# **Early Teacher Development**

Trends and Reform Directions





Global Cities Education Network

A GLOBAL CITIES EDUCATION NETWORK REPORT

## EARLY TEACHER DEVELOPMENT

TRENDS AND REFORM DIRECTIONS





# A background paper prepared by the Australian Institute for Teaching and School Leadership (AITSL) for the Asia Society's Global Cities Education Network (GCEN)

#### The Global Cities Educational Network (GCEN)

This report was prepared as a resource for schools and school systems, and the Global Cities Education Network (GCEN) in particular. Globalization of the economy, increasingly diverse and interconnected populations, and rapid technological change are posing new and demanding challenges to individuals and societies alike. School systems are rethinking what knowledge and skills students will need for success and the educational strategies and systems required for all children to achieve them. In both Asia and North America, urban school systems are at the locus of change in policy and practice—at once the sites of the most critical challenges in education and the engines of innovation needed to address them.

Asia Society organized the GCEN, a network of urban school systems in North America and Asia, to focus on challenges and opportunities for improvement common to them and to virtually all city education systems. A critical element of high-performing school systems is that they not only benchmark their practices against those of other countries, but they also systematically adapt and implement best practices within their own cultural and political contexts. The GCEN is intended as a mechanism for educators and decision makers in Asia and North America to collaboratively dream, design, and deliver internationally informed solutions to common challenges with which education systems are currently grappling.

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### **Australian Institute for Teaching and School Leadership**

The Australian Institute for Teaching and School Leadership (AITSL) was formed to provide national leadership for the Commonwealth, state, and territory governments in promoting excellence in the profession of teaching and school leadership, with funding provided by the Australian Government.

AITSL works with the education community to:

- Define and maintain standards for excellence in teaching and school leadership
- Lead and influence excellence in teaching and school leadership
- Support and recognize excellence in teaching and school leadership

Within the field of initial teacher education, AITSL has been tasked with the ongoing monitoring and review of the national approach to accreditation of initial teacher education programs. AITSL works with stakeholders to provide support and guidance for further improving initial teacher education within Australia.

## **Acknowledgment**

The initial teacher education section of this paper is substantially based on a paper prepared by Dr. Graeme Hall for AITSL (Hall 2013). We acknowledge the contribution of Dr. Hall to the thinking presented in this paper.

## **EXECUTIVE SUMMARY**

The international debate on education reform is increasingly focused on improving the quality of teaching as a major driver of improved student outcomes. A sustained focus on quality teaching requires support for teachers to develop and improve throughout their careers. The early years of a teaching career have gained policy attention, in a bid to ensure that the best people are attracted to, prepared for, and retained in the teaching profession.

A recent paper prepared by Linda Darling-Hammond (2013), Professor of Education at Stanford University, identified common features that contribute to developing and sustaining a high-quality teacher workforce. Of the three global cities profiled in the paper (Melbourne, Singapore, and Toronto), each identified the alignment of theory and practice, and rigorous professional experience as key features of high-quality initial teacher preparation. In addition, these successful approaches across systems built upon high-quality initial teacher preparation programs by providing strong supports for early-career teachers. Ian Menter (2011), Professor of Teacher Education at Oxford University, suggests that "a strong and sophisticated professional development framework throughout every stage of the career" is a requirement for such a challenging and complex profession.

#### The Australian Context

In an Australian context, approaches to initial teacher preparation and support for early-career teachers have been informed by an end-to-end system of development and progression through career stages. This approach is underpinned by shared agreement nationally about what teachers should know and be able to do through the Australian Professional Standards for Teachers ("the Standards"), endorsed by all education ministers in 2011. The Standards provide a common understanding and language for teachers to be able to reflect on and share their professional practice. The concept of development throughout a teaching career is embodied in the structure of the Standards, which describe teacher practice at four career stages.

The Standards are being implemented across Australia through both mandatory (regulatory) and voluntary (policy guidelines) levers, which underpin an end-to-end system of career development, including the following:

- Entry to the profession with "Accreditation of Initial Teacher Education Programs in Australia: Standards and Procedures," aligned with the Graduate career stage of the Standards
- Full teacher registration with "A Nationally Consistent Approach to Teacher Registration," aligned with the Proficient career stage of the Standards
- "Certification of Highly Accomplished and Lead Teachers in Australia," aligned with the Highly Accomplished and Lead Teacher career stages of the Standards

Graduate Teachers In addition, two other nationally endorsed documents—the "Australian Teacher Performance and Development Framework" and the "Australian Charter for the Professional Learning of Teachers and School Leaders"—describe and promote the type of professional culture that must exist in schools for teachers to grow and develop to their full potential.

Lead

Highly accomplished

National professional

#### SUCCESS FACTORS FOR REFORM OF INITIAL TEACHER EDUCATION

Examination of case studies and literature from around the world leads to four broad success factors for the successful implementation of new approaches to initial teacher education.

- 1. A clear vision of effective teaching that informs the entire program, provides a basis for prioritization and resource allocation, and ensures that all those involved in supporting preservice teachers present a coherent message.
- 2. **Integrating theory and practice**, so that professional experience in schools is central to the program, and so that graduates leave with a full tool kit of effective teaching strategies and the capacity to continually review and improve their approaches.
- 3. **Highly skilled and well-supported supervising teachers** who are accomplished adult educators as well as expert teachers, equipped to play the pivotal role they are assigned in these programs.
- 4. **Sustainable, scalable partnerships** that bring the resources and capabilities of all parties to the table and engage systems to ensure that the benefits of successful approaches are spread widely.

At a practical level, organizations seeking to implement and promote effective approaches should pay particular attention to the following:

- Engaging early with a broad range of partners, including universities, individual schools, school systems, teacher unions, and professional associations
- Developing, disseminating, and reinforcing a shared view of effective teaching, and using this to inform all aspects of a program, including resource allocation
- Designing the program so that there are high levels of coherence between theoretical and practical components, and so that the links between them are explicit
- Carefully selecting, training, and supporting supervising teachers, who play a central role in any such program
- Aligning assessment with the program's vision of effective teaching, and making assessment as authentic
  as possible
- Paying early attention to scale—including through partnerships with systems and districts, as well as with individual schools—and communicating successes and challenges
- Evaluating programs and researching the elements of them, with a strong focus on the outcomes achieved for graduates and their students

The current policy focus on initial teacher education presents a major opportunity to significantly improve this critical component of a high-quality education system. Examination of existing effective practices can provide a strong foundation for further reform.

