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ADMISSION TO TEACHER EDUCATION PROGRAMS: THE PROBLEM AND TWO APPROACHES TO ADDRESSING IT

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What qualities should admission criteria identify in applicants to teacher education programs in order to select those that should be admitted into the program from those applying? One approach to addressing this selection problem is to link the desired qualities of applicants to the desired qualities with which students in the program are to graduate. In this paper I, first, reconstruct in some detail an approach that puts at its centre a functional relationship between these two types of qualities. Then I discuss the challenges of this approach and offer a second approach to the admission problem that does not face the same kind of challenges. The second approach puts at its centre the linking of the selection problem to the design of the teacher education program itself.

Introduction

Whenever there are more applications to a teacher education program than spaces are available, a *selection problem* arises: How to select those who are to be admitted into the program from those who have applied. While in this scenario the selection problem arises by default, it can also arise if there are not more applicants than spaces available. In this latter case the selection problem arises if the concern for admission goes beyond a concern for filling spaces to include a concern for certain qualities of those admitted into the program. In both cases, the selection problem is addressed by establishing some kind of admission standards that define (a) minimum requirements for admission into the program and (b) a ranking scale for at least those applicants who fulfill those minimum requirements. These minimum requirements are program

(*secondary*) requirements set by the faculty of education and are applied to applicants in addition to university admission (*primary*) requirements, like having a high school diploma and at least a certain high school GPA (for concurrent programs) or a bachelors degree (for after-degree programs), and so on.

Any response to the selection problem has a normative and an empirical component. The normative component consists of the normative judgment about what the particular desirable “outcomes” for students enrolled in the program are to be. When we select applicants, we have particular desirable outcomes in mind for which we want to find candidates suitable to achieve those outcomes. The empirical component of the selection problem consists of the empirical question what initial qualities in applicants make it more likely for those admitted into a program to be successful in it relative to the desirable outcomes. This also makes clear that by necessity the empirical component is dependent on the normative component.

There is only a small body of more recent literature that focuses on admission issues into teacher education programs in North America. Simplified, this body of literature can be divided into two groups, each group linked more or less with one of the two components of the selection problem just described, although some overlap is generally unavoidable as just explained. The literature linked to the normative component of the selection problem focuses primarily on an imperative of a diversification of the teaching force in the face of a linguistically and culturally diverse student population in North America, arguing that to adequately serve the educational needs of a diverse student population, the linguistic and cultural background of the teaching force should reflect that diversity (see, for instance, Sleeter, 2008; Zumwalt & Craig, 2008). The literature linked to the empirical component of the selection problem tries to establish connections between qualities of applicants as measured by different assessment tools – like

GPA, interviews, or written profiles – and educational learning outcomes for those admitted into the program – like successful student teaching, successful program completion, or successful teaching after graduation (for a more recent overview of some of this literature see Casey & Childs, 2007).

In this paper I will focus on the attempt of the latter kind of literature to contribute to the selection problem and will argue that these contributions – for reasons of principles – are less promising in addressing the issue of the education of teachers than approaches that focus on program qualities. First, I will argue that any investigation that will contribute to the empirical component of the selection problem will have to make particular assumptions that will lead to what I will call *the admission problem*. I will then argue that a certain type of model offered as a response to the admission problem is less meaningful as a response, particularly in light of two sets of assumptions made in teacher education program designs. Then I will argue for an alternative approach to the admission problem that focuses more on the design of the teacher education program itself than on the problem of trying to make the right choice in the selection of applicants.

The Admission Problem: A First Conceptualization

The selection problem – the question of how to select applicants from the pool of applicants – is so general, that one cannot truly inquire into the question without making some fundamental conceptual assumptions that frame the question. With such a set of assumptions about what needs to be considered for an inquiry into the selection problem, the selection problem can then be articulated as *the admission problem*, as I will call it. In this section I will characterize one particular set of such assumptions presented in Casey and Childs's (2007) work,

because those seem to me developed enough for a basis for considering inquiries into the empirical component of the selection problem. Casey and Childs have developed their model for exactly that purpose: “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” (Casey & Childs, 2007, p. 6). Compared to the selection problem, which is easily articulated, the admission problem can have different versions, depending on the kind of assumptions made. In this section I articulate one version of the admission problem based on the assumptions discussed in this section. In the next section I argue for a modification of those assumptions, which results in a modified version of the admission problem.

As a first step in framing the selection problem as the admission problem, one needs to make the assumptions (a) that students are admitted with certain qualities and that those qualities are relevant to consider for the selection problem, and (b) that the program is intentionally as well as factually leading to students having certain qualities at the time they graduate from the program and that, thus, it is relevant to the selection problem to consider those “program outcome qualities”. These assumptions lead to a framework for the admission problem that has the following two central components: (1) the qualities of the applicants; and (2) the vision of the qualities of the graduates of the program. Within this framework, the admission problem is then the problem: What qualities do applicants need to have so that at the end of the program they will (most likely) have developed the envisioned qualities for program graduates? Admission requirements, then, need to be such that they screen for such qualities in applicants. Casey and Childs (2007) start out with such a framework when they write: “In this article, we propose a

framework for examining the relationship between admission criteria and knowledge, skills, and attitudes beginning teachers need” (p. 3).

