

Teacher Education Program Admission Criteria and What Beginning Teachers Need to know to be Successful Teachers

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Authors' Note

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Abstract

Most teacher education programs receive many more applications than they can accept. How should programs select among applicants and how should the programs evaluate the success of their selection processes? In this article we review the criteria utilized throughout North America to select prospective teachers into education programs. The strengths and weaknesses of each criterion are discussed. We propose a conceptual framework linking the knowledge, skills, and attitudes beginning teachers need, the preparation that teacher education programs provide, and the programs' application criteria. In the conclusion, the authors make numerous suggestions about how to adapt and change the current selection criteria so that the resultant product is the successful teacher. The authors challenge teacher education programs to critically examine their admission criteria.

Teacher Education Program Admission Criteria, and What Beginning Teachers Need to Know to be Successful Teachers

The primary goal of teacher education programs is to produce good teachers for elementary and secondary schools (Grant, Adamson, Craig, Marrin, & Squire, 1999; Lewis, Parsad, Carey, Bartfai, Farris, Smerdon, & Greene, 1999). The admission processes for these programs are expected to select applicants who will succeed in the preparatory programs and become good teachers (Darling-Hammond, 2000; Darling-Hammond, Berry, & Thoreson, 2001; Murray, 1986; Turner-Bisset, 2001). However, the relationship of admissions criteria to the knowledge, skills, and attitudes beginning teachers need and to the preparation provided by the programs are rarely made explicit.

Across North American universities, a range of admission policies has been established in an attempt to select teacher candidates who can function in the dynamic environment of education. The admissions process should be viewed as a gateway to professional practice, not just a process. As such, it must support the integrity of the teaching profession by ensuring the selection of those individuals who have the potential to become effective teachers.

This sounds simple, but requires teacher education programs to first define what it means to be “a good teacher,” particularly a good beginning teacher.

What is a Good Teacher?

Although there is wide agreement that schools need good teachers, there is little agreement about what it means to be a good teacher (Squires, 1999; Stronge, 2002; Turner-Bisset, 2001). Even the usefulness of the term is disputed, with some researchers choosing instead to focus on effective teaching (Cooper & McIntyre, 1996; Cullingford, 1995; Kyriacou, 1997; Perrott, 1982), creative teaching (Woods & Jeffery, 1996), veteran teachers (Shulman, 1987), quality teachers (Stones, 1992), and good enough teachers (Cullingford, 1995). To further complicate matters, these terms are often used interchangeably and the descriptive criteria differ from study to study (see Table 1).

Some jurisdictions have developed descriptions of what is expected of their teachers. For example, in its *Standards of Practice for the Teaching Profession* (1999), the Ontario College of Teachers (OCT) outlines standards for Ontario teachers in five areas: commitment to students and student learning, professional knowledge, teaching practice, leadership and community, and ongoing professional learning.

In this article, we propose a framework for examining the relationships between admission criteria and knowledge, skills, and attitudes beginning teachers need. Because both the design of a teacher education program and the admission criteria should begin with an understanding of the qualities beginning teachers will need to be successful in the classroom, we begin with a brief review of that literature.

What do Teacher Education Programs Teach?

Teacher education programs in North America can be divided into two types: (1) concurrent, where the pre-service teachers enter without a Bachelor's degree and receive their teacher preparation at the same time as university training in other areas, and (2) consecutive, where applicants must already have a Bachelor's degree relevant to the subject area in which they intend to teach. The instruction in the consecutive programs focuses on the "how" of teaching – pedagogical knowledge and pedagogical skills (Shulman, 1987), not the "what" to teach and consists of both formal instruction and supervised practice. The instruction in the concurrent programs includes the "what"-that is, content knowledge. Formal instruction in all programs covers general and subject-specific pedagogy (Stronge, 2002). Some programs include explicit instruction intended to affect pre-service teachers' attitudes, such as openness to learning about cultures other than their own. Supervised practice usually consists of teaching, under the supervision of the classroom's teacher, often with support and/or supervision from the teacher education program's faculty (Guyton & McIntyre, 1990).

What Knowledge, Skills, and Attitudes do Beginning Teachers Need?

Assuming that it is possible to develop a definition of a good teacher, should that definition apply equally to veteran teachers and to beginning teachers – that is, teachers who have completed a teacher education program and are in their first year of teaching independently? On the one hand, the students in a class will have the same needs, whether it is the teacher's first or fifteenth year, suggesting that the same definition should apply. On the other, is it reasonable to expect beginning teachers to meet the definition without several years of on-the-job apprenticeship?

