

# InSights

## **Teacher induction**

### **Annotated bibliography**

October 2015

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## Introduction

The Australian Institute for Teaching and School Leadership (AITSL), in consultation with stakeholders, is responsible for the development of national induction guidelines for teachers in their first two years of teaching. AITSL was given responsibility for this initiative in the Australian Government report of the Teacher Education Ministerial Advisory Group (TEMAG).

This annotated bibliography is intended to help inform the proposed guidelines. It is focused on induction policies and practices, mainly in education settings. The bibliography is one of a number of activities AITSL is undertaking to establish an evidence base to support this work.

## Methodology and structure

The initial stage in the process of developing the annotated bibliography was determining the themes within which readings should be grouped. The themes are intended to illustrate key issues in understanding teacher induction. A set of 94 abstracts formed the research base for the bibliography on the basis of an earlier review of induction literature.

The project analysed these abstracts and a number of other policy and research documents related to induction. Following a review by Associate Professor Rosie Le Cornu, a further 17 articles were reviewed in original form. This process led to the identification of a working definition of induction programs, and the following themes:

1. Purpose: what goals and intentions drive the establishment and delivery of induction programs?
2. Induction as part of a sustained continuum of professional learning: how does induction fit within a career-long process of teacher development?
3. Strategies and structures: which activities, forms of support and structural arrangements are most effective in achieving the purposes of induction programs?
4. Embedding induction in a learning culture: what school culture best supports induction; how should induction meet the needs of individuals?
5. Roles and responsibilities: which individuals and organisations have important roles to play in delivering induction programs?
6. The role of context: are there specific situations requiring variations in induction programs to improve their effectiveness?
7. Evaluation: what is the role of evaluation in the development, delivery and improvement of induction?

## Definitions

The literature offers a range of definitions of induction. Rather than seeking a simple, explicit definition, the approach taken here has been to identify descriptions of induction that imply a definition. This bibliography includes accounts that exemplify the richness and complexity of the induction process and the context, and a sense of what good induction practice looks like.

### **Effective support for new teachers in Washington State: standards for beginning teacher induction (Center for Strengthening the Teaching Profession 2014)**

The Center for Strengthening the Teaching Profession, a non-profit organisation, developed a set of standards for teacher induction in Washington State illustrating an independent view about the components of induction.

The Center brought together teachers, mentors, principals, human resources directors, curriculum and instruction specialists, professional development coordinators and managers of beginning teacher induction, and conducted a literature review.

The standards identify multiple elements of the induction process: hiring, orientation (the integration of new teachers into the system), mentoring, professional learning, formative assessment and the impact of induction programs (evaluation). For each element, the paper proposes key features of quality practice. It also notes that a single model of induction is not adequate to meet the diverse needs of educators and systems.

### **Creating a teacher induction program (Hammond, Lupe, Parsons Pulver & Reinhart 2001)**

Hammond et al identify three broad models of induction, arguing that induction can move beyond simple orientation or increasing teacher effectiveness to meet the goal of transforming the school into a site for state-of-the-art practice and continuous learning among all staff, not just inductees.

The paper centres on data arising from an evaluation of the USA National Education Association program 'A Change of Course'. The evaluation was conducted by the Colorado-based not-for-profit organisation InSites.

The authors describe three models of induction, arguing that most programs are combinations of the three. The Basic Orientation Model focuses on orienting both new and experienced teachers to the school's procedures and culture. The Beginning Teacher Development Model increases teacher effectiveness by helping inductees bridge theory and practice. The Transformative Induction Model orients all elements of the school to continuous learning for all members of staff, including inductees. The paper proposes that effective induction programs are:

- results-driven and job-embedded
- directed towards teachers' professional and intellectual development
- focused on enhancing immersion in subject matter and pedagogy
- designed and directed by teachers.

### **Induction of newly qualified teachers in New Zealand (Piggott-Irvine, Aitken, Ritchie, Ferguson & McGrath 2009)**

The authors use 'success case studies' in different settings in New Zealand to identify exemplary practices in supporting provisionally registered (newly qualified) teachers (PRTs).

The project identifies 20 case studies, conducting focus groups with key stakeholders, semi-structured interviews with participants and analysis of induction policies, plans and other documents in use.

The key success factors identified include:

- settings where there were systems and a culture of support extending across the organisation
- effective matching of mentors with PRTs and high levels of expertise and experience among mentors
- time provided for induction
- provision of professional development opportunities
- feedback on the PRT's progress and teaching
- effective observation
- good ratios of mentors to qualified teachers
- contextual supports including support and training of mentors, and limiting additional roles and expectations of PRTs
- effective assessment and moderation, including shared understanding of good teaching and learning, guidelines for induction assessment, and practices for gathering and reviewing evidence of progress.

#### ***Additional material***

Shockley, Watlington & Felsher (2011) in a qualitative meta-analysis of research on teacher induction programs, argue that it is difficult to establish a definition of good induction because the research left them unable to empirically determine the nature of effective teacher induction programs and what conditions enhance their effectiveness.

## Themes

The remainder of the paper consists of annotated readings grouped under the seven themes listed prior. In addition to key readings for which annotations are provided, additional brief notes indicate further readings that add depth or breadth to the theme.

### 1. Purpose

Research identifies a wide range of purposes for teacher induction. These can broadly be categorised as system purposes (e.g. teacher retention or reduced attrition, teacher selection), school purposes (e.g. engagement with school goals, supporting integration with school practices and structures) and teacher purposes (e.g. improved teaching, classroom management).

Some programs focus on one or a small range of purposes, while others address multiple purposes. A core purpose shared broadly across programs is support for sustaining beginning teachers as they establish their professional lives.

#### **Rethinking induction: Examples from Around the World (Paine, Pimm, Britton, Raizen & Wilson 2003)**

The article by Paine et al focuses its discussion of induction on the core goal of helping the novice to learn how to teach. It forms a chapter in Scherer's book, which explores what attracts good teachers and keeps them in the profession, and what makes schools better places for students to learn and for teachers to work.

