The New Teacher Education: For Better or for Worse?
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What is This?
This article offers a reading of the current state of the field of teacher education, identifying current reforms, emerging trends, and new underlying premises. The author argues that a “new teacher education” has been emerging with three closely coupled pieces: It is constructed as a public policy problem, based on research and evidence, and driven by outcomes. Illustrating and critiquing each of these pieces, the article makes the case that the new teacher education is both for the better and for the worse. The article concludes that education scholars who care about public education must challenge the narrowest aspects of the emerging new teacher education, building on its most promising aspects and working with others to change the terms of the debate.

Although the title of this article is “The New Teacher Education,” I begin by asking readers to think for a moment about “the old teacher education” or at least “the old teacher.” According to a 1923 standard elementary teacher’s contract (Apple, 1987), the teacher was expected not to get married or associate with men, to be at home between 8:00 p.m. and 6:00 a.m., and not to leave town without permission from the Chairman of the Board of Trustees. In addition, she was not permitted to smoke, drink, or ride in a carriage or automobile with any man except her father or brother. The teacher was expected to keep the schoolroom tidy, scrub the floor once a week, and start the fire each day by 7:00 a.m. so the room would be warm when the children arrived.

What is interesting here is that there are no references at all in the 1923 contract to the obligation of the teacher to actually teach anything to anyone, and the only reference to students is that they be kept warm. Of course, the gendered aspects of teaching reflected in the old contract continue to have an impact, but there are dramatically different expectations for teacher performance in the 21st century. In fact, many people now assume that teachers can—and should—teach all students to world-class standards, be the linchpins in educational reforms of all kinds, and produce a well-qualified labor force to preserve the U.S. position in the global economy. In the face of these daunting—and arguable—expectations, the question of how the nation’s teachers are recruited, prepared, and retained has become one of the hottest topics in the public and academic discourse regarding education.

This article is about teacher education, a subject that has never been the subject of an AERA presidential address. Although there have been four or five important addresses over the years that were closely related—on teacher knowledge and expertise, teaching and learning in the new century, and professional development—no presidential address has focused on teacher preparation per se. This article speaks to three questions:

• What is “the new teacher education” and why is it important?
• Is the new teacher education for better or for worse?
• What is the role of the education research community?

In answer to these questions, I conclude that the new teacher education is both for better and for worse. I also argue that, as education scholars who care about public education, we must challenge the narrowest aspects of the emerging teacher education, build on its most promising aspects, and work with others to change the terms of the debate about preparing teachers.

The New Teacher Education: Background

My identification and analysis of “the new teacher education” rests on a multidisciplinary theoretical framework, which assumes that in addition to operating at the intersections of research, policy, and practice, teacher education can be understood as social, ideological, rhetorical and political practice.1 Examining teacher education through social and ideological lenses means identifying the larger social structures and purposes within which it is embedded, as well as unpacking the cultural ideas, ideals, values, and beliefs to which it is attached. Analyzing teacher education through a rhetorical lens means taking account of the ways that metaphors, narratives, and literary devices are used strategically to garner support for the approaches various groups favor and also for their ways of understanding the issues in the first place. Finally, my analysis of the new teacher education depends on the idea that teacher education is always, in part, political, an assumption that, in a certain sense, subsumes the others. This is based on the premise that ambiguity, conflict, and competing goals are inherent in human societies. Thus teaching and teacher education are inherently and unavoidably political, in that they involve the negotiation of conflicting values about the purposes, roles, and content of schooling.2

Urgent calls for something new and improved have been the rule rather than the exception in teacher education almost since
its beginning. Even in this field that has had continuous cycles of critique and reform, however, there is something new emerging out of a convergence of current social, economic, professional, and political trends that is qualitatively different from previous calls for improvement. The new teacher education grows out of the changing notions of accountability that surfaced in the mid-1960s (Cuban, 2004) and, more specifically, the educational reform movements that began in the 1980s (Sirotnik, 2004). In addition, the new teacher education is influenced by the continuing educational achievement gap, the enlarged role of the federal government in education, the elevation of the science of education, the embrace of a market approach to education policy, and the history and status of the profession.

In this article, I offer my read of the current state of the field, including identification of what is being called for, by whom, and for what purposes. This includes identification of emerging trends, aspects of teacher education newly required by law, and standards that are now consistent across the profession. This also includes analysis of the underlying premises that are being stitched into the logic of teacher education so seamlessly that they are already nearly imperceptible, as well as areas where there is considerable disagreement. It is important to note that I am not characterizing the new teacher education as something being “done to” the profession by outside forces. Rather, the teacher education profession is being shaped by, but also helping to shape, the new teacher education.

Of course, the emergence of a new teacher education has been gradual and evolutionary rather than abrupt, and some of the changes have deep historical and epistemological roots. But for heuristic purposes I use, as a rough marker for the emergence of the new teacher education, the reauthorization of the Higher Education Act (HEA) in 1998, whose Title II provisions stipulated numerous mandatory reporting and accountability requirements for teacher education, linked state grants to the revision of certification, and provided funding for alternate routes (Earley, 2004). Finally, it is important to note that my analysis does not assume that teacher education is monolithic and unitary. It is clear that not all teacher education programs and pathways are the same, and there are multiple agendas for teacher education reform. It may be useful to think of teacher education as consisting of plural universes wherein multiple and sometimes even contradictory reforms proceed simultaneously while other aspects of teacher education remain unchanged. What this means is that the new teacher education I describe in this article does not necessarily proceed simultaneously while other aspects of teacher education remain unchanged. What this means is that the new teacher education is being constructed as a public policy problem. I refer to teacher education as a “problem” here not in the pejorative sense, but in the sense that all developing and developed countries must deal with certain challenges or problems, such as providing teachers for the nation’s schoolchildren. As Deborah Stone (1997) suggests, however, there are no “universal, scientific, or objective methods of problem definition” (p. 134) in a political society, and goals are competing and protean rather than fixed. During the 1960s and ’70s and the early ’80s, the problem of teacher education in the United States was defined primarily as a training problem (Cochran-Smith & Fries, 2005). By the 1980s, however, teacher education came to be defined as a learning problem—understanding how prospective teachers learned the knowledge, skills, and dispositions needed to function as school professionals.

When teacher education is defined as a policy problem (see Figure 2), the goal is to determine which of its broad parameters that can be controlled by policymakers is most likely to enhance teacher quality and thus have a positive impact on desired school outcomes. The policy parameters in question are the broad structural arrangements and regulations of teacher education, such as teacher testing, subject matter, and fieldwork requirements, 4- or 5-year programs, and alternate entry routes. The desired school outcomes are pupils’ learning but may include other outcomes as well. As Figure 2 shows, research and evidence about which aspects of teacher preparation do and do not have a positive impact on pupil outcomes are presumed to be what should guide the formulation of policy.