### SUCCESS FACTORS FOR INDUCTION OF NEW TEACHERS

The challenge of developing and retaining effective teachers does not end with graduation from initial teacher education. The transition into employment is a time of great learning and development for teachers, and a time in which there is some risk of disappointment and attrition. The induction challenge is made more acute by the expectations that teaching has traditionally placed on new graduates. In many countries, graduate teachers are placed in charge of a class of students, with full pedagogical and legal responsibility. Traditionally, they would have been the only adult in the room, with limited opportunities to share practice or to learn from and observe more experienced teachers. In some ways, therefore, induction is a test case for new ways of working

and supporting teachers. It is by supporting its newest members that the teaching profession can demonstrate its maturity and capacity to provide development and career progression to all teachers.

In this situation, it is encouraging that education has perhaps paid more attention to induction than any other industry. However, this has not solved concerns about attrition and the quality of the induction experience generally. While policies look good on paper, the focus needs to shift to implementation in schools to ensure that all teachers are provided with strong foundations for successful careers.

Examination of case studies and literature from around the world leads to four broad success factors for successful induction programs.

- 1. **Structured mentoring by skilled mentors.** This is perhaps the most common induction strategy adopted worldwide and is the cornerstone of many successful systems. The challenge is to ensure that mentors are appropriately skilled and that sufficient time is devoted to the mentoring relationship.
- 2. A culture of observation, collaboration, and feedback. The development needs of new teachers are not so different from those of more experienced teachers. Perhaps the greatest success factor is that they find themselves in schools where professional learning is a focus, and powerful professional learning practices such as observation, feedback, and collaboration are the norm for all teachers.
- 3. **Continuity with initial teacher education.** This helps ensure that the induction career phase builds on what has already been learned rather than being a process of unlearning the content of initial teacher education and relearning the teaching practices expected in a particular school.
- 4. **Resourcing and implementation.** Teacher induction policies are generally sound, but implementation in schools remains a concern. Any attempt to reform and improve approaches therefore requires major attention to be paid to implementation and resourcing. For induction to succeed, it must be a priority that is supported by time and resources.

The global push to improve teacher induction could be seen as being at a crossroads. The argument for the importance of induction has largely been won. However, the practicalities of implementation remain an obstacle. Ultimately, successful induction may be the result of embedding a culture of professional responsibility, "induction.

#### INITIAL TEACHER EDUCATION AND INDUCTION AS A COHERENT CAREER PHASE

The similarities between these characteristics of effective approaches are striking and form a strong argument for a coherent approach to these important phases of a teaching career. It is clear that effective support for early-career teachers, spanning initial teacher education and their early years in the classroom, would be characterized by the following:

- Support from an appropriately skilled and supported mentor
- Opportunities for professional support and discussion
- Opportunities to observe and learn from other teachers
- Evaluation of and feedback on teaching that forms the basis for further improvement
- Evaluation and improvement of the program itself, ultimately based in its impact on student outcomes
- Continuity between these career stages, including a common vision of effective teaching

These principles are not only useful for early-career teachers, although their manifestations will change as teachers move through their careers. At their heart, they describe a professional culture of learning, performance, and development, characterized by a focus on feedback, learning, and professional growth that is driven by a

relentless desire to improve student outcomes. In the Australian context, this culture is well described in the "Australian Teacher Performance and Development Framework" (AITSL 2012) and the "Australian Charter for the Professional Learning of Teachers and School Leaders" (AITSL 2012).

There is strong evidence for the importance of initial teacher education and induction as the foundation for successful teaching careers. As the global focus continues to be on the best ways to develop quality teaching in all schools, this paper seeks to promote productive discussion about how teachers can be supported to navigate this critical phase of their careers.

## INITIAL TEACHER EDUCATION

#### TOWARD A "CLINICAL" MODEL OF INITIAL TEACHER EDUCATION

The history of teacher preparation can be seen as an ongoing effort to strike the appropriate balance between theory and practice. In most countries, the long-term trend has been toward a greater, and more sophisticated, component of theory. In many countries, this is evidenced by the transfer of initial teacher education from specialized "teacher training" institutions to universities.

An increased emphasis on theory has meant that the time preservice teachers spend in schools becomes critical in developing their practical teaching skills and introducing them to the realities of school environments. Many reform efforts in initial teacher education in recent years have focused on strengthening school—university partnerships, and often on increasing the duration and intensity of the professional experience component.

This trend has perhaps gone furthest in England, where schools have explicitly been placed at the center of initial teacher education, including some use of models where universities were not involved at all. In Australia, a national agreement on improving teacher quality included funding for School Centres for Teaching Excellence, designed to improve the quality of professional experience placements. In the United States, the National Council for Accreditation of Teacher Education (2010) has realigned its approach to accreditation to promote "clinical practice." Although used in different ways, sometimes just to describe any in-school experience, "clinical" has become a commonly used description of best practice in initial teacher education.

Linda Darling-Hammond (2006) reminds us that many professions help candidates to bridge the gap between theory and practice by "engaging them in the reading and writing of cases." She goes on to point out that many highly successful teacher education programs also require candidates to develop case studies on students and on other key elements of teachers' work within schools and with parents and communities. This focus on individual clients (in this case, students) and on individual interventions and activities is what sets particular kinds of professional experience apart as "clinical."

Reinforcing this notion of teaching as a clinical profession (and continuing the health professions' analogies), Stephen Dinham (2012) has proposed that "there is a growing recognition that teachers need to be able to 'diagnose' individual student learning and provide appropriate 'prescriptions' for improvement, to be clinical, evidence-based, interventionist practitioners in the manner of health professionals."

Interestingly enough, this "clinical" focus on the individual in the field of education has roots that trace as far back as the 1960s, in the context of providing feedback to teachers on the basis of observations of their teaching, and especially of their responses to the identified learning needs of individual students. "Essentially,

clinical supervision in education involves a teacher receiving information from a colleague who has observed the teacher's performance and who serves as both a mirror and a sounding board to enable the teacher to critically examine and possibly alter his or her professional practice" (Goldhammer 1969). The clinical supervision cycle described in that paper actually provides the foundation of many current approaches to both initial teacher preparation and ongoing teacher performance and development.

#### TRANSFORMING TEACHER EDUCATION

There have been numerous studies that have analyzed evidence about effective approaches to professional teaching experience in initial teacher education, and several of these have been distilled to identify guidelines or principles for quality learning opportunities. One such study in Australia (Eyers 2005) identified six "Guidelines for Quality in the Practicum." In summary, these are the following:

- A practicum is designed as an integrating part of the program
- Well-defined roles of high-quality professional staff
- High expectations of experiences in schools and other settings
- Expectations of high-quality assessment practice
- Ongoing evaluation of the effectiveness of the program
- Expectations of high-quality program support

In the United States in 2010, the National Council for Accreditation of Teacher Education (NCATE) published a seminal report from its "Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning." A key contribution of this panel and its report was the identification of ten "design principles" for clinically based programs, and strategies for implementing them at scale rather than as isolated examples of excellence.

