Constructing Outcomes in Teacher Education: Policy, Practice and Pitfalls

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Abstract

As we enter the twenty-first century, the outcomes, consequences, and
results of teacher education have become critical topics in nearly all of
the state and national policy debates about teacher preparation and
licensure as well as in the development of many of the privately and
publicly funded research agendas related to teacher and student learning.
In this article, I argue that teacher education reform over the last fifty
years has been driven by a series of questions about policy and practice.
The question that is currently driving reform and policy in teacher
education is what I refer to as "the outcomes question." This question
asks how we should conceptualize and define the outcomes of teacher
education for teacher learning, professional practice, and student
learning, as well as how, by whom, and for what purposes these
outcomes should be documented, demonstrated, and/or measured. In this
article, I suggest that the outcomes question in teacher education is being
conceptualized and constructed in quite different ways depending on the

policy, research, and practice contexts in which the question is posed as well as on the political and professional motives of the posers. The article begins with an overview of the policy context, including those reforms and initiatives that have most influenced how outcomes are currently being constructed, debated, and enacted in teacher education. Then I identify and analyze three major "takes" on the outcomes question in teacher education—outcomes as the long-term or general impacts of teacher education, outcomes as teacher candidates' scores on high stakes teacher tests, and outcomes as the professional performances of teacher candidates, particularly their demonstrated ability to influence student learning. For each of these approaches to outcomes, I examine underlying assumptions about teaching and schooling, the evidence and criteria used for evaluation, units of analysis, and consequences for the profession. I point out that how we construct outcomes in teacher education (including how we make the case that some outcomes matter more than others) legitimizes but also undermines particular points of view about the purposes of schooling, the nature of teaching and learning, and the role of teacher education in educational reform. In the second half of the article, I offer critique across the three constructions of outcomes, exploring the possibilities as well as the pitfalls involved in the outcomes debate. In this section, I focus on the tensions between professional consensus and critique, problems with the inputs-outputs metaphor, the need to get social justice onto the outcomes agenda, problems with the characterization of teachers as either saviors or culprits, and the connection of outcomes to educational reform strategies that are either democratic or market-driven.

In public opinion polls of what concerns Americans most, education has ranked higher than the economy, the environment, and even crime (Mosle, 1996). Since 1996, the *New York Times* alone has printed 1,220 articles about teacher quality and 920 articles about teacher testing. And, as the following excerpt from the first Bush-Gore presidential debate indicates, the quality of public schools and of the nation's teaching force has now reached center stage in national politics (not to mention its continued central role in state and local politics):

> Mr. Lehrer (Debate Moderator): All right. So, having heard the two of you, voters have just heard the two of you, what's the difference? What's the choice between the two of you on education?

> Mr. Bush: Well the first—first is, the difference is, there is no new accountability measures in Vice President Gore's plan. He says he's for voluntary testing. You can 't have voluntary testing. You must have mandatory testing. You must say that if you receive money, you must show us whether or not children are learning to read and write and add and subtract. That's the difference. You may claim you've got mandatory testing, but you don't. Mr. Vice President. And that is a huge difference. Testing is the cornerstone of reform…

> Mr. Gore: Well first of all, I do have mandatory testing. I think the governor

may not have heard what I said clearly. The voluntary national test is in addition to the mandatory testing that we will require of states—all schools, all school districts, students themselves and required teacher testing, which goes a step farther than Governor Bush has been willing to go (*New York Times* Archives, 2000).

These comments from then presidential candidates George Bush and Al Gore reflect the current national attention to teacher quality and its frequent identical twin, teacher testing. In the media, in public policy debates, and within the profession of teaching and teacher education itself, there is unprecedented emphasis on accountability, results, and outcomes, or at a fundamental level, what connection the public has a right to expect among teaching, schooling, and student learning.

In this article, I consider these issues by focusing specifically on preservice teacher education. I argue that "the outcomes question in teacher education" (Cochran-Smith, 2000, a, b; in press) is currently driving the field and to a great extent, determining policy and practice. I begin this article by reviewing the policy context, including those reforms and initiatives that have most influenced how outcomes are being constructed, debated, and enacted in teacher education. Then I identify three major "takes" on teacher education outcomes—outcomes as the long-term or general impacts of teacher education, outcomes as teacher candidates' scores on high stakes teacher tests, and outcomes as the professional performances of teacher candidates, particularly their demonstrated ability to influence student learning. For each of these three constructions of outcomes, I consider underlying assumptions about teaching and learning, evidence and criteria used for evaluation, units of analysis, and consequences for the profession. I conclude by considering in some detail the pitfalls and problems that are implicated in various constructions of teacher education outcomes.

The Questions That Drive Reform in Teacher Education

The recent history of teacher education—roughly the last half century—has been analyzed in terms of philosophical and epistemological positions, historical trends, and paradigms of inquiry (Borrowman, 1956; Floden & Buchman, 1990; Griffin, 1999; Klausmeier, 1990; Lucas, 1999; Shulman, 1986; Urban, 1990; Yarger & Smith, 1990; Zeichner, 1988). Another way to think about and trace teacher education reform, however, is in terms of the major questions that have driven the field and the varying and sometimes competing ways these questions are constructed, debated, and enacted in research, policy, and practice.

Along these lines, a very loosely chronological (and necessarily simplified) list of the major questions that have driven teacher education reform over the last 50 years might go something like this: the attributes question, the effectiveness question, the knowledge question, and what I am proposing we now think of as "the outcomes question" in teacher education. Each of these questions both shaped and was shaped by the political climate, the degree and kind of public attention to K-12 schooling, the perceived supply and demand of teachers, federal and state policies and funding programs, perceptions of teacher education as a profession and an area of scholarship that ought to be located (or not) in colleges and universities, and emerging and competing paradigms and programs of research on teaching, teacher learning, and teaching/learning/curriculum in the subject areas.

The Attributes Question

The attributes question, which was prominent from roughly the early 1950s through the1960s, asked, "What are the attributes and qualities of good teachers, prospective teachers, and teacher education programs?" Explored through studies of the personal characteristics of teachers and teacher educators, versions of this question emphasized both attributes related to personal integrity and human sensitivity (the "character" of the teacher or prospective teacher) as well as attributes of the liberally educated and/or academically able person (the "quality" of the teacher or prospective teacher). A different version of the attributes question was central to critiques of teacher education programs and faculty, especially the degree to which they provided (or, more often, failed to provide) intellectually rigorous, discipline-based training for new and experienced teachers worthy of a place in the university. This version of the attributes question animated program decisions and policy debates about the balance between professional versus arts and sciences courses for prospective teachers, the academic qualifications and scholarship (or lack thereof) of teacher education students and faculty, and the organizational structures of teacher education programs.

The Effectiveness Question

The effectiveness question focused different issues: "What are the teaching strategies and processes used by effective teachers, and, what teacher education processes are most effective in ensuring that prospective teachers learn these strategies?" This question drove many of the developments and reforms in teacher education during the late 1960s through the mid 1980s. Influenced by new studies of the "scientific basis of teaching" and by empirical evidence about effective teaching strategies, many teacher education programs developed systems for evaluating prospective teachers according to scientific objectives and stated performance criteria (Gage, 1972). Checklists and other forms of assessment attempted to align classroom teachers' practices with the criteria used by fieldwork supervisors to evaluate the practice of teacher candidates and also with teacher education processes, programs, and language. Some of the other questions that shaped this period arose at least partly in response to perceived flaws in the effectiveness question (Shulman, 1986). New questions rooted in anthropological and sociolinguistic theories about the meanings of classroom events for participants, for example, countered the effectiveness question and pointed to what was left out of discussions that focused on effective teacher behaviors (Erickson, 1986).

The Knowledge Question

Prompted by but also concurrent with public concern about the quality of teaching and teacher education, the knowledge question drove the field from the early 1980s through the late 1990s. This question became mantra throughout the field, "What should teachers know and be able to do?" and/or, its companion, "What should the knowledge base of teacher education be?" At the heart of the knowledge question was the desire to professionalize teaching and teacher education by building a common knowledge base for the profession. Building on early research about teachers' thinking and on emerging knowledge in the various subject matter disciplines related to children's learning, the knowledge question moved the field away from an emphasis on what effective teachers

do to a focus on what they know and need to know, the knowledge sources they use, how they organize and evaluate knowledge (Barnes, 1989), and how they learn to construct new knowledge that is appropriate for differing local contexts (Cochran-Smith & Lytle, 1993), particularly for increasingly diverse learners (Banks, 1996).

Versions of the knowledge question identified and made distinctions among formal and practical knowledge (Fenstermacher, 1994), pedagogical content knowledge (L. Shulman, 1987), case knowledge (J. Shulman, 1992), craft knowledge (Grimmett & MacKinnon, 1992); knowledge in action (Schon, 1983), reflection on knowledge (Schon, 1987; Zeichner & Liston, 1987), culturally relevant knowledge (Ladson Billings, 1995; Irvine, 1990), and local knowledge generated through teacher research (Cochran-Smith & Lytle, 1993) and/or action research (Noffke, 1997). Prompted in part by new programs of research and in part by changing accreditation standards, the knowledge question drove major policies and program revisions in teacher education intended to ensure that the burgeoning codified knowledge base was at the center of the curriculum (Reynolds, 1989; Murray, 1996). Some versions of the knowledge question concentrated on the contexts within which prospective teachers could gain the knowledge and practices they need. This question prompted the development of new teacher education contexts, including school-university partnerships (Sirotnik & Goodlad, 1988; Jacobson, et. al, 1998), professional development schools (Holmes Group, 1996; Levine & Trachtman, 1997), and new forms of collaboration among beginning and experienced teachers, teacher educators, and arts and sciences faculty (Goodlad, 1994; Patterson, Michelli, & Pacheco, 1999).

Questioning the Questions

As we close the twentieth century and open the twenty-first, the major question that is driving the field is the outcomes question in teacher education, which I explore in the remainder of this article. Before turning to the outcomes question, however, several other comments are important. First it is important to point out that the questions I have sketched above are not simply research questions, although each of them has research aspects, and several have spawned major programs of empirical study. Each of them also has to do with policy and practice in teacher education and with the intersections as well as disconnects among the three. More important to note, however, is the fact that each of these animating questions is also in some fundamental way a question about the priorities and goals of the profession (and even of the nation). As James Hiebert (1999) points out in a thoughtful article about the relationships between mathematics research and National Council of Teachers of Mathematics (NCTM) standards, the rightness or legitimacy of priorities and goals are questions of value and belief rather than questions of evidence that can suggest educational policies based on varying levels of confidence. Values questions, of course, cannot be settled empirically. It is important to acknowledge, however, that in some cases, policies and practices are driven more by values than by empirical evidence, and, as I indicate throughout this article, all policies and programs of research are ideological in a certain sense.

Second, I want to make it clear that the short list I have offered here does not presume to include the only questions that have driven the field of teacher education nor even necessarily what some people would consider to be the most important questions. There has not been complete consensus in teacher education at any point over the last half century—nor is there now—about which questions are the right ones to ask. There have always been—and hopefully will continue to be—competing questions as well as questions that critique, play off of, and take on the major animating issues. Thus my

short list knowingly leaves out a host of important issues and critical questions that have been explored energetically by practitioners, policy makers, and researchers in teacher education.

Finally it is important to note that none of the questions I have loosely associated with particular time periods was settled during that time period or disappeared from consideration after that time. Rather many of the questions that drive the field during particular eras are periodically recycled, reemphasized, and rethreaded into new and current intersections of research, practice, and policy in ways that may or may not appear to be different from their previous iterations. For example, some of the questions about intellectual rigor in teacher education programs and the questionable scholarship of teacher education faculty that were prominent in the late 1950s and early 1960s reemerged in the 1980s (Earley, 2000). Even though the "new" critiques apparently had little to offer that was different from the old (Zeichner, 1988), they *were* nonetheless *different* in that they emerged in the context of a different social and political climate. Similarly, as I suggest below, some of the underlying assumptions of 1970s and 80s questions about the relationships of teaching and learning processes and products (Dunkin & Biddle, 1974) are being recycled into some current versions of the outcomes question in teacher education, and of course some outcomes questions were also explored in the early and mid 1980s. Old questions, however, are never just "same ole" old questions. They are instead "new" old questions because they have a different import and a different set of implications when they are woven into the tapestry of a changed and changing political, social, and economic time.

The Outcomes Question

As we enter the twenty-first century, the outcomes, consequences, and results of teacher education have become critical topics in nearly all of the state and national policy debates about teacher preparation and licensure as well as in the development of many of the privately and publicly funded research agendas related to teacher and student learning. If the major question that drove the field during the last fifteen years was, "What should teachers and teacher candidates know and be able to do?" then the driving question for the last three or four has been, "How will we know when (and if) teachers and teacher candidates know and can do what they ought to know and be able to do?" In the remainder of this article, I elaborate and analyze how policy makers, practitioners, and researchers are constructing the outcomes question in teacher education, examining what I argue are its three major forms. First, however, I briefly consider the larger policy and professional contexts out of which the outcomes question in teacher education emerged and continues to evolve.

