

Alternative Teacher Certification: A Program Theory Analysis

By Jay Paredes Scribner & Ethan Heinen

Alternative teacher certification program (ATCP) is widely used as a term for a variety of programs designed to train and credential teachers in expedited fashion. In practice, however, ATCPs consist of a loose confederation of programs and practices ranging from “emergency certification to very sophisticated and well-designed programs that address the professional preparation needs of the growing population of individuals who already have at least a baccalaureate degree and considerable life experience who want to become teachers” (Feistritzer, 1998, p. 2). The policy rhetoric suggests that these programs address teacher shortages, improve teacher quality, increase diversity of the teacher pool, and increase retention rates.

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While these goals are laudable, the underlying assumptions of the policy have been challenged (Cohen-Vogel & Smith, in press; Scribner & Akiba, 2007). These studies question assumptions about the effectiveness of alternative certification policy to attract teachers of higher quality than traditionally trained teachers. However, the antecedent assumption that ATCPs are substantially similar in structure and function remains tacit and under-explored in policy circles, among practitioners, and in large part in extant research.

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Analyses of ATCPs have tended to (a) ignore substantive differences of alternative certification at the local level by aggregating data to the national level, thereby eliminating the possibility of understanding outcomes across and within programs (e.g., Shen 1998a, 1998b) or (b) use single-site case-study approaches that limit our ability to generalize findings (e.g., Brennan & Bliss, 1998; Stevens & Dial, 1993; Stoddart, 1990). As a result, researchers and practitioners have called for studies that describe the content and processes of high-quality ATCPs and that rigorously compare alternatively and traditionally certified teachers (Kwiatkowski, 2002; see also, Stoddart, 1993; Wilson, Floden, & Ferrini-Mundy, 2001).

This article presents findings from the initial phase of a longitudinal research program designed to evaluate alternative teacher certification policy in one state. The study used program theory evaluation (PTE) to investigate policy assumptions, program logics and dilemma points from alternatively certified teacher training to teacher practice. We specifically explored how and why ATCPs differed in form and function by presenting an emergent framework to make sense of these differences. Gaining a better understanding of ATCP variation is critical given national, state, and local pressure to address teacher shortages *and* improve teacher quality (U.S. Department of Education, 2002). The following questions guided our exploration into ATCP theories: (1) what are the program theories that guide practice in the five largest ATCPs in Missouri? and (2) what factors contribute to formation of these program theories. In our discussion we consider the implications our findings have for the practice of alternative teacher certification. As this study will show, policy makers and ATCP directors must address the external factors that shape program logics and the contradictions these influences can create.

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Policy and Program Logic

The espoused logic suggests that ATCPs are effective strategies to alleviate teacher shortages and increase teacher quality (e.g., Feistritzer, 2002; U.S. Department of Education, 2002). Policymakers assume that by providing alternate routes to certification (a) persons with valuable professional experience will be recruited to the profession, (b) professional experience translates into effective teaching, (c) more mature novice teachers will persist in the profession longer than younger, traditionally prepared teachers, (d) teachers of underrepresented groups will be attracted to the profession, and (e) the experiences of students of alternatively and traditionally certified teachers do not differ significantly (Adams & Dial, 1993; Dill, 1996). ATCPs typically provide condensed and expedited exposure to coursework on pedagogy and content in order to bring teachers to the field much sooner than traditionally trained teachers. In addition, most ATCPs espouse the use of in-field teacher supports into their program models (Humphrey & Wechsler, 2007; Heinen & Scribner, 2007). For example, programs varied in terms of type and level of mentor

support, some opting for reliance solely on district-based mentoring, while others supplemented district efforts with university mentoring.

Findings concerning ATCPs' ability to achieve these aims are mixed (Darling-Hammond & Youngs, 2002; Newman & Thomas, 1999). ATCPs have been criticized for approaching teacher preparation based on an apprenticeship model, and thus emphasizing teaching as a craft rather than a profession supported by a professional knowledge base (Hazlett, 1984). Similarly, Wise and Darling-Hammond (1991) argued that ATCPs provide less preparation than traditional programs and circumvent traditional certification requirements at the expense of teacher quality. More recently, research has called into question many of the assumptions upon which alternative teacher certification policy and practice rest. This emergent body of literature has found little evidence that ATCPs address teacher shortages, recruit teachers of higher quality than traditional programs, or adequately prepare teachers (see for example, Cohen-Vogel & Smith, 2007; Humphrey & Wechsler, 2006; Scribner & Akiba, 2007). Other researchers have argued that benefits from ATCPs do occur. These researchers have found that ATCPs can help alleviate teacher shortages in urban and rural areas, can increase the pool of minority teachers, and can address subject specific shortages (e.g., Chesley, Wood, & Zepeda, 1997; Dill, 1996; Feistritzer, 2002; Shen, 1998a, 1998b;). More recently, Scribner and Akiba (2007) found that ATCPs were able to successfully attract more minorities into the mathematics and science teaching positions; they also found that those teachers persisted in the profession longer than traditionally prepared teachers.

