews are being conducted with two teachers not directly involved in the Droichead process. These interviews focus on the themes addressed in the questionnaire but allow for much more detailed insights into the operation of the pilot programme at the school level. After the case-studies are completed, newly qualified teachers will be contacted on four separate occasions to trace their experiences over time through digital diaries/exercises.

Informed consent and confidentiality/anonymity have been key principles of the approach taken. Respondents are given very clear information on the nature and purpose of the study, allowing them to make a fully informed decision regarding participation. The research team also has specific procedures in place to ensure the confidentiality and security of the data used, including restricted access to the server on which data are stored.

# **Chapter 3**

# Preliminary analyses of survey data

### 3.1 INTRODUCTION

This chapter presents preliminary analyses of the survey data from principals, mentors, other PST members and newly qualified teachers in Droichead schools. Information is also drawn from the survey of principals and newly qualified teachers in non-Droichead schools in order to compare experiences across the two groups of schools. The themes addressed in the survey were further explored in case-studies of twelve Droichead schools. A second wave of surveys will be conducted in autumn 2015 in order to explore experiences of the programme over the school year 2014/15. More detailed analyses will therefore involve the integration of data from two waves of surveys along with in-depth interviews from twelve case-study schools (see below on next steps).

### 3.2 INITIAL TEACHER EDUCATION AND TEACHER PREPAREDNESS

Principals in Droichead and non-Droichead schools were asked about the extent to which initial teacher education prepares teachers for a number of different aspects of teaching. Principals were most positive about the extent to which initial teacher education prepared NQTs in terms of knowledge of curriculum content, planning lessons and using a range of teaching methods in an appropriate way (Figure 3.1). The majority of principals felt that initial teacher education provided preparation in using appropriate assessment methods, catering to the needs of students of different abilities, classroom management and teachers taking control of their own professional development at least 'to some extent', but it is worth noting that only a minority of principals felt that NQTs were prepared 'to a great extent' in relation to these aspects of teaching. Principals were more critical of the extent to which ITE prepared teachers for dealing with diversity in terms of teaching students with special educational needs and from multicultural or disadvantaged backgrounds. A small minority of principals felt that teachers were prepared for teaching in an Irish-medium school and only a small number felt that NQTs had been prepared for working with parents. Interestingly, patterns are broadly similar across primary and post-primary principals. However, primary principals are more positive about NQT preparation in terms of curriculum content and teaching in an Irish-medium setting. Perspectives

on initial teacher education were broadly similar in Droichead and non-Droichead schools.

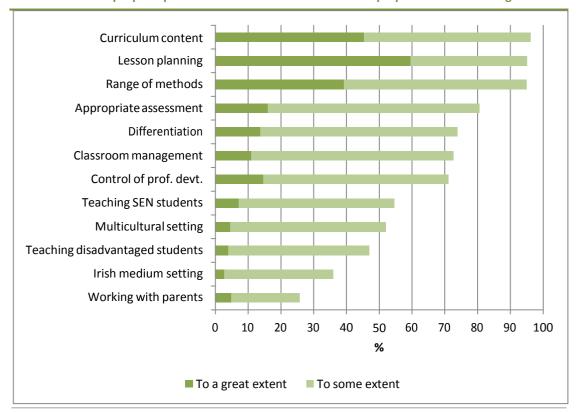


FIGURE 3.1 Principal perceptions of initial teacher education as a preparation for teaching

Newly qualified teachers were also asked about their views on the extent to which initial teacher education had prepared them for teaching. The relative ranking of different dimensions was broadly similar to that for principals, with NQTs being most positive about the range of teaching methods, lesson planning, curriculum content and assessment (Figure 3.2). Like principals, they were more critical of preparation for working with parents and teaching in an Irish medium setting. Interestingly, NQTs were generally more positive about the different dimensions of ITE than were principals.

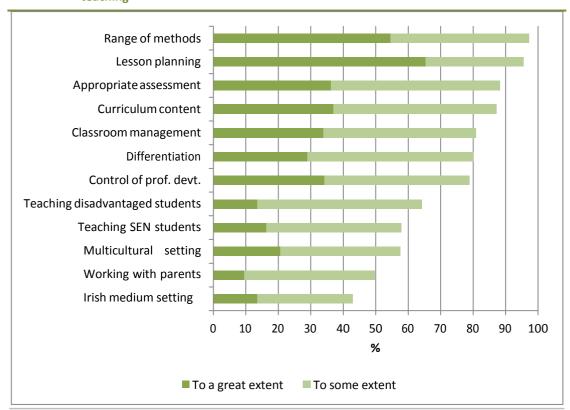


FIGURE 3.2 Newly qualified teachers' perceptions of initial teacher education as a preparation for teaching

### 3.3 TEACHER INDUCTION PRE-DROICHEAD

The decision to become involved in Droichead and the way in which it is implemented within a school is likely to reflect, at least in part, the school's previous approach to teacher induction, issues which will be explored in detail in the school case-studies. In the survey, principals in non-Droichead schools were asked about their current approach to teacher induction while those in Droichead schools were asked about the approach they used prior to becoming involved in the pilot programme. The most common approaches to teacher induction had been NQTs being given a briefing by the principal or deputy principal, NQTs being given a copy of school policies and procedures, and NQTs having informal discussions with other teachers (Figure 3.3). Schools also commonly relied on group meetings between NQTs and teachers of the same subject or year group. It is worth noting that Droichead and non-Droichead schools differ in three respects. Non-Droichead schools were more likely to rely on informal discussions among teachers (92% compared with 83% in Droichead schools). Droichead schools were more likely to have had an induction handbook for NQTs (68% compared with 54% in non-Droichead schools) and were more likely to have a formal mentoring/induction programme in place, even before joining the

Droichead pilot programme (53% compared with 40%). This approach encompassed being involved in the national pilot programme on teacher induction and/or procedures and practices developed at the school level. There is some evidence therefore that involvement in Droichead is more common among schools that previously had a more formalised approach to teacher induction. Post-primary schools were more likely to have an induction handbook for NQTs but differences between primary and post-primary schools were not marked in relation to other aspects of teacher induction.

The Droichead programme is innovative in terms of the role of observation of, and by, NQTs (see Chapter 1). The survey data provide new evidence on the extent to which schools already used these practices as part of teacher induction prior to joining the Droichead pilot programme. In almost half (48%) of schools, NQTs were given some opportunity to observe other teachers' classes. The extent to which NQTs themselves were observed teaching was much less common, but did occur in just over a fifth (22%) of schools.

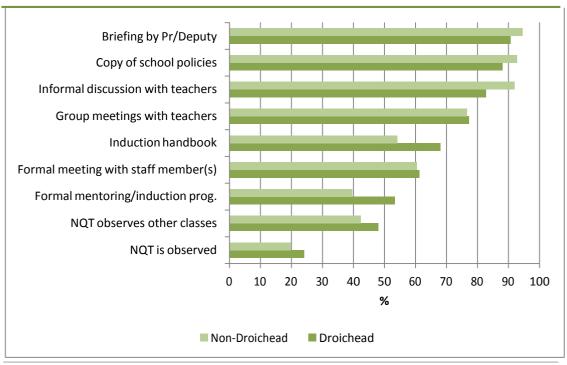


FIGURE 3.2 Approach to teacher induction in non-Droichead schools and prior to the introduction of Droichead in schools involved in the pilot programme (principals)

Only a minority (9%) of principals expressed dissatisfaction with the approach to teacher induction used. Interestingly, principals in Droichead

schools were more likely to report that they were 'very satisfied' with the approach to teacher induction (used previously) than those in non-Droichead schools (37% compared with 22%). Those who had a formal induction or mentoring programme expressed higher levels of satisfaction.

