Chapter 10
Beyond Selection: Applying Lessons from Teacher Selection to Recruiting and Developing Teacher Candidates

Abstract In this chapter of the book, we examine how lessons learned from teacher selection can be applied to recruiting better candidates to consider teaching as a profession, and to developing the candidates who are in training (see Fig. 10.1). We will consider the steps before and after the selection stage, and we will look at how the concepts and methods used in selection might productively be adapted to the purpose of recruiting and developing prospective teachers.

At the beginning of this book, we presented four pathways to improve the quality of the teacher workforce: attraction and recruitment, selection, development during initial teacher education, and development during professional practice. Throughout most of this book we have focused on selection as a pathway to educational improvement, with guidance about how educational systems might improve the way that they identify prospective teachers. However, there is more to improving the teacher workforce than making better selection decisions. How can the lessons learned from teacher selection be applied to what happens *before* and *after* candidates are selected, that is, during recruitment and development?

In this, the penultimate chapter of the book, we examine how these lessons can be applied to *recruiting* better candidates to consider teaching as a profession, and to *developing* the candidates who are in training (see Fig. 10.1). We will consider the steps before and after the selection stage, and in particular, we will look at how the concepts and methods used in selection might productively be adapted to the purpose of recruiting and developing prospective teachers.

10.1 Recruiting Prospective Teachers

Before teachers are selected for training or employment, they need to be attracted and recruited into pre-professional training. The term ‘attraction’ refers to raising potential applicants’ interest in the profession, especially for those who may not have seriously considered a teaching career. By ‘recruitment’, we mean the organizational practices that encompass influencing people to engage in the formal practices of

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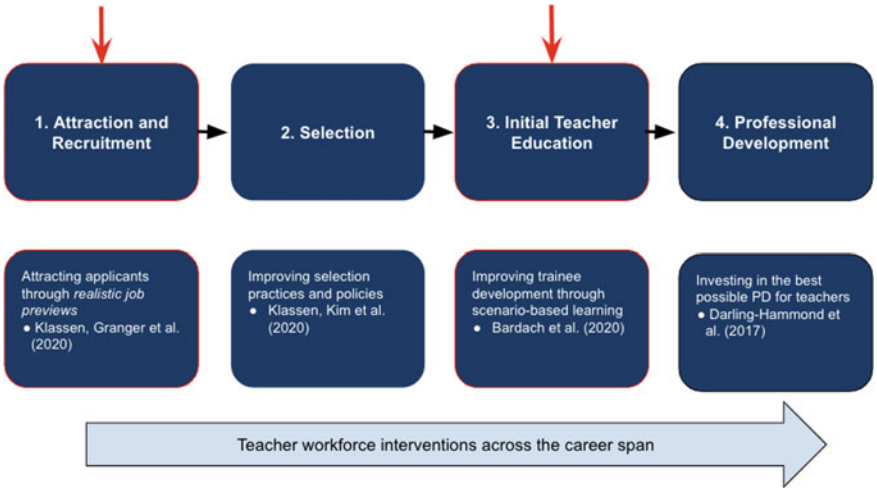

Fig. 10.1 Improving the teaching workforce through recruitment and development

applying for training or employment positions. For ease-of-use, we will use the terms interchangeably in this chapter.

A shortage of high-quality teachers hampers students' ability to learn, diminishes overall educational opportunities, and leads to a drain on economic resources (e.g., through provision of recruitment incentives) that could be better used elsewhere (Garcia & Weiss, 2019). See & Gorard (2019) examined the teacher recruitment landscape in England, and in particular, documented the gap between recruitment targets and the actual number of new entrants to the profession. They found that teacher vacancies tripled between 2011 and 2016, and proposed that teacher shortfalls could be addressed through more coherent policies accounting for supply and demand, revisions to the initial teacher education recruitment process, and a thorough evaluation of the cost and benefits of recruitment incentives. Not all countries face recruitment challenges: Finland, for example, has more applicants than places for ITE programmes, and the Covid-19 crisis and resulting economic uncertainty has increased the number of teaching applicants in the UK (Gibbons, 2020). However, in many developed and developing countries the quality of education systems has been threatened by an inability to recruit sufficient numbers of high-quality applicants.