Alternative Teacher Certification in Missouri

In Missouri, alternative teacher certification is delivered solely through university-based, state-accredited teacher education programs. ATCPs are approved by the state and are subject to the same state standards for teacher preparation as traditional teacher certification programs. These guidelines were framed in 1998 by the Missouri Department of Education and Secondary Education (DESE) as the Missouri Standards for Teacher Education Programs (MoSTEP) (Missouri Department of Education, n.d., a). MoSTEP instituted further restrictions on teacher licensure including the provision that candidates successfully complete both the content and pedagogy sections of the Praxis. Alternative licensure programs officially fall under this umbrella as a result of regulation 80-805.030 which specifically connects DESE regulations to alternative teacher certification programs (Missouri Department of Education, n.d., b)

To enter an ATCP prospective teachers must have a bachelor's degree relevant to the subject area in which they will teach and a minimum 2.5 GPA. Upon completion of initial coursework, teachers receive a two-year provisional teaching certificate. State guidelines also stipulate that alternatively certified teachers will (1) be assigned a mentor from the same subject area and approximately the same grade level during the teachers first two year, (2) receive ongoing professional education from their ATCPs during the first year, (3) participate in the district's professional

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development program, and (4) participate in the Missouri Performance-Based Teacher Evaluation program. ATCPs fall into two categories, those that (a) require coursework to be completed prior to full-time teaching, and (b) programs that introduce teachers into the classroom after a training session. In each case, ATCPs are designed to reduce the coursework in traditional programs (approximately 60 hours) to a smaller number (approximately 30 hours).

It is important to distinguish Missouri's emergency certification route from the alternative certification track. Temporary authorization certification (TAC)—i.e., *emergency certification*—is another alternative route to certification available to individuals seeking employment at the middle and secondary levels. Teachers on the TAC route were not included in this study because we were specifically interested in the theory of alternative certification programs. In Missouri, TAC teachers receive individual plans from an academic institution that can be completed at any combination of institutions of higher education (Scribner, Bickford, Ehlert, & Heinen, 2003). TAC teachers need only a bachelor's degree and an offer for a teaching position at a school district. TAC teachers participate in a school-based mentoring relationship and complete a *maximum* of 24 credit hours to become certified. TAC teachers teach under a one-year renewable license based on district recommendation. Upon completion of the TAC program, teachers became fully certified contingent on passing the state Praxis exams.

Design and Methods

Program Theory Evaluation

PTE was chosen as an evaluation framework precisely because of its strength in examining the program theory implicit in program processes, structures, and outcomes. As Hasci (2000) observed, the strength of PTE lies in its potential contribution to program replicability when evaluations “target the basic assumptions of whole categories of programs to learn more about what actually works well and what does not” (p. 77). PTE also focuses on making explicit the underlying assumptions and the linkages or disconnects between processes and outcomes (Della-Piana, 1999; Rogers, Petrosino, Huebner, & Hasci, 2000). PTE emphasizes tasks that directly address our research objectives:

- identifying and making the program logic explicit, including causal processes responsible for program outcomes (Chen, 1990);
- collecting data that challenge and/or verify program logic, especially data related to target population characteristics, program implementation, mediating variables, and anticipated outcomes (Sidani & Sechrest, 1999);
- examining the congruence of hypothesized and actual program theories (Weiss, 1995);
- improving programs by exposing areas that threaten successful program implementation and outcome attainment (Della-Piana, 1999; Rogers et al., 2000, p. 11).

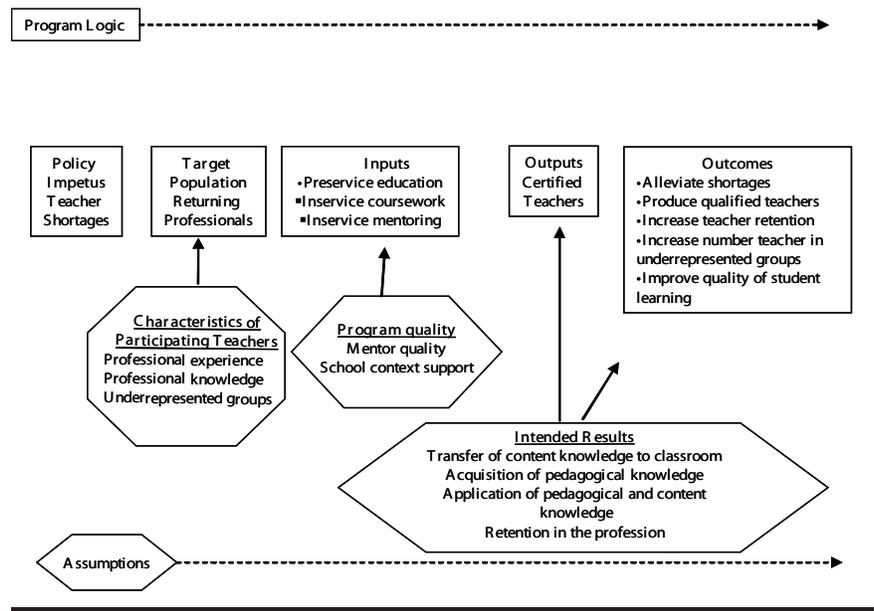
Figure 1 presents a program theory of ATCPs based on the review of literature. One of the goals of this study was to determine if actual ATCP programming follows this logic, and to investigate whether espoused philosophies regarding ATCPs are evident in practice. As this study will show, a single logic model does not adequately address program variation across sites, nor does it account for myriad external factors (e.g., geographic location, funding levels).