Feiman-Nemser (2003) notes that students enrolled in a teacher education program can acquire subject matter knowledge, study the learning process, and grasp the rudiments of approaches to planning, instruction, and assessment. However, she emphasizes that a great mistake is made when new teachers are considered to be finished products that need only to refine learned skills. She explains that new teachers need three to four years to achieve

competence, and several more years to reach proficiency. They need time to learn how to teach in a particular context and acquire knowledge about the school community. A study of new teachers in Ontario (OCT, 2003) found that beginning teachers need to learn situationally-relevant approaches to subject matter; how to think on their feet about how to size up situations and decide what to do, and to study the effects of their decisions; and how these will affect their planning. These findings are consistent with suggestions by Ball and Cohen (1999).

Although researchers have focused on different aspects of what it means to be a good teacher, four are related to teachers' needs appear repeatedly in the literature: content knowledge, pedagogical knowledge, pedagogical skills, and attitudes.

Content knowledge. Beginning teachers need to understand the subject matter they are to teach (Monk, 1994; Shulman & Sykes, 1986). Monk (1994), for example found that the high school students of teachers who had taken more university courses in mathematics (but were not mathematics majors) performed better on tests of mathematics than students whose teachers had less mathematics content knowledge; similarly, students had higher science achievement if their teachers had taken more science courses.

Pedagogical knowledge. Beginning teachers need to understand how children learn and how to teach children with a variety of needs. Pedagogical knowledge may include "how to" lesson planning approaches, instructional strategies, and assessment techniques. It is worth noting that, while most researchers distinguish between content knowledge and pedagogical knowledge, Shulman (1987) proposed an amalgam of content knowledge and pedagogy that is unique to the teaching profession "[pedagogical content knowledge] represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction" (p.8).

Pedagogical skills. While pedagogical knowledge is knowing what to do in a situation, pedagogical skill is being able to do it. Particularly important is skill in communication, with research showing that students taught by teachers with excellent verbal ability and communication skills learn more than those taught by teachers with weaker skills (Darling-Hammond, 2000; Murnane, 1983; Stronge, 2002; Wenglinsky, 2000).

Attitudes. Sixty years ago, Hellfritzsch (1945) and Rostker (1945) demonstrated the importance of attitudes toward teaching. More recently, Stronge (2002) has shown the following attitudes to be necessary for pre-service teachers to become successful teachers: caring, fairness, respect for students, peers, parents and the general community, enthusiasm, motivation, and dedication to teaching (as distinct from dedication to the teaching profession).

Sockett (1993) suggested that, because teaching involves moral and ethical obligations to the students, their parents, the school, and communities, attitudes toward morality and ethics are also important. In addition, Darling-Hammond (1997) has noted that, while teachers need to understand cognitively the differences that exist among students, for example, in culture, language, and family structure, they also need an attitude of sensitivity toward children's experiences.

A belief that they are adequately prepared for independent teaching may also be an important attitude for beginning teachers. Darling-Hammond, Chung, & Frelow (2002) found that "sense of preparedness was by far the strongest predictor of teaching efficacy" (p. 294) and that teacher efficacy is positively correlated with teacher effectiveness, as measured by student learning.

Obviously the matter of selection, of inherent qualities, and of the attributes and knowledge that prospective teachers need is complex if not complicated. Thus the question about what teacher education programs can, do, and should teach remains unanswered.

What Knowledge, Skills, and Attitudes do Applicants to Teacher Education Programs Need?

It is important to distinguish which of the knowledge, skills and attitudes that beginning teachers need, can be learned in a teacher education program. Those that cannot be learned in the program must already be possessed by applicants prior to entry into the teacher education program. In addition, there may be characteristics of applicants that, while not directly necessary for beginning teachers, are nonetheless necessary for the pre-service teacher to be able to benefit from the preparation program. Figure 1 illustrates this complex relationship among what beginning teachers need, the preparation a program can provide, and admission criteria for a consecutive teacher education program. The focus of such a program is providing instruction and practice to build pedagogical knowledge and skills, with a lesser focus on content knowledge (Casey, 2005). The expectation is that, at completion of the program, the pre-service teachers will have the knowledge, skills, and attitudes needed to be good beginning teachers (Stronge, 2002). Simply put, the minimum requirements for admission to a teacher education program can be determined by subtracting the preparation provided by the program from the minimum requirements for a good beginning teacher. So, for example, if the teacher education program does not provide preparation in content knowledge, then the applicant must already possess the required content knowledge

when he/she begins the program. However, if the program does provide preparation in pedagogical knowledge and skills, then the applicant need only have a readiness to learn those aspects of being a good teacher. Some attitudes (Darling-Hammond, 1997) may be influenced by the program. However, other attitudes, such as sensitivity to religious and cultural differences, may be resistant to change. Figure 1, therefore, shows some attitudes included in the minimum requirements for admission, with some growth expected during the program. The figure, further, acknowledges that growth in all areas is likely to continue after the formal teacher education program.