However, Casey and Childs go beyond this initial input-output framework by considering what happens in between the “input” and the “output”, which leads to one additional aspect relevant for framing the selection problem and leading to a more appropriate conceptualization of the admission problem. They write:

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. . . . 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. (Casey & Childs, 2007, p. 5)

Casey and Childs point to the importance for the selection problem of *the kind of program the applicants are admitted to* when they suggest that one needs to consider “those [qualities of applicants] that cannot be learned in the program”. Here they could refer to qualities that a university-based teacher education program simply cannot develop but that can only be developed through enculturation and embeddedness as a teacher in a particular professional context. However, I assume, that Casey and Childs have (also) in mind qualities that can be developed in one type of program but less so or not at all in another type of program. For instance, the length of a program will certainly be an important factor for which type of qualities can or cannot be developed; or the length of field experiences and the level of integration of field experiences and university-based course work will certainly be important factors as well. (For

illustrative examples of how the qualities of the programs can make a difference in the qualities of the graduating students, see the case studies in Darling-Hammond, 2006.)

The Casey and Childs quotation also points to the assumptions we make about the impact that a certain kind of program has on the development on teacher candidates. When they note that “there may be characteristics of applicants that, while not directly necessary for beginning teacher, are nonetheless necessary for the pre-service teacher to be able to benefit from the preparation program”, they point to the importance of considering our assumptions about *the impact that a program has on teacher candidates’ development as teachers.*

Taking the arguments in the previous two paragraphs together, Casey and Childs’ model suggests a third component of a framework for the selection problem: (3) the impact of the particular kind of program on the applicants’ development as teachers. The three components of the Casey-Childs model of a framework for the selection problem are:

- (1) the qualities of the applicants;
- (2) the vision of the qualities of the graduates of the program;
- (3) the impact of the particular kind of program on the applicants’ development as teachers.

Interestingly, all studies I could find that contribute to the empirical component of the selection problem fall short of the Casey-Childs model. Those studies are designed within a pure input-output framework in which certain qualities of those admitted into a teacher education program are assessed – generally through the use of standardized tests – and then correlated to some kind of success criteria at the time of graduation (see, for instance, Byrnes, Kiger, & Shechtman, 2003; Mayer Demetrulias, Chiodo, & Diekman, 1990; Riggs, Riggs, & Sandlin, 1992; and the meta-analysis in Smith & Pratt, 1996). For instance, Mikitovics & Crehan’s study (2002) inquires into the appropriateness of the Pre-Professional Skills Test (PPST), used in a number of

US states as an admission tool to teacher education programs, as a predictor of success in the program, where “success” is defined by a successful teaching practicum. Those correlation studies simply ignore the possibility that the very qualities of the particular program contribute to the correlation, and that a program with different programs can provide for a different correlation result.

With the Casey-Childs framework for the selection problem, *the admission problem* is then the problem to identify those qualities that applicants would need to have so that the vision for those graduating from the program can be accomplished with those applicants admitted, relative to the kind of program and the assumptions made about the impact of that program on the applicants’ development as teachers. At the heart of the admission problem is the identification of particular qualities of applicants.

The admission problem has clearly normative aspects; for instance, it is a normative question what qualities a program wants to develop in teacher candidates through their enrollment in the program. With normative questions responded to, the admission problem can then be inquired into to identify the required qualities of the applicants. The answer to the admission problem can then guide the development of *admission criteria*, which would be the criteria used in the assessment of the identified qualities in applicants to a particular teacher education program.

Addressing the admission problem, however, is more than developing admission criteria. The admission problem is a *gate keeping* problem. Selecting applicants for certain qualities always means not selecting other applicants because they do not have these – but rather other – qualities. However, the gates erected through the admission criteria developed in response to the admission problem do not just leave those applicants out that were not admitted, but they also

leave those out who do not meet the *primary* criteria for program admission (see the introduction section above) *as well as* those who do not apply to the program in the first place. The admission problem has to be understood as giving consideration to the make-up of the pool of applicants. For instance, in order to diversify the teaching force with respect to its socio-cultural make-up, the “vision of the qualities of the graduates of the program” might include non-educatable qualities like the socio-cultural and ethnic background of applicants. In order to address that admission criteria are only applied to those who apply to the program *and* fulfill the primary criteria, the program might need to engage an active recruitment strategy to diversify the pool of applicants accordingly, and to engage an early support strategy to help desired applicants to meet the primary criteria (more on this below).

The Admission Problem Revisited

The second component of the Casey-Childs framework model for the selection problem needs further discussion. In their discussion of this component, Casey and Childs (2007, pp. 3-4) ask what qualities (“what knowledge, skills, and attitudes”, p. 3) beginning teachers need. In their response to this question, they point out, with reference to Feiman-Nemser (2003), that beginning teachers need to continue learning to teach in the specific context of their work, and that, thus, the vision of the qualities of the graduates of a teacher education program cannot / should not be identical to a vision of the qualities of a proficient teacher. Using the categories of “content knowledge”, “pedagogical knowledge”, “pedagogical skills”, and “attitudes”, they then characterize some of the central qualities for beginning teachers some of the literature on learning to teach lists for these different categories. However, in addition to the distinction between qualities of beginning teachers and qualities of proficient teachers there are *two*

additional aspects that need to be considered for the question about the vision of the qualities of the graduates of a teacher education program. The first has to do with the question of *what kind of practice* teacher candidates are prepared for in a program and the second one has to do with the question of whose vision of the qualities of beginning teachers should be considered. I discuss the questions in turn.