A two-step process. Teacher recruitment strategies often follow a two-step process, first identifying areas of need (i.e., geographical areas or subject areas) where shortages exist, and second, offering a range of incentives (financial or guaranteed employment) to applicants, sometimes hinging on level of academic attainment (See & Gorard, 2019). However, there are problems associated with this approach: the evidence supporting teachers' general academic attainment and teaching effectiveness is not very strong (Bardach & Klassen, 2020), and recruiting prospective teachers based on cognitive factors alone may not be the best strategy to identify the most promising future teachers. In addition, paying out incentives to recruit people to join

training programs is expensive, and the long-term effectiveness of such recruitment strategies is not very well evidenced (e.g., Podolsky et al., 2019). A report on teacher recruitment produced by the OECD (Organisation for Economic Co-operation and Development) revealed that extrinsic financial incentives do not tend to attract high quality applicants, and in fact, may serve to attract applicants who are more interested in financial pay-off than their fit with the profession (OECD, 2018). There are a number of factors that attract people to a certain profession, including occupational status, work environment, sense of personal contributions, and the financial rewards associated with the profession (Podolsky et al., 2019). Looking at recruitment in other professions and learning lessons from teacher selection research may help inform how prospective teachers might be better recruited into training.

Personal and social utility. The underlying concepts in recruitment strategies usually fall under two categories. First are the appeals emphasizing the *personal utility* of pursuing a teaching career, i.e., by offering grants and bursaries for training, and higher salaries and improved working conditions for employment. The second appeal emphasizes the *social utility* of teaching; that is, through underlining how a teaching career can make a social contribution in terms of improving the lives of children and advancing social change. The 'simple view' of career attraction to teaching is shown in Fig. 10.2, with the two distinct factors contributing to the 'pull' of teaching. However, when making career-based decisions, individuals will weigh multiple factors—not just personal utility and social utility—but also their perceptions of 'fit' based on self-reflection supported by personal experiences and knowledge. This perception of fit influences the way a potential candidate evaluates the personal and social utility of a teaching career, and leads to a consideration of how well they will meet the perceived demands of the job.

Person-vocation fit. The notion of fit between people and their environments is one of the key theories in psychology and forms the foundation of person-vocation fit (PV fit), defined as the congruence between a person's interests and abilities, and the demands of particular jobs (e.g., Darrow & Behrend, 2017). Research shows a strong relation between PV fit and applicants' attitudes before applying for training or employment and also between PV fit and on-the-job behaviors and attitudes, such

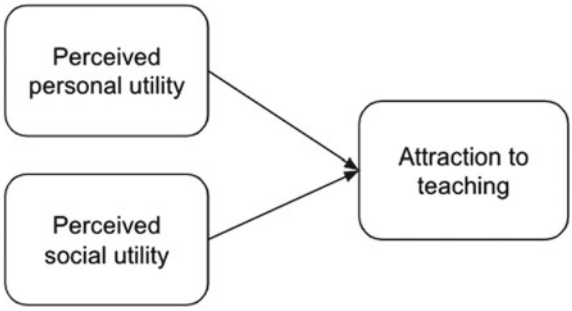

Fig. 10.2 Simple view of attraction to teaching (adapted from Klassen, Bardach, Rushby, & Durksen, 2021)

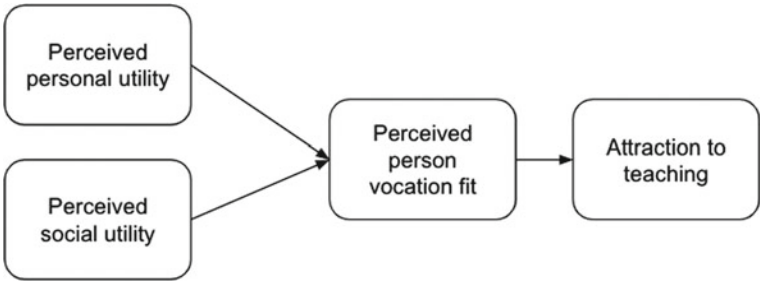

Fig. 10.3 Mediation model of teaching attraction (adapted from Klassen, Bardach, Rushby, & Durksen, 2021)

as job performance and work attitudes (e.g., Vogel & Feldman, 2009). A meta-analysis examining predictors of applicant attraction showed that perceived fit was the strongest predictor of applicant attraction across multiple stages of the recruitment process (Uggerslev et al., 2012). In education, De Cooman et al. (2009) found that selecting teachers who perceived a good fit between their own values and those of their schools were less likely to leave the profession. Findings from a meta-analysis conducted by Chapman et al. (2005) suggested that although characteristics of the job and the organization were key determinants of applicants' recruiting decisions, perceptions of fit were one of the strongest predictors of recruitment decisions. A mediation model of teacher recruitment includes personal and social utility, but these utility factors are mediated by perceptions of fit with the demands of teaching, as shown in Fig. 10.3.