The principles focus on the development of close partnerships between teacher education providers and school systems; accountability based on evidence of candidates' performance and their impact on student learning; and professional accountability of all stakeholders for the effectiveness of graduate teachers.

These ten design principles provide a useful framework for the consideration of both research and practice in the effective provision of clinical experience. While they have been developed in the United States' context, they clearly have relevance and exemplify effective programs in many countries.

These principles are well defined and are in many ways becoming mainstreamed. The focus is now shifting to implementing them in practice and at scale. This paper proposes four critical success factors for successful implementation of quality initial teacher education programs.

#### **Case Study: The National Council for Accreditation of Teacher Education**

The National Council for Accreditation of Teacher Education (NCATE) in the United States released its report "Transforming Teacher Education through Clinical Practice" in 2010. The report calls for a national effort to make the characteristics of effective programs the norm across the country. It identifies ten design principles for clinically based preparation:

- Student learning is the focus.
- Clinical preparation is integrated throughout every facet of teacher education in a dynamic way.
- A candidate's progress and the elements of a preparation program are continuously judged on the basis of data.
- Programs prepare teachers who are expert in content and how to teach it, and who are also innovators, collaborators, and problem solvers.
- Candidates learn in an interactive professional community.
- Clinical educators and coaches are rigorously selected and prepared, and are drawn from both higher education and the P–12 sector.
- Specific sites are designated and funded to support embedded clinical preparation.
- Technology applications foster high-impact preparation.
- A powerful R&D agenda and the systematic gathering and use of data support continuous improvement in teacher preparation.
- Strategic partnerships are imperative for powerful clinical preparation.

The report identifies existing examples of programs across the United States that already give effect to these principles, for example:

- The approach of St. Cloud State University, which uses a "co-teaching" approach between the
  preservice and supervising teachers, and found that student outcomes are improved in these
  classrooms.
- The partnership between Baylor University and the Waco Independent School District, which
  has shared governance, and where each organization contributes half of the funding for the
  program.
- The long-term partnership between the Long Beach Unified School District, Long Beach City College, California State University at Long Beach, and forty-six community organizations, which focuses on preparing graduates to address the specific priorities of the school district, and which has greatly improved retention of graduate teachers in local schools.
- A number of states have developed programs to assess the effectiveness of initial teacher education
  programs though the assessment of graduates and the performance of their students. An example
  is the well-established California PACT program, which assesses preservice teachers on a range of
  tasks and is mandatory.

The report calls on states, districts, and other national organizations to join forces to spread these models of clinical preparation. NCATE has used its own role in accrediting teacher education programs to help achieve this goal.

#### Source:

NCATE (National Council for Accreditation of Teacher Education). 2010. "Transforming Teacher Education through Clinical Practice: A National Strategy to Prepare Effective Teachers." Washington, DC: National Council for Accreditation of Teacher Education.

#### 1. A Clear Vision of Effective Teaching

An initial teacher education program that successfully blends theory and practice is an inherently complex exercise. It requires contributions from individuals across a range of organizations and coherence in the messages presented to preservice teachers. This is greatly assisted by a clear view of what effective teaching looks like, linked to evidence of its impact on (school) student outcomes.

From the earliest initiatives in the growth of professional development schools, the focus has been explicitly on the school students' learning, the preservice teachers' learning, and the learning of teachers in schools (Goodlad 1985), with student learning as the main emphasis. The more recent development of the concept of teaching practice as "clinical" has reinforced the practitioner/client nature of the teacher/student relationship and the need for the efforts of preservice teachers, as well as the efforts of teachers, to be directed toward student outcomes.

It has been suggested that "thinking about teaching as a clinical profession ... attends to all the dimensions of teaching: the curriculum, the teaching strategy, the assessment" (Hinds 2002). In another policy brief, it is proposed that incorporating a range of clinical activities in professional experience "may allow new teachers to focus more on their students and their learning once they enter the classroom" (Grossman 2010).

A clear vision of effective teaching provides a strong basis for prioritizing content within a program and avoiding the "crowded curriculum." In Singapore, for example, the National Institute of Education (NIE) has removed many previous elective elements of its programs to focus tightly on student learning and the development of practical classroom skills (Jensen 2012).

Teacher education in Singapore has been significantly reformed following an important report on "A Teacher Education Model for the 21st Century," published by the NIE in 2009. Significantly, this new vision for teacher education is founded on a description of the values, skills, and knowledge of twenty-first-century teaching professionals. For graduates of initial teacher education, this is elaborated in a Graduand Teacher Competencies Framework, which integrates the values, knowledge, and skills with the professional standards set by the Ministry of Education. This provides a common language that spans initial teacher education and employment. The emphasis on teacher values in particular is a different perspective to the Australian and US approaches and makes a strong statement about what it means to be a teacher.

# Case Study: The Melbourne Graduate School of Education (MGSE) at the University of Melbourne

Launched in 2008, the Master of Teaching program at the MGSE presents a departure from traditional teacher education programs. Its clinical approach connects university theory, professional knowledge, and classroom experience. The MGSE approaches teaching as a clinical practice profession "which focuses on student growth." The teacher develops and implements a practice centered on the learning needs of individual students by analyzing where the student is most ready to learn; *intervening* to support learning; and *evaluating* the impact of the intervention of the learner.

Clinical teaching enables teachers to focus on individual students' learning growth by doing the following:

- Monitoring and evaluating their impact on learning, and adapting the lesson to meet the needs of each student, rather than expecting the student to keep up regardless of their circumstances
- Using evidence about what each student knows and understands at the start of the teaching period to inform their teaching interventions
- Targeting their assessment and teaching practices to maximize the information obtained about their impact and to optimize the chances of improving student learning
- On the basis of the above, constructing appropriate teaching and learning environments for every student, whatever their developmental stage and current abilities
- Continuously evaluating the impact of their teaching, in order to inform next steps

The Master of Teaching program is a unique partnership between the MGSE and Government, Catholic, and Independent schools across the secondary and primary sectors as well as the early-learning centers in the early childhood sector.

Collaboration between the university and its partnership institutions is facilitated through local partnership groups established by the MGSE's Partnership Coordinators. Central to this partnership is the role of the Teaching Fellow, located in nominated base schools and centers, who coordinate and support teacher candidates throughout their practicum days in collaboration with school/center-based Mentor Teachers and university-based Clinical Specialists.

- Teaching Fellows: Expert teachers from the base school (the central school in a partnership school group) spend two and a half days per week mentoring candidates and supporting mentor/ supervising teachers.
- **Mentor Teachers:** Teachers from the schools where candidates are placed who supervise the individual placements.
- **Clinical Specialists:** University experts work closely with a Teaching Fellow and are on site in schools one day per week to help link university theory and classroom practice.