Component 3 in the Casey-Childs framework model considers that the same kind of program can have a different impact on applicants with different entrance qualities. Similarly, one should consider that the same kind of working conditions in schools can have different impacts on the practice teachers enact depending on the qualities of the graduates of a teacher education program. In other words, if the concern for teacher education programs is the kind of teaching practice that teacher candidates engage in after they graduated from the program, *the working conditions in schools* those graduates will staff will need to be considered in the vision of the qualities of program graduates. For example, the vision of qualities of graduates of a teacher education program may include a positive attitude towards and the competency to engage in professional learning communities in schools. Let us, however, assume that the working conditions in the schools those teacher candidates move into are such that there are no functioning professional learning communities or the demands by administrators for involvement in after-school activities are so high that there is no time and room for the teaching staff for involvement in professional learning communities. In this case, the vision of the qualities of graduates of the program (the vision of a ‘good beginning teacher’) needs to be augmented by the consideration of these particular working conditions, which then might lead to a program that helps teacher candidates with not just developing the inclination and ability to participate in professional learning communities, but also help them to develop the resilience, competencies

and skills to *build* professional learning communities and to actively shape the culture and practices in a school.

Anecdotal evidence of Canadian teacher education program design suggests to me that the predominant factor that influences the vision of the qualities of the graduates of the program is the views of the faculty members of the respective teacher education institution about what those qualities should be. The institutionally guaranteed academic freedom of professorial instructors can serve as the foundation for that. However, these views can be in conflict with those who actually select and hire applicants for teaching positions in schools. For instance, I was attending what could be called an articulation meeting concerning the practicum component within a particular teacher education program between faculty members and representatives of a number of school divisions. In that meeting one divisional administrator responded to the question of the school divisional perspective on an issue that arose for them with this particular teacher education program by saying that the program does not seem to prepare its graduates for teaching a “balanced literacy program”; if, he said, applicants are not able to demonstrate familiarity with a balanced literacy program in a job interview in his division, the applicants would not be hired. It seems to me that the *hiring conditions* in school divisions the graduates of a teacher education program most likely are hired by need to be considered in the design of a teacher education program; not just for the sake of the chances of the graduates of being hired into those divisions, but also for the sake of respect to a professional culture that exists in a school division. However, preparing for and respecting an existing professional culture does not exclude preparing for what Cochran-Smith has called “teaching against the grain” (Cochran-Smith, 2004), but one cannot teach against the grain – for the benefit of disadvantaged students, for instance – if one is not hired into a position that allows one to teach against the grain.

A teacher education program can respond in different ways to the working and hiring conditions of school divisions, but it should respond to them. Preparing teacher candidates to “teach against the grain”, for instance, includes *by default* the consideration of working conditions in schools, because it is only against those conditions that one can establish what “against the grain” means. The working and hiring conditions should be included into a framework for addressing the selection problem, since those two conditions (should) impact the design of a teacher education program, which, in turn, should impact the qualities of applicants that the program is looking for. Taking “teaching against the grain” again as an example, a teacher education program that wants to prepare teachers to teach against the grain might want to look for applicants with qualities like tenacity, deep conviction about advocacy work of teachers, and so on. Hence, I suggest an extended version of the Casey-Childs framework model for the selection problem:

- (1) the qualities of the applicants;
- (2) the vision of the qualities of the graduates of the program;
- (3) the impact of the particular kind of program on the applicants’ development as teachers;
- (4) the working conditions in schools;
- (5) the hiring criteria of school divisions.

One could make the point that conditions 4 and 5 might already be included in a program’s vision of the qualities of the graduates of the program. However, for two reasons it seems to me important to consider those two as separate components of a framework for the selection problem. First, anecdotal evidence suggests to me that Canadian teacher education institutions *do generally not* consider those two components in a substantial way in the design and enactment of their program. Second, the components in the framework are there to outline what needs to be

considered when inquiring into the qualities that applicants to a (particular) teacher education program need to have. Even if working and hiring conditions are considered in a vision of the qualities of graduates of a program, the *actual* working and hiring conditions would need to be established for any such inquiry.

The *admission problem* that develops from the modified framework for the selection problem, changes then to the problem to identify those qualities that applicants would need to have so that the vision for those graduating from the program (considering the working and hiring conditions in school divisions) can be accomplished with those applicants admitted, relative to the kind of program and the assumptions made about the impact of that program on the applicants' development as teachers. The *admission criteria* linked to this admission problem are then those criteria to be used for assessing the identified qualities in applicants to the respective teacher education program.

There are different ways in which a teacher education program can address the admission problem. According to one such approach – which I will call “the fixed-components approach” to the admission problem – a teacher education program would establish its admission criteria as follows: It would, first, establish the vision of the qualities that it wants its program graduates to have with consideration given to the working conditions and hiring criteria of school divisions; then it would draw on research that addresses the impact of certain features of programs on certain qualities of students in the program; based on such research the program can then establish which qualities applicants would need for the particular program so that the program can have the desired impact on those admitted into the program. The admission criteria would then be established to assess for those qualities in applicants. Casey and Childs's (2007) model

of a framework for the selection problem seems to suggest such an approach when they write that “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” (p. 14). It also is an approach that seems to quite “naturally” derive once one has identified the admission problem in the way it is done in this section.

In the remainder of this paper I will discuss the limitations of the fixed-components approach to the admission problem and propose an alternative way of addressing the problem, a way that, if adopted, would imply quite a different programming than can be generally found in Canadian teacher education programs. In the next section I will first develop the background required for the following exploration of the limitations of the fixed-components approach to the admission problem. For this background work I will discuss two types of assumptions made by teacher education programs that need to be considered for a response to the admission problem.