#### 3.4 FORMATION OF THE PROFESSIONAL SUPPORT TEAM

Principals were asked about the criteria they used in selecting mentors and other PST members. The most highly rated criteria were willingness to get involved and having good interpersonal skills (Figure 3.3). Over half of the principals surveyed reported using experience of supporting a student teacher while on placement 'to a great extent'. Previous professional development was also mentioned by just under half of principals. Length of teaching experience was considered 'to a great extent' by four in ten principals while management (or coordination experience) was mentioned by around a quarter. The year/class group and/or subject taught was considered much less important, with over half of the principals describing it as 'not at all' important.

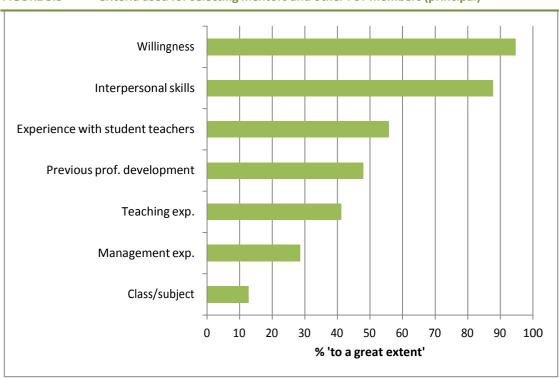


FIGURE 3.3 Criteria used for selecting mentors and other PST members (principal)

The survey of mentors indicated that 41 per cent of them had mentored before the school joined Droichead. However, a larger proportion (58%) of those currently mentoring had received mentoring training before Droichead, with the vast majority being satisfied with the training. Prior mentoring training was more common in the primary sector (49% compared with 29% in second-level schools). The vast majority of mentors (91%) had received training for their current role in Droichead and were satisfied (92%) with this training. A significant minority (32%) of the other PST members had mentored in the past but less than a fifth had received training for this mentoring. Almost all had received mentoring for their current role on the PST and the majority (86%) were satisfied with this training.

In the schools surveyed, members of the PST team were drawn from the school staff. Only 7 per cent of schools had Professional Support Teams that included teachers from another school. Variation in the use of external support will be explored in greater detail using the school case-studies.

### **3.5** THE MENTORING PROCESS

In non-Droichead schools, principals were asked to indicate whether there was a designated person with responsibility for teacher induction and/or mentoring. Sixty per cent of principals indicated that there was a person who could be considered a 'teacher induction coordinator'. In the school year 2013/14, 59 per cent of these coordinators were involved in supporting beginning teachers. Sixty per cent of the group had mentored at some point in the past. A total of 64 per cent of teacher induction coordinators in non-Droichead schools reported that they had received training for their role in supporting NQTs.

Only a subset (53%) of mentors had mentored NQTs in the school year 2013/14. However, it is worth looking at these patterns as indicative of the kinds of issues discussed between mentors and NQTs. The most commonly discussed issues were classroom management and how the NQT was coping with the job (Figure 3.4). Differentiation, teaching methods and lesson planning were discussed 'to a great extent' in around half of cases. Working with parents, the professional learning portfolio and examples of student work were less likely to be discussed in mentor-NQT meetings.

Classroom management How s/he coping Differentiation Teaching methods Lesson planning Use of resources Assessment Working with parents Portfolio Student work 0 10 20 30 40 50 60 70 80 90 %

FIGURE 3.4 Issues discussed with NQT (mentor)

Almost three-quarters (73%) of principals reported that their schools had used the NIPT observation template. Of those who used the template, around half found it 'very useful', around half found it 'useful' while only one principal was critical of the template. Primary principals were more likely to describe it as 'very useful' than their second-level counterparts (69% compared with 24%). Among mentors, 79 per cent reported using the template with all finding it very useful or useful. Among PST members, 83 per cent stated that they had used the observation template with the vast majority finding it useful.



FIGURE 3.5 Involvement of staff in providing feedback to the NQT (principal reports)

In terms of feedback to the NQT on their teaching, principals reported that mentors had the greatest involvement in this role, with almost all giving feedback 'to a great extent' (Figure 3.5). In the majority of cases, principals and other PST members had at least some involvement in providing such feedback. Schools differed more in the involvement of other teachers (that is, those not on the PST); in around half of cases, other teachers had at least some involvement while in others they had no involvement at all or were not very involved. In primary schools, the principals had a somewhat greater involvement in providing feedback while other teachers were somewhat less likely to have no involvement than in second-level schools. This is likely to reflect differential school size, at least in part.

Principals were asked about the extent to which they used the hours allocated under Droichead to cover meeting times. Just under half (46%) used these hours 'fully', 39 per cent did so 'to some extent' while 15 per cent reported that they did not use the hours. The vast majority (85%) of principals reported that they had used time outside the allocated amount. Primary schools were somewhat more polarised than second-level schools, being more likely to report that they had fully used their hours or not used them. Primary schools were somewhat more likely to report using time outside the allocated amount (91% compared with 78%).

The vast majority (97%) of newly qualified teachers in Droichead schools had been allocated a mentor by the time of the survey. In 43 per cent of cases, their mentor was teaching the same class group or subject as they were. The vast majority (97%) of NQTs indicated that they had received important guidance and assistance from someone other than their mentor. Such guidance was most frequently received from the school principal (Figure 3.6). However, the deputy principal and other teachers (whether teaching the same subject, same class or otherwise) were named as important sources of guidance, indicating the way in which formal induction processes must be seen as located within a broader informal school climate. The other PST member was mentioned by four in ten of the NQTs surveyed. Over a quarter of NQTs named another NQT as a source of support.

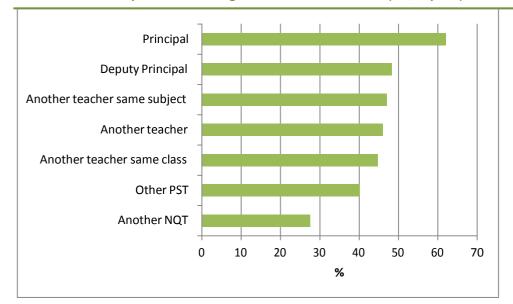


FIGURE 3.6 Most important source of guidance other than mentor (NQT reports)

#### **3.4** THE RECOMMENDATION PROCESS

The vast majority (90-91%) of principals in primary and post-primary schools felt that they were clear about the criteria for making a recommendation on the NQT and that these criteria were fair. Eighty-three per cent of principals felt they knew what would happen if the NQT was not seen as having met the Droichead criteria. Perceptions of the criteria were similar among mentors and PST members. Four-fifths of the NQTs surveyed felt that the criteria were clear and fair. Three-quarters of NQTs felt that they knew what would happen if they did not meet the Droichead criteria.