There are several difficulties in applying this model to determine the minimum admission criteria for teacher education programs. The first is the lack of consensus of the requirements for a good beginning teacher. Second, even in a well-established teacher education program, the exact parameters of the preparation made available can be hard to define – for example, is support available for students with weak academic skills or weak language skills?; should special consideration be given to specific cultural groups that may be underrepresented in the teaching profession?; is support available for some students but not others?; is support available, but unlikely to fully compensate for weaknesses in those areas for certain applicants? To complicate matters, there may be disagreement among the instructors in the program as to what support should be available. Third, even if minimum requirements can be defined, they may be difficult to operationalize without the concurrence of the office of the registrar, the Faculty and faculty members and their representative groups, and perhaps the students themselves. In spite of these difficulties, this model provides a useful framework for examining the relationships among the requirements for a beginning teacher, the preparation provided by programs, and the admission criteria for those programs. Before discussing the implications of this model for setting admission requirements, however, we will review the research on admission criteria for teacher education programs.

How do Teacher Education Programs Select Among Applicants?

Most teacher education programs use students' grade point average (GPA) as a criterion for admission (Mikotovics & Crehan, 2002; Riggs & Riggs, 1990, 1991). Some programs combine GPA with ratings of a written profile, which requires applicants to describe relevant experiences and why they are interested in teaching (Smith & Pratt, 1996), or with letters of reference (Caskey, Peterson, & Temple, 2001) or with ratings of applicants' performance in an interview (Denner, Salzman, & Newsome, 2001). In the United States, standardized test results are commonly used. Results from specific pre-requisite education

courses also may be utilized. Finally, for applicants intending to become high school teachers, most consecutive programs require university-level coursework in the subject areas to be taught. Table 2 summarizes how these criteria relate to minimum requirements for content knowledge and attitudes and readiness to learn pedagogical knowledge and skills.

Grade point average. GPA is the most widely used criterion for admission to teacher education programs (Basom, Rush & Machell, 1994; Laman & Reeves, 1983; Lawrence & Crehan, 2001; Mikitovics & Crehan, 2002; Riggs & Riggs, 1990, 1991; Riggs, Riggs & Sandlin, 1992). It is generally believed to measure academic ability and so is thought to predict success in the instructional parts of the programs. However, a more important reason for its popularity as a criterion is likely its ready availability from students' transcripts and its use by other advanced degree programs. As Smith and Pratt (1996) note, "The practice conforms to the conventional academic practice; rejected applicants rarely challenge it" (p. 43). Past success is usually used as an indicator of future success and few have found a weakness with this argument. In Canada most teacher education programs use GPA as a criterion (Smith & Pratt, 1996). However, although it is the most used criterion for admission into teacher education programs, research has shown a weak relation between GPA and performance in those programs (Byrnes, Kiger, & Shechtman, 2000; Olstad, Beal, & Marrett, 1987; Salzman, 1991).

Written profile. The second most widely used criterion for entrance into teacher education programs is an applicant profile, typically consisting of written responses to specific questions about relevant experiences and interest in teaching. Such a profile includes much of the same information that could be elicited in an individual interview. The responses may be reviewed by the teacher education program for evidence of appropriate preparation and genuine interest and for evidence of unsuitability for teaching (Caskey, Peterson & Temple, 2001). In Ontario, all but one teacher education program uses some form of profile or essay response for screening applicants (Teacher Education Application Services, TEAS, 2004).

Caskey, Peterson, & Temple (2001) suggest that profiles can reveal (1) motivation related to pupil needs, as opposed to self interests, (2) congruence with the philosophy and mission of the teacher education program, (3) a vision of need or quality in schools, and (4) an ability to express oneself in a compelling manner in writing. At one Canadian University, for example, applicants who on their profiles demonstrate histories of commitment and the ability to work with others in helping capacities are given preference (Smith & Pratt, 1996). However, other factors can affect how profiles are rated: for example, Smith and Pratt (1996) found that evaluators' ratings of the profiles were also affected by the gender of the applicant and whether or not the statement was typed.

Interview. The interview provides a unique opportunity for the teacher education program to gather information about an applicant's language proficiency, attitudes, and interpersonal skills, in addition to information similar to that which could be gleaned from a written profile (Denner et al., 2001). Some Ontario teacher education programs use interviews as part of their admission process (Smith & Pratt, 1996).

Jacobowitz (1994) suggested that interviews are necessary to ensure the selection of applicants who understand the moral and ethical dimensions of teaching, because the applicants "cannot develop a value-based and attitudinal perspective for enculturating the young within the time frame 'of the interview' unless they are clearly predisposed to those ends" (Jacobowitz, 1994, p. 46). On a written profile, in contrast, it is possible for the applicant to copy materials from other sources or obtain help in preparing his/her responses. However, Jacobowitz (1994) concluded that the interview process was not sufficient either to determine whether applicants possessed the desired attributes or to assess their ability.