**Policy and Professional Contexts
Of the Outcomes Debate in Teacher Education**

The context of reform in teacher education has been analyzed and described at great length from policy (Darling-Hammond, Wise & Klein, 1999; Kaplan & Edelfelt, 1996), curricular (Darling-Hammond & Sykes, 1999; Griffin, 1999), organizational (Jacobson, Emihovich, Helfrich, Petrie, & Stevenson, 1998; Patterson, Michelli, & Pacheco, 1999), and political (Gallagher & Bailey, 2000; Hudson & Lambert, 1997) perspectives. In the section that follows, I sketch the outlines of what might be thought of as the policy and professional context of the outcomes debate in teacher education, or, those reforms and developments in teacher education that have had a strong influence on

how the outcomes question is currently being constructed, critiqued, and enacted.

Professionalization of Teaching

First and perhaps foremost, the outcomes debate is deeply embedded in the movement to professionalize teaching and to secure for teaching and teacher education a legitimate place among other health and human services professions. As is now well-documented, there has been a major effort over the last 15 years to codify and disseminate the formal knowledge base for teaching and teacher education in order to insure that teacher education is no longer a normative, natural, or intuitive process (Gardner, 1989). Prompted in large part by nationwide criticisms of teaching and teacher education in the early and mid 1980s (Carnegie Task Force on the Teaching Profession, 1986; Holmes Group, 1986; National Commission on Excellence in Education, 1983) and by early work about teachers' thinking (Clark & Peterson, 1986) and knowledge (Shulman, 1986, 1987), the professionalization movement was intended to make teacher education a state-of-the-art field by establishing an official and formal body of knowledge that distinguished professional educators from lay persons (Gardner, 1989; Yinger, 1999).

The development of standards for the profession has been a central part of the professionalization movement. Since the mid 1980s, the National Council for the Accreditation of Teacher Education (NCATE) has evaluated teacher preparation programs according to the professional knowledge bases and later the conceptual frameworks that shaped and connected the various coursework and fieldwork pieces of the curriculum. The National Board for Professional Teaching Standards (NBPTS) was established in 1987 as the first professional organization in the teaching profession to establish standards for the advanced certification of highly experienced and successful teachers. These were parallel to the model performance-based licensing standards developed by the Interstate New Teacher Assessment and Support Consortium (INTASC), which was initiated in 1987 by the Council of Chief State School Officers to support the work of states in rethinking and reinventing teacher preparation and teacher licensing (Yinger & Hendricks-Lee, 2000). NCATE 2000 standards also offer performance standards in keeping with those of NBPTS and INTASC (Darling-Hammond, Wise, & Klein, 1999). This means that there are major efforts now well underway to develop a common national system of accreditation of "professionally grounded and performance-based standards for education, licensing, and certification" (Darling-Hammond, Wise, & Klein, 1999, p. 11) that is remarkably broad-based in its support and connects the accreditation of teacher preparation institutions with initial state licensing systems as well as systems for the advanced certification of experienced teachers. All of these center on authentic assessment of teacher performance.

As Yinger argues quite persuasively (Yinger, 1999; Yinger & Hendricks-Lee, 2000), standards always play a critical role in the process of professionalization by establishing public definitions of effectiveness, performance criteria for thinking and action, and goals for initial and continuing professional learning. Notwithstanding the critique that professional standards for teaching and teacher education are largely provisional and unvalidated—based on a consensus of professional educators and an emerging knowledge base rather than on tested outcomes and solid evidence (Murray, 1996, 2000), standards are now part of state licensing requirements in most states are play a major role in the outcomes context.

New Understandings of Teacher Learning

Part of the professionalization of teaching and teacher education was mounting recognition that training models were inadequate to the major tasks of teaching and school reform, and new models of professional development for prospective and experienced teachers were required (Cochran-Smith & Lytle, 1993; Little, 1993; McLaughlin, 1994; Darling-Hammond & McLaughlin, 1995). In fact, as we enter the new century, it is now being suggested that there is a "new paradigm" for professional development and a "new professional consensus" about what teacher education and teacher learning need to look like in order to handle the new tasks of teaching and learning in restructured schools (Darling-Hammond & Sykes, 1999; Hawley & Valli, 1999; Stein, Smith & Silver, 1999). As I have suggested elsewhere (Cochran-Smith & Lytle, 2000), the general orientation of the "new" approach to professional development is more constructivist than transmission- oriented; it is based on the recognition that both prospective and experienced teachers (like all learners) bring prior knowledge and experience to all new learning situations, which are social and specific. In addition, it is now generally understood that teacher learning takes place over time rather than in isolated moments in time, and that active learning requires opportunities to link previous knowledge with new understandings. It also has been widely acknowledged that professional development needs to be linked to educational reform (Loucks-Horsley, 1995) and needs to focus on "culture-building" not skills training (Lieberman & Miller, 1994). It is generally agreed that professional development that is linked to student learning and curricular reform should be embedded in the daily life of schools (Darling-Hammond, 1998; Elmore & Burney, 1997) and should feature opportunities for teachers to inquire systematically about how teaching practice constructs different kinds of learning opportunities for students (Little, 1993; Ball & Cohen, 1999; Cochran-Smith & Lytle, 1993). These new understandings about teacher learning are consistent and intertwined with the emerging standards for the profession noted above.

Standards for Curriculum and Subject Matter Teaching

At the same time that researchers and practitioners in teaching and teacher education were working to build and codify a knowledge base, new frameworks for teaching, learning, and curriculum in almost every K-12 subject area were also being developed by the discipline-based professional organizations such as the National Council of Teachers of Mathematics (NCTM) and the National Council of Teachers of English (NCTE). These were based on new understandings about learning, cognition, and the socio-psycho-cultural construction of subject matter understandings. These were intended to promote teaching for meaning and understanding and explicitly to avoid narrow emphases on skills development and rote learning. New curriculum frameworks were eventually implemented in almost every state, and in most of these, they were coupled with new standards for K-12 student achievement. In most states, new teaching and learning standards were eventually accompanied by high stakes paper and pencil assessments intended to be tightly aligned with the knowledge and skills outlined in the new curriculum frameworks, which in turn were to be tightly aligned with the new knowledge bases in each of the disciplinary areas as established by the professional organizations. Taken together, these developments formed the backbone of the standards movement and what Robert Roth (1996) has called "the age of standards."

National Commission on Teaching and America's Future

Undoubte dly one of the most influential factors in the policy context was the publication in 1996 of *What Matters Most: Teaching for America's Future* (Report of the National Commission on Teaching and America's Future) and the materials that followed it—*Doing What Matters Most: Investing in Quality Teaching* (National Commission on Teaching and America's Future, 1997), *Studies of Excellence in Teacher Education* (Darling-Hammond, 2000, b), and *Promising Practices: New Ways to Improve Teacher Quality* (U.S. Department of Education, 1998). As Gallagher and Bailey (2000) point out, privately commissioned blue ribbon reports such as National Commission on Teaching and America's Future (NCTAF)—and before it the Flexner Report on medical education and The Reed Report on legal education—have been used since the early part of the twentieth century to call public attention to perceived crises of national importance and to shape the discourse among practitioners, policy makers and the general public. NCTAF's Executive Director, Linda Darling-Hammond, along with colleagues and collaborators in the policy, research, and practice of teacher education, have been explicit and tireless in getting the word out about the central message of the report: what teachers know and can do is the single most important influence on how and what students learn (NCTAF, 1996; Darling-Hammond, 1998 a,b, 2000b; Darling-Hammond, Wise & Klein, 1999; Darling-Hammond & Sykes, 1999; Gallagher & Bailey, 2000). Based on this premise, the policies called for by NCTAF, many of which are now being implemented in states across the country, is exquisitely clear:

> We propose an audacious goal for America's future. Within a decade—by the year 2006—we will provide every student in America with what should be his or her educational birthright: access to competent, caring, qualified teaching in schools organized for success (NCTAF, 1996, p. vi).

NCTAF's now highly familiar list of recommendations includes: getting serious about standards for students and teachers; reinventing teacher education and professional development; placing qualified teachers in every classroom in America; supporting and rewarding teachers' developing knowledge and skill; and creating schools organized to support and sustain student and teacher success.

What is unprecedented about the commission's report is the call for all of its recommendations to be addressed in concert in order to achieve across the states a coherent and consistent system of reform in teacher education, teacher licensing, and teacher accreditation (NCTAF, 1997). This requires consistency across several major efforts, including the move toward performance-based standards for teacher licensing, parallel efforts to develop authentic assessments of teachers, and the development of national standards for teacher education, licensing, and certification. These national efforts are being led by NCTAF, NBPTS, INTASC, and NCATE (Darling-Hammond, Wise, & Klein, 1999).

Also unprecedented are the teeth that the NCTAF recommendations now have in terms of federal money and policy related to professional development, teacher education, and federal grants (Earley, 2000). In 1997, the Department of Education sponsored a five year, $23 million consortium of research universities and professional organizations in order to develop a research base supporting the implementation of recommendations put forth by NCTAF. In 1998 the Higher Education Act (HEA) was signed into law; of particular importance in terms of the policy context for the outcomes debate are the mandatory (but unfunded) accountability requirements for states and higher education institutions contained in Title II (Earley, 2000). These require that all states and colleges/universities that receive any federal dollars through HEA must

provide annual information on the performance of all teacher candidates recommended by an institution on each measure required for licensure. These data will be compiled into institutional and state report cards intended to serve as indicators of "the health of the teacher education enterprise" (Earley, 2000), which will provide public rankings of each teacher education institution .

New Standards for Teacher Education Accreditation

What is closest to day-to-day work of teacher educators are the new outcomes-based approaches to evaluating teacher preparation programs and institutions. An outcomes-based approach is now in effect at NCATE (1999), the major teacher education accrediting agency. Emphasizing outcomes rather than inputs was also a major reason for the founding of newcomer accrediting organization, Teacher Education Accreditation Council (TEAC) (Teacher Education Accreditation Council, 1999). Although fewer than half of the nation's teacher preparation institutions are currently accredited, NCATE- accredited institutions produce two thirds of the nation's teachers. In addition, NCATE has relationships with 40-some states, and some are moving to require all teacher preparation institutions to seek accreditation from either NCATE or TEAC (Wise, 1999).

In recent articles and symposia, NCATE 2000's new focus on outcomes has been described as a "paradigm shift from inputs to outputs" (AACTE, 2000), a "bold" and "daring… plunge into the world of performance assessment and performance standards" (Schlalock & Imig, 2000, p. 4), and a "major shift from curriculum- oriented standards to performance-based standards that focus on what teacher candidates know and are able to do" (Wise, 1999, p. 5). NCATE's prior standards were described by critics as merely "counting courses" or focusing on curriculum content instead of paying attention to results. The new standards focus on what teacher candidates can actually do in schools and classrooms by emphasizing performance, particularly in relation to students' learning. The new standards, which received final approval in 2000, are effective for all institutions seeking NCATE accreditation during or after Fall 2001. NCATE's new system will require schools of education to provide performance evidence of candidate competence, including state licensing examination results as well as summarized and sampled performance evidence of candidates' knowledge and skill (Wise, 1999). The stated rationale for the first major section of the new standards, "Candidate Performance," makes this emphasis clear:

> The public expects that teachers of their children have sufficient knowledge of content to help all students meet standards for P-12 education. The teaching profession itself believes that student learning is the goal of teaching. NCATE's Standard 1 reinforces the importance of this goal by requiring that teacher candidates know their content or subject matter, can teach, and can help all students learn . . . Candidates for all professional education roles are expected to demonstrate positive effects on student learning. Teachers and teacher candidates should have student learning as the focus of their work…Primary documentation for this standard will be candidates' performance data prepared for national and/or state review …[including] performance assessment data collected internally by the unit and external data such as results on state licensing tests and other assessments. (NCATE, 1999, pp. 7-9)

The new NCATE standards are in keeping with movement to professionalize

teaching and also consistent with recent developments in specialized accreditation organizations more generally, where the emphasis has shifted from inputs to outcomes measures (Dill, 1998). This is part of a larger trend in higher education, what Graham, Lyman and Trow (1995) refer to as an "increasing clamor to apply quantitative measures of academic outcomes to guarantee educational quality for consumers" (p. 7) at the higher education level.

The Deregulation Movement

The aspects of the policy context for the outcomes debate that I have mentioned so far are in sync with one another in certain important ways —the development of standards for subject matter teaching, new understandings of teacher learning, new standards for the accreditation of teacher education institutions, and the efforts of NCTAF, NBPTS, INTASC, and NCATE to unify teacher preparation, licensing, and certification. All of these are consistent with the first item on the list—the movement to establish teaching (and teacher education) as a legitimate profession with a well-established knowledge base (Reynolds, 1989; Murray, 1996; Houston, 1990; Sikula, 1996), jurisdictional responsibility for defining and acting on professional problems (Yinger, 1999; Yinger & Hendricks-Lee, 2000), and clear principles or standards for professional practice (NCTAF, 1996; Darling-Hammond, Wise & Klein, 1999). Each of these initiatives works from but also builds on the dual premises that caring, competent, and qualified teachers are essential to insuring rigorous learning opportunities for all children in America's schools *and* that upgrading teacher education and credentialing for the profession are necessary for ensuring that all children have such teachers.