The reader will note that this logic model illustrates the complexity of ATCPs in Missouri, beginning with its initial approval based on a policy response to state-wide teacher shortages. This paper focuses primarily on the implementation phase, illustrated here by population, program inputs and outputs, and espoused values and actual program outcomes. The strength of program theory lies in its ability to identify key components driving a complex policy initiative, examine these components singly and in combination, and ultimately to isolate causal connections and linkages. The program theory that emerged from these analyses was critical to understanding the impact of ATCP policy in Missouri, and the implications of program variation within the state.

Site and Participant Selection

The five ATCPs studied were chosen for several reasons. First, of the 16 ATCP programs in Missouri, these 5 ATCPs trained approximately 80 percent of alternatively

Figure 1
A General Logic Model of ATCPs



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certified teachers in the state and were situated in a range of geographic contexts. To ensure anonymity, program names and locations have been removed and are referred to by letter (i.e., A, B, C, D, and E). Programs A and D are primarily rural and serve extensive geographic regions. Programs B and E serve urban areas, while Program C is located in a mid-sized city and serves primarily suburban schools.

Participant interviews served as the primary source of data. In all, five directors, six additional administrators (e.g., assistant directors, coordinators, and teacher certification administrators), 12 instructors, and 25 aspiring teachers were selected for interviews. We asked program administrators permission to interview at least two instructors. To the extent possible we interviewed instructors teaching pedagogically-oriented alternative certification courses and content-oriented courses. In addition we interviewed aspiring teachers to ascertain their perceptions of the programs goals, quality etc.

Data Collection

Data collection also included observations of classroom instruction and document reviews. Directors and instructors were interviewed to determine program goals and objectives, the overall curriculum for mathematics and science teacher preparation, and challenges to implementation. Additional instructor interviews focused on the purposes, goals, and objectives of coursework and integration of coursework with field experiences. Instructors taught subjects ranging from methods courses to educational psychology. Interviews with teacher candidates focused on their backgrounds, career aspirations, and program experiences. All interviews were tape recorded and transcribed. Interviews with program directors and instructors ranged from one to two hours. Teacher candidate interviews ranged from 45 to 60 minutes.

Observations of teacher preparation experiences provided insight into program purposes, practices, and objectives. Observers were trained to gather data using semi-structured observation protocols on contextual factors (e.g., classroom demographics), instructional practices and materials, and pedagogical skill and content knowledge. Protocols were adapted from existing protocols designed to evaluate mathematics and science professional development according to national standards (Horizon Research, 2001; based on NCTM's *Principles and Standards for School Mathematics*, 2000, & NRC's *National Science Education Standards*, 1996). Documents with information pertaining to program requirements, goals, objectives, curriculum frameworks, students' programs of study, etc. were also gathered for analysis.

Data Analysis

Data were analyzed using the constant comparative method (Glaser & Strauss, 1967). The constant comparative method is comprised of stages that become more focused and distinct during the analytic process in order to capture emergent themes and define categories. Both *open* and *axial* coding were used to disaggregate data

and then thematically reorganize data (Strauss & Corbin, 1990). During open coding we coded data into general thematic categories according to broad concepts that reflected our theoretical sensitivity and insights gained as we analyzed data and were informed by literature on alternative teacher certification. In the second stage of analysis, *axial coding*, we further refined categories and created subcategories. This stage of analysis also allowed us to consider cross-case comparisons.

Findings

As ATCPs proliferate, it is imperative to deepen our understandings of how and why they vary, and what implications that variation creates. Program variation leaves the term *alternative teacher certification* with little conceptual value, and challenges the utility of comparative studies and large-scale studies that treat these preparation tracks homogeneously. Table 1 highlights important differences among programs. The reader will note the large variation in number of districts served, the use (or nonuse) of external partners, the differences in program structure and process, and finally the variation in field experiences that teachers are provided.