How do education systems recruit applicants? Klassen, Bardach, Rushby, et al. (2021) examined the public-facing recruitment strategies and messages from two influential education organizations in England, Teach First (the largest provider of teacher training in England), and the Department for Education (DfE), which sets policies for education in England. Two sources of data were used for each organization, first, major policy documents outlining recruitment strategies were examined: for Teach First, *Britain at a crossroads* (Sundorph, 2018), and for the DfE, *Teacher recruitment and retention strategy* (Department for Education, 2019). Materials also included the advertising campaigns from each of the organizations, with Teach First's video and print campaigns (*After the outcome,* 2019) and the DfE's *Every lesson shapes a life.* Analysis of the source data included document analysis and an integrated deductive/inductive approach which coded meaning segments from text and video into primary and secondary coding units. For comparison purposes, the recruitment strategies and messages from the national health provider, the National Health Service (NHS), were examined (*Values Based Recruitment Framework,* NHS, 2016).

Findings of the analysis of recruitment messages from Teach First and the DfE (see Fig. 10.4) showed that recruitment messages from the education organizations included some reference to person-vocation fit in the advertising campaigns, but not in the policy documents, which focused on administrative changes and personal utility (DfE strategy document) and social utility and administrative changes (Teach

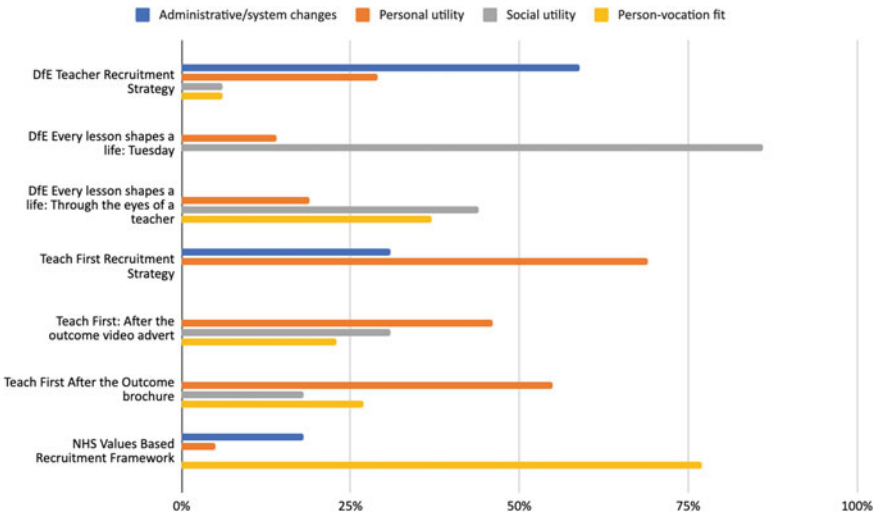

Fig. 10.4 Recruitment messages in strategy documents and advertising (adapted from Klassen, Bardach, Rushby, et al., 2021)

First document). The central focus of the Teach First video advertisements was on personal utility (e.g., "in terms of career progression… it's been a superb choice") and social utility (e.g., "let's give opportunities to kids who wouldn't normally have these opportunities"), with less attention paid to the fit between personal characteristics and teaching. The DfE advertising campaigns, such as *Every lesson shapes a life* (2020) strongly emphasized social utility, through references to shaping students' futures and making a social contribution. In contrast, messages from the NHS were highly skewed towards an emphasis on the importance of the match between the values espoused by the NHS and those values held by applicants: *there needs to be a good fit between an individual's personal values and those of the organisation* (p.52, NHS, 2016). The NHS emphasized that recruitment, selection, and long-term career development should be built on a core set of agreed values that are relevant across the career span.