Assumptions in Teacher Education Programs

In this section I discuss two sets of assumptions made in teacher education programs that are of importance to the admission problem. The first set concerns assumptions about the purpose of a teacher education program. The second set concerns assumptions about the process of learning to teach.

The Purpose of a Teacher Education Program and the Admission Problem

What is the purpose of teacher education (for a particular program)? One easy answer is to graduate good (beginning) teachers. But that shifts the question only to the question ‘What is a good (beginning) teacher?’ The answer that a program gives to this question impacts the vision

of the qualities that the program wishes for its graduates, and as such, the answer impacts the program's response to the admission problem in a crucial way.

One aspect that seems generally central to the purpose of a teacher education program as it is relevant for the admission problem is the distinction between helping teachers to teach well and helping teachers to be good teachers. The former focuses on the *doing* aspect of good teaching, while the latter emphasizes the *being* aspect of being a good teacher. From a more philosophical perspective, this distinction is often framed in the Aristotelian terms of 'techne' and 'phronesis'. In terms of good teaching practice, focusing on teaching as engaging in techne would emphasize the more technical aspects of the teaching practice, like knowing when and how to use which particular teaching strategy in which learning situation with which students. Focusing on teaching as engaging in phronesis or 'practical wisdom', the emphasis would be more on the moral aspect of decision making in one's teaching practice, emphasizing that the educational aspects of teachers' practice lies in the decisions that they make in the course of their practice and in the face of their students' needs. Such decisions require well developed competencies and sensitivities, both of which are deeply moral in character, and as such they are more than technical proficiencies. Phelan (2005) talks in this context of "the capacity for discernment": being able to "dwell within the rough ground of experience, appreciate its complexity and deep interpretability, and respond ethically" (p. 62).

Although somewhat different, this distinction between practice as techne and practice as phronesis finds its analogy in the more recent distinction in the educational psychology literature between routine expertise and adaptive expertise, the former referring to expertise that consists in applying developed competencies with greater and greater efficiency, while "adaptive experts are able to approach new situations flexibly . . . are metacognitive and continually question their

current levels of expertise and attempts to move beyond them” (National Research Council, 2000, p. 48); “adaptive experts are much more likely to change their core competencies and continually expand the breadth and depth of their expertise” (Bransford, Derry, Berliner, & Hammerness, 2005, p. 49). Routine experts score high in the efficiency dimension, while adaptive experts score not only high in that dimension but also in the innovation dimension.

How are those two distinctions connected? It is the technical aspect of teaching practice that one can develop a routine for, and it seems to me that practical routine expertise can only refer to the more technical aspects of a practice (maybe that is even a defining characteristic of the technical aspect of a practice that it can be ‘routinized’). On the other hand, decision making in the face of student needs is deeply moral in character and has to be at the core of non-routine practice, requiring adaptability of one’s ideas, principles and notion of purpose to the given context and specific circumstances. For this aspect of the teaching practice, a teacher does not need to develop her routine expertise but rather needs to further develop her capacity for moral sensitivity and situational interpretation, in other words, she needs to develop (this particular aspect of) her adaptive expertise.

The different orientations in programs and program implementation that come with a program’s stronger focus on teachers’ practical qualities (techne and routine expertise) versus a program’s stronger focus on personal qualities of teachers (phronesis and adaptive expertise) have different implications for the admission selection criteria. A stronger focus on phronesis and adaptive expertise in a teacher education program will require a stronger screening for what one might call potential of or even existence of practical wisdom or adaptive expertise, while a program that focuses on developing techne or routine expertise will require less prerequisites for admission and might even have to rely on developing this kind of expertise in the program

because this kind of expertise is very much profession-specific and cannot be expected to be there already – even rudimentary – at the time of application.

This last point refers to a second implication of the different orientation for the question of admission criteria. Teaching as *techne* or routine teaching expertise are generally neutral with respect to personal qualities of those having this kind of expertise. The qualities are very much profession-specific. Having practical wisdom, like moral sensitivity, on the other hand, is very much a personal quality that people can have already developed, and can even be considered a necessary requirement to be successful in a program that focuses on the development of *phronesis* or adaptive expertise, particularly, if the program is short in duration, making the development of a quality like adaptive expertise or ‘moral wisdom’ more challenging.

Learning to Teach and the Admission Problem

One important aspect in teacher candidates’ learning to teach is what Kennedy (1999, p. 70) has called ‘the Problem of Enactment’, with which she refers to the problems that arise when teachers (teacher candidates) use different frames of reference when talking about and enacting ideas of teaching and learning, like ‘constructivist teaching’ or ‘group work’. Furthermore, even within the same frame of reference, ideas about teaching and learning have usually a range of possible ways in which those ideas can be enacted. This aspect of teacher candidates’ learning to teach is framed by what Lortie (1975) has called ‘the Apprenticeship of Observation’. When teacher candidates enter a teacher education program, they have had about 15,000 hours of observation of and experience with teaching in schools through their own K-12 schooling. As Lortie (1975) points out, because of the particular nature of school teaching and learning, being a student functions for many students as an *apprenticeship for being a teacher*:

The interaction [in the classroom] is not passive observation . . . the student learns to ‘take the role’ of the classroom teacher, to engage in at least enough empathy to anticipate the teacher’s probable reaction to his behaviour. This requires that the student project himself into the teacher’s position and imagine how he feels about various student actions. (pp. 61-62)

Both together, the Problem of Enactment and the Apprenticeship of Observation, suggest that the pre-conceived notions of teaching and learning that teacher candidates bring to the program frame *what* they experience and *how* they experience it in the program.