Analysis led to the formation of two broad program theories resulting from each program’s response to environmental and contextual factors. Program C, because of its responsiveness to internal demands, is presented here as the *internal integration model*.¹ We present the *external adaptation model* in two parts. Programs A and D placed a premium on flexibility to serve multiple districts and thus they represent the *multiple client* approach to the external adaptation model. We refer

Table 1
Matrix of ATCP Characteristics

	Structure	Programming	Context
—Internal Integration—			
Program C	<ul style="list-style-type: none"> Districts served ? 5 TAC and ATCP Admittance authority program-based 	<ul style="list-style-type: none"> Closed cohort Highly-structured programs of study Moderate to high oversight by state department. 	<ul style="list-style-type: none"> External funding (federal grant) Formalized agreements with districts Program and school district based mentoring
—External Adaptation— (Multiple Clients)			
Program A		<ul style="list-style-type: none"> Ad hoc admittance Individualized programs of study Highly flexible Minimal oversight 	<ul style="list-style-type: none"> No formal partnerships Informal agreements with districts School district based mentoring
Program D	<ul style="list-style-type: none"> Districts served ? 50 TAC and ATCP Admittance authority with director 	<ul style="list-style-type: none"> Open cohort Minimal oversight Moderately flexible certification paths 	<ul style="list-style-type: none"> No partnerships School district based mentoring
—External Adaptation— (Single Client)			
Program B	<ul style="list-style-type: none"> Districts served ? 1 ATCP Admittance authority program and partnership based 	<ul style="list-style-type: none"> Closed Cohort Highly structured to meet state department certification requirements. Courses are structured to address immediate student needs 	<ul style="list-style-type: none"> Formal partnerships (foundation and school district) School district and program based mentoring
Program E	<ul style="list-style-type: none"> Districts served: 1 TAC and ATCP Admittance authority partner based 	<ul style="list-style-type: none"> Open cohort Low oversight by state department. Highly influenced by partners 	<ul style="list-style-type: none"> District; foundation. Low program autonomy School district responsibility.

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to Programs B and E as the *single client* approach to the external adaptation model due to the influence that single districts had on these ATCPs. These labels are not normative statements of program quality, but rather serve to reflect the essence of each program as they reacted to multiple forces within unique contexts.

The Internal Integration Model

Program C operated under what we refer to as an internal integration model due to its tightly coupled structures, processes, and program content. More so than the other case-study programs, Program C was designed with acute awareness of the broader accountability policies facing teacher education. For example, directors and instructors indicated that their ATCP—which was funded through a federal grant—was designed around national standards for science and mathematics teacher preparation. Furthermore, these stakeholders emphasized the program’s sole focus on the shortage areas of mathematics and science in order to “not spread themselves too thin.” Ensuring the development of quality teachers was motivated by a commitment to the teaching profession, as well as an understanding of threats posed by policymakers who blamed traditional teacher preparation programs as part of the perceived problem of teacher quality.

Program structure. Program C administrators agreed with administrators from other programs that the general nature of the state’s ATCP guidelines left room for interpretation. While Program C administrators were responding to the state’s call to certify teachers and alleviate teacher shortages, their program was developed explicitly with the national and state standards for high-quality mathematics and science teacher preparation in mind. Program C’s funding began in June 2002 and ceased with the completion of the final cohort in 2006. This funding allowed Program C more flexibility in terms of structuring its program. For example, Program C was able to target a specific population and to provide these students with stipends after admittance to the program. In addition, students received a Master of Arts in Teaching. Candidates were identified, recruited, and screened by Program C personnel.

Programming and delivery. Teachers in Program C entered their program as a cohort. This “closed cohort” (Scribner & Donaldson, 2001) model was used to structure and deliver coursework solely to teacher candidates in this program. Teachers in other tracks (e.g., traditional or emergency routes) were not allowed to participate in these courses, nor were these ATCP teachers allowed to alter their programs of study. However, teachers in Program C were able to choose between two teaching routes. About half the teachers chose to enter the teacher profession immediately upon completion of their summer program and completed remaining coursework during monthly meetings over weekends for two years. The other half of Program C participants continued in their prior occupation and completed their coursework within one year. Instructors attempted to balance the delivery of content knowledge with training in learning theories to bring the realities of secondary mathematics and science classrooms into their students’ preparation experiences.

The field experience component in Program C was highly structured and supervised, and mentoring was an integral piece of the program. Program C provided mentor support directly, in the form of on-site supervision of participating teachers, as well as overseeing additional mentoring on-site. Teachers in Program C commonly referred to these relationships as critical components to their success. As one teacher described, “Most of what I’m learning is by dealing with a really good mentor-teacher, and I am at a teachable moment every moment.”