Interview ratings have also been found to be of limited value for predicting student teaching performance (Byrnes et al., 2000; Caskey et al., 2001; Denner et al., 2001; Haberman, 1987; Malvern, 1991). However, Shechtman (1992) found that ratings of applicants' performance in a group interview predicted student teaching performance and that this type of interview was a better predictor than academic criteria. Similarly, several researchers have presented evidence that ratings on individual interviews can be good predictors of future teaching success (Haberman, 1987; Malvern, 1991).

The interview process can be particularly time consuming and costly both for programs and applicants. Because of this, some programs invite to be interviewed only applicants who have met other admission criteria. Even so, interviews have been criticized as an unnecessary barrier for applicants who live at a distance from the program and also because they may reward interviewees' personal characteristics such as confidence, sociability, appearance, and attitude which might be in congruence with those of the interviewers (Breland, 1971; Kahl, 1980; Malvern, 1991).

Letters of reference. Many programs require letters of reference (Caskey et al., 2001); in fact, Laman and Reeves (1983) found that written recommendations were required by all of the 147 U.S. programs they surveyed. These letters vary in content from a discussion of the applicant's academic competencies to descriptions of personal characteristics. Some programs pose specific questions to which referees respond in prose or using a rating scale (Jacobowitz, 1994). However, because the applicant usually selects the referees, it is expected that the letters will be favorable.

Standardized tests. Many teacher education programs in the U.S. use results from standardized tests in their selection processes. For example, 28 states and the District of Columbia require applicants to pass the Praxis I: Pre Professional Skills Assessments (Educational Testing Service, 2006), which tests basic skills in reading, writing, and mathematics knowledge. There does not appear to be a consistent protocol for the use of or selection of standardized tests in the United States, and none are used in Canada as the mandate for Education falls under the jurisdiction of provincial governments.

Courses in education. In some concurrent teacher education programs, applicants are admitted directly into the program in their first year of university. Other programs, however, require students to apply after the first or second year of undergraduate courses. Some of these programs require students, who wish to apply, to take pre-requisite courses in pedagogical methods, child psychology, or educational psychology and use performance in these courses as an admission criterion. Riggs and Riggs (1991), analyzing the records of 437 elementary pre-service teachers found that marks in two prerequisite education courses correlated .24 and .37 with subsequent student teaching performance (GPA correlated >.28). Based on this finding they recommended that teacher education programs consider postponement of formal admission to their programs until students have successfully completed at least one pedagogical methods course. No literature was added which investigated the use of pre-requisite education courses at Canadian institutions.

Courses in subject area. Applicants for consecutive programs who wish to train to be elementary school teachers are often assumed to have adequate subject matter knowledge if they have a Bachelor's degree (although some programs will require them to also pass tests of reading, writing, and mathematics). Applicants for preparation as high school teachers, however, typically must provide proof of adequate knowledge of the subject areas they intend to teach. Often, this requirement is met by providing a university transcript showing completion of the required numbers of courses in the specialization areas. Marks (1990) recommended that high school teachers have a minimum requirement of six semester courses in their major teaching area. More recently, Stotsky (2006) has suggested that the content of the course should be considered and that university academic departments should be held responsible for the content knowledge of elementary and high school teachers in their disciplines.

Standardized admission tests. A great deal of research has analyzed the relationship between standardized admission tests and student teaching success, but found these tests to have little usefulness as predictors (Basom et al., 1994; Dybdahl, Shaw & Edwards, 1997; Lawrence & Crehan, 2001; Marso & Pigge, 1991; Olstad et al., 1987; Riggs & Riggs, 1990,

1991; Riggs et al., 1992; Salzman, 1991; Sentz, 1991). Of course, the use of these tests as admission criteria means that potential applicants who failed the tests are not granted admission, so no data are available on how well they would have performed in the program. This is similar to the difficulty with research on the GPA. With either admission criterion, in order to determine its true relationship with performance after admission, it would be necessary to admit all applicants, regardless of their levels on the criteria.

Multiple criteria. Where programs use multiple criteria, these may be requested at once or in stages. For example, only those applicants to Queen's University's program who pass the first round of screening are asked to complete a profile that consists of a personal statement describing life experiences, employment and training, volunteer or service experiences, work with diverse groups, languages spoken, special skills, and leadership roles (Smith & Pratt, 1996).