Although policymakers’ attention to the problem of teacher preparation is not new, three things are: faith in state and federal policy as the key to solving the problem of teacher education; the desire (at least rhetorical) to establish policy based on sound research; and the inclusion of policy as a major part of the discourse within the teacher education community itself. This policy approach was not the norm during most of the long history of teacher education. In fact, Carolyn Evertson and colleagues (Evertson,
Hawley, & Zlotnik, 1985) pointed out two decades ago that most proposals for teacher education reform were “unburdened by evidence that the suggested changes [would] make a difference” in quality of teachers (p. 2). Further, as Mary Kennedy (1996) noted, policy-related approaches to teacher education were traditionally most familiar to skeptics and critics of teacher education, including economists and policy analysts, and least familiar to teacher educators themselves. Both situations have changed considerably over the last half dozen years, and many recent debates about and within teacher education have concentrated on policy and the policy-relevant evidence.

Teacher Education as a Policy Problem: Examples and Essence

The policy turn in teacher education is reflected in the many new reports about teacher quality and preparation that are organized around the interests of policymakers and intended to influence the policy debate. For example, no fewer than 15 research
reviews (including their respective responses and addenda) that start with policymakers’ questions have been produced in the short period between 2000 and 2005.3

To illustrate the gist of teacher education as a policy problem, I use two examples from the remarkable amount of material now being produced with policymakers in mind. A recent report on teacher quality by the Education Commission of the States (Allen, 2003), for example, synthesized the results of 92 empirical studies to address eight policy questions. On the basis of the strength of the research, the report rated the degree of confidence that policymakers should place in its answers to these questions, with highest marks given to studies that shed light on causal relationships. The answer to the question posed in the report’s title—Eight Questions on Teacher Preparation: What Does the Research Say?—can be summarized in two words: “Very little.” In fact, the report concluded that none of its answers had strong empirical support and only one had even “moderate” support, making reliable policy recommendations difficult.

A more colorful example—and one that is considerably less tentative in its conclusions—is Increasing the Odds (Walsh & Hale, 2004), a report for policymakers produced by the National Council on Teacher Quality, which features cartoon-like illustrations. The cover pictures a “star” teacher candidate plucked from the clamoring crowd of would-be teachers and carried by the seat of his pants by the crane of policy into the school. This kind of illustration makes the report’s intentions clear, as does its subtitle, How Good Policies Can Yield Better Teachers. The brief report provides terse “bottom lines” about what the research says and what policymakers ought to do.

There are significant variations in the depth, breadth, and complexity of studies and syntheses that define teacher education as a policy problem. Some define teacher quality in terms of both pupil performance and teacher attributes. Some include outcomes such as teacher placement and retention in hard-to-staff schools, in addition to pupil achievement. Some pay attention to the cultures of schools and the conditions that do or do not support the faithful implementation of policy. These variations notwithstanding, however, the central thesis or theory of reform behind the construction of teacher education as a policy problem is consistent: The implementation of appropriate policies regarding teacher education will solve the teacher supply problem and enhance the quality of the teachers being prepared for the nation’s schools, thus leading to desired school outcomes, especially pupils’ learning.

For Better and for Worse
So, is the policy approach for better or for worse? It is certainly for the better that the general public and policymakers have concluded what parents and those who work as or with teachers have long known—teachers matter. Their work makes a difference in children’s lives, and we should pay more attention to policies and practices assuring that all children have good teachers. And it is certainly for the better that research is being used to guide policy. For years, AERA members, including a number of presidents in their annual addresses, have tried to bridge the divides between research and policy and between research and practice. Efforts to link research and policy are not simply welcome; they are the essence of our work in this organization. Further, it is both in keeping with the general shift in notions of educational accountability from inputs to outcomes and an essential part of legitimacy for a profession that it be held accountable for its work. After all, who among us would stand against the idea that what happens in teacher education programs should have a demonstrable impact on what teachers actually do in classrooms and on what and how much students learn?

With these things said, however, it appears that an exceedingly narrow version of teacher education as a policy problem is being promoted by some public officials and the foundations and think tanks allied with them. This approach is reflected in the Secretary of Education’s three reports to Congress (U.S. Department of Education, 2002, 2003, 2004) on meeting the highly qualified teachers challenge and in other position statements. The Secretary’s first report (U.S. Department of Education, 2002) asserted that teacher education was “broken,” in that it was not producing the teachers needed by the nation. According to that report, research showed both that teachers’ education courses did not improve pupils’ achievement and that teachers’ verbal ability and subject matter knowledge were the most important attributes of highly qualified teachers. The report said that existing alternate routes “demonstrated” that they could increase teacher supply while maintaining—and even boosting—teacher quality. “With these facts in mind,” the report asked, “what would a rational teacher preparation and recruitment model look like?” And the report answered: “In sum, a model for tomorrow would be based on the best alternate route programs of today” (p. 19).

Putting aside that the Secretary’s conclusions about what the research shows are highly debated (Darling-Hammond & Youngs, 2002; Zeichner & Conklin, 2005), two aspects of the policy approach to teacher education are worth noting: its linear view of the impact of policy coupled with a circular view of teacher quality, and its grounding in a market-based approach to reform.

Teacher Quality as Circular
The Secretary’s reports and other related position statements take a linear view of how policy affects educational outcomes, without much attention to school culture, resources, and communities or to variations in district and state accountability contexts (Elmore, 2002). In the narrow policy view of teacher education, a key link is teacher quality, which is now one of the most common phrases in the vocabulary of educational reform, and one of the few about which we have national consensus. In short, everybody likes teacher quality and wants more of it. The problem is there is no consensus about what it is. The notion implicit in the narrow policy approach that I am critiquing here, however, is surprisingly straightforward.

As Eric Hanushek (2002) suggests, “I use a simple definition of teacher quality: good teachers are ones who get large gains in student achievement for their classes; bad teachers are just the opposite” (p. 3). Hanushek’s analyses are sophisticated and based on complex econometrics. His definition of teacher quality, however, is simple and circular: Teacher quality is test score gains, and, conversely, test score gains are evidence of teacher quality (see Figure 3). In definitions like this one, it is clear that “teacher quality” is assumed to reflect an amorphous “something,” but that something is captured only in test scores. At the end of the day, then, teacher quality remains a black box—we do
not know what effective teachers do, know, believe, or build on, nor do we know the conditions that make this possible. Further, because teacher quality is isomorphic with pupil achievement—achievement, too, is a black box, and we know nothing about what and how high-performing pupils learn, what resources they bring to school with them, or how they build on what they know. Knowing that there are variations among teachers and students without any information about why, how, for whom, under what conditions, and to what ends may allow us to group teachers into segments from highest- to lowest-performing, but it does not go very far toward improving teacher preparation or schooling.