Influence of context. Program C’s structured cohort program, with tightly sequenced coursework, fulltime faculty, specific subject area focus, and coordinated and tracked field experiences were made possible in large part due to the program’s relationship with its external funder. Save for a project evaluator who provided an annual evaluation to program staff, the agency played a relatively “hands-off” role. This approach gave the program directors a higher degree of autonomy than other programs with external support. Program C was able to use its external support in many ways. Administrators were able to advertise statewide and actively recruit aspiring teachers. This fact allowed the program to focus limited resources (e.g., human, fiscal, and time) on these two subject areas. In contrast, as we will describe, programs A and D viewed state policies as malleable, and used this ambiguity to emphasize program marketability.

External Adaptation Model: Multiple Client Approach

The remaining four programs reflect two variations of what we call the *external adaptation approach* to ATCPs. On one hand Programs A and D adapted to their external environments by building their programs around service to multiple districts (i.e., clients). On the other hand, both Programs B and E adapted to their external environment by partnering its urban district. Interestingly, each of these programs’ district partnerships involved a local philanthropic funder that played roles quite different from the funder role described in Program A above.

Program structure. Directors from Programs A and D described a statewide mission. Many of the districts served by these two programs were rural, and superintendents often faced teaching vacancies with limited prospects for finding adequate replacements. Responsiveness to district superintendent staffing needs was supported by program structures and processes that enabled strategic flexibility, and teachers were generally offered a wider array of entry points and opportunities to complete coursework. These programs chose “open” models in which students started the program at any time. Cohorts, as Program A’s Director stated, “restricted enrollment and program of study flexibility.”

To enhance his program’s responsiveness to school districts, Program A’s director developed an approach to alternative certification that, in effect, blurred the lines between three non-traditional routes to teacher certification—temporary authorization certification, alternative certification, and an informal group he referred to as “advisees.” The director developed individualized programs of study for TAC teachers

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while they worked under emergency certification. A second group of teachers began the university's state recognized alternative certification program prior to obtaining a teaching position. Finally, in order to increase the pool of potential teachers the director created a third group he referred to informally as "advisees," individuals who did not hold a relevant bachelor's degree and who did not have an offer of employment at a school district (a requirement for the TAC track). The director explained:

[Advisees] are not officially alternative certification. A few of them have all the subject area you'd ever want, but have no Teacher Ed. But they don't have a job. So, we will let them take some of the initial courses that are in the alt cert sequence versus our normal undergraduate. Sure, why not. What am I going to do—turn tuition away?

While the program director and some instructors distinguished among these certification tracks, our analysis suggested that teachers' programs of study were indistinguishable.

A similar phenomenon occurred in Program D, where directors and instructors also emphasized program flexibility. Their flexibility manifested itself in teachers' option to choose between certification-only and Masters degree (and certification) tracks. Similar to the arrangement at Program A, Program D teachers seeking a master's degree or certification-only through the ATP, emergency certification, or certification through traditional preparation often took the same coursework. Thus, flexibility in program structures led to overlap—programs that were different in purpose and served aspiring teachers with differing needs. As a result, it was difficult to differentiate the actual experiences among these groups of teachers except as they appear on paper.

Programming and delivery. By adopting program theory that emphasized external adaptation, Programs A and D were able to maximize their ability to meet the steady stream of requests for new teachers. However, certain challenges arose within this model. For example, program administrators, instructors, and teachers acknowledged challenges with properly staffing coursework, creating articulation between courses, offering differentiated instruction based on teachers' particular needs, and ensuring meaningful practicum experiences.

Delivery of programming in Program A was often individually tailored to meet the hiring needs of districts. For instance, when a class needed by a teacher was not available, the director hired an adjunct instructor from the field to teach the course. As the director stated, "An instructor is always found, whether that person is a full-time faculty member at the university or an "expert in the field." According to the director, these experts were local teachers or principals. The proximity and accessibility of these instructors further streamlined programming at Program A, enabling the director to expedite students' matriculation through the program and into full-time teaching positions.

While the ability to cover critical material adequately was a challenge for all five

of the case-study programs, the openness of Programs A and D exacerbated these challenges. To accommodate large numbers of alternative certification students, students were absorbed into existing programs and coursework with other aspiring teachers on traditional tracks, or taught on-line. Trying to prepare teachers in eight weeks did not provide enough time in this teacher's opinion: "We run into time constraints. In five or six weeks, or four weeks, however long those classes were, reading two or three times a week, or even just on weekends, we run out of time."