The vast majority (92%) of principals stated that their PST had used the Teaching Council indicators of good practice. Only one principal was critical of the indicators with 44 per cent describing them as 'very useful' and 55 per cent as 'useful'. Similarly, the majority (84-86%) of mentors and PST members reported they had used the indicators and almost all found them useful or very useful.

Principals were most likely to be involved 'to a great extent' in making a recommendation regarding the NQT (Figure 3.7). The other PST team member was somewhat more likely to be involved than the mentor, but mentors had at least some involvement in the majority of schools. Other teachers not on the PST were less likely to be involved in making a recommendation on the NQT than members of the PST, though it is

worth noting that that they are described as having at least some involvement in four out of ten schools. There are some differences by school type. Principals are more likely to be highly involved in primary schools than in second-level schools (83% 'to a great extent' compared with 67%). The other PST member is also more likely to be highly involved in primary schools (75% 'to a great extent' compared with 40%). In contrast, in a quarter of primary schools, the mentor is not involved to any extent in the recommendation process. Primary schools are more polarised than second-level in the involvement of other teachers, being more likely to be involved 'to a great extent' or 'not at all'. The different approaches taken to handling the recommendation process will be explored in greater detail using the school case-studies.

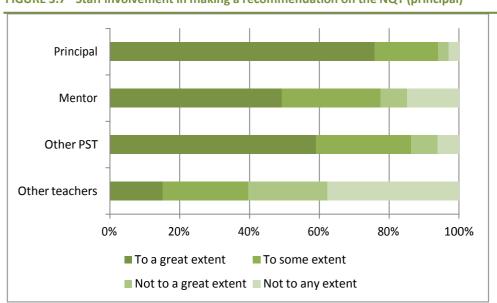


FIGURE 3.7 Staff involvement in making a recommendation on the NQT (principal)

# **3.6 PERCEPTIONS OF DROICHEAD**

Principals and mentors were asked two sets of questions about their satisfaction with the Droichead process. The first set related to the degree to which different aspects of the process were seen as appropriate. The vast majority (83%) of principals describe the number of meetings between the NQT and the PST as 'about right' (Figure 3.8). Around three-quarters see the opportunities for the NQT to observe other classes and be observed by other teachers as 'about right'. While the majority (62%) of principals saw the number of hours/days required

to complete the process as 'about right', over a third felt that the requirement was not sufficient. On closer investigation, this dissatisfaction was found to relate to school sector; over half (57%) of primary principals felt 'too few' days were required while only 6 per cent of second-level principals felt that 'too few' hours were required. Primary principals were more critical of the opportunity for the NQT to observe other classes (with 37% feeling there were too few such opportunities compared with 13% of second-level principals). They were also somewhat more critical of the opportunities for NQTs to be observed (29% compared with 16%) and of the number of meetings (23% compared with 7%). Responses were very similar between mentors and principals, though a small number of mentors considered that there were too many hours/days required to complete Droichead.

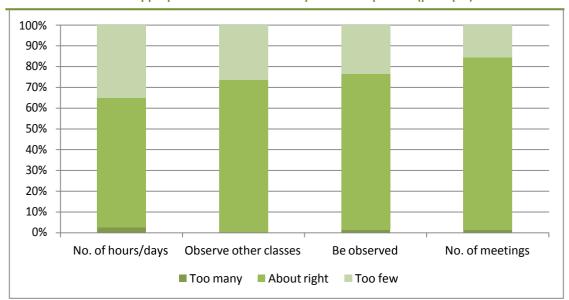


FIGURE 3.8 Perceived appropriateness of different aspects of the process (principal)

The second set of questions related to satisfaction with different aspects of the pilot programme. Overall, levels of satisfaction were high among school principals (Figure 3.9). The vast majority, around four-fifths, were satisfied with the written information provided, external support (e.g. through NIPT), the content of meetings/seminars, and professional development for NQTs and for PST members. Principals were somewhat less satisfied with some aspects of the process, including the timing and location of meetings/seminars, the resources available to support the process, the extent of whole-school involvement and the responsiveness of the Teaching Council and the NIPT to their school's experience of the programme. It should be noted, however, that even in these cases, the

majority of principals expressed satisfaction. Primary principals were more likely to describe themselves as 'very satisfied' with some aspects of the process, including written information (61% compared with 38%), the content of meetings (63% compared with 32%), and the timing of meetings (44% compared with 23%).

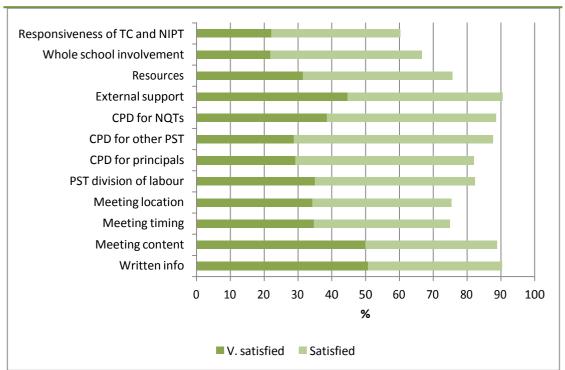


FIGURE 3.9 Satisfaction with different aspects of the process (principal)

Levels of satisfaction with different aspects of Droichead were broadly similar across all members of the professional support team — principal, mentor and other PST member (Figure 3.10). However, some differences are evident. Principals are more satisfied with meeting locations and, to some extent, timing of meetings than mentors or PST members. They are also more likely to be satisfied with levels of external support and resources. Mentors are somewhat more satisfied with the professional development they have received than principals or other PST members.

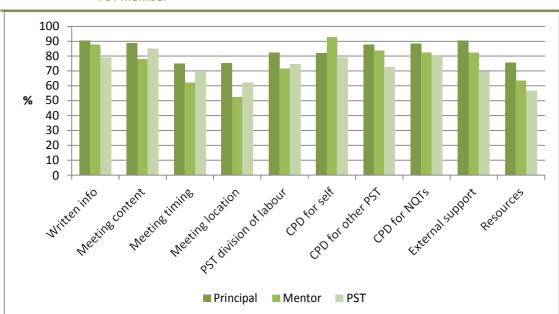


FIGURE 3.10 Satisfaction with different aspects of the process – principal, mentor and other PST member

Principals, mentors and other PST members were asked about the benefits of taking part in the Droichead programme. The questions were open-ended, allowing respondents to specify the benefits for their particular school. These responses were grouped into a number of categories allowing for an overview of the main issues but a number of quotes are included to exemplify the emerging themes. Only a small number (7%) felt that it was too early to specify any benefits with the remainder mentioning one or more benefits. The most frequently mentioned benefit (50% of principals) was that Droichead provides a more structured form of support for newly qualified teachers. Responses centred on the idea that Droichead was 'making the process more formal' and that it 'has given a clearer agreed and defined process to induction'. Having a structured approach to induction and one that was school-based was seen by principals (29%) as having raised staff awareness of the needs of the NQT and given other teachers more ownership over the process: 'We see the programme as a whole-school approach; most teachers bought into that' and it 'improves the concept of shared professional responsibility'. A very significant proportion of principals (44%) felt that Droichead had contributed to greater collaboration and more openness among teachers in the school. One principal, for example, noted that 'more professional conversations are taking place, more teacher collaboration and trading of experience'. Another principal

remarked that 'it is has impacted on professional conversations in a positive way'.