The capstone assessment of preservice teachers is through a "clinical praxis exam," which focuses on the presentation of the "cases" of individual students and a discussion and evaluation of the interventions made by preservice teachers to improve their learning. This assessment reaches across subjects within the program and has required individual academics to integrate their assessment practice on the basis of a shared vision of clinical teaching. Over time, it has influenced the ways in which these individual subjects are structured and taught.

#### Sources:

Dinham, S. 2012. "Walking the Walk: The Need for School Leaders to Embrace Teaching as a Clinical Profession." Australian Council for Educational Research. Accessed July 15, 2013. http://research.acer.edu.au/cgi/viewcontent.cgi?article=1137&cont ext=research\_conference

"Master of Teaching: Clinical Praxis Exam Video." Accessed August 29, 2013. http://education.unimelb.edu.au/about\_us/clinical\_teaching

At a larger scale, teacher standards provide a vision of the graduate teacher that can be used to inform the design of initial teacher education. Teacher standards also create a shared language for discussing preservice teachers' progress toward becoming competent graduates. In Australia, all new initial teacher education programs are now accredited on the basis that they will produce graduates who meet the Australian Professional Standards for Teachers (AITSL 2011). NCATE (2010) advocates a similar standards-based approach.

# Case Study: The Australian Professional Standards for Teachers as the Basis for National Support Materialse

As all initial teacher education programs across Australia are redesigned to demonstrate that their graduates will meet the Australian Professional Standards for Teachers, organizations involved in initial teacher education are producing practical support materials that can be used across the country. This creates economies of scale and helps to ensure that the materials will be of high quality.

Project Evidence and Project Assessment are collaborations involving six universities in total, based in four Australian states. These projects have produced websites that present a set of practical strategies and support materials for supervising teachers, preservice teachers, and teacher educators to assist them in supporting learning, evidencing of achievement, and assessment in professional experience placements.

The Supervising Preservice Teacher program is an interactive and self-directed online professional learning program that supports teachers who are either supervising a preservice teacher or thinking about a supervising role. Launched in April 2013, the program was developed by the Australian Institute for Teaching and School Leadership (AITSL) in partnership with the New South Wales Institute of Teachers (NSWIT) and the Queensland College of Teachers (QCT).

The program consists of four online, flexible learning modules that will give teachers the knowledge, skills, and confidence needed to effectively supervise preservice teachers. The learning focuses on skills in the following:

- Effective partnerships
- Practice analysis
- Making judgments
- Unpacking the Graduate Standards

Participants can study any or all of the modules according to their interest and will be certified according to the modules they complete. Key features of the program include the following:

- Access to high-quality, interactive, evidence-based content developed by experts
- The ability to study online, at one's own pace
- Learning through a "just in time" inquiry model, accessing content through the use of questions and multimedia resources
- Learning alongside colleagues from across Australia

The comprehensive online professional learning program is open to all Australian school education professionals at no cost and forms part of AITSL's Learning Centre: <a href="www.learn.aitsl.edu.au/professional-learning-programs/supervising-preservice-teachers">www.learn.aitsl.edu.au/professional-learning-programs/supervising-preservice-teachers</a>

#### Sources:

AITSL. 2013. "Supervising Preservice Teachers." Melbourne: AITSL. www.aitsl.edu.au/professional-learning/supervising-preservice-teachers/supervising-preservice-teachers.html

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Sim, C., J. Freiberg, S. White, A. Allard, R. Le Cornu, and B. Carter. 2012. "Using Professional Standards: Assessing Work Integrated Learning in Initial Teacher Education." Melbourne: Australian Teaching and Learning Council. www.teacherevidence.net

#### 2. Integrating Theory and Practice

The approach to teacher preparation that evolved through the latter part of the twentieth century has been described as a two-step process in which preservice teachers commence their program with studies in education to gain essential knowledge about schools and teaching, and then apply this knowledge to teaching during school placement experiences (Ure 2009).

Teacher preparation constructed around clinical experience provides for this site-based experience not only to be integrated into all aspects of the program, but also for it to be the *integrating feature* of the program. Much professional preparation, including for teaching, now includes both frequent and regular immersion in clinical experiences, as well as extended blocks of professional practice. It is suggested that preservice teachers see and make sense of theory and practice differently if they are taking coursework concurrently with fieldwork (Darling-Hammond 2006).

In exploring the various kinds of boundary crossing that have emerged in attempts to provide alternatives to the traditional two-step approach, Ken Zeichner (2010) has proposed the concept of "third space." Third space is a conceptualization of the bringing together of school- and university-based educators, and of practitioner and academic knowledge, creating new learning opportunities for prospective teachers. Zeichner provides a number of examples of ways in which programs have addressed the development of these third spaces.

Clinical models of initial teacher education focus heavily on the school as a site for this learning and in many cases have significantly increased the duration of school placements, as well as the continuity of placements in a single school. Teach for America, as well as the related models that exist in many other countries, takes this to an extreme, with the associate employed as a teacher in a single school throughout the two-year program.

## **Case Study: Boston Teacher Residency**

The Boston Teacher Residency (BTR) program is a joint initiative of Boston Public Schools and the Boston Plan for Excellence, with partners that include the University of Massachusetts Boston. Residents teach with a more experienced teacher four days a week, and undertake academic study in a summer residency and one day and one evening a week during the school year. Additional in-school support is provided by Clinical Teacher Educators. At the end of the program, residents qualify for a master's degree and a teaching license.

This close partnership produces graduates who are well suited to teaching in Boston Public Schools. Of those graduates employed in Boston Public Schools, 80 percent remain employed there after three years, compared to a national average of 50 percent for urban schools, and 97 percent of principals would recommend hiring a BTR graduate.

The program has also paid attention to scaling up its approach. It was a cofounder of Urban Teacher Residency United, which now has eighteen programs across the United States that have met its strict standards to become a partner in that program.

Source:

www.bostonteacherresidency.org/

#### 3. Highly Skilled and Well-Supported Supervising Teachers

A clinical model requires school-based personnel to take a lead role in mentoring and assessing preservice teachers. These supervising teachers must be not only highly skilled teachers who can model effective practice but also skilled adult educators who can support the development of the preservice teacher.

The critical nature of the quality of support and supervision of preservice teachers is a constant theme in the literature. In practice, teacher educators report that the pressure to secure sufficient placements for their students means that they do not have the luxury of selecting quality mentors and coaches but must accept any placements that are offered. Grossman (2010) suggests that the selection and professional preparation of supervising teachers are too often cursory and are a weak link in the design of clinical preparation.