There are suggestions of how to engage teacher candidates in activities that can support a shift in teacher candidates’ conceptualization of teaching (see, for instance, Feiman-Nemser & Featherstone, 1992). However, the literature on learning to teach is replete with studies suggesting the difficulties that initial teacher education programs have with changing teacher candidates’ beliefs about different aspects of teaching and student learning (Korthagen, 2004; Richardson, 1996).

What this means for the admission problem is that if a changed belief system about teaching and learning is part of the desired qualities of graduates of a program and changing beliefs is difficult to accomplish in the program, then teacher candidates would need to come with a belief system about teaching and learning that matches to a good part the desired belief system by graduation, or they would need to come into the program with some kind of flexible belief system that can be influenced within the program. A program’s assumptions about the notion of teaching and learning become, thus, central aspects to be considered for addressing the admission problem, that is, for determining the admission criteria to the program.

In the next section I argue that the discussion in this section helps illuminate the limitations of the fixed-components approach to the admission problem.

The Fixed-Components Approach to the Admission Problem and Its Limitations

Above I briefly outlined a particular approach to the admission problem as it will manifest itself for a particular teacher education program: Starting with the vision of the qualities that it wants its program graduates to have with consideration given to the working and hiring criteria of school divisions, the program would then draw on research that addresses the impact of certain features of programs on certain qualities of students in the program. Based on such research the program can then establish which qualities applicants would need for the particular program so that the program can have the desired impact on those admitted into the program. I call such an approach to the admission problem *the fixed-components approach*, since components (2) – (5) of the Casey-Childs framework model (see section three above) are fixed components in the model, and it is the qualities of the applicants (the first component) that is the component that is adjusted to fit the components that are already fixed in place. In other words, the qualities required for the applicants are conceptualized as *a function of the other four components*. (I chose the label “fixed-components approach” to emphasize one particular aspect of this approach in order to allow contrasting it better with another model that I discuss below.)

The fixed-components approach to the admission problem faces some serious limitations as a response to the admission problem. The first limitation comes from the implicit assumptions about what needs to be in place for the approach to provide a response to the admission problem. The second limitation comes from the above discussed assumptions that teacher education programs make (explicitly or implicitly) about the purpose of teacher education and about learning to teach. Taking those assumptions seriously, the fixed-components approach can only in a very limited way respond to the responsiveness that those assumptions suggest for teacher education programs. I discuss each limitation in turn.

To provide suggestions for adequate admission criteria relative to the program and relative to a vision of qualities for graduating teacher candidates, the fixed-components approach requires having the following established:

- (a) the qualities of teacher candidates at the time of graduation need to be clearly defined;
- (b) adequate methods to assess and evaluate applicants with respect to those admission qualities need to be defined and enacted;
- (c) the features of the program and its implementation need to be clearly understood and kept “constant”;
- (d) the assumption has to be made that the teacher candidates with particular qualities (as characterized by the admission criteria) enrolled in the program develop certain qualities by the time of graduation; this assumption needs to be supported by sufficient evidence;
- (e) hiring criteria from the different school divisions in which graduates will work need to be clearly defined;
- (f) working conditions in schools in which graduates will work need to be clearly defined and “translated” into qualities of program graduates.

This list should make the first limitation of the fixed-components approach clear: there simply has to be too much in place and assumed to stay “fixed” for the approach to allow deriving a meaningful response to the admission problem. Point (a), for instance, would require a high level of agreement on what the respective teacher education program is to accomplish with respect to graduates’ qualities – which seems an insurmountable condition, considering the generally wide range of visions for the qualities with which graduates of a teacher education program are to graduate. But even if a common view on those qualities could be clearly defined, point (c) would require that the implementation of this vision in the individual courses – which is ultimately what establishes the learning opportunities for teacher candidates – need to be in line with the vision and kept “constant” (fixed) over time and across courses. This requirement seems far too

demanding, considering the reality of Canadian teacher education programs, in which course instructors change regularly, in which teaching practices vary among different instructors, and in which a culture of autonomous, uncoordinated course teaching is the rule. If we include the practicum component, which, in Canadian teacher education programs, is almost exclusively organized in complete separation from the university-based coursework with different instructors and uncoordinated purposes, the possibility of a common implementation of the same vision of qualities with which teacher candidates are to graduate from their teacher education program seems very unlikely.

Because what the approach needs is not in place or difficult to put in place, the fixed-components approach to the admission problem is very limited in what it can actually provide as a response to the question of the qualities that applicants should have when entering a (particular) teacher education program.

Another challenge to the fixed-components approach comes with the assumptions made in any teacher education program around its purpose. If a program – in its response to the purpose question – emphasizes the notion of teaching as engaging in phronesis or adaptive expertise, the program aims for the development of more fundamental human qualities in teacher candidates than a program would that focuses on just the technical aspects of teaching practices. It aims for the development of capacities of moral sensitivity and situational interpretation and flexibility and of the willingness and the capacity to continually expand one's expertise. Such capacities are fundamental human qualities in the sense that they concern the way one lives one's life and concern not just technical aspects of a practice that is limited to the school context. My assumption is that those fundamental human qualities develop quite differently in those that are admitted to a program, regardless of the admission criteria. In order to facilitate, scaffold or

occasion the development of such fundamental human qualities, a teacher education program and its implementation need to be very flexible in order to be *responsive* enough to the different developmental needs of teacher candidates as they are helped with the development of such capacities. The fixed-components approach – in order for it to derive a meaningful response to the admission problem – requires quite the opposite to such a responsive program and implementation. As point (c) in the list above suggests, the fixed-components approach requires a “fixed” program and a “fixed” implementation of the program. This means that the fixed-components approach is only of limited value in helping to establish meaningful admission criteria for programs which make assumptions about the purpose of teacher education that give a central role to the notion of phronesis or adaptive expertise – and I do hope that many programs do.