The authors were involved in a study from 1998-2002 on induction for middle-grade mathematics and science teachers in selected countries. After an initial phase that studied induction in 12 countries, they did more intensive fieldwork in France, China (Shanghai), New Zealand, and Switzerland. They conducted one to three months of interviews and observations to examine induction policies, programs and practices.

The paper argues that induction goals in all four countries stress:

- effective subject-matter teaching
- understanding and meeting pupils' needs
- assessing pupil work and learning
- engaging in reflective and inquiry-oriented practice
- dealing with parents
- understanding school organisation and participating in the school community
- understanding oneself and the current status of one's career.

#### **Induction: making the leap (Ling 2009)**

Ling examines approaches to induction in Australia and the Pacific Rim. The paper discusses the purposes of induction, and questions whether it should preserve the existing culture of teaching or bring about change and renewal.

The study draws on a 1997 Asia-Pacific Economic Cooperation study covering 11 countries, and a review of practice in some Australian jurisdictions. It involves a critical examination of approaches to induction.

Ling identifies five common purposes cited for induction programs:

- familiarise inductees with the responsibilities of teaching and the culture of their schools
- increase the competency of the inductees, by improving their professional skills
- screen inductees to ensure they can perform the duties of teaching and that they are an effective 'match' for the school
- provide support and guidance to help smooth their transition from beginners to professionals
- increase retention of teachers.

Ling argues that approaches to induction usually focus on technical skills and practice, rather than addressing broader questions that can move the culture forward and engage with emerging social issues.

### **A system approach to building a world-class teaching profession: the role of induction (Haynes 2011)**

Haynes finds that empirical studies of induction demonstrate that more comprehensive induction programs are more effective in achieving core purposes. The most effective elements include having a mentor from the same field, having common planning time with teachers in the same subject, and having regularly scheduled collaboration with other teachers.

The paper reviews empirical studies conducted since the 1980s. It also analyses national (US) databases, a survey of American teachers conducted in 2005, and a Harvard University report on the next generation of teachers.

The study shows that as the number of supports for beginning teachers increases (as programs become more comprehensive), there is improvement in core purposes including:

- teachers' job satisfaction, commitment and retention
- teachers' classroom teaching practices and pedagogical methods
- student achievement.

Haynes argues that a comprehensive induction program that comprises multiple types of support reduced by one-half the turnover rate of those receiving induction in comparison to those receiving none.

### **Literature review on induction and mentoring related to beginning teacher attrition and retention (Long, McKenzie-Robblee, Schaefer, Steeves, Wnuk, Pinnegar & Clandinin 2012)**

Long et al argue that induction sometimes focuses on teacher retention or improving teacher quality, but rarely serves the purpose of sustaining beginning teachers' lives as teachers.

The authors reviewed empirical studies focusing on teacher retention and attrition, both qualitative and quantitative, published after 2000. The studies are from Canada, the United States of America, New Zealand, Australia and the United Kingdom.

The study found that recent literature has moved away from narrow, technical and fixed-goal oriented framework towards a process-view of the way beginning entrants become teachers. The research emphasis on sustaining the lives and building the identities of



inductees should shift the focus of programs to collaborative cultures and contexts that value teacher knowledge, focus on what is most educative for students, and see students as the responsibility of the whole school.

### **Onboarding new employees: maximising success (Bauer 2010)**

Bauer discusses 'onboarding', the process of helping new employees to adjust to the social and performance aspects of their jobs, and identifies key purposes for the process.

The paper is one in a series designed for human resources professionals in the United States of America. The series brings together research findings to identify what works. Bauer's paper explains why onboarding is important, where it fits into the larger HR context, how HR managers can proactively manage onboarding, and how new employees can help facilitate their own onboarding process. While not concerned with teacher induction, the paper addresses issues common to induction programs.

Bauer identifies four building blocks for onboarding, each of which serves a key functional purpose:

- Compliance: basic legal and policy-related rules and regulations
- Clarification: ensuring that employees understand their new jobs and all related expectations
- Culture: organisational norms, both formal and informal
- Connection: interpersonal relationships and information networks.

### ***Additional material***

Abu Rass (2012), discussing induction in the remote Northwest Territories of Canada, notes that one purpose of induction in such locations is accelerating the transmission of school, community and regional culture.

## 2. Induction as part of a sustained continuum of professional learning

There is a consistent view across the key pieces of research that induction is only one phase in a sustained program of professional growth. While this issue is rarely the focus of the literature examined, recent research locates induction within a broad view about learning communities across the profession.

There are specific features that relate to induction, but these can be addressed within a program aimed at professional learning for all teachers, and engaging all teachers, including beginning teachers, in helping shape their continuing growth.

### **Making Practice Public: Teacher Learning in the 21st Century (Liebermann & Pointer Mace 2009)**

Liebermann et al argue for teacher learning experiences across the profession that use professional learning communities, centre on the study of practice, and incorporate the use of technology.

The article discusses the literature on teacher professional learning, reviews induction practice in high-achieving countries (based on scores in international measures of student achievement) and analyses research on both learning communities and online networking.

The authors argue that learning communities across the profession are the basis of teacher professional growth and can provide a greatly improved basis for induction. They benefit from the use of social media and draw on leadership from classroom teachers themselves. Using online and multimedia communication to support conversation about teaching:

*...changes the whole experience of the induction years, eliminating the isolation and wheel spinning that drive so many promising novices from the profession, and joins them early on with their colleagues (p. 79).*

### **Teacher Preparation to Proficiency and Beyond: Exploring the Landscape (Ward, Grudnoff, Brooker & Simpson 2013)**

Ward et al locate teacher induction within a wider discussion about the professional lifecycle of teachers. While they do not define this lifecycle, they argue for a scaffolded transition from initial teacher education through induction to broader in-service learning.