It is widely recognized that mentor teachers should be competent teachers, selected on the basis of "their knowledge and ability to teach and interact with adults rather than just years of teaching experience and qualifications" (Hudson and Hudson 2010). This study by teacher education researchers at Queensland University of Technology provides an insight into the outcome of well-supported mentor development programs, particularly their formation of Zeichner's "third space," referred to earlier. In particular, the teachers report a sense of responsibility for the quality of the profession, as well as their own learning and insights into their practice.

The relationship between preservice teachers and professionals in the schools where they undertake practical experience is reported to be critical to the effectiveness of the experience. Ure (2009) reports both supervising and preservice teachers' accounts of their experience of this professional interaction. It appears from this account that, at least in the schools in her study, this interaction was limited to the provision of feedback on individual lessons taught by preservice teachers.

Stronger partnerships between schools and universities create the possibility of new staffing models. In Singapore, 15 percent of academic staff at the National Institute of Education are seconded from the Ministry of Education, and both organizations regularly second classroom teachers. Other models already discussed have created roles such as the Clinical Teacher Educator in the Boston Teacher Residency, and the Clinical Specialists at the Melbourne Graduate School of Education, who are university staff but spend large amounts of time in schools working with teachers.

### **Case Study: Charles Darwin University**

A collaboration between the Northern Territory Department of Education, Charles Darwin University, and the Northern Territory Teacher Registration Board has seen the establishment and support of a number of "teaching schools" based on the model of clinical medical education and committing all partners to "graduating work ready teachers of a high standard" (Charles Darwin University n.d.). In these carefully selected schools, there is an emphasis on developing the responsibility of both school and university educators for the development of high-quality teaching graduates.

In this partnership, the focus on the preservice teacher as a member of an interactive professional community is evident. The guidelines explicitly refer to the school as a community of practice where preservice teachers and teachers alike focus on developing the learning program.

#### Source

Charles Darwin University. n.d. "What Is a Teaching School?" Darwin: Charles Darwin University. https://online.cdu.au/bbcswebdav/institution/Education/Inschool documents/STUDENT RESOURCES/What is a Teaching School.pdf

#### 4. Sustainable, Scalable Partnerships

Equally important as the selection of and support for supervising teachers (some would say more important) is the selection of, and provision of support and development for, school sites for clinical experience. The notion of Professional Development Schools, which developed in the United States largely as an outcome of the work of John Goodlad and the Holmes Group (see e.g. Goodlad 1985), provides an early and enduring example. These strong, embedded partnership arrangements are heavily supported by commentators and researchers such as Darling-Hammond (2006) and Grossman (2010). The concept has been adopted in many guises internationally, at both system and local levels (Hall 2005).

Professional Development Schools focus on the learning of all parties. This has the benefit of placing preservice teachers in a strong, supportive professional community and also means teachers in the school gain a benefit from participating. Necessary elements of the model include clear documentation of roles and responsibilities, shared governance, shared resourcing, opportunities for staff to work across settings, and formal rewards and recognition for those involved in the partnership (National Association for Professional Development Schools 2008). Schussler (2006) examines the role of supervising teachers in these schools and identifies a strong commitment to a shared goal as a means of overcoming communication difficulties between school-and university-based staff, with strong governance structures and time allocated to building the partnership. In addition, incentives such as the removal of other responsibilities that take up time are critical to teachers' engagement in these partnerships.

As the research and practice reported here has indicated, clinical approaches to professional preparation require collaboration among a range of stakeholders. This holds as true in preparation for teaching as it does across the range of client-focused professions. There need to be "enduring partnerships" in delivering all initial teacher preparation programs (AITSL 2011). However, for clinical approaches to be successfully implemented, these partnerships must be broader than simply between providers and schools.

NCATE (2010) proposes that school systems/districts, university-based programs, policy makers, and teacher unions should all be party to these partnerships. In a number of examples referenced earlier—such as the Northern Territory teaching schools and Urban Teacher Residency programs in the United States—the partnerships are demonstrably strategic and explicit, and include a range of stakeholders. Partnerships with systems and districts, as well as individual schools, are emerging as a means to provide high-quality placements at scale.

### Case Study: Edith Cowan University, Western Australia

Edith Cowan University in Western Australia has implemented a Teacher Residency Model. The initiative is a partnership involving the university, the Department of Education and the Catholic Education Office. Preservice teacher "residents" undertake intensive periods on campus as well as in schools, including two days each week participating fully in school life. Initial evaluation of this program indicate high levels of teaching performance (78 percent of preservice teachers achieve a grade of at least Distinction in their teaching practice), greater enthusiasm to teach, and a stronger sense of what teaching is about (Lock 2012).

Early results of this program indicate the significance of partnerships that have high-level support of their school systems and are funded to achieve their objectives.

Features of this model, which is offered to participants in the one-year Graduate Diploma of Education, include:

- Two weeks of intensive university teaching prior to the school year, combined with professional activities at schools during this period.
- In-school placements comprising two days per week throughout the year, as well as longer block placements.
- Programs delivered at the university one day per week throughout the year, and an intensive prior to the commencement of the second semester. (Lock 2012)

Major success factors have included careful selection of supervising teachers and residents, and early involvement of the Department of Education and Catholic Education Office in the development of the model.

As the principal systemic partner in this project, the Western Australian Department of Education has now extended its involvement to include three additional universities and some twenty more school sites, including eight rural schools (Western Australian Department of Education 2012).

#### REALIZING THE BENEFITS OF A CLINICAL APPROACH: IMPLEMENTATION

The literature and case studies examined above suggest that there are some practical steps that organizations seeking to develop effective new models of initial teacher education can take. These include the following:

• Engaging early with a broad range of partners, including universities, individual schools, school systems,

teacher unions, and professional associations

- Developing shared governance and resourcing arrangements that sustain and embed partnerships
- Developing, disseminating, and reinforcing a shared view of effective teaching, and using this to inform all aspects of a program, including resource allocation
- Designing the program so that there are high levels of coherence between theoretical and practical components, and so that the links between them are explicit
- Carefully selecting, training, and supporting supervising teachers (who play a central role in any such program), and providing incentives for them to participate
- Aligning assessment with the program's vision of effective teaching, and making assessment as authentic as possible
- Paying early attention to scale—including through partnerships with systems and districts, as well as with individual schools—and communicating successes and challenges.
- Evaluating programs and researching elements of them, with a strong focus on the outcomes achieved for graduates and their students.

