Chapter 8 Highlights: Induction

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This chapter on induction programs reviews recent research, Economy policies, and promising practices based on surveys filled out by Economy researchers participating in this international study.

Induction programs are known to be variable in focus, quality and outcomes. Currently, induction of beginning teachers is focused on fostering career-long learning dispositions (Feiman-Nemser 2012). Typically they include activities such as school orientation, classroom support, workshops, mentoring and opportunities for collaboration with colleagues (Ingersoll and Strong 2011). However, even within the one school, beginning teachers' experiences can vary from supportive to challenging (Wechsler et al. 2010).

Ideally, induction is a systemic, comprehensive, coherent and multiyear professional development process that takes place within a supportive professional learning community that is ongoing throughout a teacher's career. Of the participating Economies, the SIN case has the most explicit focus on inducting beginning teachers into a nation-wide professional learning community via a required Ministry of Education Heritage Centre visit and non-mandatory school-based initiatives, such as onsite "research activist" lesson study groups and school clusters that have action research as a professional development activity. AUS and NZ are Economies where teaching as inquiry is being embedded system-wide into professional teacher standards and is an expectation for registration.

Mentoring by experienced teachers is a key element of most induction programs, and it impacts beginning teacher retention, job satisfaction and teaching practice. Mentoring needs to be an educative process where both the mentor and mentee are positioned as learners in the induction process. Educative mentoring is explicitly mandated as part of beginning teacher induction in NZ, where policy positions the mentor and beginning teacher as learners together (NZTC 2011).

Mentors need and benefit from support and training (Langdon 2013) and time to focus on their role. This is provided in AUS, NZ, PRC and RUS. Quality induction requires that school leaders sanction time for beginning teachers to be observed and reflect on their own teaching as well as on their students' learning (Darling-Hammond et al. 2009; Hudson et al. 2007).

Beginning teachers benefit from informal as well as formal mentoring, with informal mentors helping to address the tension between assistance and evaluation. Ingersoll and May (2011) report that beginning teachers need supportive school environments where they feel valued, trusted and empowered to collaborate for the purpose of improving instruction. Informal professional and personal collaboration can support reflection on practice to develop understanding of content, pedagogy and learners, enhance job satisfaction (Berry et al. 2010) and resilience (Papatraianou and Le Cornu, 2014). In Shanghai's experimental schools, for example, teachers are expected to engage in joint work to support their teaching. Beginning teachers are assigned senior teachers as their mentors to assist them in learning about and developing their practice in line with professional teacher standards. In RUS and PRC, beginning teachers observe lessons conducted by experienced teachers in their own school and other schools.

Subject-specific mentoring is advocated on the basis that the development of beginning teacher PCK is essential (Desimone et al. 2013). Induction programs with a focus on subject-specific pedagogy and beginning teacher participation in teacher networks in their specialized fields are useful in supporting beginning teachers' learning as envisioned within current curriculum (Luft 2009). Studies indicate that teachers who experience subject-specific support are more likely to remain in the profession (Smith and Ingersoll 2004). However, there is no definitive research evidence that subject-specific mentoring leads to higher student engagement and achievement.

Information and communication technologies can play a useful role in the induction process. External networks supported by online technologies can help reduce teacher isolation while providing access to a wider range of ideas and colleagues for reflection and feedback (Fulton et al. 2005). All Economies encourage the use of portfolios to illustrate teacher learning and development against various professional teacher standards. In many Economies, the internet and other media have become a major resource for teachers. In NZ, for example, the website Te Kete Ipurangi (TKI) has been developed by the Ministry of Education and houses a wide variety of teacher resources, including reading for teachers and curriculum and assessment information. In RUS, magazines published for mathematics, chemistry and physics teaching are dedicated to the development of class lessons, sharing teachers' experience and useful information for teachers.

Exhibit 5 summarizes the different induction processes in the Economies that participated in the study and allows for identification of different practices. For

example, the Western Economies of Australia and New Zealand have a common practice of mandating in-school mentors and portfolios, while the U.S., which can also be considered a Western Economy, leaves these processes to school-level decisions.

Exhibit 5. Key Elements of Economy Beginning Teacher Induction Processes

Economy	Program type	Required for full teacher registration	Formal or informal	Time allowance	In-school mentor	Portfolio mandated
AUS	State & school-based	Yes	Both Formal (1-2 yrs)	Yes	Yes	Yes
PRC	Regional & school-based	Yes	Both Formal (4 yrs)	?	Yes (Initial 1-2 years)	No
NZ	School-based	Yes	Both Formal (2 yrs)	Yes	Yes	Yes
RUS	School-based	No	Both Formal (4 yrs)	?	Yes	No
SIN	Economy (Compulsory) & school-based	No	Both Formal (2 yrs)	School-dependent	Yes	No
USA	Variable	No	Formal in some districts	No	No (school dependent)	No (school dependent)

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APEC Project: HRD 03 2009S

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APEC #215-HR-01.2