The authors draw on previous research on induction in New Zealand, Australia, Scotland and England; countries chosen because of their relatively similar approaches to induction. They summarise the New Zealand approach to teacher accreditation and registration and contrast it with the situation in the other three jurisdictions.

The paper proposes that there are five stages in a teacher's development: novice, competent, proficient, accomplished and pedagogical leader. Initial teacher education should achieve the shift from novice to competent; induction should enable proficiency. Beyond that point, in-service learning should be largely self-driven and determined by inquiry into their own practice and that of others. There is considerable work still to do in locating initial teacher education and induction within this teaching lifecycle.

### **Supporting Beginning Teachers (Boogren 2015)**

Boogren argues that beginning teachers go through five phases in their first year: anticipation, survival, disillusionment, rejuvenation and reflection. Their steep learning curve reflects the complexity of skills that make up high-quality teaching:

*For many of the tasks that teachers perform daily in the classroom, expertise develops over time as practitioners gain exposure to a wide variety of classroom occurrences (p. 10.)*

Boogren's work includes a broad review of research related to the experience of beginning teachers and the kinds of support they require. It also addresses the process of moving from novice to expert status.

The study shows that expert teachers develop skills in:

- interpreting classroom phenomena
- discerning important events
- using routines
- making predictions
- distinguishing between typical and atypical events
- evaluating performance.

Developing skills in these dimensions takes three to five years. Reaching the highest levels requires 'deliberate practice', a concentrated effort to improve, and continuing attention to identifying problems with technique and working to correct them. This complex process requires support.

*Beginning teachers can only reasonably be expected to succeed if they receive intentional, comprehensive support catered to meet their unique needs (p. 11).*

### **Newly qualified teachers in Hong Kong: professional development or meeting one's fate? (Forrester & Draper 2007)**

Forrester and Draper argue that a key dimension of professional behaviour is a commitment to continuing improvement. In the absence of effective support and feedback during induction, one danger is that teachers will settle for limited further development, 'good enough' teaching and a restricted professional strategy.

The study involved questionnaires and interviews with 72 teachers in Hong Kong (12% of Hong Kong's annual supply of new teacher graduates) throughout their first year of teaching. It aims at evaluating the extent to which these teachers had a good start to their careers and what predictions might be made about their continuing professional development.

The authors propose that teachers should be provided with information both before and on arrival at their first school, support for survival, and feedback on their teaching. Many of the inductees received limited support and information; over half had little explicit feedback on their teaching and many gained information about teaching from non-professional sources. The paper argues that the investment in training teachers requires that they continue to develop their competence. Without support and monitoring during the induction process, this goal is at risk.

### **Ireland's National Induction Programme for Teachers (Santoli & Vitulli 2014)**

Santoli and Vitulli, describing the Irish National Induction Program, note that it is based on a view that induction is part of a continuum of professional learning including initial teacher education, induction and in-career development. with programs in other countries.

The study draws on research, observations and conversations with educators to outline the Irish induction program, how it has evolved and how it functions, and compares it

The program offers teachers three years to complete a series of workshops. They are also provided with experienced, trained mentors, and access to a professional support group and a website with induction information and resources. This is one phase in a continuum of professional learning, aspects of which are exemplified in the school-wide engagement in the program within which all participants have clearly defined roles. Participation in mentoring, for example, is a key element of teacher professional development, helping to ensure sustainability in the profession.

#### ***Additional material***

Hobson & Ashby (2012) argue that support for beginning teachers should be sustained beyond the initial year of teaching to avoid the 'reality shock' that can occur when induction support is removed.

Wong (2004), as part of a review of literature on best practice induction, argues that induction should become part of a lifelong, sustained, intensive professional development program because this is one key factor in retaining good teachers in the system.

### 3. Strategies and structures

The research refers to a range of induction strategies, but mentoring is by far the most common. In some research, induction and mentoring are treated as equivalent. A degree of consensus is evident, however, that broad programs with multiple strategies and forms of support are the most effective. More recently, digital and online support is discussed.

#### **Understanding beginning teacher induction: a contextualized examination of best practice (Kearney 2014)**

Kearney reviews international induction programs with the goal of identifying the characteristics of effective induction as a basis for proposing how Australia could establish formal, structured induction programs dictated by policy, and overseen by regulatory authorities.

The study examines state, national and international reports, reviews of research and two empirical studies on effective induction programs in Japan, Germany, New Zealand, Switzerland, China, France, Canada and the United States of America. The programs were selected because of their success in reported teacher retention rates and the levels of support offered to participants.

Kearney recommends that programs should provide professional support with the following characteristics:

- orientation to the school and its community to help socialise beginning teachers
- mentoring culminating in initiation into a professional community of practice
- focused collaboration with colleagues
- structured observations of beginning teachers by their mentor
- structured time release for beginning teachers to:
  - meet with their mentors for professional support and to discuss outcomes of observations
  - work on collecting evidence and supporting documentation in line with the Australian Professional Standards for Teachers
  - reflect on practice.
- training and either structured time release, remuneration or both for mentors
- induction as part of a larger formal program of continuing professional learning that is sustained throughout the beginning teacher's career.

#### **Beginning Teacher Induction: What the Data Tell Us (Ingersoll 2012)**

Ingersoll analyses approaches to teacher induction in the United States. He notes a substantial increase in induction programs, and evidence that induction can help retain teachers, improve their instruction and their students' achievement. He also argues that these effects vary substantially with variation in the intensity and duration of programs. The research uses national data to analyse the prevalence and variety of induction programs and its impacts on teacher retention and student outcomes.

Ingersoll notes a substantial increase in teacher numbers in recent years and specifically in the hiring of new teachers, but also in early attrition among these beginners. While 91% of teachers reported in 2008 that they participated in induction or mentoring, the nature of these programs varied widely. Activities with the most positive effect on teacher retention were having a mentor teacher from the same teaching area

and opportunities for working with other teachers. In addition, the more components in induction programs, and the longer they lasted, the more effective they were.