10.2 Applying Lessons from Teacher Selection to Teacher Recruitment

Although teacher recruitment strategies that highlight social and personal utility can be effective, they can also attract applicants who may have an unrealistic view of teaching, resulting in high attrition rates due to poor fit (e.g., Baur et al., 2014). These traditional 'seduction' techniques can be complemented by recruitment methods that focus on the fit between applicants and a career in education.

Methods used for selection can be adapted for recruitment purposes. Situational judgment tests (SJTs)—typically used for selection purposes—can be repurposed to recruit potential applicants through an intervention called *realistic job previews* (RJPs), built on the tenets of person-vocation fit. RJPs are a recruitment method where potential applicants are presented with authentic workplace scenarios, similar to those presented for selection using SJTs, with the implicit question, *How well do you fit with this job?* Research on RJPs has been conducted for more than 50 years, with results showing that the intervention can result in better integration into a new field, leading to lower attrition and better workplace outcomes (Baur et al., 2014).

Including RJPs in the recruitment process provides three positive benefits: (a) they communicate an honest and believable portrayal of a job, leading to higher levels of applicant trust, (b) they reduce expectations so that new trainees are better prepared for inevitable workplace challenges, and (c) they lead to a self-selection process where applicants might decide not to pursue the profession if the perceived fit is poor. The combination of RJPs with person-vocation fit feedback helps to attract potential candidates who receive positive fit feedback and deters those who receive a message that they may not be well-suited to a particular vocation (Earnest et al., 2011).

RJPs to recruit STEM undergraduates into teaching. In many countries, there is an urgent need to improve the recruitment of STEM (Science, Technology, Engineering, and Mathematics) teachers: in the UK, the shortage of teachers in STEM-related fields has been acute, with shortfalls since at least 2011, and with growing shortages predicted (Foster, 2019). Recent research in the UK has investigated how RJPs might be used to attract undergraduate students in STEM subjects (science, technology, engineering, and mathematics) to consider a teaching career (Klassen, Granger, et al., 2021). In their study, Klassen and colleagues adapted materials from teacher selection tests to conduct a brief online RJP intervention that was delivered to STEM undergraduates, with post-test measures of self-efficacy for teaching, interest in teaching as a career, and match between personal attributes and the attributes required in a teaching career. Participants used their personal devices to view a series of brief classroom dilemmas in animated format. then to rate the appropriateness of three courses of action, and finally to provide a rationale for their response. Real-time feedback was provided on the alignment between their own ratings and those of expert teachers, and a 'fit' message based on their scoring profile was delivered to them (e.g., *Excellent fit – you think like a teacher! Your judgment matches closely with that of experienced teachers*).

Results from the study showed a statistically significant association between RJP scores and interest in a teaching career, but not between RJP scores and self-efficacy or attribute match. The findings held up after including the control variable of prior career intentions, suggesting that the RJP intervention increased interest in teaching as a career for those with and without prior interest in the career. Follow-up individual interviews found that the brief intervention was memorable and (for some participants) effective: *The activity showed that I had similar ideology as a teacher so made me think that maybe I would be suitable; it really helped me think about how teachers think*. Other participants were deterred from considering teaching as a

career: *I realize now that I'm just not patient enough (for teaching)*. Overall, the study showed that methods closely related to methods used for selection, i.e., SJTs, could provide a cost-effective and scalable approach to deliver a recruitment intervention. In addition, the methods adapted from teacher selection could also prove valuable for the development of prospective teachers, through an approach called *scenario-based learning*.

10.3 Developing Preservice Teachers Using a Scenario-Based Learning Approach

Although selection into a teacher education program represents a key starting point in a teacher's career, it is only the beginning of the story. Once an applicant is selected and starts a training program, developing the knowledge, skills, and attributes needed for successful practice becomes the goal. The simulated classroom situations that form the heart of SJTs used for selection (and also the realistic job previews used for recruitment) can be used for development purposes, in a method known as scenario-based learning or *SBL*.

Scenario-based learning. A new approach—SBL—to developing future teachers has recently been examined in the UK. The method of SBL is sometimes referred to as a *developmental* SJT, and it can provide a way to expose preservice teachers to a wide range of classroom contexts and situations in a low-risk learning environment, thus building teaching confidence (self-efficacy) and readiness to enter the classroom. The scenarios taken from SJT methodology provide the ideal vehicle to assess and develop classroom readiness, because the characteristics that make SJTs so valuable in personnel selection—their approximation of real-life scenarios, their adaptability to differing contexts, and their relative ease of administration—make them useful and adaptable to a wide range of classroom contexts. In spite of the apparent utility of SBL for developing training content, there is little empirical research exploring their use in teacher education, and a stronger research base is needed to understand the processes through which they influence learning. There is also a need for further exploration of which elements of scenario-based training (e.g., scenario content and length, scenario medium [video or text], feedback conditions [automated, targeted, supportive, etc.]) positively influence learning processes.