#### SUGGESTED FURTHER READING

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## **INDUCTION**

#### THE IMPORTANCE OF INDUCTION

The early years of a teaching career have long been recognized as a critical stage that can either provide a strong foundation for high performance as a teacher or lead to disillusionment and high levels of attrition. A review conducted by the Hay Group for the Australian Institute for Teaching and School Leadership found that education has done more to acknowledge the importance of induction than other professions, and in fact the literature on induction is dominated by contributions from the education sector (Hay Group 2013). This is not to say, however, that the problem has been solved. In many countries, up to a third of teachers leave the profession in the first three to five years (Jensen et al. 2012)

The difficulty of supporting new teachers is exacerbated by the traditional structures of the teaching profession. Teaching is unique in the level of responsibility that new graduates are expected to take. A graduate teacher will typically have full responsibility for a group of students from day one, usually as the only adult in the room. In this situation, any form of support risks being distanced from the reality of a new teacher's classroom experience. It follows that new teachers will be among the major beneficiaries of practices that deprivatize the classroom and provide opportunities for all teachers to benefit from observing the practice of others and giving and receiving feedback.

Aside from its benefits in reducing attrition, there is evidence that an effective induction program can have a positive impact on student outcomes. This is summarized in the box below.

### **Does Induction Contribute to Improved Student Outcomes?**

The case for induction inevitably demands consideration of whether induction programs will help to improve student outcomes and, while the evidence base remains limited, the indications are positive. One of the characteristics of successful education systems in East Asia is that the reforms introduced by these systems persistently focus on learning as the key criterion of their interventions, rather than teaching (Jensen 2012). While induction by its nature focuses on the teacher, it is important to question the impact that induction of new teachers has on student learning. However, this is not an easy question to answer. First we have to agree what is meant by "student outcomes," which can be interpreted narrowly as academic achievement or more broadly to include the well-being and engagement of students (see e.g. MCEETYA 2008). Secondly, induction activities do not have an easily identifiable nexus with student learning, being at least one step removed from the students' learning experience (Ingersoll and Strong 2011).

## Induction Has a Positive Impact on Student Achievement

Various studies have investigated whether a direct link between induction and student outcomes exists, with the majority focusing on academic achievement, but the existing empirical evidence is not sufficient to establish the existence of a causal relationship (Ingersoll and Strong 2011; Darling-Hammond et al. 2009). While the research does not establish a direct link, a comprehensive review of empirical research by Ingersoll and Strong concluded that despite limitations identified in the various studies, they collectively provide support for the claim that induction (often equated with mentoring) has a positive impact on student achievement, as well as on teacher commitment and retention and teacher classroom instructional practices.

#### Student Achievement

Ingersoll and Strong found that almost all of the studies reviewed showed that the students of new teachers who experienced some form of induction achieved better testing or academic outcomes (Thompson et al. 2004; Fletcher et al. 2008; Fletcher and Strong 2009; Rockoff 2008). Again, the intensity of the intervention appeared relevant to the outcomes. However, one prominent study, funded by the US Department of Education and conducted by a research team from the Mathematica Policy Research Center of Princeton, compared teachers receiving a comprehensive induction program and a control group of teachers who received standard induction support. This study found that it was only after two years of induction that there was a significant positive difference observable in student achievement between the students of the comprehensive induction teachers and the control group teachers.

#### Teacher Commitment and Retention

Ingersoll and Strong reviewed six studies: Kapadia et al. (2007); Fuller (2003); Cohen and Fuller (2006); Henke, Chen, and Geis (2000); Smith and Ingersoll (2004); Hans-Vaughn and Scherff (2008); and Duke, Karson, and Wheeler (2006). Each study showed that induction had some degree of positive impact on achieving higher satisfaction, commitment, or retention in new teachers. However, the degree of impact varied significantly, indicating that both the intensity of the induction interventions and the nature of the intervention were relevant to the outcomes achieved.

#### Teacher Classroom Practices

The reviewers found that two of the four studies considered (Evertson and Smithey 2000; Stanulis and Floden 2009) indicated that new teachers who received some sort of induction also showed improvement in a range of classroom practices across the different studies, such as classroom organization and student engagement. A third study by Davis and Higdon (2009) found that induction (in this case, school–university induction partnerships) "may" contribute to teacher effectiveness. The fourth study (Roehrig et al. 2008) had ambiguous findings.

### **But Significant Questions Remain**

While the review did conclude that induction had positive impacts on the three dimensions above, it also indicated that the existing research does not yet answer a number of significant questions about the nature and impact of induction:

## Which Elements of Induction Programs Are the Most Effective, and Why?

This question, Ingersoll and Strong suggest, is made more complex by the multiple and competing definitions of teacher effectiveness. Comparing novices and experts underscores the point that competence, proficiency and expertise take time to develop and do not automatically flow from experience. However, this does not tell us how novices gain skill and develop over time (Feiman-Nemser 2010).

#### How Much Is Enough?

While the studies considered suggested that the quantity of induction is important, it is not clear how much, and at what intensity, is actually enough to make a difference.

#### What Is the Cost/Benefit Analysis of Induction?

Existing practice in induction varies widely across different schools and systems, and it follows that the financial cost involved also varies. Research into the cost/benefit of different programs and their elements would be of great value to the schools, systems, and policy makers making decisions or recommendations on induction.

#### What about the Context?

It intuitively makes sense that context should influence the design of induction programs. In his review of schools in New South Wales, Ramsey (2000) appeared to take for granted that induction programs should recognize the specific needs of the school, such as Indigenous or non-English-speaking backgrounds and special-education needs. However, to date, the research has not specifically explored this issue.

#### Source:

Reproduced from Hay Group. 2013. "Building a Strong Foundation: Improving Teacher Induction in Australian Schools." Paper prepared for the Australian Institute for Teaching and School Leadership. www.aitsl.edu.au

#### SUCCESS FACTORS FOR INDUCTION PROGRAMS

### 1. Structured Mentoring by Skilled Mentors

Mentoring is perhaps the most widely used induction strategy. In the OECD's Teaching and Learning International Survey (TALIS), 75 percent of teachers report that their schools have mentoring programs (OECD 2009). However, this does not translate into a significant difference in the amount of feedback that teachers report receiving in these schools compared to schools without mentoring programs. Despite this, mentoring is central to many successful induction programs, suggesting that when done well, it can make a major contribution (Jensen et al. 2012).

Mentoring is at the heart of a comprehensive approach to induction in Seoul, South Korea. Teaching is a high-status profession in Korea, and new teachers have already passed a competitive employment exam. Once employed, they undertake a three-stage training program during their first year. A two-week program prior to the school year focuses primarily on classroom management, the school curriculum, and student guidance. During the year, they are mentored by Master Teachers, with a strong focus on receiving feedback. Following the school year, a further two-week program allows time for reflection and discussion, focusing particularly on the evaluation of students and understanding communities (Seoul Metropolitan Office of Education 2013).

As with initial teacher education and the supervision of preservice teachers, it is critical that these mentors are well trained and carefully selected. In some countries, teacher career structures support this and make mentoring a formal requirement of other teachers. In others, selection of mentors is more individual.