Ingersoll's review of robust empirical studies shows that induction works. The research demonstrated positive effects on job satisfaction, commitment and retention. Teachers performed better at various aspects of teaching, including maintaining a positive classroom atmosphere and classroom management. Most of the studies also showed that induction was associated with higher student scores or gains on academic achievement tests.

### **Mentoring and New Teacher Induction in the United States: A Review and Analysis of Current Practices' (Bullough 2012)**

Bullough examines current practices in mentoring and induction practices across New York, Texas and California. He notes that 'mentoring' is often used interchangeably with 'induction' but argues that mentoring is effective when it is established according to clear criteria and part of a broader induction program.

Bullough notes that simply assigning a mentor to a beginning teacher is not a guarantee of results. Research suggests that mentors should be trained, should work in the same subject area as their mentees, benefit from time release and should work closely with the mentee (and others) in analysing teaching practice. Further, a mentoring program of this kind works best when it is part of a sustained induction program including support for teacher networking and teacher cohorts, and consistent interaction with school administrators.

Bullough finds that mentoring is a highly personal relationship in which both mentor and mentee progress, and is located within a broader community of relationships. Additional research is needed on some key aspects of mentoring including cost-effectiveness, impact on student learning, mentor training programs and the impact of the process on mentors. Successful induction programs are wholly people dependent, and that their success rests entirely on how effectively they enable and support learning and engagement.

Bullough argues:

*Clearly, while a mentor is crucially important to a beginner's development, mentoring, alone, is no substitute for a full program of induction. It is apparent that effective induction requires something more than what a single, thoughtful, and caring mentor alone can provide. This said, for beginners the need for support of various kinds remains, including emotional support, which mentees consistently report as the most valued outcome of being mentored (65).*

### **Building Early Career Teacher Resilience: The Role of Relationships (Le Cornu 2013)**

Le Cornu notes that the early years of teaching are challenging, and seeks to understand the interplay of personal and contextual factors affecting these teachers and the means by which their resilience can be strengthened.

The study was a critical enquiry conducted over a year through two semi-structured interviews with 60 early career teachers and interviews with members of the leadership team in each school. The study developed a thematic analysis and focused on relationships as one of the five conditions for resilience that emerged from the analysis.

Le Cornu uses Jordan's model of relational resilience as a framework. She discusses relationships with students, teaching colleagues, leaders, peers, family and friends, other professional staff, parents of students, and themselves, noting the ways in which these relationships affect resilience. Le Cornu concludes that:

*...in order for the new teachers to feel confident and competent they needed to be sustained by – and be able to sustain – relationships based on mutual trust, respect, care and integrity (p. 2).*

These relationships include those that recognise them as new professionals with something to offer the profession.

### **Beginning teacher support in Australia: towards an online community to augment current support (Kelly, Reushle, Chakrabarty & Kinnane 2014)**

Kelly et al propose that weaknesses in induction programs suggest the need for approaches that go beyond school-based support. Their data indicate that many beginning teachers are not effectively supported, and that online approaches could assist.

The study involved a survey of the induction experience of 200 teachers (118 completions meeting the criteria) in Queensland early childhood, primary and secondary settings. A second survey, attempted by 64 teachers, collected data about perceptions of online support systems.

Teachers ranked school support and support from other teachers as most valuable. A significant proportion felt poorly supported. They saw significant value in being able to use online mechanisms to ask questions of experienced teachers and access other support. They also felt the need for help in finding high-quality teaching resources. The authors report on a case study of online support in the IT profession and argue for this type of community knowledge-sharing as a model for supporting beginning teachers.

### **Meeting the standard? The New Teacher Education Induction Scheme in Scotland (Draper, Christie & O'Brien 2007)**

Draper et al discuss the New Teacher Education Induction Scheme in Scotland. The scheme's approach is rigorous and standards-based, but the authors note that implementation issues and the relatively restrictive framework could limit its usefulness.

The paper uses observational case studies, policy documents, interviews of participants and questionnaires for probationers and Local Authorities to examine the effectiveness of the new approach to induction established in Scotland in 2002-03.

The scheme offers inductees a degree of choice about their appointment location, a 70% teaching load in their first year with 30% allocated to professional development, and 10% of an experienced teacher's time as support. Probationers produce a portfolio of evidence to show they have met the new Standard for Registration.

The study shows that probationers had extensive professional development experience including observation, shadowing and other activities. There were, however, difficulties with overly complex administrative requirements, inadequate planning and excessive speed of implementation, variability in local procedures and a focus on fitting the Standards framework rather than developing an individual style of teaching.

### **Significant research and readings on comprehensive induction (Wong & Wong 2012)**

The authors examine research on comprehensive induction programs, and argue that while mentoring is important, it is likely to be ineffective unless it is located within a comprehensive, long-term induction program.

The paper is a literature review of research on induction programs in the United States of America. The authors distinguish between induction, coaching and mentoring.

The paper finds that there is little research evidence to support mentoring as the core

element of induction without a broader program. Much mentoring is unstructured, unmonitored and lacks follow-up. Despite this, in many states in the United States of America, mentoring is the predominant induction activity. Coaching is more effective because coaches have well-defined roles and clear goals and work closely in the classroom with teachers. The authors argue that effective induction programs:

*have clearly articulated goals, administrative supervision, long-term objectives, networks that allow for structural and nurturing collaboration, demonstration classes where teachers can observe and be observed, portfolio assessments to assess pedagogical knowledge and skills, and effective coaching... The entire process is rigorously monitored and evaluated and it flows seamlessly into a sustained lifelong professional development process (p. 16-17).*

### **Helping school leaders help new teachers: a tool for transforming school-based induction (Birkeland & Feiman-Nemser 2012)**

The authors note that despite the power of comprehensive induction programs, few tools exist to guide schools in creating such systems. The article describes a tool which plays this role.