A similar limitation of the fixed-components approach is suggested when taking seriously the Problem of Enactment and the Apprenticeship of Observation. Both together suggest for a teacher education program that it needs to work with teacher candidates on their conceptual framework and their belief system about teaching and learning. Working with someone’s belief system and conceptual framework faces similar challenges as educating for teaching as enacting phronesis: these frameworks and belief systems will develop, so I assume, quite differently in those that are admitted to a program regardless of the admission criteria. Hence, the program and its implementation require a far more individualized and flexible educational approach in the program than the fixed-components approach can afford to allow.

To summarize, using the fixed-components approach to address the admission problem faces two big challenges. First, the approach requires things to be in place and stay constant in a program and its implementation that are far too variable and dynamic. Second, the approach does

not allow for the flexibility in the programming and its implementation to address central assumptions that some programs might want to make about their purpose and about the process of learning to teach. The fixed-components approach seems to be too linear and mechanistic and not enough organic and flexible. In the next section I propose an approach to responding to the admission problem that addresses these limitations inherent in the fixed-components approach.

The Program-Adaptability Approach to the Admission Problem

The admission problem, as defined in this paper, is the problem of identifying those qualities that applicants would need to have so that the vision for those graduating from the program can be accomplished with those applicants admitted, relative to the kind of program and the assumptions made about the impact of the program on the applicants' development as teachers. In its response to the admission problem, the fixed-components approach conceptualizes the qualities required for admission as a *function of* the other elements, particularly the features of the program and the assumptions about the impact of the program on teacher candidates' development during the program. A central, and as I argued problematic, feature of this approach is that in order to establish the admission criteria those other elements need to be kept constant.

In this section I suggest a different approach to the admission problem. In this approach the functional interpretation of the admission problem is replaced by a view that sees the interaction between the qualities that admitted teacher candidates bring into the program and the assumptions about the impact of the program on those teacher candidates as far more dynamic. At the centre of this dynamic approach lies the idea that the program is designed to be *responsive* to the qualities that teacher candidates bring with them, which leads to a different take on the

admission problem. In contrast to the fixed-component approach, in this approach the program is adaptable to the individual learning needs that admitted applicants have at the time of admission as well as at different times of their development within the program, for which reason I call the approach *the program-adaptability approach to the admission problem*.

The fixed-components approach wants to establish admission criteria into a program as a *function* of, particularly, the specific features of the program, which requires that those features need to be kept constant. This approach, I argued above, results in two important limitations of this approach in establishing admission criteria. First, the approach requires program features to be kept constant that cannot be assumed to stay constant. Second, the approach assumes that it is possible to identify admission criteria that select applicants in such a way that those selected can develop the desired qualities of program graduates in a program that provides the same learning context to all those admitted, which, I argued, is not a very convincing assumption. In the program-adaptability approach to the admission problem the problem is not interpreted in a functional way. Responding to the very issue underlying those two challenges, the program-adaptability approach rather responds by suggesting a flexible and responsive program structure so that the program can help those admitted into the program to achieve the desired qualities of program graduates in response to the qualities they have at the time of their admission and their individual learning needs. Rather than having a program with fixed elements in place, like the number and types of courses to be taken, the number and types of field experiences to be taken, etc., an adaptable program is concerned with understanding where admitted students come from, where they need to go from where they currently are, and what help they need in order to get there, so that the experiences in the program can be adjusted to the individual student to provide the needed help and support. The courses within the program would need to allow the instructors

to respond to the identified needs of students at the individual level and link the courses in a way that allows a team of instructors to teach from a *developmental* perspective over the time of the whole program. A flexible and responsive (adaptive) program can much better respond to the Problem of Enactment and the Apprenticeship of Observation discussed above, because such a program is by design responsive to the individual development of teacher candidates' pre-conceived notions about teaching and learning relative to the vision of teaching and learning promoted in the program. An adaptive program can also respond to varying working and hiring conditions that might exist, for instance, between rural and inner city school divisions.

The view of an adaptive program to the education of teachers finds support more generally in the literature on human development, particularly Bronfenbrenner's (1979, 2005a) bioecological approach to human development, in which he conceptualizes human development as resulting from a dynamic interaction between a person's attributes at a given time and the contextual conditions for that person during that time. The fixed-components approach to the admission problem acknowledges that different teacher education programs have a different impact on applicants with different personal attributes. This acknowledgement is the very foundation for the functional approach in establishing the needed attributes of applicants for a particular program in the fixed-components approach to the admission problem. However, when Bronfenbrenner writes that "particular environmental conditions have been shown to produce different developmental consequences depending on the personal characteristics of individuals living in that environment." (Bronfenbrenner, 2005b, p. 109), he is doing so recognizing (a) that those environments (contexts) are not constant over the full length of a teacher education program, and (b) that the influence is bi-directional, meaning that it is not just the program context that influences an admitted applicant's attributes but that it is also the admitted

applicant's attributes that shape the context. The functional approach of the fixed-component approach does not account for (a) nor (b).