**A Market-Based Model**

The other “for worse” aspect of constructing teacher education as a narrow policy problem is its basis in a market model of society. In *Policy Paradox*, Deborah Stone (1997) characterizes the market model as a social system in which individuals compete with one another for scarce resources and pursue their self-interests through the exchange of mutually beneficial items. Here, the ultimate freedom is the freedom of the market, and the public interest is assumed to be “the net result of all individuals pursuing their self interest” (p. 22). Problems requiring collective social action or private sacrifice for the greater good are seen as exceptions, and change is assumed to occur through informed self-interest, prompted by competition and the prospect of rewards and punishments. Stone contrasts this model of society with that of a political community, wherein “individuals live in a web of dependencies, loyalties, and associations, and where they envision and fight for a public interest as well as their individual interests” (p. x). Her distinction is useful here.

*Teaching at Risk*, the 2004 report of The Teaching Commission, chaired by former IBM CEO Louis Gerstner, provides an illustration. The problem of teaching quality, like most of the solutions recommended by the Commission, is couched in the logic and language of the marketplace. For example, the report refers to a poorly educated public in terms of costs in individual productivity and national economic growth, holding out the promise that substantial improvements in education over a period of 20 years—including revamping the nation’s teaching force—could lead to as much as a 4% addition to the Gross Domestic Product (p. 14).

One of the clearest statements of the market ideology applied directly to teacher preparation is in a 2001 proposal from the Progressive Policy Institute (Hess, 2001). This proposal calls for “tearing down the wall” of teacher preparation and certification and exposing schools of education to the “cleansing waters of competition” (p. 22). The proposal asserts that the current model of teacher certification, which prescribes preparation for new teachers, is “monopolistic and removes key incentives for quality . . . [while] the competitive model treats teachers as autonomous professionals able to make their own informed decisions about skills and expertise development” (p. 2).

The consequences of “market cleansing” are very clear in this proposal. In fact, the proposal specifically points out that if the competitive system were put in place, little would change in the suburbs, where schools would continue to hire fully qualified and certified teachers. But in what are referred to as “dysfunctional” school districts, the competitive model would be welcome, according to this proposal:

> Under this proposed system, little is likely to change in many of our high-performing suburban districts. In the Fairfax (Virginia) and West Chester (New York) counties of the U.S., the school systems are flooded with teacher applicants and . . . school administrators would continue to cherry pick from the nation’s top teacher education graduates. It is the less desirable and more troubled systems, the nation’s urban and rural school districts where administrators currently have tremendous difficulty finding . . . certified bodies . . . where the wave of new teachers will most likely be recruited and welcomed. (Hess, 2001, p. 23)

That affluent school districts would continue to have a wide range of fully prepared teachers to choose from while poor and urban schools would be grateful for what they could get is not seen as a problem from a market perspective. In fact, this is what...
it means to “let the market decide” who gets which teachers. The Progressive Policy Institute proposal is consistent with others that are market-based, such as the Thomas B. Fordham Foundation’s “Manifesto” (1999) on how to get better teachers by applying the discipline of the market. As the Progressive Policy Institute proposal itself so clearly indicates, this approach will reify and perhaps intensify the inequities that already plague our schools since the affluent and middle classes will always be in the best position to make choices, including choices about what teachers to hire. Surely, then, as an education research community, we must recognize that a solely market-based approach to teacher education is for the worse.

Teacher Education Based on Research and Evidence

The second major piece of the new teacher education is its basis in evidence and research. If, as Ellen Lagemann (2000) suggests, education had a “romance with quantification” (p. xi) during the 20th century, its current paramour is evidence, and the affair is hot and heavy in teacher education.

The preoccupation of the new teacher education with evidence is consistent with the way the standards movement has evolved and with the trend toward evidence-based practice in education writ large. Although there have long been several lines of research related to the effects of teacher education (Kennedy, 1999), the current intense focus on evidence in the mainstream of teacher education is a significant departure from the reforms of the distant and recent past. The major reforms of the 1980s and early 1990s, for example, pushed teacher education to be more coherent and intellectually rigorous, and accreditation standards required teacher educators to concentrate on the professional knowledge base. At the same time, some reformers argued that school renewal and teacher education reform should proceed simultaneously based on moral purposes. None of these reforms concentrated on evidence.

Evidence-Based Teacher Education: Examples and Essence

The most obvious example of the focus on evidence in the new teacher education is the Title II reporting requirements that went into effect in 1998 following the reauthorization of HEA. These require all states to provide annual evidence to the federal government about the quality of teacher preparation, which in turn depends on institutions providing annual evidence to the state about the qualifications (especially scores on state teacher tests) of every candidate recommended for certification.

In addition, the National Council for the Accreditation of Teacher Education (NCATE) now requires institutions to provide “compelling evidence” (Williams et al., 2003, p. xiii) of teachers’ content knowledge and performance, and demands that all programs have built-in data-driven assessment systems. The Teacher Education Accreditation Council (TEAC), approved as a national accrediting agency in 2003, requires valid and reliable evidence that would be credible to “disinterested experts” in support of the claims a faculty makes about its teacher graduates (Murray, 2005). The first of three design principles of Teachers for a New Era (TNE), a major teacher education initiative funded primarily by the Carnegie Corporation, is “respect for evidence.”

Across the country, more and more of the people engaged in teacher education are also engaged in assembling evidence about their practices and their graduates. This is partly to satisfy their evaluators, but it is also to see whether programs are measuring up to their own standards for excellent teaching. In addition, many teacher educators nationally and internationally are engaged in practitioner inquiry and self-study in connection with their own programs, courses, and assumptions (Loughran, Hamilton, LaBoskey, & Russell, 2004). What all of this evidence gathering has in common is the intentional and systematic effort to unlock the “black box” of teacher education, turn the lights on inside it, and shine spotlights into its corners, rafters, and floorboards. The central tenet of the evidence-based feature of the new teacher education is that with clear goals, more evidence, and more light, practitioners and policymakers at all levels will make better decisions, and teacher quality will improve.

For Better and for Worse

So, is this evidence-based approach for better or for worse? Yes and yes.

Many aspects are definitely for the better. For years, the critics have said that teacher education is idiosyncratic and insulated, guided more by tradition, fashion, or ideology than by cutting-edge research and solid evidence. If this was ever true—and that is arguable—it certainly is changing. It is clear that there are numerous careful studies now under way, many of which involve teacher educators working with colleagues in economics, measurement, sociology, psychology, and anthropology to invent mixed methods for studying the meaning and impact of teacher preparation variations. It is likely that these efforts will indeed shine new light on some of the old problems.