The authors were part of the Induction Partnership Project, which developed a theory of effective induction. The group coached senior staff in six Jewish day schools. Observing the absence of tools to support this work, they developed the Continuum of Practices for Building Comprehensive School-Based Induction.

The Continuum is a detailed description of exemplary induction and its stages of development. It is based on established continua describing teaching practice, and:

- provides concrete images of what comprehensive induction looks like at the school level in different phases of development
- communicates the ways in which structures and culture connect in successful school-based induction
- serves as a formative assessment tool against which to mark schools' progress in developing systems of new teacher induction
- is used to stimulate discussion in schools, and as a means of assessing progress.

### **Additional material**

Kane & Francis (2013), analysing a longitudinal study of new teachers in Ontario, argue that it is essential to develop programs for mentor teachers that focus on ways to support professional learning.

Patrick, Elliot, Hulme & McPhee (2010) suggest that good induction programs mix formal and informal elements. The paper argues the importance of informal elements such as collegiality, approachable management and a welcoming school ethos.

Staudt, St Clair & Martinez (2013) report on the use of Facebook in a teacher preparation program in the United States of America to provide access to continued program support, extended mentoring and private spaces for professional discourse.

Taranto (2011) reports on the establishment of an online learning community for newly employed teachers in Pennsylvania as part of their induction program. Teachers found the community helpful in aiding instruction, seeking support and facilitating reflection.



#### 4. Embedding induction in a learning culture

The literature shows that, just like for professional learning and performance and development, successful approaches to induction are more likely to occur within a strong and supportive learning culture. Characteristics such as taking account of inductee needs, motivations and expectations, coherence, support through school structures and a focus on improving professional practice, support sustained improvement of beginning teachers. This reflects the fact that teacher identities are shaped in the early years of teaching by new and unfamiliar experiences, and beginning teachers need support in understanding their experiences and the process of identity formation they are going through.

##### **Induction of beginning teachers in urban environments: an exploration of the support structure and culture for beginning teachers at primary schools needed to improve retention of primary school teachers (Gaikhorst, Beishuizen, Korstjens & Volman 2014)**

The authors note that schools where induction programs are positively regarded by beginning teachers offer programs more tailored to individual needs, and inductees have the opportunity to say what support they would prefer.

The study aimed to find ways to enhance the retention of beginning teachers, defined as teachers with less than six years' experience. It involved in-depth, semi-structured interviews with eight beginning teachers and 11 principals working in urban primary schools in The Netherlands.

Gaikhorst et al find that in schools where support practices are regarded positively, schools focus on and tailor support activities to the specific problems of their beginning teachers, and beginning teachers have the opportunity to indicate what type of support they preferred. The support culture in these schools was described as open, collegial, spontaneous, learning-focused and non-judgmental.

By contrast, schools regarded negatively have not planned as carefully and are less clear about what is expected of novices. In these schools, collaboration is structured, closed and veteran-oriented.

##### **A personal services paradigm of teacher induction (Cherubini 2007)**

Cherubini argues that induction practices should be less focused on in-service activity and information transmission, and more on creating and sustaining environments that provide personal service to inductees aimed at professional growth.

The article consists of a review of the literature on induction practice. It focuses on research that aims to identify the optimal focus of induction programs.

Cherubini argues for a 'personal service' approach to induction. Such an approach:

*accounts for the unique needs of each beginning teacher, structures the respective professional development to facilitate individual growth, and promotes professional capacity so that beginning teachers are better able to adapt to the challenging circumstances that are known to be especially prevalent in the first year of teaching (p 4).*

This requires beginning teachers having opportunities to identify their own growth needs and capacities, and to use their capacities to achieve an impact on school organisational culture and student achievement.

### **Promoting early career teacher resilience: a framework for understanding and acting (Johnson, Down, Le Cornu, Peters, Sullivan, Pearce & Hunter 2014)**

Johnson et al outline a social theory of resilience, and use it to discuss the experience of early career teachers and to develop a Framework of Conditions Supporting Early Career Teacher Resilience. They argue that this framework should be used to better support graduate teachers, since it provides an understanding of the interplay of factors affecting their early experience of teaching.

The study is based on an Australian research project that examined the experiences of 60 graduate teachers (see Le Cornu, pp10). The authors examine the conventional literature on the experience of early career teachers and propose an alternative approach based on resilience.

The authors develop a framework made up of five themes, each with implications for developing resilience:

- Policies and practices: early career teachers are affected by 'taken-for-granted' policies and practices
- Teachers' work: they struggle with the intense and complex nature of teaching
- School culture: cultures are shaped by people and are fluid and variable
- Relationships: teaching is primarily about relationships
- Teacher identity: engagement in self-reflection, challenging assumptions and negotiating teaching dilemmas contribute to resilience.

The authors elaborate a set of 18 positive conditions that support teacher resilience.

### **Learning to teach: a survey of provisionally registered teachers in Aotearoa, New Zealand (Cameron, Dingle & Brooking 2007)**

The authors note that inductees often have little idea about induction, begin their careers in a variety of roles, are given widely varying levels of responsibility and substantially different levels and kinds of support.

The report is part of a larger induction study commissioned by the New Zealand Education Council. It examines the inductee experience in induction programs. Data were collected through surveys completed by 571 provisionally registered teachers, some of whom also participated in focus groups and a small number of telephone interviews.

Cameron et al report that many inductees are uncertain about their entitlements or responsibilities during induction. Many of them start in relieving positions, while some have several positions in their early years. Some teach subjects for which they are not qualified, and some are expected to take on management responsibilities in their first year. While almost all felt welcomed and valued, many were not given key feedback on their teaching and some did not have access to their required time allowance. The authors conclude that the quality of the support and assessment for inductees depends largely on the capabilities and learning conditions in their workplaces.

### **Significant aspects of professional orientation of beginning teachers (Juklova 2011)**

Juklova argues that the experiences, backgrounds and motivations of beginning teachers are key factors in shaping their relationship with the profession. These factors influence individual ways of coping with the requirements of teaching and needs for support.