In terms of researching the impact of a teacher education program on teacher candidates' development as teachers, the view of a dynamic interaction between learning context and developing personal attributes leads to a research program that gives consideration to such interaction without making the claim that it is possible to establish a *functional* link between the features of a teacher education program and a set of desired attributes for program graduates on one hand and the attributes of applicants to the program on the other hand. There are some fairly recent studies that inquire into the impact of teacher education programs on teacher candidates' development as teachers from a bioecological approach to teacher development (Lewthwaite, 2008, 2010, McMillan & Falkenberg, 2009). What such kind of studies promise to provide teacher educators with is a deeper understanding of how particular qualities in particular teacher candidates interact with particular micro and macro contexts into which teacher candidates are embedded while learning to teach. While those studies might reveal some generalized understanding of what qualities are more beneficial for teacher candidates to enter with in a particular teacher education program in order to develop as teachers with certain qualities, the epistemological stance of these studies is more characterized by the recognition that learning to teach – as is human development in general – is a complex process of a dynamic, individual-specific interaction between a teacher candidate's particular attributes and the qualities of the different levels of contexts into which the candidate is embedded.

The idea of adjusting a teacher education program to fit the needs of those admitted into the program is not new. It can be found in cases where teacher educators have tried to diversify the teaching force. For instance, in their efforts to diversify the teaching force in the south of the

USA through the education of more African-American teachers, the Southern Education Foundation

proposed the value-added philosophy, which comes from the discipline of economics, and holds that quality, in large measure, depends on *how* elements are blended and crafted to produce a final product. . . . Applied to the recruitment and preparation of teachers, this philosophy supports taking teacher applicants from where they are to where they need to be. Instead of recruiting the “best and brightest,” the added-value philosophy looks for other primary indicators of ability and future success. (Lau, Dandy, & Hoffman, 2007, p. 30)

Based on this value-added philosophy, the Pathways Program at Armstrong Atlantic State University (Lau, Dandy, & Hoffman, 2007) “screened carefully, then prepared [90 African American teachers] in a rigorous university-based programme that was tailored to their needs, including providing various forms of financial, social, and academic support” (Sleeter, 2008, p. 1949).

The admission problem was the problem to identify those qualities that applicants would need to have so that the vision for those graduating from the program (considering the working and hiring conditions in school divisions) can be accomplished with those applicants admitted, relative to the kind of program and the assumptions made about the impact of that program on the applicants’ development as teachers. Embedded in a flexible and responsive program, the program-adaptability approach can approach the admission problem in a non-functional way: The elements that the fixed-components approach needs to assume to be constant (particularly the program features and its implementation) the program-adaptability approach accepts as being flexible, as just discussed. What then does the program-adaptability approach have to say in response to the admission problem, and, particularly, what does a program-adaptability approach suggest as admission criteria?

Even in a program that is flexible and responsive, certain attributes are required for those coming into the program. As mentioned above, beliefs about teaching and learning, about diversity and inclusion, the willingness and the capacity to reflect on one's own practices, and so on concern human attributes that might be difficult to change in a one or two-year teacher education program, even if the program has a developmental approach to the education of teachers. However, the requirements for certain attributes can be far less prescriptive than in the fixed-component approach, since in the program-adaptability approach the relationship between program design and attributes of applicants is bi-directional. The concern for the admission problem is not abdicated in the program-adaptability approach. However, this concern is now more qualified, shifting from a concern focused on admitting applicants that have qualities fitting the program with its fixed features to admitting applicants that have qualities that the program "can work with" in order to help the admitted applicants develop the qualities envisioned by the program for its graduates. The program-adaptability approach does not rely on the availability of findings from a larger range of correlation research that links incoming qualities of admitted students with outcome qualities of graduating students and the qualities of a teacher education program. Rather, with a flexible program structure, the assumptions about the impact of the program on those admitted into the program do not have to be established in general but rather can be investigated on a case by case basis. The impact actually has to be established on a case by case basis anyway in order to establish the learning needs of those admitted into the program and decide on how to respond programmatically to those needs.

This greater flexibility of the program-adaptability approach in terms of required attributes by admitted applicants at the time of admission makes this approach *compensatory* with respect to the admission criteria that an admission committee would need to establish to

address the selection problem. (I thank an anonymous reviewer of a previous version of this paper for requesting to have this point made more explicit and for suggesting the term.) The compensatory nature of the program-adaptability approach allows the program to admit applicants that are weaker with respect to certain desired attributes while being stronger in others, while the fixed-components approach requires a fixed set of minimum attributes *all* of which would need to be fulfilled by applicants for admission into the program.

The compensatory program-adaptability approach to the admission criteria allows those criteria to include to a much higher degree than in the fixed-components approach *non-educatable* qualities like the ethnic-cultural background of applicants. This point can be of greater relevance in efforts of teacher education programs to diversify the teaching force, as the Pathways Program at Armstrong Atlantic State University, referenced above, illustrates. In the Canadian context, this point of considering non-educatable qualities for admission into a teacher education program has been, for instance, made for Aboriginal teacher education. In a literature review on the implications of teacher recruitment, retention and training on First Nations education (Archibald, Pidgeon, Janvier, Commodore, & McCormick, 2002), the authors reference literature that supports the view of the importance and benefits of having Aboriginal teachers in the classroom (p. 10). While discussing the larger issue of diversifying the teaching force in light of the admission problem would go beyond the scope of this paper, I have indicated how the two different approaches to the admission problem discussed in this paper would contribute somewhat differently to the issue.