Similar kinds of responses were evident from the mentors. Over half emphasised the value of having a structured and supportive induction programme for newly qualified teachers. The process was seen as facilitating the 'Introduction of NQT to school life, procedures etc. [It] is organised not haphazard. NQT hopefully feels someone is looking out for them and cares about them'. Over a third felt that the process had impacted on the school more generally, fostering a climate of openness and collaboration among teachers: 'It has opened communication, dialogue about teaching practices amongst staff'. A fifth of mentors mentioned the value of professional development for themselves and other members of the professional support team: 'Being a mentor boosted my own morale as a teacher'. A similar proportion emphasised the value of on-going support for, and assessment of, the NQT, contrasting this with the inspection model: 'Droichead is based on progression of a teacher rather than one "perfect" day when an inspector visits. ... There is consistent support for the NQT'.

Responses from the other PST member echoed those of the principal and mentor. Providing a structured support for newly qualified teachers was mentioned by over three-quarters of those surveyed: 'It allows a structure in which NQTs can learn and develop with support. It takes away the concept of starting at the deep end and it allows the PST also to have more professional and constructive conservations. It also promotes reflective practice and inter subject learning'. A third of PST members mentioned the impact of Droichead on teacher collaboration and openness; it was seen as 'starting other staff to think of opening their doors' and as providing 'experienced teachers with extra motivation and new methodologies that they can use'. Around a fifth of teachers focused on the fact that support was given to the NQT on an on-going basis and that assessment therefore reflected this longer process: 'A realistic appraisal of NQT rather than the one day "performance" for the inspectorate'. The value of professional development for PST members was also mentioned: 'Observations can benefit PST by allowing self reflection and also learning new methodologies'.

Members of the professional support team were asked about the challenges involved in implementing the Droichead process in their school. As with perceived benefits, these involved open-ended questions.

The most common responses, mentioned by three-quarters of principals, centred on the theme of time. This encompassed time for meetings and observations: 'For all team members to meet, it has to involve afterschool time.' Another principal noted that 'One of the biggest challenges is time. Ensuring we make time to meet, time for observations, and that the NQTS have adequate time to participate in the programme'. Trying to schedule meetings and observations was seen as challenging in a context where classes needed to be covered. One principal suggested that: 'In an ideal setting hours would be allocated at the beginning of the year and the release hours for observation etc. would be built into a teaching (mentor) timetable. This would reduce class disruption'. In addition, a quarter of principals specified staff buy-in as a challenge. This included difficulties in recruiting mentors and PST members: 'encouraging enough teachers to take part as members of the team'. However, several principals pointed to challenges in getting the broader group of teachers to engage with the process: 'Building the culture within the school community of open door policy in the classroom. Teachers tend to be quite protective of their classrooms'. Principals mentioned a variety of other challenges including the timing and location of external meetings, how to handle NQT underperformance, the need for additional CPD and the changed relationship resulting from observing and being observed by colleagues.

Three-quarters of mentors mentioned time as a challenge. However, their perspective was somewhat different to that of principals since they mentioned the dilemma of spending time with the NQT while missing out on time with their class: 'As a teacher I do not like missing my timetabled classes for Droichead work'. Other challenges were mentioned less frequently but included the tensions involved in evaluating colleagues, the need for CPD and potential dynamics within the PST.

Four-fifths of PST members mentioned time as a challenge: 'Time is a major constraint as it's frustrating when you want to give it your best'. Like the mentors, other PST members were concerned about missing class time because of their duties with NQTs: 'Teachers giving up time with own classes to work with NQTs, limits progress with own classes and is not sustainable in the long term'. Around one in six PST members referred to the potential tensions involved in adopting an evaluative role in relation to colleagues. One teacher felt that the 'Professional relationship with NQT hampers the social relationships'. Others pointed to the difficulties in providing constructive feedback. A similar proportion

 one in six – referred to challenges regarding whole-staff buy-in to the process.

Newly qualified teachers will be asked about their perceptions of Droichead during the case-study interviews and in the second wave of the survey when they have completed the Droichead process. However, initial indications of the settling-in process can be examined by looking at the extent to which teaching met their expectations as well as their overall levels of stress and job satisfaction. The majority (62%) of NQTs reported that teaching met their expectations 'to a great extent'; the remainder felt it met their expectations 'to some extent' with only one NQT replying 'not to a great extent'. Eleven per cent of NQTs felt 'very' stressed by teaching while a further 39 per cent said that they were 'fairly' stressed. Two-thirds of NQTs reported that they were very satisfied with teaching. Responses did not vary significantly between primary and second-level school settings.

## 3.7 NEXT STEPS

The research team is currently undertaking fieldwork in twelve casestudy schools, six primary and six post-primary. The case-studies involve in-depth interviews with newly qualified teachers, principals, mentors and other PST members as well as short interviews with selected staff members who are not directly involved in the Droichead process. These case-studies will provide rich information on the experiences of Droichead on the ground. The NQTs in the case-study schools will be contacted by email at a number of time-points subsequent to the school visit in order to trace their experiences over time in greater detail. A second wave of surveys will be issued to Droichead (and matched non-Droichead) schools in the autumn of this year. The follow-up survey will provide more information on schools' experiences of Droichead, in particular, on the nature and frequency of meetings, observations and feedback for the larger group of schools taking part in the process over the school year 2014/15. The survey data will also allow for a direct comparison on NQT experiences in Droichead and non-Droichead schools. The survey will follow up on NQT experiences having completed the Droichead process, allowing for a comparison of perceived developmental needs over the period of a year.

## **REFERENCES**

Achinstein, B., & Barrett, A. (2004). (Re)Framing classroom contexts: How new teachers and mentors view diverse learners and challenges of practice. *Teachers College Record*, *106*(4), 716-746.

Advisory Committee on Teacher Education and Qualifications (ACTEQ) (2003). Towards a learning profession: the teacher competencies framework and the continuing professional development of teachers. Hong Kong: Government Logistics Department

Angelle, P. S. (2006). Instructional leadership and monitoring: Increasing teacher intent to stay through socialization. *NASSP Bulletin*, 90(4), 318-334.

Athanases, S. Z., & Achinstein, B. (2003). Focusing new teachers on individual and low performing students: The centrality of formative assessment in the mentor's repertoire of practice. *Teachers College Record*, *105*(8), 1486-1520.

Barnett K., McCormick J. and Conners R. (2000). Leadership behaviour of secondary school principals, teacher outcomes and school culture. Sydney: Paper presented at the *Australian Association for Research in Education Annual Conference*. Available at http://www.aare.au.

Barrett, J., Jones, G., Mooney, E., Thornton, C., Cady, J., Guinee, P., et al. (2002). Working with novice teachers: Challenges for professional development. *Mathematics Teacher Education and Development*, *4*, 15-27.

Barrett, S. J., Solomon, R. P., Singer, J., Portelli, J. P. And Mujuwamariya, D. (2009). The hidden curriculum of a teacher induction programme: Ontario teacher educators' perspectives. *Canadian Journal of Education*, 32(4), 677-702.