Important issues also emerged from our analysis of field experiences. Standards for teacher education preparation called for program-supervised field experiences in which teachers were provided opportunities to work under the guidance of a supervising teacher. In Programs A and D the focus on serving large numbers of teachers and districts resulted in a number of field placements that far outstripped the programs' ability to provide support. In Program A, the director indicated that, as statute states, once a teacher is a "teacher of record" mentoring becomes a district responsibility. An exchange with one of Program D's administrators described his feelings:

It's a mixed bag. Sometimes they don't even know who their mentor is, but it's on paper someplace. But the rest of the time it's somebody across the hall, and they're there between classes saying, you might try this, or use this, or this will help you, whatever.

Thus, while these ATCP program officers would like to have provided additional support to these first-time teachers, the number of districts and teachers served stretched resources to the point that activities such as providing meaningful in-field support and supervision were difficult.

Influence of context. The way in which Programs A and D adapted to their external environment as they worked diligently to meet these needs of local districts underscores the difficult trade-offs inherent in attempting to be responsive to "customers" while providing high quality preparation experiences to teachers. These programs' responded to a willingness among policymakers to lower the "certification obstacles" that limited teacher supply as powerful administrator associations exerted pressure on the state to address teacher shortages by allowing more expedient routes to teacher certification.

However, along with broad and minimal guidelines came confusion. Program directors and state department of education officials stated that alternative teacher certification rules were often unclear, contradictory, or in limbo. Thus, regulations concerning certification often had minimal impact on decision-making at the program level. Directors of Programs A and D worked as a conduit between state certification officials and district superintendents to boost enrollment and meet district demands for certified teachers.

External Adaptation Model: Single Client Approach

Programs B and E served large urban districts facing significant challenges

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including low student performance, threats of state takeovers, severe financial constraints, and teacher shortages. As a result, the state education agency and third party funders played an active role in Programs B and E. Coordinators from each program worked closely with state officials to develop strategies for expeditiously certifying teachers.

Program structure. These urban programs had unique relationships with external funders. In both cases, funders were local philanthropic entities that had made local school and district improvement one of their missions. Unlike the situation with Program C, these external partners had a profound impact on operational decision-making at each site and severely restricted the autonomy of program coordinators. Although producing high-quality teachers was the espoused goal for all concerned, political pressures resulted in very different *in-practice* program theories. The partners primarily worked to address urban issues and had little familiarity with education specifically. Nevertheless, in each case these programs ended up influencing structure, course delivery, and curricula.

Both Program B and E directors believed that their programs would be most effective in serving a single partner district as a result of greater levels of collaboration. However, implementation of this ideal proved problematic. Because these ATCPs were set up to serve one district, program decisions such as how teachers were recruited and selected into the program; how, when and where teacher placements were made; and how course sequences unfolded were influenced by external partners. Program B and E directors stated that district officials used their influence to pressure preparation programs to meet their demands (e.g., expedited course sequences and late placements). A Program E coordinator expressed a desire to expand the program to include additional districts, adding that: “Right now it is very rocky and not at all under our control.”

The ATCP-funder relationship also impinged on directors’ perceptions of their decision-making autonomy. For example, the Program B director described the influential role their partner foundation had in placing ATCP teachers throughout the district. Although Program B tried to facilitate placements that would allow teachers to be successful, these attempts were routinely blocked. The director commented: “The [external partner] puts the people from our program into some of the roughest, most dead-end schools where the faculty is already burned out. It’s just a bad place, and it is the kind of place that loses first-year teachers.”

Programming and delivery. The espoused program theory was to produce high-quality teachers through challenging coursework and field support. However, the theory in-practice was to expedite matriculation to fill vacancies in the district. Staffing courses with experienced instructors was a challenge as our observations revealed. Supporting these observations, one instructor described his approach to teaching:

I let the students pick which chapters they wanted to cover because they knew what they needed more than anyone else...and I think they’re more invested in it because

they got to pick what we covered. I was given a lot of autonomy. I doubt that I'll be observed teaching this course. I doubt that there will be any feedback.

As the above quotation suggests, instructors were routinely left to their own devices. In the above instance, the instructor left decisions of course content to aspiring teachers who had yet to enter the field.

Influence of context. Furthermore, aspiring teachers in these two programs received little or no program-based field support. Inconsistent communication between the districts and the programs was the norm; there was no evidence that formal mechanisms for providing on-site support were being successfully implemented. Teachers from both programs commented on the lack of effective and consistent mentoring. Because state law requires public schools to provide mentors for new teachers, staff from Programs B and E did not provide additional mentoring for teachers in the field. In many cases teachers reported that they could not find their mentors. A Program B coordinator described the situation:

The school may provide a mentor, but this doesn't necessarily mean anything. The schools need to meet their requirements and do their paperwork. They do that and someone gets compensated whether they do the work or not. Nothing really functions in the manner it was designed and hoped for.

These single-client urban contexts presented unique challenges for program implementation. Other programs retained more autonomy, in part due to serving multiple districts and by not relying on external funding. In this context, decisions affecting teacher preparation were not primarily based in the preparation programs. Instead, decision-making power was distributed across external partners as a result of political and economic pressures.