# Case Study: The Victorian Institute of Teaching's Provisionally Registered Teachers Program

As in all Australian jurisdictions, newly graduated teachers in the state of Victoria are granted provisional registration and are required to achieve full registration to continue their teaching careers. Full registration is achieved by demonstrating achievement of the Australian Professional Standards for Teachers at the Proficient career stage. The Victorian Institute of Teaching is the regulatory authority with responsibility for registering teachers. Recognizing the critical importance of this career stage, the institute has invested heavily in supporting mentors, as well as in supporting provisionally registered teachers directly.

It is a requirement of the registration process that provisionally registered teachers have a mentor who has undertaken the institute's mentor training program. Mentors are expected to provide support throughout the process and to assist the provisionally registered teacher to gather the evidence to demonstrate achievement of the Standards. In order to provide the provisionally registered teacher with useful feedback, and to be in a position to participate in a decision about whether the teacher meets the Standards for full registration, the mentor is required to work with the provisionally registered teacher in their classroom at least three times.

A critical factor in the success of this program has been close cooperation with all education sectors in Victoria. It is school systems and individual schools that need to provide the mentors and ensure that both mentors and provisionally registered teachers have the time to participate in this process. To date, nearly fourteen thousand mentor teachers have been trained.

#### Source:

Victorian Institute of Teaching 2013. "Annual Report 2012-13." http://www.vit.vic.edu.au/SiteCollectionDocuments/PDF/Annual%20Report/Victorian\_Institute\_of\_Teaching\_Annual\_Report\_2012-13.pdf

#### 2. A Culture of Observation, Collaboration, and Feedback

The needs of beginning teachers, and the features of effective professional learning for them, are in many ways not radically different from the needs of all teachers. Effective induction is most likely to take place in schools where teachers receive regular, constructive feedback, and where they have the opportunity to work together and to observe and be observed by other teachers. This school culture is described in the "Australian Teacher Performance and Development Framework" (AITSL 2012a) as having five major elements:

- A focus on student outcomes
- A clear understanding of effective teaching
- Coherence
- Flexibility
- Leadership

It is notable that in many successful systems of induction, the processes used to support and evaluate new teachers are those that are used for all teachers, with some adaptation to the induction career stage.

### Case Study: Induction in Shanghai: A Comprehensive Process

Shanghai provides new teachers with a comprehensive and multifaceted induction program that is similar to the approach used in the development of all teachers. All teachers in Shanghai have mentors, but new teachers have two: one focused on subject-specific teaching skills, and one focused on classroom management. Observation occurs in both directions—the new teacher observing and learning from the mentor, and the mentor observing and providing feedback to the new teacher.

The mentoring program is only part of an overall approach that includes the following\*:

- Working closely with, being observed by, and receiving feedback from experts in different fields
- Participating in research groups with other beginning teachers
- Courses, workshops, and seminars offered at the district level
- Demonstration lessons given by experienced teachers at the district level
- Action research projects that are expected to lead to publications in academic journals
- Teaching competitions
- Additional support for beginning teachers who are struggling

In this way, beginning teachers are comprehensively supported and are also introduced to the practices and expectations of the profession. These forms of support and professional learning will continue throughout their careers, rather than induction being a "special" phase of additional support that is not maintained.

#### Source:

Jensen, B., A. Hunter, J. Sonneman, and T. Burns. 2012. "Catching Up: Learning from the Best School Systems in East Asia." Grattan Institute. http://grattan.edu.au/publications/reports/post/catching-up-learning-from-the-best-school-systems-in-east-asia/

\*This report notes that not all these features are present in all schools, but they are typical.

In most countries, the end of the induction phase is marked by a formal progression to the next career stage. In some jurisdictions, this takes the form of achieving full registration, or a license to teach. In other situations, especially in more unitary systems, the focus is on achieving ongoing employment, or tenure. In situations where these gateways exist, it is important that they are aligned, to avoid confusion or duplication of the demands placed on beginning teachers. Effective and fair processes for teacher evaluation are critical to making these high-stakes decisions.

The Third International Summit on the Teaching Profession considered teacher evaluation as a strategy for improving teacher quality. Although some elements of evaluation systems were contested, there was consensus on some important points:

- A shared vision of the outcomes sought from schooling is critical in guiding efforts to improve teaching.
- The teaching profession needs to be centrally involved in efforts to improve teaching, with the
  development of clear teaching standards being an important starting point.

- Evaluation must include multiple measures from multiple sources, reflecting the complexity of teaching and its outcomes.
- Feedback is important but needs to be linked to professional learning that allows teachers to improve in the areas identified as development priorities.
- Teacher career structures can be improved, and the results of evaluation should lead to career progression.
- Attention must be paid to implementation, with training of evaluators and the allocation of time being important considerations.
- There is a balance to be struck between evaluating individual teachers and evaluating schools.
- Evaluation is not a silver bullet and must be part of a comprehensive approach to improving teacher quality (Asia Society 2013)

Applied to new teachers, an evaluation system that paid close attention to these considerations would provide a clear picture of professional expectations, a powerful source of feedback, a valid basis for decisions on career progression, and a clear pathway to future success in a teaching career.

# Case Study: The Ontario New Teacher Induction Program: An Integrated Approach

Ontario provides new teachers with a comprehensive induction program. Although there is flexibility at the school board level, the program is funded by the provincial Ministry of Education, and certain elements must be present. The three major elements of the program are the following:

- Orientation to the school and school board
- Mentoring by experienced teachers
- Professional development and training appropriate for new teachers

Each new teacher has an individual induction strategy, endorsed by their principal, that specifies which elements of the program an individual will participate in. The individual strategy is used to tailor the program to the needs of the individual and the school, and to track progress.

The professional development component focuses on those areas that are particularly critical for new teachers, including literacy and numeracy teaching, early identification of students at risk, safe schools, classroom management, assessment, communication with parents, and meeting the needs of diverse learners. Mentors must be experienced teaching professionals with strong skills in working with adults as well as children, and they must undertake training.

The induction program is integrated with Ontario's approach to teacher evaluation. To complete the program, new teachers must receive two satisfactory performance assessments within their first year of teaching. If this does not occur, the program extends into a second year. If two satisfactory ratings are not achieved in twenty-four months, the teacher does not complete the program, and his or her employment may be terminated. Completion of the program also leads to a notation to this effect being added to the teacher's Certificate of Qualification and Registration with the Ontario College of Teachers.

The New Teacher Induction Program represents a comprehensive and cohesive approach that ensures that

all new teachers receive support, while allowing for individual tailoring. Integration with the approach to teacher evaluation eliminates the burden of participating in two separate processes and allows support to be provided to new teachers at risk of not succeeding in the profession.