Scenario-based training has been used in some contexts outside of teacher education, for example, in training airline pilots (Fritzsche et al., 2006), and in health-related education, such as in medicine, nursing, and dentistry. Cox et al. (2017) compared the effects of SBL and lecture-based training on procedural and declarative knowledge on volunteers at a humanitarian disaster relief agency. Participants were given pre-tests assessing declarative knowledge about how to provide services after a natural disaster, followed by either lecture-based training or scenario-based training, and post-tests three weeks after the training. Participants in the scenario-based condition had higher procedural knowledge scores three weeks after the training than

those in the lecture-based condition ($d = 0.50$), with pre-test to post-test scores showing significant change only for participants in the scenario-based training condition. In a randomized control trial exploring the effects of scenario-based training on the communication competence of nurses, Hsu et al. (2015) found that nurses' mean communication scores and communication self-efficacy showed greater positive change in an SBL condition compared to a control group. In spite of studies showing the positive effects of SBLs for training, there has been little exploration of how scenario-based training might be useful in developing the competencies of prospective teachers.

Research using SBL for preservice teacher development. Researchers from the Teacher Selection Project recently developed an SBL intervention (Klassen, Bardach, Rushby, Maxwell, et al., 2021) based on teacher selection methods, and specifically, SJTs used to identify promising teaching candidates. They carried out a series of studies using SBL for developing preservice teachers, with an initial study showing that exposing participants to classroom scenarios in isolation was not sufficient to influence participants' self-efficacy and classroom readiness: the added components of self-reflection and feedback from experienced teachers provided a necessary boost to influence the outcome variables (Bardach et al., 2021).

A second study implemented a more intensive intervention: a four-session SBL 'module', with each session consisting of five video or text scenarios (Rushby & Klassen et al., 2021) focusing on the attributes of empathy and communication, emotion regulation, resilience and adaptability, and organization and planning (see Fig. 10.5 for a still shot of a video scenario). Participants were 463 preservice teachers enrolled in early years and primary ITE programs in Australia and the UK and who were preparing for entering the classroom as preservice teachers for a major practicum. Participants completed the four SBL sessions on the device of their choice (i.e., mobile phone, tablet, laptop) over a four-week period. For each scenario, participants:

1. Read or viewed the scenario
2. Rated the appropriateness of three possible response options (from *inappropriate* to *appropriate*
3. Provided a brief reflection for their responses
4. Viewed how experienced teachers rated the scenario responses, and
5. Received tailored feedback on their own responses

At the start of the intervention, and at the end of each session, participants completed brief measures of teaching self-efficacy (e.g., *I am confident that I can manage student behavior),* and emotional and cognitive classroom readiness (e.g., *I feel enthusiastic about teaching,* and, *I think I have the competencies needed to be a good teacher*).

Results from the four-week intervention showed statistically significant increases in SBL performance ($p < 0.05$), with post-hoc comparisons showing a significant difference between session 1 and the subsequent sessions. There was also a significant increase in mean self-efficacy (with a large effect size), emotional classroom readiness (medium effect size), and cognitive classroom readiness (large effect size).