As is now well known, however, the professionalization movement is not the only national agenda related to teaching and teacher education. There is also a well publicized and well-funded movement to deregulate teacher education by dismantling teacher education institutions and breaking up the monopoly that the profession (i.e., schools of education, professional accrediting agencies, and many state licensing departments) has, according to its critics, too long enjoyed. The deregulation movement, well-funded by conservative political groups like the Heritage Foundation, the Pioneer Institute, and the Fordham Foundation, begins with a premise that is radically different from the premises of professionalization. Those who support deregulation assert that teacher education programs and most of the requirements of state licensing agencies are unnecessary hurdles that keep bright young people out of teaching and focus on social goals (even "social engineering") rather than academic achievement (Kanstoroom & Finn, 1999).

Denigrating professionalization efforts as the "romance of regulation" (p. 3), the Fordham Foundation's 250 page volume on how to get "better schools" and "better teachers" (Kanstoroom & Finn, 1999), for example, intentionally frames its agenda in opposition to efforts to professionalize teaching and teacher education. The Fordham Foundation "manifesto" asserts:

> Today in response to widening concern about teacher quality, most states
> are tightening the regulatory vise, making it harder to enter teaching by
> piling on new requirements for certification. On the advice of some highly
> visible education groups, such as the National Commission on Teaching and
> America's Future, these states are also attempting to 'professionalize' teacher
> preparation by raising admissions criteria for training programs and
> ensuring that these programs are all accredited by the National Council for

the Accreditation of Teacher Education (NCATE). That organization is currently toughening its own standards to make accredited programs longer, more demanding, and more focused on avant-garde education ideas and social and political concerns…

The regulatory strategy that states have followed for at least the past generation has failed. The unfortunate results are obvious: able liberal arts graduates avoid teaching, those who endure the process of acquiring pedagogical degrees refer to them as 'Mickey Mouse' programs, and over time the problems of supply and quality have been exacerbated. When a strategy fails, it does not make much sense to do the same thing with redoubled effort. Yet that is what many states are now doing. (pp. 4- 5)

Lest anyone think they eschew all regulations related to teacher education, editors of the Fordham volume concede that some regulation is necessary:

Every child should be able to count on having a teacher who has a solid general education, who possesses deep subject area knowledge, and who has no record of misbehavior. The state has an obligation to ensure that all prospective teachers meet this minimal standard. (p. 11)

Publications by Chester Finn and colleagues (e.g., Kanstoroom & Finn, 1999; Finn, Kanstoroom, & Petrilli, 1999; Klagholz, 2000; Finn & Petrilli, 2000) advocate alternate routes into teaching, high stakes testing as the primary way to ensure teachers' subject matter knowledge, and a heavy emphasis in schools on academic achievement, order, and discipline (Farkas & Johnson, 1997). Part of a larger conservative political agenda for the privatization of American education, the deregulation movement is an influential part of the policy context in teacher education and, as I argue here, it is playing a major role in the ways we construct outcomes in teacher education.

Sorting Out the Outcomes Question

The different ways outcomes are being constructed in teacher education rest on differing assumptions about what teachers and teacher candidates should know and be able to do, what K-12 students should know and be able to do, what counts as evidence of "knowing" and "doing," and what the ultimate purposes of schooling should be. Different premises about the purposes of schooling mean different ways of demonstrating that teacher education programs and procedures are "accountable," "effective," or "value-added." Despite these differences, however, most discussions about teacher education outcomes have to do with the connection between teacher education and student learning. In a certain sense, every debate related to outcomes assumes that the ultimate goal of teacher education is student learning and that there are certain measures that can be used to indicate the degree to which this outcome is or is not being achieved by teacher candidates, K-12 students, teacher educators, higher education institutions, local or state policies, and the education profession itself. At a general level, then, the outcomes debate in teacher education revolves around these two questions:

What should the outcomes of teacher education be for teacher learning, professional practice, and student learning?

How, by whom, and for what purposes should these outcomes be

documented, demonstrated, and/or measured?

It is important to note that unanimity about the outcomes questions we should be asking begins and ends here, at this rather surface level of understanding. If we move one level deeper in terms of specificity or elaboration, we uncover disagreement. If we attempt to describe the relationship between teacher learning and professional practice, attempt to explain what we mean by teacher learning and student learning, attempt to elaborate the theoretical bases and consequences of the kinds of student learning we are trying to account for, or even attempt to define what we mean by "students" (which students? how many? all of them or some statistically significant portion of them?), we uncover differences, some of which represent deep philosophical and political divides. Notwithstanding the growing—and many say unprecedented—consensus about standards for teaching and teacher education (Darling-Hammond, 1996, 2000; Darling-Hammond, Wise & Klein, 1999), it is important to acknowledge that there is considerable variation both within and outside the profession in terms of how outcomes are being constructed and upon what grounds they are being debated.

The question of outcomes is being taken up in differing ways depending on the policy, research, and practice contexts in which it is posed as well as on the political and professional purposes of the posers. One way to sort out different ways of constructing teacher education outcomes is to consider at least the following:

1. How are "teacher learning," "professional practice," and "student learning" defined, or, what is used as a proxy for these? How are teacher learning, professional practice, and student learning assumed to be related to one another? What is assumed to be central or extraneous?
2. What counts as evidence of teacher learning and student learning? What are the criteria against which the evidence is measured? What is the source of these criteria? What is the unit of analysis?
3. What is assumed to be the larger purpose of schooling and the role of schooling in society?
4. What is the larger political and/or professional agenda behind a given construction of outcomes? What are the consequences for policy and practice of constructing outcomes this way?

As Figure 1 indicates, at least three major ways of constructing outcomes in teacher education are currently receiving major attention and visibility nationally, at the state level, and within teacher education institutions: the long-term or general impacts of teacher education as a profession; the aggregated scores on teacher tests of teacher candidates, teacher preparation programs, and/or higher education institutions; and the professional performances expected of teachers and teacher candidates. In some policy and practice contexts, one or more of these is used in combination with others to guide decisions about distribution of resources, licensing and accreditation privileges, and relative rankings of programs, institutions, and individuals.

Figure 1
Constructing Outcomes in Teacher Education:
Three "Takes" on the Outcomes Question

The Outcomes Question in Teacher Education	What should the outcomes of preservice teacher education be for teacher learning, professional practice, and student learning? How, by whom, and for what purposes should these outcomes be documented, demonstrated, and/or measured?
Outcome as "long-term/general impact"	What long-term and/or general impacts should preservice teacher education be expected to have, particularly on student achievement?
Outcome as "teacher test results"	What impact should preservice teacher education be expected to have on teacher test results? What results on teacher tests should be expected of teacher candidates, teacher education programs, higher education institutions, states?
Outcome as "professional performance"	What professional performances should teacher candidates be expected to demonstrate? How should teacher candidates and teacher education programs/institutions be expected to document, analyze, and evaluate these professional performances?

So far in this article, I have explained *why* the outcomes question is the question that is driving reform in teacher education at this particular juncture of political, professional, and social contexts. In the next section, I take each of the major "takes" on the outcomes questions and look more closely at *how* they are being constructed in teacher education and then consider *what the consequences (and pitfalls)* of these constructions are for policy and practice.

Long-term/General Impact as Outcome of Teacher Education

The first major take on the outcomes question concerns the long-term or general impact of teacher education on teacher knowledge, teacher preparedness, teacher attrition, teacher ratings, and student achievement. Explorations of these questions in teacher education are located within much larger debates about teacher quality and teacher qualifications, teacher licensing and certification, professional standards for teaching and curriculum, and the use of student achievement as a valid evaluation measure for teachers and schools. Various studies have analyzed whether teacher candidates who have completed approved teacher education programs stay in teaching longer than those without such preparation, whether their attitudes and knowledge about teaching and learning are different (Ashton & Crocker, 1987), whether they feel more committed to teaching than others or more prepared to teach, and whether their principals rate them higher or lower than others (Haberman, 1985). Studies have also compared the teaching ratings of liberal arts graduates with those prepared in pedagogy (Haberman, 1985; Grossman, 1990) and/or have compared the teaching effectiveness, including the classroom management skills, of those with minimal versus extensive subject matter knowledge and/or minimal versus full preparation in teaching (Ashton & Crocker, 1987; Evertson, Hawley & Zlotnik, 1985; Kennedy, 1991; Denton & Lacina, 1984; Darling-Hammond, 1991). Other studies have considered whether education and

subject matter preparation predict "teaching performance" of teacher candidates (Ferguson & Womack, 1993) and/or have an impact on students' achievement (Ashton & Crocker, 1987). There is a great deal of attention currently to sorting out the results of these studies and drawing policy conclusions from them.

As we enter the new century, the issue that is most visible *and* most highly contested has to do with the impact of teacher education on K-12 students' learning. This question, debated in the research literature and in the media, is being explored primarily through meta-analyses and/or syntheses of previous and current work in order to make recommendations about teacher education as state policy that is either value-added or not, either a good investment or not. In these high stakes debates, teacher education at the preservice level is not considered by itself but as one of several factors related to the quality and qualifications of teachers. The unit of analysis is not teacher candidates—individually or collectively—or even teacher preparation programs and institutions. Rather the unit of analysis is the profession itself—teacher preparation as one aspect of a broad category referred to as "teacher qualifications," which includes scores on licensure examinations, graduate level degrees, years of experience, preparation in the subject matter area of certification as well as in pedagogy, type and extent of certification in the teaching area, and amount of money spent by school districts on professional development. Student learning is generally defined as student gains on achievement tests, often reading and mathematics in grades one through twelve. The relationship between the two is taken to be the percentage of variance in student gains accounted for by teacher qualifications when other variables are held constant or adjusted. The pertinent units of analysis are aggregated student achievement scores and general indices of teacher qualifications that include multiple features.
Questions about the long term impact of teacher education are at the heart of many policy debates related to the initial preparation of teachers as well as teachers' continuing professional development. These have enormous implications for how states (and now the federal government) support and invest in the improvement of schooling, how higher education institutions support and invest in teacher education programs and schools of education, and how school districts establish and maintain hiring and reward systems as well as local programs of ongoing professional development.

Synthesizing the Research: "Teacher Education Matters Most"

The initial report of NCTAF (1996) addressed the question of long-term impact directly by linking teacher qualifications—including extent of teacher education— with student learning. Speaking for the Commission, Darling-Hammond (1998) argued that a growing body of research "appears to confirm" that teacher knowledge and teacher expertise are significant influences on student learning, as are to a lesser extent class size and school size. Although Darling-Hammond pointed out that the initial Commission Report was a starting point for more public discourse rather than a set of research-based conclusions, this work was widely cited by those committed to elevating the status of the teaching profession, particularly by those embroiled in battles about teacher certification regulations at the state level.

The NCTAF report was highly successful in generating public discourse about teaching and teachers—Darling-Hammond (2000) indicates that more than 1500 news articles and editorials have appeared nationally and internationally since its publication. Major research syntheses that support the initial direction of the report (Darling-Hammond, 1998, 1999, 2000b; Sykes & Darling-Hammond, 1999) have also now appeared as have several case studies (e.g. Elmore & Burney, 1997) that provide

contextual information. Darling-Hammond's (2000, b) major synthesis of research on teacher quality and student achievement has been disseminated widely. The synthesis, which appeared in this electronic journal on January 1, 2000, had been retrieved more than 23,000 times year later. This review provides what is probably the clearest example of how long-term impact is being constructed as an outcome of teacher education; the review explores the impact on students' achievement of large scale policies and institutional practices that affect the overall level of teachers' knowledge and skills in a given state or region.

Drawing on data from an NCTAF 50-state survey of policies, case studies at the state level, the 1993-94 Schools and Staffing Surveys (SASS), and the National Assessment of Education Progress (NAEP), Darling-Hammond (2000b) examined how teacher qualifications are related to students' achievement. She concluded:

> The findings of both the qualitative and quantitative analyses suggest that policy investments in the quality of teachers may be related to improvements in student performance. Quantitative analyses indicate that measures of teacher preparation and certification are by far the strongest correlates of student achievement in reading and mathematics, both before and after controlling for student poverty and language status. . . This analysis suggests that policies adopted by states regarding teacher education, licensing, hiring, and professional development may make an important difference in the qualifications and capacities that teachers bring to their work. (p. 1)

Constructing the outcomes of teacher education as long-term impact on students' achievement is part of NCTAF's larger campaign to provide qualified and competent teachers for all students by emphasizing and aligning professional standards across initial teacher preparation, teacher licensure, and teacher certification at the state and regional levels. This take on the outcomes question provides little information about the impact of teacher education disaggregated from teacher qualifications more generally, nor does it address the relative merit of various approaches to teacher education, although there is related research that does so. But this was never the point of constructing outcomes as long-term impact of teacher qualifications on students' achievement. The point was to demonstrate that teacher education, as part of teacher professionalization more broadly, was and is a good investment—for state policy makers, for higher education institutions, and for the future of a democratic society.