Bleach, K. (2013). *Induction and Mentoring of Newly Qualified Teachers: A New Deal for Teachers*. London: Routledge.

Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: A metaanalytic and narrative review of the research. *Review of Educational Research*, 78, 376–409.

Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, 48, 303–333.

Cherubini, L. (2009). New teachers' perceptions of induction: insights into principled practices. *Alberta Journal of Educational Research*, 55 (2), 185-198.

Clift, R., Hebert, L., Cheng, Y., Moore, J., & Clouse, N. (2010). Exploring the potential of internet-based technology for mentoring and induction programs. In J.Wang, S. Odell, & R. Clift (Eds.), *Past, present, and future research on teacher induction: An anthology for researchers, policy makers, and practitioners* (pp. 151-168). Lanham, MD: Rowman & Littlefield Education.

Coburn, C. E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher*, *32*(6), 3-12.

Conway, P. F., & Clark, C. M. (2003). The journey inward and outward: a re-examination of Fuller's concerns-based model of teacher development. *Teaching and Teacher Education*, *19*(5), 465-482.

Conway, P. F., Murphy, R., Rath, A., & Hall, K. (2009). *Learning to teach and its implications for the continuum of teacher education: A nine-country cross-national study*. Report commissioned by the Teaching Council (Ireland). Available online at: www.teachingcouncil.ie

Conway, P. F., Murphy, R., & Rutherford, V. (2013). 'Learningplace' practices and Initial Teacher Education in Ireland: Knowledge generation, partnerships and pedagogy. *Teacher learning in the workplace: Widening perspectives on practice and policy*. London: Routledge.

Cooper, M. (1988). Whose culture is it anyway? In A. Lieberman (ed.), *Building a professional culture in schools*. New York: Teachers College Press.

Curtner-Smith, M. D., Hastie, P. A., and Kinchin, G. D. (2008). Influence of occupational socialization on beginning teachers' interpretation and delivery of sport education. *Sport, Education and Society*, 13(1), 97-117.

Darling-Hammond, L. (2002). What's at stake in high stakes testing? *Brown University Child & Adolescent Behavior Letter*, 18 (1), 1.

Darling-Hammond, L., & Lieberman, A. (2012). *Teacher Education around the World: Changing Policies and Practices. Teacher Quality and School Development*. London/New York: Routledge.

Davis, J. (1988). Culture and change in the small school. *The Rural Educator*, 10(2), pp. 4-7.

Deal, T. E., and Peterson, K. D. (2009). *Shaping school culture: Pitfalls, paradoxes, and promises*. New York, NY: Wiley.

DeAngelis, K. J., Wall, A. F., & Che, J. (2013). The impact of preservice preparation and early career support on novice teachers' career intentions and decisions. *Journal of Teacher Education*, *64*(4), 338-355.

Desimone, L. M., Hochberg, E. D., Porter, A. C., Polikoff, M. S., Schwartz, R., & Johnson, L. J. (2014). Formal and Informal Mentoring Complementary, Compensatory, or Consistent?. *Journal of Teacher Education*, *65*(2), 88-110.

Draper, J., O'Brien, J. and Christie, F., (2004) First impressions: The new teacher induction arrangements in Scotland. *Journal of In-Service Education*, vol. 30, 2, pp. 201–223.

Duke, L., Karson, A., & Wheeler, J. (2006). Do mentoring and induction programs have greater benefits for teachers who lack preservice training? *Journal of Public and International Affairs*, 17. Retrieved from http://www.princeton.edu/jpia/past-issues-1/2006/4.pdf.

Edmonson, S., Fisher, A., Brown, G., Irby, B. and Luneburg, F. (2002). Creating collaborative culture. *Catalyst for Change*, 31 (3), 9-12.

Edwards, J.L., Green, K.E., Lyons, C.A. (2002). Personal empowerment, efficacy, and environmental characteristics. *Journal of Educational Administration*, 40(1): 67-86.

Ehrich, L., Hansford, B., and Tennent, L. (2004). Formal mentoring programs in education and other professions: A review of the literature. *Educational Administration Quarterly*, 40(4), 518-540.

Eraut M. (2007). Learning from other people in the workplace. Oxford Review of Education, 33(4), 403–22.

Feiman-Nemser, S. (2001a). From preparation to practice: Designing a continuum to strengthen and sustain teaching. Teachers College Record, 103, 6, 1013-1055

Feiman-Nemser, S. (2001b). Helping novices learn to teach: Lessons from an exemplary support teacher. *Journal of Teacher Education*, *52*(1), 17-30.

Feiman-Nemser, S. (2012a). *Teachers as Learners*. Cambridge: Harvard Education Press.

Feiman-Nemser, S. (2012b). Beyond solo teaching. *Educational Leadership*, 69(8), 10-16.

Feiman-Nemser, S. & Parker, M. B. (1992). Mentoring in context: A comparison of two U.S. programs for beginning teachers. East Lansing, MI: National Center for Research on Teacher Learning.

Feiman-Nemser, S., Schwille, S., Carver, C., & Yusko, B. (1999). *A conceptual review of literature on new teacher induction*. Washington, DC: NPEAT.

Feiman-Nemser, S. Schwille, S., Carver, C. & Yusko, B. (1989). *A conceptual analysis of literature on beginning teacher induction*. Washington DC: U.S. Department of Education.

Fideler, E.F. & Haselkorn, D. (1999). *Learning the ropes: Urban teacher induction programs and practices in the United States.* Belmont, MA: Recruiting New Teachers, Inc

Fives, H., Hamman, D. and Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student teaching semester? *Teaching and Teacher Education* 23, 916–934.

Fletcher, S., Strong, M., & Villar, A. (2008). An investigation of the effects of mentor-based induction on the performance of students in California. *Teachers College Record*, 110(10), 2271–2289.

Florio-Roane, S. (1989). Social organisation of classes and schools, in M. Reynolds (Ed.), *Knowledge Base for the Beginning Teacher*, London: Pergamon.

Forrester, V., & Draper, J. (2007). *Newly Qualified Teachers in Hong Kong: Professional Development or Meeting one's Fate?* (pp. 381-390). Netherlands: Springer.

Franke, M. L., Carpenter, T., Fennema, E., Ansell, E., & Behrend, J. (1998). Understanding teachers' self sustaining, generative change in the context of professional development. *Teaching and Teacher Education*, *14*(1), 67-80.

Friedman, I. A. (2000). Burnout in teachers: shattered dreams of impeccable professional performance, *Journal of Clinical Psychology*, 56(5), 595–606.

Fullan, M. (2000). The return of large-scale reform. *Journal of Educational Change*, 1(1), 5-27.

Fulton, K., Yoon, I., & Lee, C. (2005). *Induction into learning communities*. Washington, DC: National Commission on Teaching and America's Future.

Ganser, T. (2002a). Building the capacity of school districts to design, implement, and evaluate effective new teacher mentor programs: Action points for colleges and universities. *Mentoring and Tutoring*, 10(1), 47-55.

Ganser, T. (2002b). The new teacher mentors: Four trends that are changing the look of mentoring programs for new teachers. *American School Board Journal*, 189(12), 25-27.

Gehrke, N. & Keys, R. (1984). The socialization of beginning teachers through mentor-protégé relationships. *Journal of Teacher Education*, *35* (3), 21-24.