Discussion

In this section, we cast new light on our assumed logic model (see Figure 1), examine program adaptations based on our models—*Internal Integration* and *External Adaptation*—and suggest a course of action for further research on ATCPs. A key focus of this research has been to identify areas of variation and to connect these variations to external factors. Based on our analyses, variation among ATCPs in Missouri was caused by pressures from two key areas (a) *top-down* pressures (from state policymakers), and (b) *grassroots* pressures (from school districts).

Top-down pressures. Ultimately, each of the programs operated formally under state policy. The State Department of Education set rules for certification, approved the operation of ATCPs, and determined who was qualified to teach. In addition, the department had to be responsive to the demands of the State Board of Education and the state legislature. Over the past year, the State Department of Education reduced the requirements for the TAC certificate, largely in response to demands by the State Board of Education. As our data showed however, ATCPs interacted

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with state policymakers quite differently, and interpreted and implemented policies in unique ways.

Although the state was relatively heavy-handed with Programs B and E, it acquiesced to Programs A and D, and more or less ignored Program C. The espoused policy line at the state was to produce high-quality teachers, particularly in response to high-needs content areas and for positions in rural and urban areas. To ensure that enough teachers were produced statewide, state officials responded strategically in terms of their interactions with ATCPs. As a result of this flexibility, ATCPs took different approaches to structuring their programs, marketing their programs to prospective teachers, and matriculating teachers through coursework.

Programs A and D, classified here as *multiple client programs*, took what could be described as an entrepreneurial approach by producing a multitude of teachers for a large geographic area. This entrepreneurship was facilitated by conditions of high discretion, low state oversight, and access to a large client base (i.e., multiple school districts). One strength of this approach was that it encouraged flexible programming in order to simultaneously accommodate large numbers of teachers from diverse backgrounds. In addition, this approach coincided with the need for state policymakers to assist schools and districts experiencing acute teacher shortages. On the flipside, this approach—in some cases—resulted in programming that was essentially identical to undergraduate programs, calling into question the ability of these programs to handle so many new students. Regardless, Programs A and D addressed the teacher shortage expeditiously, and state officials acquiesced to demands from these programs (particularly Program A) in efforts to ensure that a steady supply of teachers would not be interrupted.

Programs B and E exhibited relationships with state officials that were largely based on politics resulting from the influence of external organizations. Interactions with the state were more “official”—that is, the kind of politicking evident in the entrepreneurial approach was not evident. Instead, interactions were based on meeting bureaucratic requirements (e.g., curricula and course delivery), particularly since the single-client model did not readily coincide with the needs of state policymakers. Unlike Programs A and D, Program B and E lacked the autonomy to respond fluidly to demands for teachers regionally, and state officials were less able to work through these programs to respond to statewide teacher shortages. Although the single-client model held great promise in terms of access to external funding and collaboration with cooperating school districts, this promise was never realized. Instead of being used to creatively address problems concerning program quality and certification, this funding instead was used to limit discretion at each program. Program goals were short-term, and the expectation among program coordinators was that strained relations would become an increasingly acute problem. For example, officials at Programs B and E had to maintain the illusion that partnerships with external funders enhanced the quality of the programs, when the actual effect was that these relationships likely contributed to decreased

program autonomy and a subsequent lack of focus on teacher quality (e.g., lack of program-based mentoring).

Program C was a notable exception. Although funded by an external organization, Program C was able to operate largely as it pleased and was largely insulated from external pressures. Thus, Program C partnered with relatively few school districts (approximately five), but maintained a large enough client base to safeguard against an over reliance on a single client. Relative to the other programs, Program C was largely ignored by the state agency. This was due in large part because of its independent funding source and stable clientele base. However, Program C served an important role statewide by producing mathematics and science teachers. Although the numbers of teachers produced was smaller than other programs (particularly Program A and D), the need for these content areas was acute and addressed the needs of state policymakers.

Grassroots pressure. Not all pressures were top-down; grassroots pressure was also evident in programs' relationships with school and districts. Districts were concerned directly with program outcomes, including the experiences and abilities of the alternatively certified teachers themselves, and how the presence of alternatively certified teachers impacted. As the director at Program A noted, "When you're a principal and you don't have a science teacher then you have a teacher shortage." The teacher shortage, as experienced by schools and districts, was both chronic and acute. The resulting pressure from school administrators to train teachers quickly was addressed by state officials, who used ATCPs as one way to alleviate these concerns.