Synthesizing the Research: "Teacher Education Doesn't Matter Much"

There is, however, another conclusion about long-term impact as an outcome of teacher education. Economists such as Dale Ballou, Michael Podgursky, and others (Ballous & Podgursky, 1997, 1998, 1999; Goldhaber & Brewer, 1999) offer analyses of teacher preparation, licensing and certification that support the deregulation of teacher education and seek to limit the power of the educational community to control the profession. For example, in what they refer to as a "layman's guide" to teacher training and licensure that appears in the Fordham Foundation's (Kanstaroom & Finn, 1999) policy statement on how to produce better teachers and better schools, Ballou and Podgursky (1999) conclude:

> [T]eacher ability appears to be much more a function of innate talents than

the quality of education courses. Teachers themselves tell us that this is so. We come to similar conclusions when we examine the determinants of scores on teacher licensing examinations. Finally, teachers who enter through alternative certification programs seem to be at least as effective as those who completed traditional training, suggesting that training does not contribute very much to teaching performance, at least by comparison with other factors. (p. 57)

Like the syntheses that support the recommendations of NCTAF, the summaries by these conservative economists construct outcomes in teacher education as part of a general category of teacher qualifications (including teacher preparation and licensing based on completion of accredited programs) and in terms of student achievement and teacher attrition. They draw in many instances on the same data and even refer to many of the same sources that are used by Darling-Hammond and others.

Despite a certain surface level of similarity, however, the deregulation-ists reach conclusions that are diametrically opposed to the conclusions of those who advocate professionalization. The introduction to the Fordham Foundation's policy statement (Fordham Foundation, 1999), which is signed by William Bennett, Chester Finn, E.D Hirsch, James Peyser, and Diane Ravitch, among others, states this conclusion in no uncertain terms:

We are struck by the paucity of evidence linking inputs [courses taken, requirements met, time spent, and activities engaged in] with actual teacher effectiveness. In a meta- analysis of close to four hundred studies of the effect of various school resources on pupil achievement, very little connection was found between the degrees teachers had earned or the experience they possessed and how much their students learned. (p. 18)

Contrast this conclusion with Linda Darling-Hammond's conclusion in *Doing What Matters Most: Investing in Quality Teaching* (1997):

Reviews of more than two hundred studies contradict the long-standing myths that 'anyone can teach' and that 'teachers are born and not made' . . .teachers who are fully prepared and certified in both their discipline and in education are more highly rated and are more successful with the students than are teachers without preparation, and those with greater training…are more effective than those with less. (p. 10)

The fact that some of the same evidence is used to make two exceedingly different cases about teacher education is confusing to say the least. (Note 1) Debates about the evidence concerning the relationship of teacher education and student learning outcomes continue, and they are growing increasingly heated. In a recent issue of *Teachers College Record*, for example, Ballou and Podgursky (2000) directly attacked the Commission's findings, and Darling- Hammond (2000) emphatically refuted their use of evidence and their conclusions. Questions about the evidence were also explored in a face-to-face debate between Linda Darling-Hammond and Chester Finn, which was sponsored by the Education Commission of the States (Education Commission of the States, 2000).

The Problem of Teacher Education

Part of the difference in conclusions about the long- term outcomes of teacher education may lie in the details of the ways terms are defined and data are selected for these analyses. For example, there are major differences across reports in what is included under "alternate programs," what it means to be "fully qualified," or "to have a major" in one's area of certification. The accumulation of many small differences in definitions of terms and data analysis procedures may account for some of the major statistical differences and the contradictory conclusions of these two major syntheses. But the differences may also be partly explained by differences in the way "the problem" of teacher education is framed in the first place and how these different constructions shape the ways terms are defined, procedures are established for data selection, results are manipulated, and interpretive frameworks are developed.

Penelope Earley (2000) makes an incisive point along these lines in a recent discussion about the value-laden nature of educational research and its easy use by policy makers to further their own agendas. She suggests that "data and evidence used in the policy process will have several levels of bias: that embedded in the data or evidence itself, bias associated with analysis, and the biases of those in the policy world who use the information" (p. 35). This understanding of the policy process may help to explain some of the differences I have just been highlighting. Supported by the Carnegie Foundation and the Ford Foundation, NCTAF (in collaboration with NBPTS, INTASC, and NCATE) frames "the problem" of American education in terms of democratic values (Engle, 2000; Earley, 2000; Labaree, 1997)) and thus begins—and ends—with calls for stepped-up, standards-driven improvements in teacher education and professional development in order to guarantee a well-qualified teacher for every American school child.

The Fordham Foundation and other conservative organizations and politicians, on the other hand, frame "the problem" in terms of a market approach to educational policy making. They criticize the profession's "preoccupation with teacher preparation" (Ballou & Podgursky, 1997, p.4), seek to limit the power of the profession to control the market by controlling licensing and approved programs, and push an agenda based on what Earley calls "competition, choice, winners and losers, and finding culprits" (Earley, 2000, p. 36). They thus begin—and end—with calls for alternate routes to certification and for eliminating "needless barriers" to the profession. They advocate heavy emphasis on the results of education and favor heavy sanctions for those who cannot or will not measure up. (I return to this issue of market versus democratic ideologies in the final section of this article where I suggest, following many others, that these two approaches to educational policy—democracy-driven and market-driven—are mutually exclusive.)

Teacher Test Scores as Outcome of Teacher Education

The teacher tests now required for initial licensing in most U.S. states (Digest of Educational Statistics, 1997) suggest another highly visible way that outcomes are being constructed in teacher education. The construction of test scores as outcomes is in a certain sense a subset of the preceding construction in that the test scores of prospective teachers are often taken to be one facet of the long-term impact of teacher education. However, because teacher tests have been given so much recent attention and weight, it is worth considering them separately. Debates about teacher tests are connected to larger debates about quality, licensing, standards, and assessment. Teacher tests are also related to the long history of criticisms of teachers as mediocre students, "semi-skilled" workers, "less than literate" individuals, and members of a minor or "not quite" profession.

With initial licensing tests, what is measured (and taken to be an indication of what

prospective teachers have learned) is usually some combination of general knowledge, including communication and literacy skills, with knowledge of specific subject matter and pedagogy, both of which are demonstrated on a paper and pencil exam. Although teacher test scores have probably received more publicity and more public outcry than any other recent measure of outcomes, they are linked to teacher performance and K-12 student learning primarily through presumption rather than empirical evidence and/or are considered in combination with other measures of teacher expertise or teacher qualifications that are difficult to untangle as I noted a moment ago. There is little evidence that large-scale implementation of statewide teacher testing programs is affecting the actual classroom performance of teachers (Flippo, 1986; Ladson-Billings, 1998), although there is some evidence that testing has an impact on the "quality" of those entering and remaining in teaching where "quality" is defined as other test scores, grade point averages, and similar measures (Gitomer & Latham, 2000)

Until recently teacher test scores were assumed primarily to measure individual fitness for teaching the way SATs and GREs are assumed to measure individuals' potential for college and graduate level academic work. Relatively little attention was paid to the aggregated scores of individuals from the same state or the same teacher education institution. Times have changed, however, fueled in part by the dismal performance of Massachusetts teacher candidates on that state's first ever teacher test in 1998—when 59% of candidates failed, and Massachusetts House Speaker Thomas Finneran called test takers "idiots" (Melnick & Pullin, 2000). The Massachusetts scores fanned the debate about teacher quality and teacher preparation that was already going on in the U.S. Congress partly in response to the report of NCTAF and in light of proposed stipulations of the reauthorized Higher Education Act. (See Earley, 2000, for an excellent discussion of federal policy debates regarding teacher education and Melnick & Pullin, 2000, for thoughtful analyses of many of the legal and policy issues involved in the Massachusetts teacher test.)

Of particular importance in the Higher Education Act are the mandatory accountability requirements, which stipulate that all states and colleges/universities receiving federal dollars must provide annual information on the performance of all teacher candidates recommended by an institution on each measure required for licensure. As has been widely broadcast, these data are to be compiled into institutional and state "report cards" intended to serve as indicators of the fitness of the teacher education enterprise and will provide public (and no doubt highly politicized) rankings of teacher education institutions in the U.S. (U.S. Department of Education, 2000).

By switching the unit of analysis from individuals to institutions, recent testing arrangements locate the responsibility for teacher education outcomes squarely at the feet of colleges and universities, some of which will be seriously threatened with closure when the new regulations go into effect (Schrag, 1999; Wise, 1988). In some states, it has even been suggested that a major result of teacher tests has been to discredit schools of education and provide ammunition for those who would like to close them (Cochran-Smith & Dudley-Marling, in press). In a strange sort of contradiction, teacher tests in some places are now being framed in the media as both outcomes of teacher education (i.e., teacher education programs and institutions get public blame for low test scores), and, at the same time, prerequisites for teacher education programs (i.e., candidates in some institutions are now being required to take certain portions of tests in order to be admitted to programs in the first place).

Constructing outcomes in teacher education as scores on teacher tests creates a number of problems and has important consequences for the pool of candidates entering the profession. Some statewide teacher tests, for example, are anathematic to the

concepts and knowledge taught in teacher education programs (Melnick & Pullin, 2000), particularly in terms of conceptions of literacy, views of student learning, and notions of growth and progress (Luna, Solsken, & Kutz, 2000). Unfortunately, at exactly the same time that we are supposedly interested in recruiting a more diverse pool of teacher candidates, teacher tests are working as gate keepers to keep some potential teachers out. Fear of poor performance on teachers tests is leading some schools of education to change admissions standards with the consequence that fewer students are applying, and there is increasing evidence that the implementation of teacher tests—like other tests historically that are biased against minorities—may be playing a role in the decline of minority participation in the teaching profession (Garcia, 1986; Gitomer & Latham, 2000; Smith, 1984; Wise, 1988). Further, although some studies have also considered whether teacher candidates prepared in fully-accredited teacher education programs (particularly at NCATE-accredited institutions) score higher on teacher tests than those prepared in other teacher education programs and/or those with no teacher preparation (Wise, 1999), there is little evidence that teacher test scores are related to actual teaching performance in classrooms or to students' learning.

Professional Performance as Outcome of Teacher Education

The third take on the outcomes question—and the one that is closest to the everyday work of many teacher educators—has to do with the professional performances that teacher candidates should be expected to demonstrate, including the ways candidates and teacher educators document, analyze, and evaluate these performances. This version of outcomes is located within larger debates about authentic assessments of teaching that result in student learning, the shift from "inputs" to "outputs" as the basis of professional accreditation reviews of teacher education institutions, the development of quality assurance mechanisms based on professional standards that are consistent across the professional lifespan, and a growing body of literature that examines the relationships of inquiry, knowledge, professional practice, and teacher education pedagogy.

Teacher Candidates and Professional Performance

Constructing teacher education outcomes in terms of the professional performances of teacher candidates begins with the premise that there is a professional knowledge base in teaching and teacher education based on general consensus about what it is that teachers and teacher candidates should know and be able to do. The obvious next step, then, is to ask how teacher educators will know when and if individual teacher candidates know and can do what they ought to know and be able to do. A related and larger issue is how evaluators (i.e., higher education institutions themselves, state departments of education, or national accrediting agencies) will know when and if teacher education programs and institutions are preparing teachers who know and can do what they ought to know and be able to do.

In a recent historical sketch of performance assessment, Madaus and O'Dwyer (1999) suggest that today's emphasis on performance assessment in K-12 education is part of a larger sea change in educational measurement that highlights the "3 P's—performance, portfolios, and products" and that has captured "the linguistic high ground, just as the term 'minimum competency testing' did in the 1970s" (p. 688). Madaus and O'Dwyer point out that despite the hype, performance assessment is based

on the same technology as all assessments—obtaining a small piece or sample of a candidate's behavior drawn from the larger domain of knowledge and skill it is assumed to be part of and then using the candidate's performance on that sample to make inferences about his or her likely performance on the entire domain. Defining performance assessment broadly, Madaus and O'Dwyer include three ways to sample behavior from a larger domain—requiring an examinee to construct or supply oral or written answers to some set of questions, requiring him or her to perform an act that will be evaluated according to certain criteria, or requiring him or her to produce a product of some kind.

Notwithstanding the long list of cautions about the use of performance assessments for high stakes contexts cited by Madaus and others (Madaus & O'Dwyer,1999; Madaus, 1993; Haertel, 1999), all signs indicate that the teacher education profession is driving full throttle into the world of performance assessment. This is being done for two different purposes, each drawing on different units of analysis: (1) for the purpose of evaluating individual prospective teachers where the unit of analysis is the individual teacher candidate and the evaluator is some combination of school- and university-based teacher educators involved in the candidate's educational program, and (2) for the purpose of evaluating individual teacher education programs where the unit of analysis is the teacher education program itself within and in relation to its larger institutional unit (university, school, college, or department) and where the evaluator is a national accrediting agency, a state department of education, or some combination of the two.