On a more local level, many teacher education programs—my own included—now know more than they ever did about whether and where their candidates teach, how long they stay, and how well prepared they are for the challenges of beginning teaching. It is also clear that more and more teacher educators are working from what Susan Lytle and I (Cochran-Smith & Lytle, 1999, 2004) refer to as an “inquiry stance” on practice, by treating their own work as sites for systematic and intentional inquiry and their own and others’ research as generative of new possibilities. I believe that these related but differing activities that aim to make teacher education more evidence-based are definitely for the better. They have the potential to transform the culture of teacher preparation by shifting the focus of accountability from external policy only to external policy plus local internal practice.

There are other aspects, however, of the evidence focus of the new teacher education that are very troubling. These derive from the narrow version of evidence-based practice and policy that is part of the current education agenda, whose theory is explicit in the recommendations by the Coalition for Evidence-Based Policy (2002):

Education is a field in which a vast number of interventions . . . have gone in or out of fashion over time with little regard to rigorous evidence. As a result, over the past 30 years the United States has made almost no progress in raising the achievement of elementary and secondary school students . . . despite a 90 percent increase in real public spending per pupil. . . . The Department should undertake a focused and sustained effort to . . . (i) Build the knowledge base of educational interventions that have been proven effective through randomized controlled trials . . . (ii) Provide strong incentives for the widespread use of such proven, replicable
interventions by recipients of federal education funds. In this strategy, we believe, lies the key to reversing decades of stagnation in American elementary and secondary education, and bringing cumulative, evidence-driven progress—for the first time—to the U.S. educational enterprise. (pp. 1–2)

Although this strategy is crafted primarily for K–12 education, its hand reaches far into teacher education, as a report for the White House conference on preparing tomorrow’s teachers made clear: “Unfortunately experimental methods have not yet found their way to research on teacher training” (Whitehurst, 2002, p. 10).

Evidence-Based Practice

I want to be crystal clear on my position here. There is an important place for large-scale experiments and other causal and correlational research in teacher education. But I question the likelihood that randomized trials will provide all or most of what we need to know to improve teacher preparation. The source of the evidence-based education movement in the United States is evidence-based medicine in the United Kingdom, which focuses on randomized clinical trials. In a critical appraisal of evidence-based practice in the United Kingdom, Liz Trinder (2000) points out that in the early 1990s, evidence-based medicine was heralded as “profound enough” to be referred to as a paradigm shift (p. 212). However, over time and across many fields, “a number of cracks are beginning to show and its claim to be a new paradigm appears to be premature or over-inflated” (p. 236). When applied to teacher education, the narrow version of evidence-based practice does not offer a new paradigm, either. In fact, many of the underlying assumptions are quite similar to those of the training model of teacher education and the process—product research on teaching that were predominant in the 1960s and 1970s. Although the new notion of evidence-based teacher education is not exactly the same as the training model, its underlying assumptions about the nature of teaching, the purposes of teacher preparation, and the power of science are very similar. To use Patti Lather’s (2004) words, evidence-based practice “reinscribes[es] the idealized natural science model . . . [and] disavows decades of critique” (p. 27). At the end of the day, then, with the very narrow version of evidence-based education, the new paradigm may well be the old paradigm, or as Lather concludes a bit more bluntly, “This IS your father’s paradigm” (p. 15).

In responding to the report of the National Research Council (2001) on scientific research in education, which provides examples of educational questions that warrant research, Fred Erickson (2005) also critiqued the narrow view of scientific research currently being forwarded. Erickson suggests that questions of prediction, explanation, and verification are inappropriately overriding questions of description, interpretation, and discovery. He argues that many of the most important questions in education cannot be answered by causal research designs and offers a list of other possible questions in education that are worth pursuing.

Inspired by Erickson’s list, I would suggest that there are many important questions about teacher education that deserve exploration. Some of these can be answered by causal and correlational studies, while others cannot. All, I think, are worth asking: Are there any variations in teacher preparation associated with teachers’ retention in hard-to-staff and other schools? What experiences do teacher candidates of color have in mostly White teacher education programs and institutions? Is this important? Are there differences in the ways college graduates with and without teacher preparation construct lessons, interact with pupils, and interpret what they see in classrooms? Are these differences related to pupils’ learning? Is caring a quality that can be taught in a teacher preparation program, learned on the job, or is it something people simply have or don’t have? Does this matter in teaching? How do we know? How do teacher candidates make sense of the roles parents do and do not play in their children’s school lives—what do they make of the “no-shows” at back-to-school night and parent conferences? Does this make a difference in how teachers act in the classroom? Why do new teachers migrate from urban to suburban schools, even if they were prepared specifically for urban classrooms? Is it fair that suburban school districts have a wide range of choices about which teachers to hire, while urban and rural schools do not? How do we make a judgment about fairness in this case? What are the school conditions that make it possible for new teachers to take advantage of the resources available to them? How do teacher candidates know if their pupils are learning? What do they count as evidence of learning, and how do they use that evidence to alter curriculum and instruction?

The Politics of Evidence

As my questions (and Erickson’s) suggest, there are many important issues related to the preparation of teachers, some of which may be answered by randomized clinical trials; but many others—just as important—require empirical evidence that describes, interprets, and discovers. There are also many questions on my list and elsewhere that cannot be answered by empirical evidence at all. These remind us that although assembling good evidence can have a profound effect, it cannot tell us what to do in teacher education. Even on that grand day when all the evidence is in, we will still need to make decisions based in part on values, moral principles, priorities, available resources, trade-offs, and commitments.

What this suggests is that there is a politics to the new teacher education that is not being taken into account in the narrow version of evidence-based practice. This does not mean that we should not gather good evidence. It can have a tremendous impact on the shape of teacher education for the 21st century. But it does mean that we should acknowledge the politics of evidence. As we gather more and more evidence in teacher education (and in education more broadly), we must not forget to ask: Evidence of what? For what purpose? Collected by whom and under what circumstances? In order to serve whose interest and (perhaps) ignoring or disadvantage whom?

Teacher Education Driven by Outcomes

The new teacher education is frontally about outcomes, and it is now widely assumed that the sine qua non of good teacher-preparation policies and practices is that they ensure that teachers can ensure pupils’ achievement. In fact, the language of outcomes has become so much a part of the contemporary teacher education lexicon as to be completely normalized. Across the country, providers of teacher education are struggling to demonstrate, document, and measure the effects, results, consequences, and effects of teacher preparation on school and other outcomes.
Prior to the mid-1990s, however, the emphasis was primarily on process—how prospective teachers learned to teach, how their beliefs and attitudes changed over time, what kinds of pedagogical and other knowledge they needed, and what contexts supported their learning. During this time, teacher education assessment focused on what is now retrospectively referred to as “inputs” rather than outcomes—institutional commitment, qualifications of faculty, courses and fieldwork, and the alignment of all of these with professional knowledge and standards. The shift in teacher education from inputs to outcomes is part of a larger sea change in how we think about educational accountability.