The Relationships of the Applicants Selected, Success in the Program, and Good Student and Beginning Teacher Ratings

In order to determine whether the applicants selected by teacher education programs go on to succeed as beginning teachers, measures of the preservice teachers' success teaching independently after completion of the program are needed. However, measures of success – whether focusing on the teacher's performance or the students' learning – in independent teaching are difficult for programs to obtain and, where obtainable, may not be reliable or aggregated at the right level (Darling-Hammond, 2006; Wineburg, 2006). As a result, most studies of teacher education program admission criteria have used success in the program itself as indicators of the probability of future success. A few studies have used judgments of preparedness for teaching (Imbimbo & Silvernail, 1999; Silvernail, 1998). Unfortunately, each of these indicators is incomplete. The program's courses may tap pedagogical knowledge and student teaching performance may indicate pedagogical skills in supervised practice, but neither measures whether the preservice teacher can subsequently apply the knowledge and skills in independent teaching. Judgments of preparedness can include attitudes as well as pedagogical knowledge and skills, but, depending on who provides the judgments, are based on preservice teachers' self-assessments, their teacher education instructors' assessments based on observations of coursework and student teaching, or their supervising teachers' assessments of their student teaching (Casey, 2005).

In spite of its limitations, the research examining the relationship of admission criteria with success in teacher education program coursework and student teaching is worth

considering. After all, success in a teacher education program is a prerequisite in most jurisdictions for obtaining certification to teach, so such success is in itself important. In addition, it seems reasonable to assume, as many researchers do, that performance in student teaching is related to performance in independent teaching. Finally, the judgments of teacher education instructors and supervising teachers about preservice teachers' preparedness to teach are based on observations of their student teaching, plus conversations with the preservice teachers that may illuminate their professional attitudes, and, in the case of the instructors, knowledge of their performance in the program's coursework.

Overall success in a teacher education program. A few studies have examined the ability of admission criteria to predict overall success in a teacher education program. Caskey, Peterson, and Temple (2001), for example, analyzed the admission data for 82 applicants who were subsequently admitted to a one-year consecutive teacher education program. They found that ratings of reference letters and a writing test score were most highly correlated with overall program performance ($r = .40$ and $r = .30$, respectively). The correlation with GPA was $.11$; with personal statement, $.16$; with performance in a group problem solving activity, $.20$; and with a holistic rating of the complete application, $.03$. Together, the six admission criteria accounted for 38% of the variance in program performance.

An obvious marker of overall success in a program would be whether or not a preservice teacher failed the program. However, very few preservice teachers fail in their programs. In fact, Johnson and Yates (1982) reported that 15% of teacher education programs never fail a student and 65% fail up to a maximum of 1% in a given academic year.

Student teaching performance. Several studies have looked at the ability of admission criteria to predict performance in student teaching. Olstad, Beal, Noe, and Schaefer (1983) investigated the predictive value of entrance GPA for success in student teaching for 190 preservice teachers (95 elementary, 95 secondary) and found that the top third of the elementary preservice teachers, ranked based on their practice teaching performance, had significantly higher entry GPAs than those in the middle or lower third. While the same pattern held for secondary preservice teachers, the difference was not significant. Riggs and Riggs (1991), as cited earlier, found a correlation of $.28$ between entrance GPA and student teaching performance. Salzman (1991), in a study of 610 elementary and secondary preservice teachers, found that GPA was correlated $.22$ with ratings of teaching plans during student teaching, $.19$ with classroom procedures, and $.13$ with interpersonal skills ($r = .13$); only the correlation with teaching plans was statistically significant. Marso and Pigge (1991) found that GPA ($r = .33$) was significantly correlated with student teaching performance (self predictions of future

success were also significantly correlated with performance, as were some personality inventory scores).

Part of the difficulty with research involving applicants' GPA is that programs that require high GPAs for admission necessarily have a restricted range of GPAs among their preservice teachers, making it difficult to detect a significant relationship between GPA and any other variable, including student teaching performance. In addition, failure to detect a significant relationship does not mean that requiring a minimum GPA is not useful; unfortunately, it is not possible to know whether the students who were not eligible for admission because they did not have a high enough GPA would have succeeded had they been admitted.

Interview ratings, whether from individual interviews or group interviews, have also been found to have some value for predicting student teaching performance. Malvern (1991) compared the interview ratings of 112 preservice secondary teachers with their subsequent performance in student teaching and in coursework and found a clear relationship between the interview ratings and student teaching performance: Of the 20 who received the top grade of A on the interview, 83% performed very well in student teaching, compared to 54% of those who received a B and 32% with a C. Malvern (1991) found no discernable relationship between the interview ratings and general course performance in the teacher education program, however. Baskin, Ross, and Smith (1996) interviewed 68 preservice teachers using the Urban Teacher Selection Interview, a structured interview designed to identify individuals who are likely to succeed in high-stress urban school settings, and found that it was significantly predictive of subsequent ratings of communication skill during their student teaching ($r = .27$), but not of other aspects of student teaching performance. More recently, Byrnes, Kiger, and Shechtman (2000) studied 65 preservice teachers, comparing their university supervisors' and supervising teachers' ratings of their student teaching performance with their ratings from a group interview intended to assess applicants' verbal, interpersonal, and leadership skills. The group interview ratings added significantly to the prediction of the university supervisors' ratings of the preservice teachers' student teaching performance, after controlling for the contributions of GPA and ACT test scores, but not to the prediction of the supervising teachers' ratings.