Glazerman, S., Dolfin, S., Bleeker, M., Johnson, A., Isenberg, E., Lugo-Gil, J., et al. (2008). *Impacts of comprehensive teacher induction: Results from the first year of randomized controlled study*. Washington, DC: Mathematica Policy Research.

Glazerman, S., Isenberg, E., Dolfin, S., Bleeker, M., Johnson, A., Grider, M. & Jacobus, M. (2010). *Impacts of Comprehensive Teacher Induction Final Results from a Randomized Controlled Study. Impacts of Comprehensive Teacher Induction Final Results from a Randomized Controlled Study (NCEE 2010-4028).* Washington, DC: National Center for Education Evaluation and regional Assistance.

Goldhaber, D.D. & Brewer, D.J. (1997). Why don't schools and teachers seem to matter? Assessing the impact of unobservables on educational productivity. *The Journal of Human Resources*, *32*(3), 505-523.

Goldrick, L., Osta, D., Barlin, D., & Burn, J. (2012). *Review of state policies on teacher induction*. Santa Cruz, CA: New Teacher Center. www.newteachercenter.org.

Gray, W. A. & Gray, M. M. (1985). Synthesis of research on mentoring beginning teachers. *Educational Leadership*, 42(3), 37-43.

Greenwald, R., Larry V. Hedges, and Richard D. Laine. The Effect of School Resources on Student Achievement. *Review of Educational Research*, vol. 66, no. 3, Autumn 1996, pp. 361-396

Gruenert, S. (2008). School culture, school climate: They are not the same thing. *Principal*, 87(4), 56-59.

Hall, J. L., Johnson, B., & Bowman, A. C. (1995). Teacher socialization: A spiral process. *Teacher Educator*, *30*(4), 25-36.

Hallinger, P. and R. Heck. (1998). Exploring the principal's contribution to school effectiveness: 1980-1995. *School Effectiveness and School Improvement*, 9: 157-191.

Hargreaves A (1992). Cultures of Teaching: A focus for Change. In: Hargreaves A. and Fullan M.G. (eds), *Understanding Teacher Development*. Columbia: Columbia University Teachers College Press.

Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and Teaching: History and Practice*, 6, 151-182.

Hargreaves, A., Early, L. and Ryan, J. (1996). *Schooling for change: reinventing education for early adolescents*. London: Falmer Press.

Heck, R. and Marcoulides, G. (1996). School culture and performance: Testing the invariance of an organizational model. *School Effectiveness and School Improvement*, 7(1), 76-95.

Hellriegel D., Jackson S.E., Slocum J., Staude G., Amos T., Klopper H. B., Louw L. and Oosthuizen T. (2004). *Management: Second South African Edition*. Cape Town: Oxford University Press.

Hirsch, E. (2013). *Cross-State Analyses of Results of 2012-13 Teaching Empowering Leading and Learning (TELL) Survey Research Report*. http://www.newteachercenter.org/products-and-resources/teaching-and-learning-conditions-reports/cross-state-analyses-results-2012-13.

Hobson, A. J. Ashby, P., Malderez, A., & Tomlinson, P. D. (2009). Mentoring beginning teachers: What we know and what we don't. Teaching *and Teacher Education*, 25, 207-216.

Hobson, A. J., & Malderez, A. (2013). Judgementoring and other threats to realizing the potential of school-based mentoring in teacher education. *International Journal of Mentoring and Coaching in Education*, *2*(2), 89-108.

Holahan, P. J., Jurkat, M. P., & Friedman, E. A. (2000). Evaluation of a mentor teacher model for enhancing mathematics instruction through the use of computers. *Journal of Research on Computing in Education*, *32*(3), 336-350.

Hopkins, M., & Spillane, J. P. (2014). Schoolhouse teacher educators structuring beginning teachers' opportunities to learn about instruction. *Journal of Teacher Education*, 65, 4 327-339.

Horng, E. L. (2009). Teacher tradeoffs: Disentangling teachers' preferences for working conditions and student demographics. *American Educational Research Journal*, 46, 690–717.

Hoy, W. K. (1990). Organizational climate and culture: a conceptual analysis of the school workplace. *Journal of Educational and Psychological Consultation*, 1(2), 149–168.

Hoy, W. K. and Feldman, J. A. (1999). Organizational health profiles for high schools, in: H. J. Freiberg (ed.) *School climate: Measuring, Improving and Sustaining Healthy Learning Environments* (Philadelphia, PA: Falmer Press), p. 85.

Hoy, A. and Murphy, P. (2001). Teaching educational psychology to the implicit mind. In Torff, B. and Sternberg, R., *Understanding and teaching the intuitive mind: Student and teacher learning*, 145–86. Mahwah, NJ: Lawrence Erlbaum Associates.

Hoy, W. K., Tarter, C. J. Bliss, I. (1990). Organisational climate, school health and effectiveness: A comparative analysis. *Educational Administration Quarterly*, 26, 26—272.

Hoy, W. K., Tarter, C. J. and Collkarnp, R. (1991). *Open Schools/Healthy Schools, Measuring organisational climates*. Beverly Hills, CA: Sage.

Huling-Austin, L. (1992). Research on learning to teach. *Journal of Teacher Education*, 43(3), 173-180.

Ingersoll, R. M. and Smith, T. M. (2004). Do teacher induction and mentoring matter? *NASSP Bulletin*, 88(638), 28-40.

Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers a critical review of the research. *Review of Educational Research*, *81*(2), 201-233.

Johnson (2000). Strategy through a Cultural Lens: Learning from Managers` Experience, *Management Learning*, Vol.31, No.4, pp.403-426.

Johnson, S. M. (2004). Finders and keepers: Helping new teachers survive and thrive in our schools. San Francisco, CA: Jossey-Bass.

Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581-617.

Johnson, S.M. Kraft, M.A & Papay, J.P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record*, *114*, 1-39.

Joiner, S. and Edwards, J. (2008). Novice Teachers: Where Are They Going and Why Don't They Stay? *Journal of Cross-Disciplinary Perspectives in Education*, Vol. 1, No. 1 (May 2008) 36 – 43.

Kapp C. A. (2000). Leadership development for educational leaders: from needs assessment to impact evaluation. *South African Journal of Education*, 20:286-292.

Kardos, S. M., Johnson, S. M., Peske, H. G., Kauffman, D., & Liu, E. (2001). Counting on colleagues: New teachers encounter the professional cultures of their schools. *Educational administration quarterly*, *37*(2), 250-290.

Kardos, S., & Johnson, S. M. (2007). On their own and presumed expert: New teachers' experiences with their colleagues. *Teachers College Record*, 109(9), 2083–2106.

Kardos, S. M., & Johnson, S. M. (2010). New teachers' experiences of mentoring: The good, the bad, and the inequity. *Journal of Educational Change*, *11*(1), 23-44.

Kelley, L. M. (2004), Why induction matters. *Journal of Teacher Education*, 55(5), 438-448.

Keup J. R., Walker A.A., Astin H. S. and Lindholm J.A. (2001). *Organizational Culture and Institutional Transformation*. Eric Clearinghouse on Higher E ducation. Available at http://www.ericdigest.org.