**Teacher Education Driven by Outcomes: Essence and Examples**

An early indication of the emerging outcomes focus was the highly publicized debate during the late 1990s and early 2000s about whether collegiate teacher education and professional certification were warranted as broad educational policies. Played out in the pages of academic journals, face-to-face debates, and reports and counter-reports from foundations and professional organizations, the debate zeroed in on outcomes, primarily pupils’ achievement.

In addition, there are many state and regional efforts now under way that involve the collective efforts of teacher educators and other researchers to trace the impact of teacher preparation variations on outcomes of various kinds. Researchers in western Oregon, for example, are building on years of research on teacher work samples (Schalock & Myton, 1988) to examine the longitudinal impact of variations in teacher preparation on pupils’ learning; work samples have since been used as a way to assess the outcomes of teacher education in many state and reform initiatives. Ohio’s Teacher Quality Project, which involves all 50 of its teacher certification institutions, is using both value-added assessments and qualitative studies to sort out the relationships of teacher preparation, classroom discourse, instructional practices, and pupils’ learning. Working with labor market economists and teacher educators, the City University of New York is using New York City and New York State teacher databases to analyze outcomes by pathways, including traditional and a variety of alternate route programs located at New York public and private colleges. In addition, under larger umbrellas such as NCATE, TEAC, and TNE, many individual institutions are studying the outcomes of teacher preparation, defined as both teacher candidates’ and pupils’ learning. The University of Virginia, for example, is using video cases to assess teacher candidates’ decisions about classroom events and their classroom practices; there, the consistency of candidates’ practices with research-based strategies is considered an outcome of the program. Bank Street College is using structured observations to analyze the tasks their teachers assign to pupils in terms of cognitive demands; in this case, increasing cognitive complexity is regarded as an outcome.

One of the clearest examples of the new outcomes-driven teacher education is the state of Louisiana’s Teacher Quality Initiative, which is intended to improve teacher preparation through four stages, including requiring that all programs meet high accreditation standards. The fourth stage, which is currently at the pilot test point, was announced in a press release from the Louisiana Board of Regents (August 25, 2004) as follows:

“Louisiana is the first state in the nation to examine the effectiveness of teacher preparation programs by assessing the achievement growth of students and linking that growth in student learning to college and university teacher preparation programs.”

What is groundbreaking about this is that it is a state-level initiative to use value-added assessment to compare the achievement gains of the pupils of experienced teachers with the gains of the pupils of new teachers who were prepared at various Louisiana teacher education programs, thus allowing the evaluation and ranking of the programs and their institutions based on pupil outcomes. Preliminary analyses indicate that the pupils of experienced teachers evidence more growth than the pupils of new teachers, with the exception of the pupils of new teachers from one teacher education program: Those pupils’ growth actually surpassed that of the pupils of experienced teachers. According to the researchers (Noell, August 24, 2004), these results suggest that a new teacher “does not have to be less effective than an experienced one” and point to future possibilities for improving the other programs in the state, on the basis of what the exceptional program does.

As these examples show, there are important philosophical and methodological variations in the new focus on outcomes, including especially whether pupils’ achievement as measured by test scores is the only outcome examined, or whether other outcomes—such as teacher candidates’ knowledge growth—count as well. There are also differences in what are suggested as the logical or possible implications of focusing on outcomes. These differences notwithstanding, however, the central tenet is that the effectiveness of teacher preparation programs and pathways can and ought to be assessed in terms of their affects on outcomes, especially pupils’ achievement, and that this information will lead to improved teacher preparation.

**For Better and for Worse**

Is the emphasis on outcomes for better or for worse? My answer here is the same as it has been so far—the new outcomes-driven teacher education is both for the better and for the worse.

It is certainly for the better that schools of education—and some alternate providers of teacher preparation—are thinking hard about the goals of their programs and inventing new ways to trace their impact all the way to the ultimate destination—the nation’s schoolchildren. This is virtually unheard-of in professional education. For example, although providers of medical and legal education keep track of their graduates’ scores on exams, they generally do not follow their graduates into hospitals and courtrooms. In fact, a recent study from the Finance Project (Neville, Sherman, & Cohen, 2005) indicates that, among the professions studied (law, accounting, architecture, nursing, firefighting, law enforcement, and education), only education assesses the effects of its professional training programs on professional performance. In this sense, the work in teacher education is not only for the better—it may be ground-breaking.

It is also for the better that there are many interdisciplinary groups of researchers working together on the outcomes problem. They are inventing new ways to think about outcomes and systematically examining the complex links among variations in
teacher preparation programs and pathways, teacher candidates’ learning, varying accountability contexts, and pupils’ learning. Many of these interdisciplinary efforts involve mixed-method or multiple-method research designs. They work from the idea that pupils’ test scores on state assessments are a necessary part of evaluating the outcomes of teacher preparation, but they also make clear that test scores alone are an insufficient way to do so.

In addition, at some teacher education institutions, particularly those that prepare teachers for urban schools, educators are conceptualizing work for equity and social justice as an outcome of teacher preparation in and of itself. For example at the University of California, Los Angeles, the teacher education group has worked for the last 7 years to track the placement and retention patterns of their graduates who work in Los Angeles’ most difficult schools, counting as an outcome of their program their graduates’ commitment to and retention in careers as social justice educators (Quartz & TEP Research Group, 2003). At Boston College, we are developing a multi-methods instrument for assessing how candidates “learn to teach for social justice,” by combining surveys with vignette analysis, interviews, and school observations of teachers and pupils. At the University of Illinois, Chicago, educators are linking their program-completer information to information from the Illinois Teacher Data Warehouse, which tracks all Illinois public school teachers, to see whether they meet their own goal of serving children who live in poverty. And at Montclair State University, teacher educators have invented a system for tracking the progress of every teacher candidate toward the outcome of teaching for cultural diversity. What these examples have in common is the assumption that preparing teachers who effectively teach all students (including those who attend the poorest and most neglected schools) and, at the same time, work to make their schools and communities more caring and just places, is an essential outcome of teacher preparation.

All of these examples—from state and regional studies linking pathways and pupils’ achievement to studies measuring outcomes in terms of urban retention and work for social justice—are part of the new focus on the outcomes of teacher preparation. The full array of this work is beginning to establish what the outcomes trap has to do with teacher preparation. The full array of this work is beginning to establish what happens in teacher preparation to its consequences in classrooms and in the world. This is surely for the better.

The Outcomes Trap

With this said, however, the reductionist version of outcomes—that is, relying entirely or almost entirely on pupils’ test scores as the way to evaluate teacher preparation—is highly problematic. In an article titled “The Testing Trap,” Richard Elmore (2002) argued that the No Child Left Behind Act of 2001 and its supporting bills and policies were “accelerating the worst trend of the current accountability movement: that performance-based accountability has come to mean testing alone” (p. 35). In teacher education, we may be dangerously close to falling into what may be called “the outcomes trap,” which in a nutshell is the questionable theory that evaluating teacher preparation programs on the basis of graduates’ annual impact on pupils’ test scores and reporting those evaluations publicly will bring about change and—ultimately—solve the teacher quality problem.