A great deal of research in the United States has analyzed the relationship between standardized admission tests and student teaching success, but found these tests to have little usefulness as predictors. Salzman (1991) found that the Pre-Professional Skills Test (PPST) Reading score was significantly correlated with ratings of classroom procedures ($r = .29$) in student teaching and with interpersonal skills ($r = .23$), but not with teaching plans ($r = .19$). PPST Writing and Mathematics scores were not significantly correlated with any aspect of

student teaching performance. Mikitovics and Crehan (2002) found that, for a sample of 1,062 preservice teachers (both elementary and secondary), PPST Reading, Writing and Mathematics scores were not significantly correlated with student teaching performance, but were correlated .27, .28, and .19, respectively, with GPA. GPA, however, was correlated .10 with student teaching performance. Riggs and Riggs (1991) found that scores on the National Teachers Examination (NTE) correlated only .02 with student teaching.

Of course, the use of these tests as admission criteria means that potential applicants who fail the tests are not granted admission, so it is impossible to know how well they would have performed in the program. This is similar to the difficulty with research on GPA. For any admission criterion, in order to determine its true relationship with performance after admission, it would be necessary to admit all applicants, regardless of their levels on the selection criterion.

Before leaving the discussion of research on prediction of student teaching performance, it is worth mentioning an additional difficulty with this research. Ratings of student teaching performance are subjective and rarely nuanced. For example, Riggs and Riggs (1991) found that supervising teachers' evaluations, after daily observation and interaction with preservice teachers, tended to be either completely positive or completely negative. The measure of performance is often a pass or fail, which lacks sensitivity when used as an outcome variable.

Preparedness. In addition to examining performance in teacher education program coursework and student teaching, in order to predict success as an independent teacher, it is possible to ask preservice teachers themselves or their instructors and supervising teachers whether they believe they are prepared to teach independently. In a study of 102 preservice secondary mathematics teachers, Casey (2005) compared admission criteria with judgments of preparedness. She found that entrance GPA was significantly correlated with the instructors' judgments of the preservice teachers' preparedness to promote student learning ($r = .34$), to teach critical thinking ($r = .34$) and to use technology ($r = .22$), but not with instructional leadership and understanding learners. GPA was not significantly correlated with the preservice teachers' self-ratings on the same scales or with ratings by their supervising teachers. Ratings of the written profile used in the admission process were not significantly correlated with any of the judgments of preparedness.

Success as a beginning teacher. Only a few studies have examined the relationship of admission criteria to eventual teaching success. However, recent requirements in the U.S. for teacher education programs to provide evidence of their effectiveness have prompted many programs to begin to collect post-graduation data. For example, Wineburg (2006), in a recent survey of American Association of State Colleges and Universities with teacher education

programs, found that about half of the programs follow teachers for at least a year after graduation. Most of the programs reported collecting data through surveys of the graduates, but many also solicited information about teacher performance and student achievement from the schools in which their graduates teach. Wineburg (2006) notes, however, that the information about student achievement, in particular, is of limited value, as aggregated scores are usually available at the school, rather than the classroom, level.

Schallock, Schallock, and Ayres (2006), in enumerating the requirements for teacher education programs to fulfill their potential as sites for research into what works in teacher preparation, describe the need for systematic data collection on “candidate entry to and progression through a preparation program ... coupled to the performance of program completers as early career teachers” (p. 115). To support such research, Darling-Hammond (2006) reports several California universities are undertaking a project to link teacher education program performance with post-graduation teacher performance assessments. The beginning teachers will create a portfolio based on a week-long unit, with portfolio entries to include videotapes of their teaching and samples of student work, as well as plans for and reflections on the unit. While it may be several years before these initiatives bear fruit, they will eventually permit teacher education programs to determine the extent to which their admission criteria and the preparation they provide are yielding successful beginning teachers.