In teacher education, performance assessment is intended to evaluate teacher candidates' ability to produce "products" and complete "authentic tasks" that closely resemble the real work of teaching and do so in ways that are aligned with consistent internal and external standards and criteria. The notion of professional performance as outcome is a central to new partnerships among accrediting, licensing, and certification agencies across states and the nation (Wise, 1996). Performance as outcome is also implicated in the debate between NCATE and TEAC as accrediting agencies, including disagreements about whether the latter is a threat to professionalization or a useful and appropriate accrediting alternative for many institutions (Murray, 2000; Darling-Hammond, 2000, a). Performance as outcome is behind the move in some states to require all teacher education institutions to seek either NCATE or TEAC accreditation as well as other new state requirements that teacher education programs provide evidence that teacher candidates have state-of-the-art knowledge and a demonstrable impact on K-12 students' learning (Wise, 1999).

In the following section I briefly describe four teacher education initiatives or ongoing projects that illuminate how professional performance is being constructed as an outcome of teacher education. Although they use different language, each of these elaborates a process for documenting the linkage between teacher education, teaching practice, and student learning. Each of the programs I use as illustrations here has been highly visible and thus open to public scrutiny as a result of multiple publications and presentations. Each has also been supported by or connected to larger professional foundations, agencies, or organizations and/or has been used as a public exemplar of teacher education practice in keeping with a particular agenda. Taken together, the four examples reveal some of the range and variation in performance as outcome in terms of definitions of teaching and learning, how aspects of teaching are related to one another, and the larger social and political agendas to which teachers' work is attached (or not). Despite differences, however, these examples also reveal some basic similarities in the performances teacher candidates are being required to demonstrate in preservice education. (Note 2)

Ability-Based Performance Assessment

Alverno College's standards-based approach to performance assessment for preservice teachers is part of the larger ability-based curriculum of the college, which was developed in the 1970s in order to meet the needs of a non-traditional student population (U.S. Department of Education, 1998). The work at Alverno College, which specifically eschews curriculum as "counting courses" and fosters instead a view of ongoing "assessment as learning" (Diez & Hass, 1997), has received considerable attention in the literature on outcomes in teacher education (Diez & Hass, 1997; Diez, 1996, 1997, 1998; Alverno College, 1996; Blackwell & Diez, 1999). It has been widely cited and used as an exemplar of preservice teacher education in line with the standards-based professionalization efforts of NCTAF, INTASC, NBPTS, and NCATE (Darling-Hammond, Wise & Klein, 1999; Diez, 1998; National Commission on Teaching and America's Future, 1997). In addition, the U.S. Department of Education's guide to improving teacher quality (U.S. DOE, 1998) features the program at Alverno as one of three preservice programs that exemplify "promising practices," and the *Studies of Excellence in Teacher Education* series co- published by AACTE and NCTAF (Darling-Hammond, 2000, c) include it in their booklet on preparation at the undergraduate level,.

Alverno College's program, which focuses on "what students can do with what they know" (Diez & Hass, 1997, p. 17), is based on the idea that performance assessment is not an add- on, but a basic approach that transforms the curriculum as well as the ways teacher education faculty think about their work. The Alverno curriculum specifies eight general abilities including communication, analysis, problem solving, values within decision making, social interaction, global perspectives, effective citizenship, and aesthetic responsiveness that cut across the entire four year curriculum (U.S. DOE, 1999). Teacher education students also have professional abilities that they must demonstrate including integrating content knowledge with teaching pedagogy, diagnosing individual student needs, and managing resources effectively. Each course has specific goals aligned with general outcomes and requires "complex evidence of student performance."

Students' abilities are assumed to be developmental and, because the evidence they require is complex, assumed to demand multiple opportunities for demonstration of abilities and a wide variety of assessment modes (Diez & Hass, 1997). Thus students are engaged in literally hundreds of performances during their preservice preparation, each of which includes a self-assessment component. In describing the Alverno program in the studies of excellence series, Zeichner (2000) comments, "I doubt that there is a teacher education program anywhere that gives such careful attention to assessment of its students" (p. 11). Performance assessments are "situated in authentic contexts and teaching roles" (Diez & Hass, 1997, p. 21) and based on "proofs" of professional ability such as essays, letters, position papers, case study analyses, observations of teachers, simulations with parents and others, and development of curriculum materials. Program developers point out:

> Alverno faculty believe that performance assessments are most beneficial
> when they come as close as possible to the realistic experiences of the
> practicing teacher. In developing the curriculum for teacher education, they
> have identified a number of roles that teachers play, including but going
> beyond the primary role of facilitator of learning in the classroom.

Therefore, performance assessments of the abilities of a teacher may be simulated to focus on parent- teacher interaction, multidisciplinary team evaluation, the teachers' work with district or building planning, or the teacher's citizenship role, as well as on actual classroom teaching performance in the field experience and student teaching classrooms. In this way they provide candidates with successive approximations of the role of the teacher (Diez & Hass, 1997, p. 24).

The portfolio interview assessment is the major external assessment and is required in order to conclude the pre- professional stage of the program and begin the student teaching period (Zeichner, 2000). Here students compile all of their own work, lesson and unit plans, videotapes of lessons, and self assessments. Portfolios are reviewed by faculty advisors as well as teams of principals and teachers, whose feedback is used to prepare for student teaching.

Chief spokesperson for the program, Mary Diez (2000) emphasizes that Alverno's approach to performance assessment is based on the idea that teaching and learning have to be connected when teaching performance is assessed, especially how particular teaching practices facilitate students' learning and how teachers learn to examine their own and their students' work over time. Like the emphasis of the INTASC and NBPTS standards, the work at Alverno emphasizes how a teacher's thinking leads to improvements in teaching and students' learning. Thus the performances that are required of teacher candidates must indicate teacher learning as much as and in connection to student learning. Through portfolios, analyses of lessons and units, and other self-assessments and reflective activities, teachers learn to look at and make sense of students' work and document the impact of their own practice on students' learning. They are required not simply to demonstrate that their teaching has an impact on students' learning, although they must do that, but also how and why their teaching practices impact student learning within particular contexts that closely resemble the actual contexts of teachers' work.

Performance Understanding

Research ers and teacher educators at Michigan State University, the University of Michigan, and elsewhere have for some time been involved in major efforts to develop professional education for prospective and experienced teachers—particularly in mathematics—that generates teaching strategies in keeping with new curriculum standards and reform-oriented pedagogies (Ball & Cohen, 1999; Lampert & Ball, 1998; Wilson & Ball, 1996; Cohen, McLaughlin, & Talbert, 1993; Cohen & Ball, 1990). Here teacher education outcomes are framed as the alignment over time of teachers' pedagogy with current curriculum standards and with discipline-based goals for students' learning of complex forms of reasoning, problem solving, and communication. This approach to performance understanding is based on earlier explorations of teachers' learning of "adventurous teaching" (Heaton & Lampert, 1993) or "teaching for understanding" (Cohen, McLaughlin, & Talbert, 1993; Cohen & Ball, 1990), conceptualized as a kind of educational practice where "students and teachers acquire knowledge collaboratively, where orthodoxies of pedagogy and 'facts' are continually challenged in classroom discourse, and where conceptual (versus rote) understanding of subject matter is the goal" (McLaughlin & Talbert, 1993). This work has received considerable attention as part of the "new professional development" (Hawley & Valli, 1999; Sykes, 1999) and/or as a "new pedagogy of teacher education" that is closely aligned with national standards for professional development and especially with visions for contemporary K-12

curricular reform (Lampert & Ball, 1998, 1999; Wilson & Ball, 1996; Ball, 1996; Ball & Cohen, 1999).

Writing specifically about performance and knowledge, Lampert & Ball (1999) argue that if teacher education is to prepare teachers for "the kind of ambitious teaching that reformers envision" (p. 39), then those who would reform teacher education will have to reconsider what it means "to know" something in teaching. They suggest that knowing means understanding in such a way that one is prepared to perform (or practice) in a given situation for which one cannot fully prepare in advance. They base this idea on David Perkins' and Howard Gardner's "performance perspective" on understanding:

> In brief, this performance perspective says that understanding a topic of study is a matter of being able to perform in a variety of thoughtful ways with the topic, for instance, to: explain, muster evidence, find examples, generalize, apply concepts, analogize, represent in a new way, and so on . . . Understanding something is a matter of being able to carry out a variety of 'performances' concerning the topic. (Perkins, 1993, p. 7, quoted in Lampert & Ball, 1999, p. 35)

Lampert, Ball and their colleagues advocate K-12 classrooms where children's performance understanding is the norm. Consistent with this idea, they advocate teacher education pedagogy where the performance understanding of teacher candidates is the norm. In this way K-12 curriculum and assessment, which are closely aligned with professional teaching and learning standards in the subject matter, are in turn closely aligned with teacher education pedagogy and performance assessment, which are also closely aligned with professional standards for teacher learning and professional practice. Initiatives based on these ideas attempt to provide social and organizational contexts for teacher education in which teachers work together in pairs or small groups where inexperienced teachers observe and reflect on the work of a more experienced one (Lampert and Ball, 1998).

Lampert and Ball (1998) emphasize *how* teacher candidates should know what they need to know rather than focusing on simply *what* they need to know. Based on the idea that teaching is an uncertain and indeterminate activity, they suggest that teachers learn how to construct knowledge by working in communities of practice. Teacher candidates learn by working with artifacts and records of practice, raising questions about these, connecting these to other concepts and theories, and so on. This notion of a "pedagogy of professional development" (Ball & Cohen, 1999) means presenting preservice students with various opportunities to conduct "pedagogical inquiry" (Lampert and Ball, 1998) based on artifacts and records that have been pre-catalogued and arranged in order to facilitate multiple perspectives, triangulation of interpretations, and retrieval and sorting of ideas in multiple ways.

For example, teacher candidates read or experience in a multimedia environment a more experienced teacher's records of practice and then reflect on these with the guidance of a teacher educator who may or may not be one and the same with the experienced teacher they have observed. As Lampert and Ball (1999) point out, these assessments tap into:

> …beginning teachers' capacities to analyze practice and develop hypotheses about it [and] . . . assemble portfolios of their work and to describe, justify, and analyze it. As important as what they know is their capacity to reason

critically and professionally about their work. (p. 37)

The idea that the outcome of teacher education should be performance understanding—or linking what and how teachers know by working with artifacts and records of practice—is very much in keeping with assessments for beginning and experienced teachers designed by INTASC and NBPTS.

Teacher Work Samples

Western Oregon University's Teacher Work Sample Methodology (TWSM) has been in place since 1986 (Schalock & Myton, 1988) when the state of Oregon passed sweeping reforms of teacher education. These included the requirement that teacher certification programs provide evidence that teacher candidates could produce appreciable progress in the learning of all K-12 students (Cowart & Myton, 1997). With the implementation of NCATE 2000's new outcomes-based standards (NCATE, 1999), the work sample methodology—which is intended as both a vehicle for the learning of teacher candidates and a measurement system—has been receiving considerable attention (McConney, Schalock, & Schalock, 1998; Millman, 1997; Schalock, Schalock & Myton, 1998).Along these lines, the American Association of Colleges for Teacher Education (AACTE) has sponsored a series of workshops and institutes led by Western Oregon faculty to aid other teacher educators trying to develop systematic means of connecting teaching and learning (Schalock & Imig, 2000). Several other states are currently considering adopting this method.

Western Oregon's TWSM is a "complex, 'authentic' applied performance approach" to the evaluation of teacher candidates that is outcomes-based and grounded in a "context-dependent" theory of teacher effectiveness (Schalock, Schalock, & Girod, 1997, pp. 17- 18). Work samples represent teacher candidates' teaching of 3-5 week units of study developed through 8 distinct design steps from which faculty derive 7 broad categories of measure. These are used for decision making in teacher preparation and licensing as well as in research. Teacher candidates design units of instruction aligned with the desired outcomes, which are in turn aligned with Oregon's standards-based curriculum. They then assess their teaching in terms of K-12 student progress by means of the work sample method. Thus work samples provide a "rich and ready context for the evaluation of a teacher's knowledge and skill as well as a one-of-a-kind context for evaluation of teachers' effectiveness and/or productivity" (Schalock, Schalock, & Girod, 1997, p. 19).

Although the authors note that the TWSM does not stipulate specific performance standards, which are to be determined by the particular group or program using TWSM, they do provide information about how the Western Oregon program deals with evaluative criteria and performance standards. The following is illustrative of how the TWSM constructs performance as an outcome of teacher education:

> Starting with preinstructional data on pupil learning, a student teacher calculates a 'percentage correct' score for each pupil in his or her classroom. Using these scores, the teacher than (a) tabulates, from highest- to lowest-scoring pupil, the range of preinstructional scores; (b) sorts these scores into high-, low-, and middle-scoring groups; and (c) calculates the means scores for each of the groups formed and for the class as a whole. These preinstructional groupings provide the structure for both the analysis of postinstructional measures of outcome attainment and the calculation of

gain scores.