The study gathered qualitative data via a biographical research design involving semi-structured in-depth interviews with 13 teachers in country and town primary schools in the Czech Republic. The teachers had experience ranging from one to six years of teaching.

Juklova argues that success in becoming a teacher is affected by factors including one's motivation for choosing teaching, the unique character of personal history, the duration of interest in teaching, professional maturity and professional involvement. While this suggests that training, induction and support should include a focus on self-knowledge, self-reflection and social skills, much of the professional preparation of teachers consists of static theoretical knowledge.

### **Learning together, shaping tomorrow: new teachers try new ways (Cooper & Stewart 2009)**

The authors draw on the concept of social and cultural capital to argue that teacher induction involves the development of professional capital as inductees construct and reconstruct their identities as teachers.

The research involved case studies of four new teachers in Victoria and Queensland. Data were collected through surveys, interviews and observations.

The authors argue that inductees are engaged in the development of a teaching identity in complex circumstances. They have varying experiences, even in the same school. They find it difficult to recognise their own needs, and feel a sense of isolation and uncertainty. They value support from colleagues, and forums in which to express their doubts about themselves and their teaching.

The study suggests that induction programs need to work with new teachers to help them understand and work with the diversity of classrooms, and to support their personal and professional learning.

#### ***Additional material***

Kane and Francis (2008) argue that teacher candidates need opportunities to examine their beliefs critically in relation to a vision of good teaching, and to develop the tools and dispositions to use their own teaching practice as a site for inquiry.

Morrison (2013) proposes that greater emphasis needs to be placed on the experiences and circumstances of teacher identity formation. Induction should focus, in addition to content areas, on supporting teachers in understanding and interpreting their experience, teaching identity and developing practice.

## 5. Roles and responsibilities

Discussions of roles and responsibilities in teacher induction often argue for partnerships between the various players: employers, school leaders and staff, universities and inductees themselves. Research often focuses on the roles of school principals and mentor teachers. There is a need to clarify the roles of the different stakeholders, and to provide support to those who assist beginning teachers in establishing themselves.

### **Initiation and rites of passage: learning the school culture (Schuck, Brady & Griffin 2005)**

Schuck et al argue that the rites of passage involved in becoming a teacher can be substantially more effective if the roles of schools and school leaders, teacher education programs and education systems are clarified and complementary.

The study cohort was identified and data collected through a survey of education graduates from the University of Technology Sydney, and focus group interviews with 14 respondents. It focused on school culture but provided recommendations regarding induction for schools, systems and teacher educators.

The authors suggest that education systems should mandate separate supervisors and mentors for teachers, provide mentor training and a mentoring network, and provide inductees with time release and opportunities for professional development and observation. Schools should train, support and provide time release for mentors and supervisors, build a sharing culture and implement a school-based induction program. Teacher educators should incorporate feedback from graduates, teach first year survival skills, and review course content to include support for inductee interaction with principals, parents, supervisors and mentors.

### **Relationships and early career teacher resilience: a role for school principals (Peters & Pearce 2011)**

Peters and Pearce investigate the ways in which teachers' feelings of personal and professional wellbeing are affected by their relationships with principals. They note that these effects can be positive or negative.

The data for the study come from an Australian research project that examined the experiences of 60 graduate teachers (see Le Cornu, p.10). The authors develop narrative portraits of the experience of two young teachers, and use these to illustrate the impact of relationships between early career teachers and their principals.

The authors note:

*the vulnerability of many beginning teachers, whose work conditions are dependent on the goodwill and discretion of colleagues and leaders (p.260).*

The study finds that the experience and resilience of early career teachers is enhanced when principals:

- take a personal interest in early career teachers' welfare and development
- actively participate in their employment and ongoing induction
- model and foster trusting and helpful relationships
- develop school cultures that are supportive of the learning and wellbeing of staff and students
- negotiate democratic and collaborative processes
- help build self-esteem while also developing professional knowledge and skills.

### **Broadening Landscapes and Affirming Professional Capacity: A Metacognitive Approach to Teacher Induction (Cherubini, Kitchen, Goldblatt & Smith 2011)**

The authors seek to situate teachers' knowledge, regardless of whether they are beginning teachers or mentors, in a context-based and reflective environment. They argue that induction programs should provide an effective means of nurturing critical inquiry in both beginning teachers and mentors.

The study concerns a teacher induction project established as a partnership between the Faculty of Education at City Center University and the Ontario College of Teachers, and six district school boards in Ontario, Canada. Two teachers and mentors from each board took part. They worked together in extended project sessions undertaking activities designed in accordance with induction research ('case-based professional learning'), provided reflective commentary on induction and teaching, and participated in structured interviews.

Inductees reflected positively on the impact of the sessions. Mentors also felt that the structured interactions gave them a better understanding of the lives of beginning teachers, and that the experience also improved their practice as teachers. The authors argue that:

*...successful mentoring practices contribute directly to improving teachers' sense of self-efficacy and, in turn, better equip them to cope with the expectations of being professional educators (p. 2).*

Participants felt that the process generated free critical thinking, and offered affirmation of their work. Mentors valued the opportunity to work collaboratively with both inductees and other experienced colleagues.

#### ***Additional material***

Brondyk & Stanulis (2014) discuss the role of a teacher leader responsible for full-time mentoring of 15 beginning teachers in an urban elementary school. The teacher created a new culture of support, directly affecting teaching quality and student achievement.

Buchanan, Prescott, Schuck, Aubusson, Burke & Louviere (2013), in a study of teacher retention and attrition in Australia, argue for teacher education programs and school leaders to focus on developing and supporting five attributes: resilience, reflection, responsiveness to students and the school environment, relationships and resourcefulness, in their graduates and beginning teachers.

## 6. The role of context

General programs of induction are the focus of much of the research, with a degree of local adaptation anticipated. There are some contexts that require more substantial reconception of induction because they place additional demands on beginning teachers and often lack tailored support.