Conclusion

Initial teacher education programs need to continually re-evaluate their admission criteria. GPA is most likely to continue to be used, if only as a minimum requirement. Written profiles, however, should be reviewed regularly to be sure they provide opportunities for the applicant to demonstrate the knowledge, skills, and attitudes that are required for entrance into a program. In addition, the way those materials are used in the admission process needs to be carefully evaluated to make sure that each criterion is used in a way that is clearly justified. For example, because of the diversity of the population in Ontario, teacher education programs now want applicants to articulate the knowledge/skills and attitudes they have as a result of experiences with various diverse groups. Perhaps another focus could be applicants' knowledge/skills and attitudes towards literacy/numeracy across the curriculum.

Teacher education programs need to critically examine their admission criteria to make sure that those criteria, along with the preparation they provide, will lead to their graduates being successful beginning teachers. This is not a call for higher admission standards – indeed, it may be that the minimum GPA requirements of some programs are unjustified or that applicants who use educational jargon in their written profiles are unfairly advantaged – but a

call for admission criteria that are based on the research about what beginning teachers need and realistic assessments of the preparation teacher education programs can offer.

One of the difficulties in doing research on admission criteria is the lack of information about how the pre-service teachers ultimately perform as independent teachers. It is apparent that there is a need for a longitudinal study that follows Teacher Candidates from the time they enter a teacher education program into, at least, the first five years of teaching. A longitudinal study could investigate the following important questions: Are the teachers experiencing success in the first few years of teaching and if so, how is this success measured?; Do Teacher Candidates'/teachers' ratings of preparedness differ between the end of the teacher education program and the first year of teaching?; and, Are GPA and Profile Grades good predictors of success in teaching?

In order to provide Teacher Candidates with consistent feedback on their practice teaching during the teacher education experience, the practice teaching evaluations could be modified to be consistent with current teacher evaluation practices. Consistency of language in the evaluation process, from the practice teaching experience to the actual teaching experience, could provide more clarity and understanding of how individuals are performing in the role of teacher. It would also allow them to see a continuum in terms of their growth as teachers. Additionally, a consistent evaluation process for both Teacher Candidates and independent teachers would provide more consistent data for a longitudinal study on Teacher Candidates/teachers and allow for more accurate comparisons.

A more difficult question to address is: Is knowledge of subject matter the most important aspect of teaching (knowledge) or is good teaching more aligned with personality traits and characteristics (skills/attitudes)? These questions need to be addressed by teacher education programs in order to gain valuable insight into the practice teaching experience. This insight could help the administrators of teacher education programs to better manage and set up the practice teaching sessions so that teacher candidates can have experiences that build on the knowledge and skills they already possess.

The Importance of Associate Teachers

Associate Teachers play a very important role in the development of Teacher Candidates. The practice teaching experiences contribute to the perspectives and insights of beginning teachers. During the practice teaching sessions, Associate Teachers need to provide daily constructive feedback in a supportive and inclusive environment. Associate Teachers are usually exemplary teachers selected by the principal. The assumption made is that, because

they are exemplary teachers, they are also excellent at evaluating teaching and giving appropriate, constructive feedback. This assumption is quite possibly made at the expense of the Teacher Candidates. The Associate Teachers are obviously well qualified to teach, but are they qualified to critique Teacher Candidates on their teaching? Further research into this area is paramount, as the practice teaching experience plays such an important role in the teacher education program.

Application of Research to Other Groups in Teacher Education Programs

It is unknown whether the results of this study are directly applicable to other groups within the educational milieu. Therefore, it would be relevant to collect similar data from Teacher Candidates representative of other I/S (secondary) subject areas, as well as Teacher Candidates from Primary/Junior/Intermediate (elementary) programs. Additionally, it would be prudent to collect data from Teacher Candidates from teacher education programs other than OISE/UT.

This study provides an up-to-date compilation of information about the predictive value of admission criteria and also highlights the need for more research examining the relationship of admission criteria to teacher education program preparation and beginning teachers' needs and performance. It is imperative that longitudinal research, which examines the relationship between entrance criteria and successful teaching, be carried out.