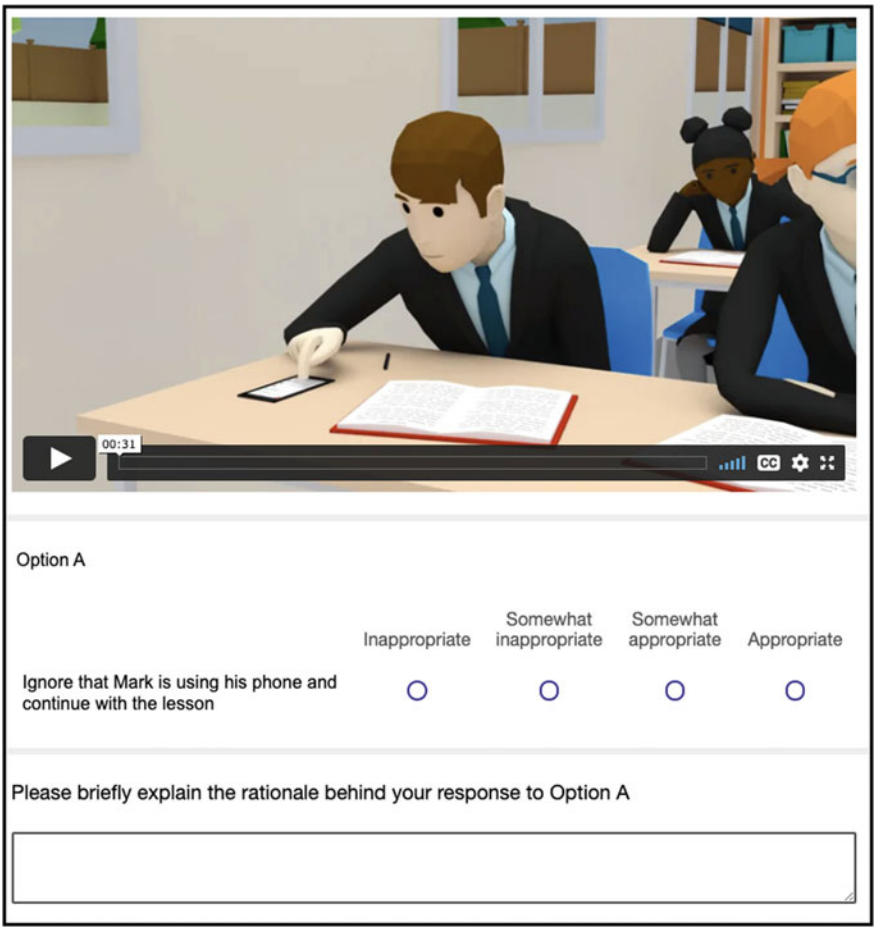

Fig. 10.5 Example item with automated feedback from 2020 SBLP pilot test

Reactions from participants to a series of open-ended questions revealed strong support for the effectiveness of the intervention, with participants highlighting that the authenticity of the scenarios helped them to feel more confident and prepared for their upcoming teaching placements. Participants also noted that the real-time feedback allowed them to make comparisons of their teaching decisions with the decision-making of expert teachers, and that the reflection opportunity encouraged critical thinking about these challenging situations: *It gave me the opportunity to think practically about situations and issues that I have not yet faced… Thinking more in-depth about real situations reduced my overall stress when it comes to thinking about teaching… It makes me feel more confident in my abilities and it helped me to consider how I might want to tackle such problems in the future.* The majority of participants (97.5%) found that the SBL intervention helped them feel

prepared to teach, and 91.3% reported feeling more confident about their teaching. This effective intervention, built on the research and methods from selection research, showed a high degree of effectiveness in boosting preservice teachers' confidence and readiness to enter the classroom as preservice teachers.

Scenario-based learning interventions are built using the same 'engine' as SJTs used for selection: authentic classroom situations that provide prospective teachers with a taste of classroom practice. Including SBL interventions in a teacher education program offers one way to provide novices with the chance to reflect on challenging classroom demands, and to receive tailored feedback from experts. Further work is needed to develop this intervention, but the findings from recent studies are promising across levels (primary and secondary) and a range of ITE programs internationally. For education organizations, the integration of recruitment, selection, and development activities can be built on a coherent framework of shared attributes that underpin teacher effectiveness.

10.4 Chapter Summary

Methods used in teacher selection, and especially the simulated classroom scenarios used as the basis for SJTs, can be used to inform teacher recruitment and development. These authentic slices of classroom practice provide a taste of teaching for potential applicants using a realistic job preview method and can also provide development opportunities for trainees in scenario-based learning applications. Recent research shows that using 'real-world' scenarios with targeted feedback provides a powerful message for recruitment purposes, where a person-vocation fit message can recruit applicants who may not have considered teaching as a career, but also for development purposes, where trainees can experience the classroom, and receive guidance from more experienced professional colleagues. The lessons learned from teacher selection can, indeed, be applied to the stages before and after the selection process and can transform the recruitment and development of high-quality prospective teachers. In the final chapter we propose some of the trends and likely future developments in teacher selection.

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