Across Australia there are many varied and complex contexts in which a beginning teacher may commence their professional career. Literature has examined a wide variety of contexts and four such cases have been considered in greater detail in this annotated bibliography:

- remote schools with Indigenous students
- the recruitment of teachers from low-SES and culturally diverse backgrounds
- situations involving short-term and contract teachers
- special education.

This section provides annotations and additional material for each of the four areas.

### Remote and Indigenous schools

#### **Supporting newly recruited teachers in a unique area, the Northwest Territories in Canada (Abu Rass 2012)**

The author argues that teaching in remote settings and with Indigenous students requires not only learning to teach but also developing cultural competence.

The article examines induction practices in the Northwest Territories in Canada, both in remote towns and in isolated Native Canadian communities. Data were gathered through questionnaires for newly-appointed and beginning teachers, and 26 formal interviews with new and beginning teachers and two mentors.

The author finds among others, that the process of adjustment to the Indigenous culture takes longer and requires more effort because teachers are dealing with a homogeneous group that is very different from them. There is a need for an extended and comprehensive cultural program to acquaint teachers with the culture of their pupils.

Teachers need support in approaching parents and initiating cooperation. Mentors should focus on cultural issues and assist in contacts with parents and children, including making new teachers aware of the kind of behaviour they should expect from children.

#### **Questionable practices? Relying on individual teacher resilience in remote schools (Sullivan & Johnson 2012)**

Sullivan and Johnson argue that graduate teachers employed in remote schools are often left to rely on their own capacity to adapt and cope rather than being provided with effective research-based support mechanisms.

The study was part of a larger Australian study (see Le Cornu, p. 10). A data set was created for one beginning teacher who was posted to a remote Indigenous community school. Data were collected through two semi-structured interviews with the teacher and an interview with her principal. The authors acknowledge the limitation of a single case study, but argue that it illustrates broader systemic and contextual issues.

The authors note that beginning teachers are often employed in remote and difficult-to-staff schools:

*The remote context of Meg's appointment meant that she faced challenges such as extreme living conditions, isolation, teaching students with complex needs, limited opportunities for collaborative work and a lack of professional support or learning opportunities (p.113).*

Teachers often feel ill-prepared to cope with these circumstances, but have to rely on their own resources and support mechanisms. The paper argues that pre-service providers, employers and schools should help beginning teachers to develop resilience and support them to remain at remote schools for as long as possible.

### **Coping strategies for adaptation to new teacher appointments: Intervention for retention (Sharplin, O'Neill & Chapman 2010)**

Sharplin et al note that teachers appointed to rural and remote schools adopt a range of coping strategies. They can be assisted by targeted interventions timed to match critical phases.

The paper describes a longitudinal case study of 29 teachers in the 15 months after they started employment in 17 rural or remote schools in Western Australia. Data were collected through an initial questionnaire, telephone interviews, site visits and email contact throughout the study period.

The authors find that teachers adopt three kinds of coping strategies: direct-action (getting information, seeking assistance etc); palliative (positive self-talk, use of humour, seeking health support etc.); and avoidance (ignoring, denying, withdrawal, substance abuse etc.). They argue that support is needed at defined points: first weeks of immersion and familiarisation; the first semester for feedback on competence and provision of support; and career continuity and certainty occurring in the last months of the year. As the authors suggest:

*By understanding the critical time periods for teachers commencing new appointments in rural/remote schools and the coping strategies used by teachers, colleagues and leaders in workplaces can take action to improve within-school support structures (p. 144).*

### **Additional material**

Cameron, Dingle, Brooking (2007) in their study of provisionally registered teachers in New Zealand note that there is inadequate information on induction in Maori settings. They find that there are low levels of guidance for new teachers in supporting Maori learners.

Kono (2012), as part of a study of induction in South Dakota, argues that induction in rural schools must satisfy both principals and beginning teachers. Comprehensive programs are needed that teach classroom skills, but also assist inductees in becoming socialised in rural communities.

## Low SES and cultural diversity

### **The impact of teacher preparation: a study of alternative certification and traditionally-prepared teachers in their first year of teaching (Linek, Sampson, Haas, Sadler, Moore & Nilan 2012)**

Linek et al investigate how induction programs can best serve the needs of entrants from different backgrounds, noting that students from an alternative certification program required different forms of support from those exiting a traditional teacher education program.

The study followed eight teachers from the traditional program and 14 from the alternative program throughout their first year of teaching, collecting data about their progress from a wide range of primary and secondary sources.

The study found that the alternative certification teachers were seen by principals as less competent and struggled to survive in the profession. The authors argue that alternative certification can involve putting people into classrooms with minimal training and supervision. They propose identifying promising children from low SES communities, sponsoring and supporting their pathways through school and into teaching and providing them with experience as tutors in schools. This approach could generate a cohort of teachers committed to their communities and provide role models for children from those communities.

## Short-term and contract teachers

### **The importance of collegiality and reciprocal learning in the professional development of beginning teachers (Patrick, Elliot, Hulme & McPhee 2010)**

Patrick et al note that temporary and relief appointees are often denied the benefit of both formal and informal induction processes.

The study discusses the factors that enhance induction experiences for beginning teachers. The research comes from a national study into the impact of new entrants on professional culture in Scottish schools. Quantitative and qualitative data came from an online questionnaire, six regional focus groups, semi-structured individual interviews and six case study schools.

The authors argue that professional learning available through the induction scheme, collegiality, approachable management and school ethos were key factors in enhancing the induction experience. For short-term contract and relief teachers, some of these opportunities are not easily available. These teachers have reduced access to formal professional development. Teachers who are in schools for short periods of time or move between schools are denied the opportunity to become part of the school team. They miss opportunities to engage in collegial relationships and this can affect their professional development.

#### *Additional material*

Maxwell, Harrington & Smith (2010), discussing the Education Alumni Support Project developed at the University of New England, argue that the needs of casual, relief and support teachers can be met through online support programs offering an environment of professional collaboration and peer support.