Kelchtermans, G. (2009). Who I am in how I teach is the message: self understanding, vulnerability and reflection. *Teachers and Teaching*, 15, 257-272.

Kelchtermans, G, and Ballet, K. (2002). The micropolitics of teacher induction. A narrative-biographical study on teacher socialisation. *Teaching and Teacher Education* 18, 105–120.

Killeavy, M., & Murphy, R. (2006). *National Pilot Project on Teacher Induction: Report on Phase 1 and 2, 2002-2004: Executive Summary*. Dublin: Department of Education and Science.

Kruger A. G. (2003). Instructional leadership: the impact on the culture of teaching and learning in two effective secondary schools. *South African Journal of Education*, 23:206-211.

Kyriacou, C. and O'Connor, A. (2003). Primary Newly Qualified Teachers' Experience of the induction year in its first year of implementation. *Journal of In-Service Education*, 29, 3, pp.185–200.

Ladd, H. (2011). Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? *Educational Evaluation and Policy Analysis*, *33*, 235–261.

Lave J. and Wenger, E. (1991). Situated Learning. Legitimate Peripheral Participation. Cambridge: University of Cambridge Press.

Lee, M., & McLoughlin, C. (2010). Supporting peer-to-peer e-mentoring of novice teachers using social software. In G. Berg (Ed.), *Cases on online tutoring, mentoring, and educational services: Practices and applications* (pp. 84-97). Hershey, PA: Information Science Reference.

Leithwood, K., Harris, A., Hopkins, D. (2008). Seven strong claims about successful school leadership, *School Leadership and Management*, 28(1), 27-42.

Löfström, E., & Eisenschmidt, E. (2009). Novice teachers' perspectives on mentoring: The case of the Estonian induction year. *Teaching and Teacher Education*, 25(5), 681-689.

Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.

Luft, J. A., & Cox, W. E. (2001). Investing in our future: A survey of support offered to beginning secondary science and mathematics teachers. *Science Educator*, *10*(1), 1-9.

Luft, J. A., Roehrig, G. H. H., & Patterson, N. C. (2003). Contrasting landscapes: Acomparison of the impact of different induction programs on beginning secondary science teachers' practices, beliefs, and experiences. *Journal of Research in Science Teaching*, 40(1), 77-97.

Maciejewski, J. (2007). Supporting new teachers: Are induction programs worth the cost? *District Administration*, 43(9), 48-52.

Macneil, A., Prater, D.L. and Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*, January–March 2009, Vol. 12, No. 1, 73–84

Maloch, B., & Flint, A. S. (2003). Understandings, beliefs, and reported decision making of first-year teachers from different reading teacher preparation programs. *Elementary School Journal*, 103(5), 431-457.

Mandel, S. (2006). What new teachers really need: What first-year teachers say they need to survive on the job is often markedly different from what schools provide. *Educational Leadership*, 63(6), 66-69.

Martin, J. and Frost, P. (2004). The Organisation Culture Games: A Struggle for Intellectual Dominance. In Clegg, S., Hardy, C. Nord, W. and Lawrence, T. (eds). *Handbook of Organisational Studies*, London, Sage.

Martin. J. (1992). *Cultures in Organisational Culture: Three Perspectives*, Oxford University Press.

Martins N and Martins E (2001). Organisational Culture. In: Robbins S P, Odendaal A and Roodt G (eds). *Organisational Behaviour: Global and South African Perspectives*. Cape Town: Pearson Education.

Marvel, J., Lyter, D. M., Peltola, P., Strizek, G. A., & Morton, B. A. (2007). *Teacher attrition and mobility: Results from the 2004–05 teacher follow-up survey.* U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office. Retrieved June 22, 2007, from http://nces.ed.gov/pubs2007/2007307.pdf.

McBeath, J. (2012). Future of teaching profession, available online.

McLeskey, J. (2011). Supporting improved practice for special education teachers: the importance of learner centred professional development, *Journal of Special Education Leadership*, 24(1), 26-35.

Mewborn, D.S, Stinson, D.W. (2007). Learning to teach as assisted performance, *Teachers College Record*, 109(6), 1457-1487

Mintzberg H (1983). *Power in and around Organisations*. Englewood Cliffs, NJ: Prentice-H all.

Moir, E. (2005). Launching the next generation of teachers: the new teacher centre's model for guality induction and mentoring. In H. Portner (ed.) *Teacher mentoring and induction: the state of the art and beyond.* Thousand Oaks: Corwin Press.

Moir, E., Barlin, D., Gless, J., & Miles, J. (2009). *New teacher mentoring: Hopes and promise for improving teacher effectiveness*. Cambridge, MA: Harvard University Press.

Moir, E. & Stobbe, C. (1995). Professional growth for new teachers: Support and assessment through collegial partnerships. *Teacher Education Quarterly, 22*(4), 83-91

Moore-Johnson, S. (2004). *Finders and Keepers: Helping New Teachers Survive and Thrive in Our Schools*. San Francisco: Jossey Bass.

Moran, A., Dallat, J., & Abbott, L. (1999). Newly qualified teachers in post-primary schools in Northern Ireland: The support provided for their needs and their own vision for induction. *European Journal of Teacher Education*, 22(2), 173-189

Nias, J. (1996). 'Thinking about Feeling: the emotions in teaching', *Cambridge Journal of Education*, 26(3): 293–306.

Oberski, I., Ford, K., Higgins, S., & Fisher, P. (1999). The importance of relationships in teacher education. *Journal of Education for Teaching*, *25*(2), 135-150.

Patterson, J.L., Purkey, S.C., and Parker, J.V. (1986). *Productive school systems for a non-rational world*. Alexandria, VA: Association for Supervision and Curriculum Development.

Pourdavood, R., Grob, S., Clark, J., & Orr, H. (1999). Discourse on professional growth: Processes, relationships, dilemmas, and hope. *School Community Journal*, *9*(1), 33-47.

Richardson, R. C., Glessner, L. L., & Tolson, H. (2007). Stopping the Leak: Retaining Beginning Teachers. *Australian Journal of Teacher Education*, *32*(2).

Risser, H. S. (2013). Virtual induction: A novice teacher's use of Twitter to form an informal mentoring network. *Teaching and Teacher Education*, *35*, 25-33.

Robinson, G. W. (1998). *New teacher induction: A study of selected new teacher induction models and common practices*. Chicago, IL: Annual Meeting of the Mid-Western Educational Research Association. (ERIC Document Reproduction Service No. ED 424219)

Roehrig, A. D., Bohn, C. M., Turner, J. E., & Pressley, M. (2008). Mentoring beginning primary teachers for exemplary teaching practices. *Teaching and Teacher Education*, 24(3), 684-702.

Rousseau, D. M. (1990). Assessing organisational culture: the case of multiple methods. In B. Schneider (Ed.), *Organisational Climate and Culture*, pp. 153-192, San Francisco: Jossey-Bass.

Ruohotie-Lyhty, M. (2013). Struggling for a professional identity: Two newly qualified language teachers' identity narratives during the first years at work. *Teaching and Teacher Education*, *30*, 120-129.

Sackman, S.A. (1991). *Cultural Knowledge on Organisations: Exploring the Collective Mind*. California, Sage Publications, Inc.