As in the case of the preinstructional measure, a percentage-correct score is calculated for each pupil on the postinstructional measure and is matched with the pupil's preinstructional score. Gain scores are then tabulated for the high-, low-, and middle-scoring groups based on the preinstructional measure. Mean gain scores also are tabulated for each of these groups and for the class as a whole to obtain a general impression of the learning gains that have been made by particular groups of pupils as a consequence of instruction received. Using these data as a point of departure, the teacher can then proceed to refine them to bring a *level of standardization* to the teacher-designed and curriculum-aligned measures of pupil learning used. This is done by calculating an Index of Pupil Growth (IPG) score for each pupil. The IPG is a simple metric devised by Millman (1981) to show the *percentage of potential growth* each pupil actually achieved. The metric is calculated as follows:

$$\frac{(\text{Post \% correct}) - (\text{Pre \% correct})}{(100\% - \text{Pre \% correct})}$$

Multiplying this metric by 100 results in a score than can range from –100 to +100, where a negative number represents a lower score on the posttest than on the pretest, 0 represents no change from pre- to posttest, and +100 represents a perfect score on the posttest regardless of pretest performance. A negative score is rare, with most scores falling in the +30 to +80 range. (Schalock, Schalock & Girod, 1997, pp. 22-25, emphasis in original)

Following these calculations, teacher candidates write an explanation for why K-12 students did or did not attain the desired learning outcomes. According to its architects, the teacher work sample approach to performance as outcome sharply contrasts with assessments that feature portfolios, teachers' analyses of lessons planned and taught, candidates' assessments of students' learning for diagnostic purposes, and so on. TWSM developers argue that these other approaches provide "relatively weak evidence of the teachers' success in fostering learning" (Schalock, Schalock, & Myton, 1998, p. 469) as opposed to TWSM, which focuses explicitly on demonstrable teacher effectiveness as measured by the learning gains of students.

Inquiry as Stance

For a number of years, a group of us as university- and school- based researchers and practitioners at the University of Pennsylvania and the Philadelphia area schools (and more recently at Boston College) have been involved in efforts to promote teacher research as a vehicle for generating local knowledge and challenging the status quo by linking inquiry, professional knowledge, and professional practice across the teaching lifespan (Cochran-Smith, 1991; Cochran-Smith & Lytle, 1990, 1993, 1999, 2000; Cochran-Smith , et. al., 1999). In our efforts, we have not used the language of "outcomes" and "results." However it is clear in all of the writing about these initiatives that a major outcome of teacher education is teacher learning and professional practice that promote rich learning opportunities for all students with the larger goals of equity and social justice. We have pointed this out explicitly:

Here we take the more radical position that learning from teaching ought to be regarded as the primary task of teacher education across the professional lifespan…This argument is based in part on the assumption that the increasing diversity of America's schools and schoolchildren and the increasing complexity of the tasks that educators face render global solutions to problems and monolithic strategies for effective teaching impossible. Hence, what is required in both preservice and inservice teacher education programs are processes that prompt teachers and teacher educators to construct their own questions and then begin to develop courses of action that are valid in their local contexts and communities (Cochran-Smith & Lytle, 1993, p. 63)

From this perspective, the goals of teacher education include teacher candidates' learning to engage in practitioner inquiry and to construct local knowledge within inquiry communities (Cochran-Smith & Lytle, 1999, a; Lytle & Cochran-Smith, 1992). This work has received considerable attention as part of the teacher research movement over the last decade (Cochran-Smith & Lytle, 1990, 1999b) and has been recognized and supported nationally by the Spencer Foundation, Teachers College Press, and the University of Pennsylvania's Ethnography and Education Research Forum What professional performance looks like when inquiry is regarded as an outcome has been spelled out in detail in my writing about inquiry-centered preservice teacher education with the goal of social justice (Cochran-Smith,1991; 1995a,b; 1998) and in the writing and presentations of my students at the University of Pennsylvania and to a lesser extent at Boston College (e.g., Maimon, 1999; Black, et. al., 1993). Inquiry performances include: analyses of the culture of the school; small-scale classroom studies that drawing on classroom data, including students' written work, verbal interactions, observations, texts and other materials; case studies that explore patterns in students' classroom behavior, uses of linguistic and cultural resources, and responses to learning opportunities as well as documentation of the teacher's adaptations to these individual variations; and development of curriculum and pedagogy that provide all students (including very young children and "at risk" students) opportunities to debate complex ideas, interpret unabridged texts, exchange points of view with others based on evidence and experience, and explore issues related to equity, language, power, and racism in the classroom. These performance outcomes were developed collaboratively by university-based and school- based educators at the University of Pennsylvania over the course of many years of joint work. Fieldwork supervisors and school-based cooperating teachers had a strong voice in the development of criteria for assessment of performance, including what counted as evidence of teaching skill, students' learning, and inquiry stance. Teacher candidates were evaluated jointly—by themselves, their cooperating teachers, and their fieldwork supervisors—based on specific classroom evidence and documentation of the major goals of the program. In addition, portfolios of all teacher candidates' inquiries, samples of teachers' and students' work, and critical narrative essays analyzing teacher learning over time represented a major final performance (Cochran-Smith, 1998).

When teacher inquiry is framed as an outcome, professional performances are expected to demonstrate how teachers construct local knowledge, how they open their decision- making strategies to critique, and how they know when and what their students have learned. They also demonstrate how prospective teachers learn to wrestle with multiple perspectives, utilize others' research to generate questions and new analyses,

and work within professional communities committed to social justice. Each of these aspects of learning to teach is related to what Susan Lytle and I have called an "inquiry stance" on teaching and learning (Cochran-Smith & Lytle, 1993, 1998, 1999a, 2000). Learning to teach through inquiry is difficult and uncertain work. It is work that is profoundly practical in that it is located in the dailiness of classroom decisions and actions, including teachers' interactions with their students and families, choices of materials and texts, uses of formal and informal assessments, and so on. At the same time, however it is work that is deeply intellectual in that it involves a continuous process of constructing understandings, interpretations, and questions. Performances that demonstrate that teacher candidates are learning through inquiry to teach for social justice, then, include not only the particular practices they employ and the impact these have on K-12 students' learning—but also how they struggle to document, theorize, and alter their practice.

Looking Across Constructions of Performance

The four preceding examples are similar in important ways. All four assume that a rightful outcome of teacher education is that teacher candidates can demonstrate classroom practices and accomplish classroom tasks that are linked to students' learning. All assess performance by focusing on authentic school and classroom tasks that are close to the everyday work of teaching. All assume that teacher candidates should know how to learn from their own practice by analyzing teaching and learning events and making their interpretations public and thus open to critique by others. And finally, all four make it clear that professional performance as an outcome of teacher education has to do with demonstrating the connections among teacher learning, professional practice, and student learning.

There are also important differences here, however, and the four examples provide some sense of range and variation in how professional performance is being constructed as an outcome of preservice teacher education. With approaches such as teacher work samples, for example, teacher candidates demonstrate their knowledge by constructing appropriate learning objectives and writing explanations about why particular students did and did not make the desired learning gains. In these explanations, teacher learning and teacher knowledge are regarded only as "enablers" of desired student outcomes (Schalock, Schalock, & Myton, 1998, p. 469) rather than as outcomes of teacher education themselves (Diez, 2000). The overriding focus with work samples is "demonstrable teacher effectiveness as measured by the learning gains of students" (Schalock, Schalock, & Myton, 1998, p. 469), an approach that contrasts with assessments that emphasize portfolios and inquiries by teacher candidates about students' learning, which as I stated above, are considered by work sample proponents as "weak evidence" of teacher candidates' success. In contrast to work samples, performance assessments that focus on teacher knowledge and understanding are more consistent with the professional standards of NBPTS and INTASC (Darling-Hammond, 1998; Diez, 2000). Advocates of portfolios and the like point out that teacher work samples do not provide a well-developed explanation of the connections between teaching and learning, do not require teacher candidates to understand why certain practices lead to student learning, and do not require them to justify why certain learning objectives are more important than others.

As these four examples make clear, when professional performance is regarded as an outcome of teacher education, there is variety in emphasis on teacher learning, student learning, and/or the relation between teacher and student learning. There is also

variation in the sources of standards and criteria for evaluation of performances. Some of the examples above evaluate teacher candidates' performances against standards aligned with professional curriculum and teaching standards, some against standards of professional practice validated in the field, and some against some combination of these. With other approaches, it is not clear what the sources of standards and criteria are. Along different lines, some versions of professional performance emphasize critique of curriculum standards and traditional practices by evaluating teacher candidates—at least in part—in terms of their ability to challenge, rather than comply with, current "best practice" if and when these best practices do not serve the interests of particular groups of students.

I would argue here that at the heart of different constructions of what constitutes competent teaching performance is more than a semantic debate about whether teacher education should be producing what some have called "accomplished teachers," who know how to learn from teaching on an ongoing basis, or as others have termed it, "teachers who can accomplish something" by way of measured student learning gains (Schalock & Imig, 2000). What is at the heart are basic differences in definitions of teaching and learning and in connections that are assumed among teacher learning, professional practice, and student learning. As my examples attest, these differences are played out in the tasks teacher candidates are expected to perform, the kinds of products they are required to produce, the evidence that is collected to document these, the criteria used to evaluate the evidence, and the underlying assumptions about professional knowledge and practice that guide the overall enterprise. Also at issue are the roles critique and inquiry are assumed to play (or not) in professional performance and the larger political, professional, and social agendas to which they are connected.

Constructing Outcomes in Teacher Education: Possibilities and Pitfalls

So far in this article, I have tried to make the case that how we construct outcomes in teacher education (including how we make the case that some outcomes matter more than others) legitimizes but also undermines particular points of view about the purposes of schooling, the nature of teaching and learning, and the role of the teacher in educational reform. In the remaining sections of this article, I explore some of the possibilities as well as the pitfalls in the outcomes debate.

Tensions between Consensus and Critique

Many discussions about outcomes in teacher education begin with the assumption that there is an unprecedented professional consensus about how to reform education by developing closer and closer alignment among three things: (1) standards for teaching and learning in particular content and curricular areas, (2) high stakes assessments of students and teachers, and (3) new models of teacher education, licensing, and certification. There is, however, a fair amount of evidence that just below the surface of common language and very general agreement, there are deep differences rather than consensus.

The whole movement for the privatization of schooling (and with it the deregulation of teacher education), driven by a market approach to education reform (Earley, 2000), is an obvious—an enormous—example of the lack of consensus about teacher education in the U.S. The deregulation movement mentioned earlier in this article helps to explain some otherwise puzzling discrepancies within and among state policies. For example, many states now have official relationships with NCATE and/or

are working with INTASC and NBPTS to develop professional standards for the licensing of beginning teachers (Scannell & Metcalf, 2000). However some of these very same states have recently implemented or are about to put into place state policies that are fundamentally out of sync with the professional standards of these organizations. Colorado, for example, has removed the word "diversity" from its regulations regarding teacher preparation. Massachusetts Department of Education officials have excised the word "constructivism" from discussions and guidelines for school district leaders. Just two weeks before it was to be administered to thousands of K-12 students (and well after teachers and school districts had adjusted curriculum and instruction so that they would be consistent with new assessments), Arizona suspended its "cutting edge" performance-based student assessment plan and returned to more traditional assessments (Smith, Heinecke, & Noble, 1999). In addition, states such as New Jersey and Texas now advocate alternate routes with "quickie" teacher education workshops as a preferred entry into teaching (Klagholz, 2000), and new teacher certification regulations such as those in Massachusetts explicitly separate the development of pedagogy, which is to be picked up on the job, from the development of subject matter knowledge, which is regarded entirely as an arts and sciences matter (Massachusetts Department of Education, 1999).

These are glaring examples of the fact that there is not consensus in the U.S. about how and where teachers should be educated, what they should learn (or not learn), and what theories of teaching and learning should guide their learning. Even if we put the professionalization- deregulation debate aside, however, it may be that what Hawley and Valli (1999) have called "an almost unprecedented consensus . . . among researchers, professional development specialists, and key policymakers on ways to increase the knowledge and skills of educators substantially" is at least partly an illusion—or a wish.

There are indications of lack of consensus within the profession as well as between the profession and its detractors. For example, only 500 of the 1200 institutions in the country that recommend teachers for certification are nationally accredited (Wise, 1999), and Linda Darling- Hammond (2000) claimed in a recent discussion of the reforms called for by the NCTAF that the American Association of Colleges for Teacher Education had actually lobbied against a provision in the Higher Education Act that would have encouraged accreditation as a means of increasing accountability for teacher education institutions. (Note 3) Along related but different lines, Frank Murray, who was an early and active player in efforts to codify the knowledge base for teaching and teacher education (Murray, 1996), has cautioned that the knowledge base is a tentative and emerging one with few settled policies and practices (Murray, 2000). He points out that the professional standards, which are the backbone of reforms proposed by NCTAF and other professional agencies, represent provisional and untested recommendations rather than empirically validated policies and practices. Murray advocates accreditation standards based on outcomes evidence in keeping with institutional purposes and goals rather than simply in keeping with standards. Murray and the TEAC organization, which he heads, have been characterized as obstacles to reform in teacher education, and their emphasis on outcomes evidence based on institutional goals rather than professional standards has been labeled "disingenuous" at best, "consumer fraud" at worst (Darling-Hammond, 2000, a).