Bauer (2010) in a report on onboarding new employees, notes that onboarding for casual or part-time staff tends to be informal and limited. This is likely to be the position for beginning teachers who cannot secure full-time ongoing work.



## Special education

### **A review of teacher induction in special education: research, practice and technology solutions (Billingsley, Griffin, Smith, Kamman & Israel 2009)**

Billingsley et al propose that induction programs for special education teachers (SETs) are relatively less frequently studied. They recommend improving the work context, systematically designing induction programs and providing technology-based support for SETs.

The paper outlines what is known about teacher induction in special education. Research was reviewed on the experience of new SETs and induction and support provided to them. Nine induction programs were analysed and a further study conducted on technology and e-mentoring.

The authors recommend improving the work context by encouraging more inclusive practices for SETs in schools. They propose that induction programs should understand and address beginning SETs' concerns and should include goals, processes, mentor programs and professional development opportunities tailored for SETs. They also suggest that technology-based support could assist, with low-cost universally available solutions, effective infrastructure and training in both the technology and in supporting inductees at a distance. Finally, they argue that there is a wide range of areas affecting special education teacher induction that should be subject to further research.

#### ***Additional material***

Grima-Farrell, Long, Bentley-Williams & Laws (2014) report on a school-university partnership designed to prepare teachers for inclusive classrooms in which adaptations and adjustments are required to meet the needs of students with a disability.

## 7. Evaluation

There is consistent support for the place of evaluation as one element of teacher induction. Researchers argue that it is essential both to strengthen our understanding of what works in supporting novice teachers, and in shaping and renewing implemented programs. This section addresses both the role of evaluation within induction programs, and the conduct of evaluations of such programs.

### **Lost at sea: summary results of a meta-analysis of the efficacy of teacher induction and implications for administrative practice (Shockley, Watlington & Felsler 2011)**

Shockley et al note that existing empirical research on induction programs fails to demonstrate the nature of effective programs and the conditions that make them effective. This suggests that there is a need for further research and strengthened evaluation arrangements.

The authors conducted a meta-analysis of empirical research on the effectiveness of induction programs. Data sources included books, journal articles and government and non-profit commissioned reports on teacher induction programs published within the previous ten years.

The study finds that empirical studies fail to demonstrate the effectiveness of induction programs. While self-published reports claim success, independent studies are less clear. There is a need for an expanded research plan to validate programs. Induction programs should be designed with a strong theoretical basis to guide development, implementation and evaluation. Teacher induction effectiveness instruments would capture teacher views of the process. Evaluation and research are essential, to determine if the investment in induction is effective.

### **The Impact of Induction and Mentoring Programs for Beginning Teachers: A Critical Review of the Research (Ingersoll & Strong 2011)**

Ingersoll and Strong find that support and assistance for beginning teachers has a positive impact on teacher commitment and retention, classroom instructional practices and student achievement.

The study critically examined 15 empirical studies of induction programs conducted since the mid-1980s. They selected studies that were evaluative rather than descriptive, that compared participant and non-participant outcomes, and that provided explicit descriptions of their data and methods.

The authors find that, with some variations, the studies support the positive impact of induction programs. Teachers involved had higher satisfaction, commitment or retention. They performed better at various aspects of teaching, such as keeping students on task, developing workable lesson plans, using effective student questioning practices, adjusting classroom activities to meet students' interests, maintaining a positive classroom atmosphere, and demonstrating successful classroom management. Their students mostly had higher scores or gains on academic achievement tests. They argue that there is a need for further evaluative research on the content of induction, its duration and intensity, the relative costs and benefits and the impact of context.

### **A Review of Literature On Beginning Teacher Induction (Whisnant, Elliott & Pynchon 2005)**

Whisnant et al note the relative absence of high-quality data on induction programs and argue that there is a need for a commitment to an outcomes-rich evaluation model.

The authors conducted a review of literature to summarise research on the practices, policies, and programs developed to support novice teachers.

The study notes the predominance of qualitative reporting about induction programs, and the weak representation of quantitative evaluation. This means that conclusive, data-rich analysis of induction is beyond reach. Few induction programs include a rigorous outcomes-based orientation to measure changes in teachers' practice or student achievement.

The authors argue for the establishment of an outcomes-rich evaluation model to enable development of outcomes-focused programs. Innovation should then be examined by carefully constructed studies that yield statistical data and provide research-based models that can be more broadly replicated.

### **Leap year: assessing and supporting effective first-year teachers (The New Teacher Project 2013)**

The authors demonstrate the value of focused critical feedback both in providing empirical data about the effectiveness of induction as a basis for program improvement and in improving teacher practice.

The New Teacher Project is a national non-profit organisation in the United States of America. The organisation developed the Assessment of Classroom Effectiveness (ACE) system designed for new teachers to ensure consistency in developing effective teachers. The report describes the system and explains its value.

ACE uses classroom observations, student surveys, student academic growth data and principal ratings to track inductees' progress towards a clear performance standard. The data gathered demonstrated that: teachers perform at different levels and improve at different rates; initial performance predicts future performance, and multiple measures produce the same conclusions about potential. The report argues that evaluation of teachers should be linked to development, enabling teachers to take greater responsibility for their own learning.

### **Additional material**

Donaghy (2008), discussing the induction of doctors entering general practice, argues that induction programs should be updated annually based on feedback from inductees, trainers and any new legislation. Other stakeholders' views (patients, ancillary and nursing staff) should be given consideration in this process.

Howe (2006), reviewing exemplary teacher induction programs internationally, notes that in California, state standards provide criteria for designing, implementing and evaluating induction programs.

Langdon et al (2014), conducting a major review of induction and mentoring in New Zealand, find that school leaders and primary schools hold the most highly positive views of induction. They argue, however, that there are significant gaps in the research on induction, with a relatively narrow focus on beginning teacher perspectives.

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