Sahîn, S. (2004). The relationship between transformational and transactional leadership styles of school principals and school culture. *Educational Sciences: Theory and Practice*, 4:387-396

Saka, Y., Southerland, S. A., Kittleson, J., & Hutner, T. (2013). Understanding the induction of a science teacher: The interaction of identity and context. *Research in Science Education*, 43(3), 1221-1244.

Schein, E. H. (1992). *Organizational culture and leadership*. San Francisco: Jossey-Bass Publishers.

Schein, E. (1984). Coming to a New Awareness of Organisational Culture. *Sloan Management Review*, Vol. 25, No. 2, pp. 3-16.

Scherer, M. (Ed.) (1999). A better beginning: Supporting and mentoring new teachers. Alexandria, VA: Association for Supervision and Curriculum Development.

Serpell, Z., & Bozeman, L. (1999). *Beginning teacher induction: A report on beginning teacher effectiveness and retention*. Washington, DC: National Partnership for Excellence and Accountability in Teaching. Retrieved from: www.ericcsp.org/pages/digests/BeginningTeacherInduction.htm.

Shen, Jianping. Teacher Retention and Attrition in Public Schools: Evidence From SASS91. *Journal of Educational Research*, vol. 91, November/December 1997, pp. 81-88.

Singh, P. and Lokotsch, K. (2005). Effects of transformational leadership on human resource management in primary schools. *South African Journal of Education*, 25:279-286.

Smith, T. M. and Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681-714.

Sfard, A. (1998). On two metaphors for learning and the dangers of choosing just one. *Educational Researcher*, 27(2), 4–13.

Stanulis, R. N., & Floden, R. E. (2009). Intensive mentoring as a way to help beginning teachers develop balanced instruction. *Journal of Teacher Education*, 60(2), 112-122.

Staub, F. and West, L. (2003). *Content-Focused Coaching: Transforming Mathematics Lessons*. Portsmouth: Heinemann.

Stoll, L. (1998). *School culture*, School Improvement Network's Bulletin No. 9, Autumn, Institute of Education, University of London.

Strong, M. (2005). Teacher induction, mentoring, and retention: A summary of the research. *The New Educator*, 1(3), 181-198.

Strong, M. (2009). *Effective Teacher Induction and Mentoring: Assessing the Evidence*. New York: Teachers College Press.

Strong, M., & Baron, W. (2004). An analysis of mentoring conversations with beginning teachers: Suggestions and responses. *Teaching and Teacher Education*, 20(1), 47-57.

Sugrue, C. (2011). Between the Twin Towers of Autonomy and Accountability: Performative Accountability or Transformative Leadership? In: Helen O' Sullivan & John West-Burnham (eds). *Leadership and Management in Schools: Irish Perspectives*, pp 59-74. California: Sage

Swanlund, A. (2011). *Identifying working conditions that enhance teacher effectiveness: The psychometric evaluation of the Teacher Working Conditions Survey.* Chicago. IL: American Institutes for Research.

Tait, M. (2005). Resilience and new teacher success. *Education Today*, 17(3), 12-13.

Teaching Council (2010). *Draft Policy on the Continuum of Teacher Education. Background Report: Teacher Education in Ireland and Internationally.* http://www.teachingcouncil.ie/\_fileupload/Teacher%20Education/policybackgroundpaper%20brf24dec2010.pdf. Accessed 20 January 2013.

Teaching Council (2011). *Policy on the Continuum of Teacher Education*. http://www.teachingcouncil.ie/\_fileupload/Teacher%20Education/FINAL%20TC\_Policy\_Paper\_SP.pdf. Accessed 20 January 2013.

Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational Research Review*, 3(2), 130–54.

Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, *54* (2), 143-178.

Wang, J. (2001). Contexts of mentoring and opportunities for learning to teach: A comparative study of mentoring practice. *Teaching and Teacher Education*, *17*(1), 51-73.

Wang, J., & Odell, S. J. (2002). Mentored learning to teach according to standard-based reform: A critical review. *Review of Educational Research*, 72(3), 481-546.

Wang, J., Odell, S. & Clift, R. (Eds.) (2010). *Past, present, and future research on teacher induction: An anthology for researchers, policy makers, and practitioners.* Lanham, MD: Rowman and Littlefield Education and the Association of Teacher Educators.

Wang, J., Odell, S.J., & Schwille, S.A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59(2), 132-152.

Wang, J., Strong, M., & Odell, S. J. (2004). Mentor–novice conversations about teaching: A comparison of two US and two Chinese cases. *Teachers College Record*, *106*(4), 775-813.

Waters, T. and Kingston, S. (2005). Standards we need. *Leadership*, 14-16; 36-39.

Williams, A., Prestage, S., & Bedward, J. (2001). Individualism to collaboration: The significance of teacher culture to the induction of newly qualified teachers. *Journal of Education for Teaching*, *27*(3), 253-267.

Youngs, P. (2007). District induction policy and new teachers' experiences: An examination of local policy implementation in Connecticut. *Teachers College Record*, 109(4), 797-837.

Youngs, Peter A. (2007). How Elementary Principals' Beliefs and Actions Influence New Teachers' Experiences. *Educational Administration Quarterly*, vol. 43, no. 1, pp. 101-137.

Yusko, B., & Feiman-Nemser, S. (2008). Embracing contraries: Combining assistance and assessment in new teacher induction. *Teachers College Record*, *110*(5), 923-953.

Zachary, L. J. (2005). *Creating a mentoring culture: the organisation's guide* (2<sup>nd</sup> ed.). San Francisco: Jossey-Bass.

Year	Number	Title/Author(s) ESRI Authors/Co-authors Italicised
2015		
	513	Firm-level Estimates of Fuel Substitution: An Application to Carbon Pricing  Marie Hyland and Stefanie Haller
	512	Academic Achievement among Immigrant Children in Irish Primary School Frances McGinnity, Merike Darmody and Aisling Murray
	511	Forward Price, Renewables, and the Electricity Price: The Case of Italy Valeria di Cosmo
	510	Carbon Dioxide (CO2) Emissions from Electricity: The Influence of the North Atlantic Oscillation  John Curtis, Muireann Á. Lynch and Laura Zubiatec
	509	The Impact of the North Atlantic Oscillation on Electricity Markets: A Case Study on Ireland  John Curtis, Muireann Á. Lynch, and Laura Zubiatec
	508	Nudging Electricity Consumption Using TOU Pricing and Feedback: Evidence from Irish Households  Valeria di Cosmo, Denis O'Hara, and Niamh Devitt
	507	Investment vs. Refurbishment: Examining Capacity Payment Mechanisms Using Mixed Complementarity Problems With Endogenous Probability Muireann Á. Lynch and Mel T. Devine
	506	Returns to Education and the Demand for Labour in Vietnam Seamus McGuinness, Elish Kelly, Pham Thi Thu Phuong , Ha Thi Thu Thuyd
	505	Analysing Residential Energy Demand: An Error Correction Demand System Approach for Ireland  John Curtis and Brian Stanley
	504	Restructuring European Electricity Markets – A Panel Data Analysis  Marie Hyland
	503	Assessing the Sustainable Nature of Housing - Related Taxation Receipts: The Case of Ireland Diarmaid Addison-Smyth and <i>Kieran McQuinn</i>