The outcomes trap has three springs. The first spring is the premise that teachers are the critical components in boosting pupils’ achievement. The report of The Teaching Commission (2004) is particularly straightforward on this point:

Bolstering teacher quality is, of course, not the only challenge we face as we seek to strengthen public education. There are social problems, financial obstacles, and facilities issues, among other concerns. But The Teaching Commission believes that quality teachers are the critical factor in helping young people overcome the damaging effects of poverty, lack of parental guidance, and other challenges. . . . In other words, the effectiveness of any broader education reform . . . is ultimately dependent on the quality of teachers in classrooms. (pp. 14–15)

Reports such as this seem unconcerned about the paradox that teachers are presumed to be both the most intractable problem and the best solution to all that ails the schools (Cohen, 1995; Fullan, 1993). They ignore the reality that teachers (and teacher education programs) alone cannot fix the nation’s worst schools and improve the life chances of the most disadvantaged students. To do so will take simultaneous investments in resources, capacity building, and teachers’ professional growth, not to mention changes in access to housing, health, and jobs. The trap here is that statements like those in the previous two sentences get construed by critics as an “excuse” for teachers or teacher education (e.g., Carter, 2000; Haycock, 2005). This is not an excuse. Acknowledging that the problems of the nation’s schools include, but go far beyond, teachers, and that the problems of the nation include, but go far beyond, the schools, is not an excuse. It reflects categorical acceptance of the goal of equal and high-quality education for all students and flat-out rejection of the idea that holding teachers and teacher preparation accountable for everything will fix everything, while meanwhile letting everybody else off the hook.

The second spring in the outcomes trap has to do with teacher preparation for urban and poor areas. A recent study by Decker, Mayer, and Glazerman (2004) for the Mathematica Policy Research Institute, which compared the effect on pupils of Teach for America (TFA) teachers and non–TFA teachers, has been heralded as a methodological breakthrough because it uses a randomized field trial and thus meets today’s “gold standard” for research. My critique here is not of the TFA program itself or of the science used to study it, but of the question with which it began: “Do TFA teachers improve (or at least not harm) student outcomes relative to what would have happened in their absence?” (Decker et al., 2004, p. xi). As one critique pointed out, the TFA study did not ask whether TFA or the control teachers in the regions studied were effective for the students they taught: “If they had [asked this question], the answer would be, ‘no.’ Students of both TFA and control group teachers scored very poorly” (Southeast Center for Teaching Quality, 2004). Rather, the study asked whether having teachers who were not fully prepared and certified did any harm to pupils by making their achievement scores any worse than they would have been anyway, given the reality that high poverty schools often have to hire poorly educated, uncertified, and unqualified teachers. Decker et al. are explicit on this point: “The consistent pattern of positive or zero impacts on test scores across grades, regions, and student subgroups suggests that there is little risk that hiring TFA
teachers will reduce achievement, either for the average student or for most subgroups of students” (p. xvi). The trap here is the premise of studies like this one: that the goal of policies for high-poverty, hard-to-staff, and minority schools is to provide teachers who will do no harm because they are “good enough” to maintain or slightly increase existing very low levels of achievement—rather than to invest in approaches that interrupt the cycle of inadequate resources, low expectations, and poor achievement.

The final spring in the outcomes trap is the assumption that the primary purpose of education in our society is to produce the nation’s workforce in keeping with the demands of a competitive and increasingly global and knowledge-based society. Norton Grubb and Marvin Lazerson (2004) refer to an education system “whose purposes are dominated by preparation for economic roles,” as “vocationalist,” a trend that first emerged at the turn of the 20th century and is now paramount in the 21st. Vocationalism’s narrow focus on producing the nation’s workforce, coupled with excessive attention to the tests used to compare U.S. students with those in other countries, has pushed out other goals and purposes of teacher education (Cuban, 2004; Michelli & Keiser, 2004). Chief among those pushed out is the goal of preparing teachers who know how to prepare future citizens to participate in a democratic society. Amy Gutman (1999) argues that the key to what she calls “deliberative democracy” is democratic education: “Deliberative democracy underscores the importance of publicly supported education that develops the capacity to deliberate among all children as future free and equal citizens” (p. xii). If all free and equal citizens of a society are to have the benefit of a democratic education, all teachers need the knowledge, skills, and dispositions to teach toward the democratic ideal, and all teacher preparation programs need to be measured—at least in part—by their success at producing teachers who teach for democracy. This is decidedly not what is happening as the narrow and reductionist version of the new teacher education gains prominence.

The New Teacher Education: Enduring Tensions

I have described in some detail the three major pieces of the emerging new teacher education: It is constructed as a policy problem, based on research and evidence, and driven by outcomes. As these pieces are put together in differing accountability contexts and in light of the commitments that have historically animated teacher education, a number of tensions have surfaced. These include the trade-offs between selectivity and diversification of the teacher workforce, the balance between subject matter and pedagogy, the competition between the university and multiple other locations as the site for teacher preparation, and the contradictions of simultaneous regulation and deregulation at both state and federal levels. As noted above, space constraints permit me simply to mention these four tensions.

Diversification and Selectivity

Increasingly, there are calls to increase the selectivity of teacher preparation programs and entry routes based on claims that teachers’ general verbal ability is consistently associated with pupils’ achievement (Whitehurst, 2001). This trend is reflected in the teacher tests now in place in most states, the higher GPAs necessary for entry into teacher education programs at many universities and colleges, and the record numbers of applicants to programs like Teach for America, which recruits seniors from highly competitive liberal arts colleges and universities. At the same time, however, as Villegas and Lucas (2004) and others have concluded, there is a compelling case for increasing the racial and ethnic diversity of the teacher workforce, based on research about the cultural knowledge of teachers of color, their function as role models for all students, and the importance to pupil learning of the teacher’s ability to establish caring relationships. There is also increasing evidence that teacher tests—like other tests historically that are biased against minorities (Gitomer & Latham, 2000)—coupled with the negative experiences of many teachers of color in preparation programs at mostly White institutions (Villegas & Lucas), may be depressing minority participation in the teaching profession. As these very different lines of inquiry suggest, the tensions between diversification and selectivity come to the surface very quickly with a new teacher education that is driven by evidence and outcomes. There is more than one kind of evidence, and there are often conflicting, or at least not easily compatible, research conclusions. These conflicts illustrate that many important policy decisions ultimately are in part values- and priority-oriented rather than simply evidence-based.