Source

Ontario Ministry of Education. 2010. "New Teacher Induction Program Induction Elements Manual." http://faab.edu.gov.on.ca/NTIP/NTIP-English Elements-2010\_Web.pdf

#### 3. Continuity with Initial Teacher Education

One of the great challenges in initial teacher education is integrating the theoretical and practical components of a program. This challenge continues once new teachers graduate and enter schools full time. In cases where induction is not effective, new teachers can experience isolation, withdrawal of the support provided during initial teacher education, and a loss of confidence (Hay Group 2013). At the extreme, a poor induction experience can lead teachers to feel that they have gained little from their initial teacher education and that they now have to begin the process of learning to teach all over again.

The challenge of linking theory and practice is discussed in the initial teacher education section of this paper, and many of the strategies outlined there can also be applied to the induction phase. One approach is to effectively merge the induction and initial teacher education phases, through programs with a large amount of in-school experience and strong attention to meeting the particular needs of a school district or system. The teacher residencies in Boston and other US cities are examples of this approach and achieve high levels of employer satisfaction with graduates.

In less-integrated systems, teacher standards can provide a common language that defines the expectations of new graduates in ways that are consistent with the content and assessment of initial teacher education. In Australia, all initial teacher education programs are being structured around the Australian Professional Standards for Teachers, with graduation dependent on being assessed as having met the Standards at the Graduate career stage. Graduate teachers then need to meet the Standards at the Proficient career stage to achieve full registration. This provides a common structure for their progression through these linked phases of their careers.

## Case Study: Continuity in Singapore's Approach to Induction

Initial teacher education in Singapore, delivered through the National Institute of Education, is regarded as a world-leading approach. One of the major advantages of the Singapore approach is the close cooperation that exists between the National Institute of Education, the Ministry of Education, and individual schools. Teachers are prepared for the specific demands of Singapore schools, and a feature of the initial teacher education program is to assign the individual teachers to schools that match their interests and capabilities and that are likely to have a vacancy coming up. However, graduation is not the end of the process. Singapore has a highly effective induction system.

Induction in Singapore includes formal professional development, mentoring, and access to networks of

beginning teachers, as well as networks specific to subject areas and other interests. The National Institute of Education delivers professional learning, and the programs for beginning teachers are targeted to areas that are important for success in the early years of teaching, and that complement the areas covered in initial teacher education.

#### Source:

OECD (Organisation for Economic Co-Operation and Development). 2011. "Strong Performers and Successful Reformers: Lessons from PISA for the United States." www.oecd.org/document/13/0,3746,fr\_2649\_35845621\_46538637\_1\_1\_1\_1,00.html

#### 4. Resourcing and Implementation

The importance of induction has long been recognized in education, and policy frameworks are generally strong on paper. In fact, education leads other sectors in researching and thinking about induction (Hay Group 2013). The challenge would therefore appear to be in implementation at the school level.

Resourcing of induction programs is never easy in a context of competing priorities, but most effective systems find a way to free up resources (Jensen et al. 2012). Many systems provide time release for beginning teachers and/or their mentors. Training for mentors, ongoing professional development for beginning teachers, and access to other forms of support are all potential areas for investment. It is also important to create incentives and expectations that all teachers will contribute to the induction of beginning teachers. In many countries, contribution to induction and mentoring of less-experienced teachers is part of the job description of experienced teachers and/or contributes to their performance assessment. In some countries, the freeing up of resources and time to devote to induction is linked to a more general approach that, for example, trades off class sizes for increased time for teachers to devote to professional learning.

## Case Study: Cultural Change to Support Induction in Hong Kong

Hong Kong is well noted for its systematic, long-term, and successful approach to education reform. Although Hong Kong did not always have a strong tradition of induction, since 2003 it has made improvement in this area. A period of research led to the development of an induction Tool Kit that was trialed and refined in schools before it was fully released in 2009. Since then, it continues to be periodically reviewed. Implementation of the Tool Kit was left to local discretion, recognizing the different priorities and starting points of individual schools.

The release of the Tool Kit was accompanied by a clear explanation of its origins, importance, and usefulness. It was supported by extensive professional learning, networks, and online discussion forums. The Tool Kit is characterized by practical templates for use in activities such as classroom observation and teachers' own reflections on their teaching practice. All these factors have supported strong take-up in schools.

#### Source:

Jensen, B., A. Hunter, J. Sonneman, and T. Burns. 2012. "Catching Up: Learning from the Best School Systems in East Asia." Grattan Institute. http://grattan.edu.au/publications/reports/post/catching-up-learning-from-the-best-school-systems-in-east-asia/

#### A FRAMEWORK FOR THINKING ABOUT IMPLEMENTATION

Successful implementation is a combination of having the right supports available for beginning teachers and having incentives for these to be taken up at the school level. In relation to support, there is a set of activities that are reasonably common in effective systems, with evidence linking some to improved student outcomes. These activities include the following:

- · Mentoring from experienced teachers who are both highly effective teachers and skilled mentors
- Access to professional learning, with a focus on areas that beginning teachers may struggle with, such as classroom management
- Opportunities to network with other beginning teachers and share issues and solutions
- Access to specific expertise in areas that are development priorities for the individual beginning teacher
- Perhaps most importantly, a supportive school culture where all teachers, including beginning teachers, have access to high-quality professional learning, opportunities for collaboration, observation and feedback, and expectations that they will learn and improve throughout their careers

Making these elements available is more straightforward than having them genuinely taken up in schools and offered to all beginning teachers in a high-quality form. This survey of approaches across the world has identified that very different ways of promoting take-up will be used in different cultures and education systems. Approaches that have worked in different contexts include the following:

- Mandating certain aspects of induction as part of regulatory processes, such as the transition to full registration, or as a condition of employment
- The promotion of the benefits of induction, combined with practical support that schools can access as they wish
- Expectations, whether cultural or as a formal condition of employment, that more experienced teachers will play a strong role in induction
- The use of professional teaching standards and other descriptions of expectations of teachers to provide a common language for assessing and supporting beginning teachers
- The promotion and creation of a culture of professional learning, observation, and feedback for all teachers, which will ensure that beginning teachers find themselves in a supportive environment.

Induction is a critical career stage but can be difficult to define, sitting between initial teacher education and ongoing professional learning throughout a career. In some ways, quality induction is simply an extension of the professional culture that should apply to all teachers. It may be that the professional responsibility of teachers to support new entrants to the profession can actually become the lever to promote these ideas for the workforce more generally.

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Hay Group. 2013. "Building a Strong Foundation: Improving Teacher Induction in Australian Schools." Paper prepared for the Australian Institute for Teaching and School Leadership. www.aitsl.edu.au

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