Conclusion

The concern for the qualities of those admitted into a teacher education program is not just a concern for how to select among the applicants those that are to be submitted, but it is an important part of the concern for graduating good beginning teachers. The admission problem is an attempt to articulate this very concern. Simplified, the admission problem links the qualities of those admitted into the program with those qualities with which they are to graduate relative to the particular type of program. In this paper I have reconstructed one particular response to the admission problem that has at its core the idea of the admission criteria being *a function* of the desired qualities of the graduates and the type of program relative to the working and hiring conditions in school divisions. Then I argued that a *functional* approach to the admission problem (the fixed-components approach) would be only of limited success in light of the great variation *within* any given program and in light of the learning needs that come with assumptions about the purpose of a particular teacher education program and about how teacher candidates learn to teach. Then I argued that in light of these limitations of the functional approach a more dynamic and responsive approach to the admission problem (the program-adaptability approach) seems to be more promising to achieve the desired learning outcome of a teacher education program. The program-adaptability approach to the admission program is grounded in the idea of a program that is flexible and adaptable to be able to respond to the learning needs as they develop in those admitted into the program in order to pick up the students where they are relative to the learning objective of the program and move them closer to those goals. Such a program idea has, quite obviously, implications for teacher education program design and implementation. An adequate discussion of those implications would go far beyond the scope of this paper, however, following I like to outline a few possibilities.

The required flexibility and adaptability of a teacher education program suggested by the program-adaptability approach to the admission problem is partially a matter of degree. I am not aware of any current teacher education program that is designed with a high degree of adaptability and flexibility to adjust to teacher candidates' needs during the program. However, there are a number of features of current programs and design and implementation ideas in the literature that provide some possibilities for programs that want to be responsive to the on-going needs of their students and want to employ the program-adaptability approach to the admission problem. Following I discuss briefly a few of those possibilities.

A more flexible program will most likely involve smaller units of education, for instance in the form of independently functioning cohorts of teacher candidates, as is the case in the teacher education programs at Simon Fraser University and the University of British Columbia. Smaller units, so I assume, are more flexible to respond to the varying needs of students in the program. With cohorts, for instance, a program can much easier respond to the cluster of learning needs that are identified in the compensatory program-adaptability approach to admission.

A responsive program will also require consistency in its responsiveness. Such consistency seems to require a close collaboration among and regular consultations between the different teacher educators involved in supporting the learning of a teacher candidate. Some programs use a team approach with regular meetings to provide this level of collaboration and consultation, like the Communities of Inquiry in Teacher Education (CITE) program at the University of British Columbia (Erickson, Far Darling, & Clarke, 2005; Far Darling, Erickson, & Clarke, 2007).

A consistent and responsive program seems to also have different expectations of the teacher educators involved, particularly the university-based ones. First, a consistently

responsive program seems to work against the idea of course instructors as specialists in a narrow domain relevant to teaching. Designing a program that requires a large number of specialist instructors runs counter to attempts of bringing the teacher educators that support the learning of each teacher candidate closer together for collaboration and consultations (see previous paragraph). Rather, the teacher educators would need to expand their understanding of different domains relevant to teaching so that the number of instructors involved in a program can be reduced to a number that makes collaboration and regular consultations manageable.

Second, enacting a responsive teacher education program requires from the teacher educators on-going assessment of learning needs and the understanding of the dynamic interaction between their students' attributes and the programmatic contexts provided in the program in general and their teaching in particular. This requires some form of on-going action research in which teacher educators not just assess the individual learning needs of their students but also contribute to the overall understanding of the dynamic interaction between teacher candidates' attributes and learning contexts provided in the program. The relatively new field of self-study of teacher education practices (Loughran, Hamilton, LaBoskey, & Russell, 2004) provides a possible foundation for such action research projects.

As just mentioned, a responsive program will need to establish in some form the on-going learning needs of those admitted into the program. Some teacher education scholars have emphasized the importance of the "teacher identity" of teacher candidates as the foundation upon which teacher candidates develop as teachers and learn in programs and from program experiences (Bullough, 1997; Korthagen, 2004). In response to this view of the importance of the teacher identity with which teacher candidates come into a program, Queen's University has changed its teacher education program in the late 1990s to include longer field-experiences right

from the start of the program (Upites, 1999; Russell, 2005). These attempts to work with where teacher candidates are at a given time to help them to go where the teacher education program wants its graduates to be fit very well with the more general view of “constructivist teacher education” (Richardson, 1997), and “student-centred teacher education” (Lunenberg & Korthagen, 2003).

These examples demonstrate some possibilities for designing and implementing a flexible and responsive teacher education program that can provide the context for the program-adaptability approach to the admission problem. From the perspective of the program-adaptability approach, addressing the admission problem is inextricably linked to the design of a teacher education program and its implementation. The arguments laid out in this paper suggest that in order to appropriately address teacher candidates’ purpose-driven learning to teach, a teacher education program needs to be flexible and responsive, and such a program can approach the admission problem in a “compensatory” way rather than having to insist on a fixed set of minimum attributes at the time of admission. Further research into teacher candidates’ development as teachers in response to the dynamic interaction between teacher candidates’ attributes and the programmatic contexts is needed to provide a better understanding of how teacher education programs and teacher educators in their program implementation should be responsive to help teacher candidates’ professional development. But what is particularly needed are teacher education reform efforts and enough teacher educators that support the design and enactment of a more flexible and responsive program with (some of) the qualities discussed in this section for the purpose outline in this paper. This might be the single most prominent challenge.

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