Along different lines, Susan Lytle and I have argued (Cochran-Smith & Lytle, 2000) that the widely touted "new professional development" may be less monolithic and consensual than is claimed in some places. We have suggested that beneath the surface of similarly- named teacher education strategies and organizational arrangements such as professional development schools or inquiry-centered teacher education, "the

new vision" of professional development differs substantially, depending in part upon underlying assumptions and goals, especially upon differing images of knowledge, practice, and teacher learning (Cochran-Smith & Lytle, 1999, a).

Some of the differences noted above among teacher education policy makers, researchers, and practitioners may be accounted for as turf battles, some as what Smith, Heinecke, and Noble (1999) call "political symbolism and contention" (p. 158), and some as genuine and rational debate about the meaning of teaching and learning and the purposes of schooling. But in the face of these disagreements, it is appropriate to ask what accounts for the strong claims that consensus already exists and what propels such strong advocacy of closer and closer alignment of educational outcomes.

Yinger's incisive explanation of the role of standards and consensus in the process of professionalization (Note 4) is useful here (Yinger, 1999; Yinger & Hendricks-Lee, 2000). He points out that the central issue in professionalization is how a group makes a claim for and establishes "jurisdictional authority" (Yinger, 1999, p. 86) over the knowledge and problems of professional practice in a given area. He comments that standards are a powerful professional tool and that consensus is critical to the professionalization process, signaling to the public and to policy makers that a profession has established cognitive jurisdiction. Yinger concludes:

> As consensus develops around national standards for teaching and teacher preparation, it fulfills the needs of both policy makers and the public for simplification of the image of teaching and issues of quality. There was no way teaching could have met these social needs for a unified, scientifically based perception of professional practice as long as academics were arguing publicly about conceptions of teaching and 50 state legislatures were deciding the matters for themselves. (p. 106)

Yinger's analysis suggests that we need consensus about outcomes in teacher education whether we have it or not. The pitfall here—and my caution as we construct outcomes in teacher education—is that we will sacrifice or gloss over the healthy and vital contribution of critique for what is arguably the greater professional good of consensus.

On a certain level, working from consensus and alignment of standards at multiple levels of schooling and teaching are rational and much-needed improvements in teacher education. Aligning school-based curriculum and learning standards with standards for teacher education is a far cry from the days of haphazard or idiosyncratic teacher education programs based on faculty members' favorite assignments or distant memories of their own teaching experiences. On another level, however, the greater the supposed consensus and the tighter the alignment of all the pieces, the less room there is for critique and questioning within the profession and in the preparation of prospective teachers.

As we construct outcomes in teacher education, a central challenge is how to prepare teacher candidates who can demonstrate what some consider "best" instructional practices, but also know how to challenge those practices when they exclude certain children or fail to serve some students. How will we prepare teachers who know how to "fit" into tightly aligned standards- driven schools and school systems, but also know how to raise questions about whose interests are being served, whose needs are being met, and whose are not being met by those systems?

The emerging professional consensus is that teacher candidates must demonstrate that they can affect the learning of *all* K-12 students. But serving the needs of *some* K-12

students may mean challenging the consensus itself—challenging the bases of some curriculum frameworks, assessments, and school policies that do not serve all students by identifying inequities in the current arrangements of schooling. Critique as an outcome of teacher education—"teaching against the grain" as outcome (Cochran-Smith, 1991a)—is a notion that is diametrically opposed to recent initiatives in some higher education institutions that are intended to provide "quality assurances" about their recent graduates. Quality assurances, or warranties—if you will—are commitments made by higher education institutions to local school districts that if their teacher candidates, once hired, are not able to perform to the satisfaction of school principals on their first jobs, they will be assisted and "retrained" by the teacher education institution until they can. What does this kind of quality assurance do to the notion of the "learning teacher" who teaches to standards but also critiques them? What does this do the notion of teacher as professional decision-maker who faces difficult choices among competing claims to justice in order to meet the needs of all students? In teacher education, we face a major challenge—how to retain and nurture constructive critique at the same time that we work to build professional consensus about what makes a promising teacher candidate and a good teacher.

Problems with the Inputs-Outputs Metaphor

As mentioned above, some people have been describing changes in accreditation standards as a "paradigm shift" (Schalock & Myton, 1988; Schalock & Imig, 2000) from "inputs to outputs" or from "inputs to outcomes" in teacher education. It is certainly appropriate to acknowledge that there are major differences in NCATE's new accreditation standards and in the new general focus on results and outcomes. NCATE's new standards focus less on the knowledge bases and conceptual frameworks of teacher education programs and more on systematic evaluation of teacher candidates' demonstrated ability to foster K-12 students' learning (NCATE, 1999). It is also the case that from its inception, TEAC focused on outcomes rather than inputs—that is, TEAC's approach was from the beginning a system for auditing the performances of teacher candidates and programs rather than assessing the alignment of curricula and programs with professional standards (TEAC, 1999).

There are a number of problems, however, with characterizing this change in emphasis as a paradigm shift and in using metaphors such as "inputs and outputs" to describe it. In Kuhn's sense, the phrase, paradigm shift, implied a major C change and a major change in world view that was shared by a given research or academic community. To apply the paradigm shift phrase to new and old ways of accrediting teacher education programs implies at the very least, that "old" programs—those that focused on the "inputs" of teacher education courses and curriculum—had nothing to do with teacher candidates' actual teaching or with K-12 students' actual learning and that old programs had little concern with how teacher candidates adjusted their professional practice to meet the needs of diverse learners. As many teacher education practitioners and researchers are well aware, however, this is not the case.

There have been many programs over the last two decades that have had all along what we might now call an "outcomes" focus, particularly those that were inquiry-and/or research-based, those that were situated within the ongoing work of schools and classrooms, and those that were committed to preparing teachers for urban and special needs populations. These programs have long concentrated on how teacher candidates posed questions, documented students' learning, analyzed and interpreted classroom data, adjusted the curriculum to meet the needs of different students, and critiqued their

own and others' practice. (Note 5) Characterizing new accreditation standards as a "paradigm shift" fails to acknowledge that programs like these have long emphasized learning to teach as a process of learning to document systematically teachers' and students' learning.

However, the dominance of the input-output metaphor to describe teacher education outcomes is even more troubling than overuse of the paradigm shift phrase. The input-output metaphor conjures up production and factory imagery and calls to mind the linear flow charts of early computer programming days and the schematics that were used to represent the input- output operations of early technology. In *Metaphors We Live By*, Lakoff and Johnson (1980) suggest that images like these can be powerful forces in the social construction of reality:

> Metaphors may create realities for us, especially social realities. A metaphor may thus be a guide for future action. Such actions will, of course, fit the metaphor. This will, in turn, reinforce the power of the metaphor to make experience coherent. In this sense metaphors can be self-fulfilling prophecies. (p. 156)

The input-output metaphor carries with it a linear view of the relationship of teaching and learning for both K-12 students and for teacher candidates, an image that is somewhat reminiscent of the process-product research that dominated research on teaching not so long ago (Dunkin & Biddle, 1974). With process-product research, teacher behaviors were central. Teacher education programs consistent with this research base made certain their teacher candidates could demonstrate these behaviors in classroom settings. In current constructions of the outcomes question, there is a different focus—a focus on K-12 student learning rather than teacher behaviors. Schalock, Schalock, and Girod (1997) points out explicitly that the new focus on outputs and results is quite different from process-product approaches in that the contexts of teaching are acknowledged and the emphasis is on student learning as opposed to teacher behaviors. Despite these differences between process-product research and outcomes-based evaluation of teacher education, however, their underlying conceptions of teaching and learning are similar—and linear—as the input-output metaphor so powerfully suggests.

As we construct outcomes for teacher education, an important challenge will be to eschew narrow views of teaching, particularly those that begin and end with the assumption that teaching can be defined as instructional practice that leads to demonstrable student learning gains. If we require teacher candidates to use some kind of calculus that measures and aggregates the learning gains of each K-12 student from pretest to posttest measures for each lesson or teaching unit, there will be an inevitable narrowing of the curriculum and an inevitable pull toward teaching as transmission and learning as accruing bits of knowledge. There will also be an inevitable emphasis on teaching practice as what teachers do within the boundaries of their classroom walls rather than an expanded view that includes teachers' roles as members of school communities, activists, school leaders, and theorizers of practice. I have described this broader view of teaching practice as follows (Cochran-Smith & Lytle, 1999, a):

> This image of practice entails expanded responsibilities to children and their families, transformed relationships with teachers and other professionals in the school setting, as well as deeper and altered connections to communities, community organizations, and school-university partnerships.

We are not suggesting that an expanded view of practice results from adding teachers' activity outside the classroom to what they do inside, but rather that what goes on inside the classroom is profoundly altered and ultimately transformed when teachers' frameworks for practice foreground the intellectual, social, and cultural contexts of teaching (p. 276).

In short, what I am suggesting here is that we need outcomes measures that—ironically—make teaching harder and more complicated for teacher candidates (rather than easier and more straight-forward). Such measures recognize the inevitable complexity and uncertainty of teaching and learning and acknowledge the fact that there are often concurrent and competing claims to justice operating in the decisions teacher candidates must make from moment to moment, day to day. Linear models of teaching will not suffice here, nor will constructions of outcomes that push only for clarity and certainty. Someone once said that those who have been forced to memorize the world are not likely to change it. It may also be true that those who have been required to measure the outcomes of teaching only with pluses and minuses will not be likely to see the value of question marks, concentric circles, and arrows that point both ways and sometimes double back.

Teachers (and Teacher Educators) as Saviors and Culprits

Many of the outcomes discussions in teacher education are based on the premise that teachers and teaching, teacher educators and teacher education, are critical components—arguably *the* critical components—in school change (and ultimately perhaps societal change). There is good news and bad news here. In debates about outcomes, teachers and teacher educators are being constructed as both the last great hope and the most culpable culprits in what ails American schools, a point that has been made repeatedly, often using quotations like these from Michael Fullan and David Cohen, respectively:

Teacher education still has the honor of being simultaneously the worst problem and the best solution in education. (Fullan, 1993, p. 105 quoted in Thiessen, 2000, p. 129)

Teachers are the problem that policy must solve, in the sense that their modest knowledge and skills are one important reason why most instruction has been relatively didactic and unambitious. But teachers are also the agents on whom policy must rely to solve that problem, for unless they learn much more about the subjects they teach, and devise new approaches to instruction, most students' learning will not change. (Cohen, 1995, p. 13 quoted in Schalock & Imig, 2000, p. 6)

The attention given recently to outcome-based assessment systems that incorporate student achievement data into evaluations of individual teachers and schools reinforces this idea. The research of Sanders and Horn (1994, 1998), for example, based on their Tennessee Value-Added Assessment System has been widely cited by researchers and policy makers who represent a wide range of perspectives (e.g. Darling-Hammond, 1998, 2000; Murray, 2000; Ballou & Podgursky, 1999) and even reach diametrically different conclusions about teacher education and teacher licensing policies. Despite their differences, however, policy makers use research like Sanders and Horn's to make the

same point about the importance of teachers and teachers' work: When other variables are adjusted for or held constant, teacher effectiveness is the primary factor that accounts for differences in student learning, even stronger as a determinant of students' achievement than class size and heterogeneity. This means that teachers are responsible for students' learning despite the mitigation of social and cultural contexts, students' backgrounds, and the match or mismatch of school and community expectations.

Many of the most prominent voices in discussions about outcomes use evidence about the impact of individual teachers to make an equally strong point about the importance of teacher education. This link is crystal clear in Gary Sykes' (1999) introduction to a recent handbook of policy and practice, which he co-edited with Linda Darling-Hammond (Darling-Hammond & Sykes, 1999).

> Improvement of American education relies centrally on the development of a highly qualified teacher workforce imbued with the knowledge, skills and dispositions to encourage exceptional learning in all of the nation's students. (Sykes, 1999, p. xv)

My intention here is *not* to differ with Sykes and others who are adamant about the importance of teacher professionalization. I am in no way suggesting that teachers—and teacher education—are not important. I have spent more than twenty years demonstrating and acting on the assumption that they are. During this time, I have argued consistently that we need teachers who enter and remain in the profession not expecting to carry on business as usual but prepared to teach differently and to join others in major efforts to change the ways we think about teaching, schooling, and social change (Cochran-Smith, 1991, 1995b, 1998).

As we construct outcomes for teacher education, we face the challenge of how to emphasize the centrality of teachers' work without implying that teachers—individually or collectively—are the panacea for the problems of American education and American society. The dire circumstances of the cities are not going to change because teachers teach better. Weiner (1989) makes this point with clarity when she argues that the "Herculean task" of teaching in urban schools is the result of complex school bureaucracies, the isolation of schools from the families and communities they are supposed to serve, and the large numbers of students in urban classrooms whose families have neither the resources nor the will to affirm and support school values. Weiner points out that professional development projects can only help teachers deal with the third factor—the situations they find in their classrooms:

> Teacher education programs can prepare teachers to confront ...conditions in their classrooms, by educating candidates to teach disadvantaged students with respect, creativity, and skill, but they cannot prepare individual teachers to substitute for the political and social *movements* that are needed to alter the systemic deficiencies of urban education. (p. 153)

McCarthy (1993) makes a similar point in his criticism of multicultural education. He claims that by ignoring "the crucial issues of structural inequality and differential power relations" (p. 243), advocates of multicultural education place enormous and unrealistic responsibility on the shoulders of classroom teachers. Notwithstanding recent research about the enduring impact of teacher expertise on students' learning, we must remember that teachers—and teacher educators—are neither the saviors nor the culprits of all that is wrong with American education and American society.