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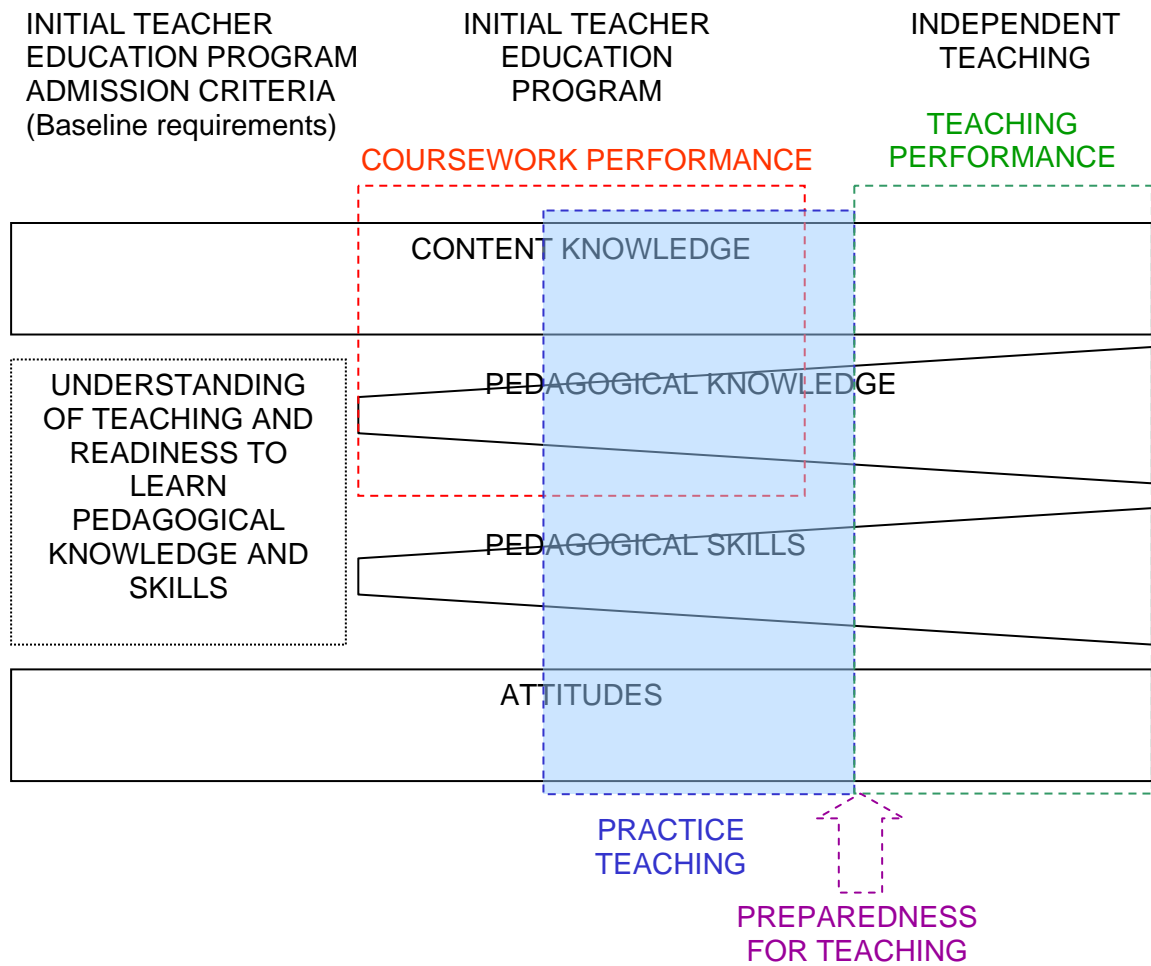


Figure 1. Minimum requirements for admission, growth expected during the teacher education program, and minimum requirements for and growth during independent teaching.

Table 1

Descriptive Terms for Teachers

Type	Description	Source
analytical	uses observation techniques	Cruikshank & Haefele, 2001
competent	passes tests to demonstrate requisite attributes	Cruikshank & Haefele, 2001
creative	usually uses constructivist approaches	Woods & Jeffery 1996
diversity-responsive	shows sensitivity to all students	Cruikshank & Haefele, 2001
dutiful	performs assigned duties well	Cruikshank & Haefele, 2001
effective	brings about higher student achievement	Perrott, 1982; Cullingford, 1995; Cooper & McIntyre, 1996; Kyriacou, 1997
expert	has extensive and accessible knowledge and is time efficient	Cruikshank & Haefele 2001
good	meets standards	Brown & McIntyre, 1993
good enough	almost meets standards	Cullingford, 1995
ideal	meets standards	Cruikshank & Haefele, 2001
quality	meets standards	Stones, 1992
reflective	examines the art and science of teaching to become more effective	Cruikshank & Haefele, 2001
respected	possesses and demonstrates qualities that are virtuous	Cruikshank & Haefele, 2001
satisfying	pleases students and parents	Cruikshank & Haefele, 2001
veteran	has experience	Shulman, 1987

Table 2

Potential Relationships Between Admission Criteria and Minimum Requirements

Admission Criterion	Minimum Requirement		
	Content Knowledge	Readiness to Learn Pedagogical Knowledge and Skills	Attitudes
Grade Point Average	+	+	*
Coursework in Subject Area	++	+	*
Written Profile (Responses to Questions About Relevant Experiences and Interest in Teaching)	*	++	++
Interview		++	++
Letters of Reference	+	++	++
Standardized Test Results	++	*	*
Performance in Pre-Requisite Education Courses	*	++	+

Note. + weak relationship; ++ strong relationship; * no relationship