Subject Matter and Pedagogy

One of the significant consequences of the new teacher education is the bright spotlight on subject matter knowledge, which now overshadows pedagogy and other areas related to education study. Indeed, subject matter is the hallmark of “highly qualified teachers” in the No Child Left Behind Act, which is echoed in each of the Secretary of Education’s Title II reports on teacher quality. In these policy documents, the emphasis on subject matter is accompanied by rejection of, or at least questions about, the need for pedagogical knowledge, particularly knowledge that might be taught in education schools. Even inside the worlds of university-based teacher preparation and state-level program approval, where pedagogy and classroom practice remain essential indicators of teachers’ readiness to teach, there is growing faith—at least on the surface—that general knowledge of the liberal arts and sciences, coupled with more specific knowledge in the subject fields to be taught, is the magic bullet needed to improve teacher preparation. This is evident in the requirements that teacher candidates have arts and sciences majors in addition to, or instead of, education majors; in the new core coursework requirements in the liberal arts; in state teacher tests in content areas; and in severe limits on how many education credits may be taken as part of a degree at a public institution. These requirements privilege subject matter over pedagogy, reflecting the popular myth that there is little to know about teaching and schools, and what little there is can be easily picked up on the job. Although the way this tension is playing out within the context of high-stakes accountability is new, the tension between subject matter knowledge and pedagogy has a very long history in teacher education. In a certain sense, the current situation can be understood as the latest iteration in a historical “anti-educationism” (Lagemann, 2000), which “encompasses assumptions concerning the lack of knowledge, skill, ambition, and competence needed and possessed by educators” (p. xii).
Although there were some alternate routes into teaching in the 1980s, for nearly all of the last century teacher preparation has been located within higher education, first in normal schools and then in colleges and universities. Now, as part of the new teacher education, almost all states have alternate providers, including school-based teacher residency projects, computer-based distance learning programs, and multiple alternate entry and certification routes, some that are attached to universities and some that bypass them altogether. In addition, community colleges are increasingly playing a role in teacher preparation, and for-profit teacher preparation has emerged as part of a growing trend in higher education wherein proprietary, degree-granting, and accredited institutions offer occupational training for a widening array of entry-level positions (Morey, 2001).

The merits of these multiple providers are often discussed from a kind of “horse race” mentality, with empirical evidence the supposed determinant of “who wins” by producing better test results in pupils. Of course, this approach is problematic. Even in the face of tightly specified policies, teacher education is enacted in ways that are highly local—embedded in the multiple and changing contexts of local institutions and regions and subject to the interpretations and social interactions of individuals and groups. There is a tension between horse race research and empirical investigations of what the active ingredients are in any effective teacher preparation approach. It is also worth examining whether some outcomes of teacher preparation, much harder to measure than test scores, are best accomplished at universities—such as teachers’ learning how the social, political, historical, and cultural contexts of schooling have helped to create the current system. Other aspects of preparation may well be accomplished only in the context of schools and classrooms—such as learning how to design academic tasks and use classroom data to make decisions about curriculum and instruction. Finally, many goals of teacher preparation are best met in the intersections of universities, schools, and communities. It is not clear whether there are any aspects of teacher preparation best accomplished through programmed learning modules at for-profit training centers.

**Regulation and Deregulation**

I have noted that there are competing agendas for the reform of teacher education. The deregulation agenda, consistent with other market-based reforms, aims to eliminate most requirements for entry into the teaching profession and open up multiple entry routes. In this sense, deregulationists want teacher education and public schools to be more like charter and private schools, in that they are accountable to the marketplace for hiring and firing decisions, with the bottom line students’ scores on tests. In many ways, this is the policy approach embraced by the federal government (and a number of states). At the same time, however, there are now unprecedented steps to regulate teacher education through more stringent control of both the inputs and the outcomes of teacher preparation. In a number of states, this boils down to simultaneous efforts to deregulate and regulate teacher preparation—for example, tighter control of required courses at state-approved teacher preparation institutions, coupled with the privileging of state-supported alternate routes that are wide open in terms of candidates’ courses and experiential backgrounds. There are similar contradictions at the federal level. This seeming contradiction, “tightly regulated deregulation” (Cochran-Smith, 2004a), reveals a major tension in the new teacher education: on the one hand, support for alternate routes that do away with most requirements and make entry into teaching wide open, and on the other hand, centralized federal control that diminishes state- and local-level decisions and greatly prescribes professional discretion and autonomy.

As this brief discussion suggests, the new teacher education is complex, especially when understood in terms of the larger educational, economic, social, and political conditions in which it is emerging: market-based reforms in education and a whole range of other human services, increasing global competition, evidence-based practice in medicine and many other professions, high-stakes accountability, and persistent social and educational inequities. The new teacher education has the potential to be for the better, but it also has the potential to be for the worse. In determining which, the education research community plays a critical role.

**The Role of the Education Research Community**

We need a new teacher education. The definitive question, though, is how to get the best out of the new teacher education when we can so easily imagine the worst.

**The New Teacher Education: The Future?**

What follows is one possible future scenario for the new teacher education that reflects some of its worst aspects.

We now have a huge national database that tracks the impact of every teacher education program according to pupils’ annual test scores. The national system produces numerical rankings of the teachers in each school and school district as well as rankings of all of the teacher preparation providers in each state and across the nation. There are incentives for the winners, ranging from cash bonuses to federal funds, to public justification for charging higher rates for services. There are also severe sanctions for the losers, including public exposure and withdrawal of funds.

The result is that many teacher education programs have shut down, but just as many others have sprung up. The competing providers, especially the for-profits and programmed learning centers, concentrate almost entirely on test preparation skills, with the most effective of them now lucrative national franchises. Among the losers are urban teacher preparation programs and poor and minority schools because their increasingly diverse populations and large numbers of English language learners make the odds against their having winners prohibitive, and thus they are harder to staff than ever. Of course, affluent school districts still hire teachers who were prepared in teacher ed programs at top colleges and universities, because their pupils already do well on tests and these districts know the value of teachers who are broadly educated but also know how to teach and know how people learn. In this new world, only the radical fringe pays much attention to theory, democratic ideals, or social justice because these don’t translate very well into test scores, and the public interest is understood to be the sum of each individual’s private interest.
Of course this is exaggerated. But to a great extent, I worry that this is the direction we are heading. As Larry Cuban (1992) did in his 1991 presidential address, I want to ask, What is our responsibility as scholars to speak out against policies we believe to be seriously “flawed in both logic and evidence, and ultimately, hostile to [our] vision for students?” (p. 6). Cuban characterized the momentum building in the late 1980s for national tests and curriculum as a train rushing down a track. He asked whether scholars should accommodate to what appeared by then almost to be political reality—by helping to build better track for the train, in the form of, say, better tests—or, whether they should use their “expertise, evidence, and freedom” (p. 6) to try publicly to slow down the train by speaking out to lay and professional audiences in order to influence the policy debate. Cuban suggested that either choice (building better track or slowing down the train) was reasonable for a scholar, although he himself preferred slowing the train.