Programs A and D served a large clientele base, limiting undue influence from a single district. Their entrepreneurial approach, however, still left them open to pressure from cooperating schools and districts that needed teaching positions filled quickly. These programs, though interactions with the state, acquiesced to demands on a case-by-case basis. This was most evident in Program A, where the director had gone so far as to create an *ad hoc* label—"advisees"—for aspiring teachers who could not be fit into the already loosely structured program. Likewise, both Program A and D ended up with undergraduate and ATCP programming that was identical. In the end, the grassroots demand to create teachers was a powerful force, shaping program structure, course sequencing, and underlying program philosophies.

Programs B and E in the single-client model were similarly pressured, albeit from a single cooperating district. As we discussed earlier, the single-client model, though well-intentioned, proved problematic in implementation. Because of a reliance on a single district for placements, these programs faced considerable pressure to acquiesce to district demands. For example, in both programs teachers were placed in the toughest teaching positions, despite concerns that they had not been adequately prepared for such challenging environments. Also, these programs were further challenged by the presence of external funders who were heavy-handed in terms of leveraging influence on structure, programming, and program-client relations.

Alternative Teacher Certification

Once again, Program C was relatively insulated from grassroots pressure. Although Program C served fewer districts than A and D, its clientele base was deep enough to avoid the pressure of a single client (as witnessed in Programs B and E). Also, its external funding resulted in more discretion in terms of screening, recruitment, and course delivery. This autonomy allowed Program C to invest in its teachers, evidenced by close-knit cohorts, stipends, and program-based mentoring.

Although there are limits to how far we can speculate, data do indicate programmatic departures from practices typically associated with teacher quality. For example, four of the five programs in this study (excepting Program C) failed to provide consistent on-site support for new teachers. Even teachers who were more comprehensively prepared had trouble adapting to full-time teaching. Teachers from these ATCPs had virtually no classroom experience and were unprepared for the rigors of the job. ATCPs—to be successful—could not rely solely on the available state mentoring program to provide sufficient support. Teachers in these programs felt a disconnect between their preparation program and their teaching placement. In the end, many teachers viewed their preparation as a bureaucratic necessity instead of valuable training.

An underlying question, then, is one of capacity. As we have seen here, producing large numbers of teachers while ensuring teacher quality is a difficult task, particularly in the face of both top-down and bottom-up pressures. In the end, programs made strategic choices to respond to these pressures, and these choices led to the variation we have described. Based on these data, it is likely that programs will continue to evolve as their environments change over time.

Program Theory

Program Theory Evaluation (PTE) proved to be an effective tool in the study of ATCPs in Missouri. As described above, findings suggested that ATCP policy was context-dependent; that is, uniform definitions for ATCPs did not fully capture the nuances that occurred when ATCPs were implemented at higher education institutions. We want to end our discussion by framing this research in terms of emerging theory as described within the PTE framework.

Chen (1990) refers to the importance of identifying causal variables. The most obvious here was state-level policy authorizing ATCP formation and implementation. However, the ambiguity of this policy allowed programs to interpret ATCP policy to further advance program interests. As we described this took many forms including increased program marketability, and the formation of external partnerships. Thus, we saw the emergence of pronounced variation across programs based on contextual needs.

Another outcome associated with PTE was the identification of data that challenged espoused program logics. Prior to our research, we developed a logic model that illustrates the general conception of ATCP implementation (see Figure 1.) However, in practice this logic model was found to be lacking in a number

of areas including the identification of target populations, quality control (e.g., program-based mentoring), and overall teacher quality as compared to traditional programs. As such, PTE revealed an underlying logic that challenged the utility of presenting ATCPs under a common umbrella.

In the end, our research supported the primary assumption underlying PTE, namely that program complexity increases when viewed in context. Thus, large-scale studies are limited in their ability to account for the nuances that ultimately define the quality of program implementation as it is actually carried out in practice. As a corollary, PTE also revealed the profound influence of innumerable external influences including market variation, partnering organizations, and state and local politics.

Future Research

ATCPs are far from being a monolithic alternative to traditional programs, and efforts to evaluate program quality across ATCPs are problematic at best. Even among these five programs, variation was significant enough that “ATCP” as a label, offered little help. In addition, it is difficult to view national research with less skepticism, assuming that these kinds of variations also exist elsewhere. This research suggests that efforts to define and implement effective ATCP programming are significantly influenced by the context in which the program operates. For example, Programs B and E can only be understood in the context of their powerful external partners. Likewise, Programs A and D must be evaluated in terms of an entrepreneurial brought on by a pressing need for certified teachers statewide. Future research on ATCPs could help us to understand the generalizability of these categories; the creation of additional models—based on research within other contexts—could help us to understand the nuances of ATCPs nationwide. Furthermore, subsequent research should connect programs to outcomes, including interactions with state officials, responsiveness to schools and districts, and the quality of ATCP teachers.

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Note

¹ The authors note that the labels ‘internal integration’ and ‘external adaptation’ are borrowed from Schien’s (1997) work on organizational culture.

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