The train Cuban described has not slowed down and is now streaking through a deep dark tunnel, which instead of light at its end, may have a concrete wall. I believe that as a community of scholars, we have little choice but to join others in a “both-and” strategy. That is, we need both to slow down the train, by speaking out against the narrowest version of the new teacher education, and, at the same time, to join others who are building better track—and, hopefully, bridges, new tunnel openings, track switchers, and even exit ramps. This strategy of simultaneously working against and within the emerging new system is paramount.

When I say “we,” here, I mean the people engaged in the day-to-day work of preparing teachers, as well as those who do research in, on, and for teacher education and those who analyze and formulate policy. But I also mean the community of education scholars in a larger sense—all of us who are readers, producers, and consumers of research that is related to teaching and teacher education and who care about public education, schools, teachers, and children. Although this article focuses on teacher education, it is clear that the issues it addresses are much broader.

The major pieces of “the new teacher education”—teacher education as a policy problem, based on research and evidence, and driven by outcomes—are problematic, particularly in their narrowest form. In this concluding section, I wish to argue that, instead, we need a new teacher education with three somewhat different pieces: teacher education constructed as a policy problem and a political problem, teacher education based on evidence plus, and teacher education driven by learning (see Figure 4).

**Teacher Education as a Policy Problem and a Political Problem**

I have argued that the narrow “super”-rational view of teacher education as a policy problem assumes a linear relationship from policy to higher test scores. We need to challenge this idea and, instead, construct teacher education as both a policy problem and a political problem. The education research community needs to make it clearer to the public and to policymakers that there are significant complexities in what happens to policies on their way, as Susan Fuhrman (2001) puts it, from “capitols to classrooms.” These complexities depend on the cultures and contexts of schools, the resources available, and the neighborhoods, communities, and larger environments where schools are located. They also have to do with variations in school district and state accountability contexts. To get the best out of the new teacher education, we need to give up the rationality project—

![Figure 4](http://er.aera.net)
or the attempt to remove public policy from the “irrationalities and indignities” (Stone, 1997, p. 6) of politics. Instead, we need to embrace the political aspects of education policy as the inevitable stuff of social institutions in human societies. This will mean understanding policy not as purely rational choice based on expediency but as the struggle over ideas, ideals, competing goals, values, and notions about what constitutes public and private interest.

**Teacher Education Based on Evidence Plus**

I have also been arguing that, although evidence-based teacher education has many aspects for the better, the “for worse” version is grounded in a narrow view of “scientific research” as causal studies only. To get the most out of the new teacher education, we need a broader notion of science that includes but is not limited to the investigation of causal questions, and a broader notion of evidence that includes but is not limited to clinical trials. The new teacher education needs also to be informed by inquiry and scholarship that are not empirical. Margaret Eisenhart (2005) recently coined the phrase “science plus” to refer to science that incorporates experimental research and qualitative research in combination with historical, theoretical, critical, and ethical scholarship. Following Eisenhart, I use the term “evidence plus” to make the point that the new teacher education will be for the worse unless it is informed by a wealth of critical and theoretical inquiry. In particular, there are whole bodies of work about teacher learning in communities and the preparation of teachers for a diverse society that come from critical and multicultural perspectives intended to interrupt the norms of conventional teacher education.

**Teacher Education as Learning-Driven**

Finally, this article suggests that paying attention to outcomes can be for the better in teacher education. But the “for-worse” version defines outcomes as test scores alone. My argument here is that we need to make learning—not outcomes narrowly defined as tests—the bottom line of teaching and teacher education. When teacher education is learning-driven, there is a focus on ensuring that all schoolchildren—including those in poor schools—have rich opportunities to learn, not just opportunities to be held accountable to the same high stakes. The bottom line for all children needs to be learning basic skills, as well as deep knowledge and critical thinking skills. We want students to be well prepared for college and meaningful work. But we also need to regard equity and inclusion as outcomes of teacher education, in addition to students’ social and emotional development. When learning is the outcome, the goal of teacher education is to prepare teachers who believe in and know how to provide challenging learning opportunities for all students. That way everybody is prepared to participate in a democratic society.

**The New Teacher Education: Back to the Future**

In conclusion, let us go back to the future for a quick look at a new teacher education for the best—teacher education that is constructed as a policy and a political problem, informed by evidence plus, and driven by the bottom line of learning. Here is another scenario for the future.

**We now have many routes and pathways into teaching, but all of them have the core components necessary for teachers to learn**

to teach in the service of students’ learning. These components were identified through dialogue within the profession and in the public arena. Quantitative and qualitative evidence was considered alongside arguments about teaching as an ethical and moral activity. There were debates about ideas and ideals for our society. Many people came to agree that, particularly in light of changing demographics, education that promotes basic skills and critical thinking for everybody was necessary to preserve our democracy.

Teacher education scholars and practitioners in all routes and pathways now collect evidence about their work. But because the focus is on learning opportunities as well as learning outcomes, policymakers pay attention to resources as well as test scores and performance measures. Social justice and equity are common words in the discourse because they are seen as worthy outcomes in and of themselves and as the foundation of a successful education system.

Nearly all of the alternate entry paths are now closely connected to universities, schools, and communities. It turned out there actually were some important goals of teacher preparation that universities did particularly well—such as helping teachers understand the social and historical patterns that created the existing system (thus helping them understand how to produce change); teaching about the relationships between culture and schooling; getting teacher candidates to examine deeply held beliefs and expectations about children; and familiarizing teacher candidates with the latest scholarship about learning, pedagogy, and language. It also turned out that there were major goals of teacher education that could only be met in schools, such as learning to design instructional tasks; using classroom data to make decisions; and creating and managing classroom environments that bolster learning. It was also realized that many goals were best met in the intersections of universities, schools, and communities. Over time, it became clear that very few of the really important goals of teacher education were accomplished through programmed learning at for-profit training centers. These eventually faded away.

Every year, a popular national news magazine ranks the top 100 teacher preparation providers in terms of how well their teachers do at creating rich learning opportunities for all children and teaching toward the democratic ideal. Since these criteria determine the rankings, everybody works really hard toward these goals.

Some people will think that the second scenario is much more fictional than the first. But it does not have to be that way. In our roles as scholars, I believe we must also be public intellectuals, using our expertise, our evidence, and our freedom to challenge a system that does not serve the interests of many students and to lead the way in another direction for the best.

**NOTES**

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In conversations over time, my colleague Curt Dudley-Marling has referred to research as a “rhetorical practice” to emphasize that researchers strategically craft both research problems and findings in order to be as persuasive as possible. I borrow this phrase here to refer to teacher education as rhetorical practice.

I have written at length about the theoretical and interpretive frameworks that ground my analyses of teacher education research, practice, and policy. In the interest of space limitations, I refer readers to other writings.

A full listing and discussion of these are included in Cochran-Smith and Fries, 2005.

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