Getting Social Justice onto the Outcomes Agenda

In the standards of NBPTS, INTASC, and NCATE, there is an explicit mandate that teachers and teacher candidates meet the needs of an increasingly diverse student population by producing demonstrable learning gains for *all* children. NBPTS Standard 1 states that professional teachers must be committed to students' learning and dedicated to making knowledge accessible to all students and that expert teachers adjust their teaching according to varying student interest, skill, knowledge and background (National Board for Professional Teaching Standards, 1994). Similarly INTASC Principle 3 states that the good beginning teacher understands "how students differ in their approaches to learning and creates instructional opportunities that are adapted to diverse learners" (Interstate New Teacher Assessment and Support Consortium, 1992). NCATE's new Standard 4, which is labeled "Diversity," is consistent with NBPTS and INTASC standards. It requires that teacher preparation units must design, implement, and evaluate curriculum, field experiences, and clinical practices so that teacher candidates acquire the knowledge, skills and dispositions necessary to help all students learn. NCATE stipulates that this should include experiences working with diverse higher education and school faculty, diverse teacher candidates, and diverse and exceptional students in schools (National Council for the Accreditation of Teacher Education , 1999). In particular, NCATE standards require that "candidates learn to contextualize teaching and to draw upon representations from the students' own experiences and skills. Candidates should learn how to challenge students toward cognitive complexity and engage students through instructional conversation" (pp. 15-16).

Some proponents of teacher professionalization have pointed out that the standards of NBPTS and INTASC coupled with new NCATE standards provide a remarkably consistent picture of the good teacher. Yinger (1999) makes this point quite lucidly:

> Through the work of [these] three organizations…a powerful consensus has emerged regarding the definition and assessment of good teaching throughout a career, from preservice education to advanced professional certification. The standards have framed the image of the professional teacher as a knowledgeable, reflective practitioner willing and able to engage in collaborative, contextually grounded learning activities. (p. 102-103)

An image of the professional teacher as reflective and knowledgeable is certainly laudable, one that few would debate. It is also important to ask, however, whether this emerging view of the prospective professional includes images of teacher candidates as activists, as agents for social change, and/or as allies for social justice? Does it include an image of the teacher candidate as one who works with others to challenge the current arrangements of schools and schooling?

As we construct outcomes in teacher education, we need to interrogate what it means to teach "all students" well and what it means to adjust teaching practices according to the needs and interests of "all children." In a recent chapter on preparing teachers for diversity, Gloria Ladson-Billings (1999a) asserts that "the changing demographics of the nation's schoolchildren have caught schools, colleges, and departments of teacher education by surprise. Students are still being prepared to teach in idealized schools that serve White, monolingual, middle class children from homes

with two parents" (p. 86-87). In another recent article about culturally relevant approaches to teacher assessment, Ladson-Billings (1999b) further asserts that these are "dangerous times" for teachers of students of color because some of the new evaluations of teacher competency "may actually serve to reinscribe a narrow set of teaching practices that fail to serve all children well—particularly children of color and children living in poverty" (p. 255). Similarly Jackie Jordan Irvine suggests that some aspects of current teacher assessments, including those used by NBPTS, are not in keeping with what we know about the strategies, relationships, and beliefs of teachers who teach children of color most effectively (Irvine, 2000; Irvine & Fraser, 1998).

As we construct outcomes in teacher education, one of the challenges we face is how to keep social justice—particularly issues of race, class, and language background—on the agenda. At the same time that there is a professional consensus that the professional teacher is knowledgeable, reflective, and collaborative, another consensus has emerged about the effective teacher of children of color, children whose first language is not English, and/or children whose culture is not Western European in origin. This other image of the professional teacher is of one who constructs pedagogy that is culturally relevant and responsive (Gay, 2000; Irvine & York, 1995; Ladson-Billings, 1994, 1995), multicultural but also socially reconstructionist (Sleeter & Grant, 1987; Sleeter & McLaren, 1995), anti-racist (Sleeter, 1992; Tatum, 1992), anti-assimilationist (King, 1996), and/or aimed at social justice (Cochran-Smith, 1995, a,b; 1999). (Note 6) In short, the professional teacher is one who teaches in a way that bell hooks (1994) calls emancipatory or "transgressive":

> The classroom with all its limitations, remains a location of possibility. In that field of possibility we have the opportunity to labor for freedom, to demand of ourselves and our comrades an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom. (p. 207)

I want to be clear that I am in no way suggesting that these two images of the professional teacher—as reflective and knowledgeable, on the one hand, and as transformative and culturally relevant, on the other—are necessarily inconsistent or that they cannot mutually coexist in constructions of outcomes in teacher education. In fact with performance assessments where teacher candidates are expected to document student learning but also demonstrate their own efforts to work for social change, the two images are entirely consistent and mutually reinforcing. But it is also important to note that these two images are by no means *necessarily* co-incidental. We could easily imagine performance assessments, for example, that demonstrate that a teacher candidate is reflective, collaborative, and knowledgeable but that have little or nothing to do with critiquing the inequities of the educational system or raising questions about the school as a sorting machine that reinforces privilege as well as disadvantage. An important challenge as we construct outcomes for teacher education is to imagine performance assessments for teacher candidates that require both.

Outcomes in Teacher Education: Democratic or Market Driven?

As I have alluded several times, many of the most contentious debates about outcomes in teacher education stem from two fundamentally different approaches to teacher education reform and from two fundamentally different views of the purposes of

schooling. The first, which is intended to reform teacher education through professionalization so that all students are guaranteed fully-licensed and well- qualified teachers, is based on the belief that public education is vital to a democratic society. The second, which is intended to reform teacher education through deregulation so that larger numbers of college graduates (with no teacher preparation) can enter the profession, is based on a market approach to the problem of teacher shortages that feeds off erosion of public confidence in education.

A number of analysts have argued that a market approach to educational policy fundamentally undermines a democratic vision of society (Earley, 2000; Engel, 2000; Labaree, 1997). Michael Engel (2000) makes this point bluntly: "Market ideology and democratic values in education are mutually exclusive" (p. 6). Similarly Earley (2000) and Labaree (1997) each point out that a market approach to reform of teaching and teacher education fundamentally misunderstands the nature of teachers' work, which is primarily a public enterprise for the common good, in contrast with market approaches to educational reform, which are about individual competition for what Labaree calls "private goods." Pointing to some of the basic contradictions implicit in the 1998 Higher Education Act as evidence of the mismatch between teachers' work, which is fundamentally democratic, and market-driven reforms, which are fundamentally competitive and individualistic, Earley offers this trenchant analysis:

> A market policy lens is based on competition, choice, winners and losers, and finding culprits. Yet teachers must assume that all children can learn, so there cannot be winners and losers. Market policies applied to public education are at odds with collaboration and cooperative approaches to teaching and learning…Paradoxically the Higher Education Act Title II categorical programs encourage institutions of higher education to form collaborative partnerships across academic disciplines and with K-12 schools for the purpose of preparing new teachers and offering professional development for career educators. However, under the market approach being used in educational policy and reflected in the accountability sections of the same law, teachers and those who design and administer their preparation programs must have as a primary concern competition, being a winner, not a loser, and certainly not being cast as a culprit. The consequence of these pressures is the domestication of teachers (Note 7) [and perhaps I could add here, the domestication of teacher educators], perpetuating their role as semiskilled workers. . . and frustrating efforts for teaching to be truly professional work. (pp. 36-37) [parenthetical comment added]

Constructions of outcomes that are embedded within market approaches to education reform legitimize the dominance of "private goods" and undermine the view that public education is an enterprise for the public good in a democratic society. Emphasis on private goods and the privatization of education is a trend that is not limited to the U.S. Rather the free-market approach to educational reform is a global phenomenon. Along these lines, Apple (2000), Whitty, Power, & Halpin (1998), and Robertson (1998), among others, have pointed out that the tendency in Australia, New Zealand, the U.K., and in parts of the U.S. has been to devolve blame for the "failures" of public education to the local level—schools, teachers, and teacher education programs—while at the same time over- regulating the content of education and dramatically curtailing the role of universities in teacher education (Thiessen, 2000).

Many of the recent attacks on teacher education are best understood in terms of this lager global debate. There is a striking similarity in many of the attacks on teacher education and in their allegiance to market-driven reforms that make the anti-democracy theme very clear . In these attacks, multicultural education is often constructed as a villain (Farkas & Johnson, 1997; Schrag, 1999)—at best politically correct but meaningless, and at worst an evil political movement that is denying white middle class citizens their share of space in the pages of textbooks and causing a downward trend in children's skills (Stotsky, 1999). In many of the attacks on teacher education, the commentator presumes to speak for "the public," for "public school teachers," or for "parents," all of whom want the same things—order, discipline, basic skills, and a return to American traditions (Farkas & Johnson, 1997). There is also an assumption that knowledge is a static and inert commodity that is (or should be) transmitted directly from teachers to students. Finally there is the presumption that what would save our schools is the "return" to an earlier and idealized time when American values were uncontested and shared by all, when the "canon" of western European history and literary works was unchallenged, and when academic standards for all students were rigorous and culturally neutral (Ravitch, 2000). Each of these entirely faulty presumptions and historical inaccuracies has been critiqued and deconstructed in great detail elsewhere (e.g., Apple, 2000; Banks, 2001; Ladson-Billings, 1999a).

The similarities among many of these attacks, though, are not surprising—nor are their explicitly conservative politics and their gestures toward racism—when it is understood that they are part of a market-driven approach to educational reform and part of the larger conservative political agenda for the privatization of American education. Although it claims to be neutral, this agenda begins with the premise that we need to deregulate and dismantle teacher education, certifying teachers solely on the basis of high stakes test scores and letting the market decide which children will have the most qualified teachers. These are anything but neutral premises and neutral assumptions about the purposes of American education, the purposes of teacher education, and the role of public education in a democratic society.

Mary Heaton Vorse once wrote, "In the last analysis, civilization itself will be measured by the way in which children live and by what chance they have in the world" (quoted in Maggio, 1997, p. 8). As we construct outcomes for teacher education, we need to keep in mind how *we* will be measured by our own measures. As researchers, practitioners, and policy makers in teaching and teacher education, *we* will not measure up unless we preserve a place for critique in the face of consensus, unless we keep at the center of teacher education rich and complex understandings of teaching and learning that are not easily reducible to algorithms, unless we acknowledge that although teachers have a critical role in educational reform, they alone are neither the saviors nor the culprits in what is wrong with American schools and American society, and unless we remain vigilant in demanding time and space on the outcomes agenda not just for professional discussions about meeting the needs of all students but for deep interrogation of questions related to diversity, equity, access, and racism.. At this critical juncture in the reform and development of teacher education, if we do not take control of framing the outcomes in teacher education, then the outcomes will surely frame us and undermine our work as teachers, teacher educators, researchers, and policy makers committed to a democratic vision of society and to the vital role that teachers and teacher educators play in that vision.

Notes

1. The American Education Research Association's "National Consensus Panel on Teacher Education" is currently exploring the empirical research in several areas related to teacher qualifications, program structures, teacher attrition, and career choices. Part of the task of this panel is to consider contradictory claims in these areas.

2. The examples used here are drawn exclusively from preservice teacher education; thus I have not used as examples the performance assessments developed as part of early licensing requirements in various states (e.g., INTASC efforts in Connecticut, Indiana, etc.). It is important to note also that I am *not* proposing a typology of performance assessments in preservice education nor am I offering these examples as prototypes. I am also not suggesting that these are mutually exclusive from one another since they are clearly not and in fact several of them overlap or are consistent in important ways. Rather I believe that they provide some sense of the ways the performance is being constructed as an outcome in preservice education as well as some sense of the consequences of doing so.

3. David Imig, President of the American Association of Colleges of Teacher Education, suggests this characterization of AACTE's position is misleading if not inaccurate because it does not fully take into account the political issues that swirled around these debates nor the fact that there was no realistic possibility that this provision would have become policy (Imig, personal communication, 2000).

4. Yinger (1999) draws on Andrew Abbott's sociological analysis of professionalization across European and American modern professions for his analysis of professionalism and standards in teacher education.

5. See Cochran-Smith & Lytle (1999b) for a synthesis of the teacher research movement over the last ten years and Cochran-Smith Lytle (1999a) for an overview of teacher education initiatives wherein new and experienced teachers work together to construct local knowledge of practice.

6. I have argued elsewhere (Cochran-Smith, 1999) that although these various pedagogies are not synonymous, they are animated by several shared premises that comprise the idea of teaching for social justice. Schools (and how "knowledge," "curriculum," "assessment," and "access" are constructed and understood in schools) are not neutral grounds but contested sites where power struggles are played out. The structural inequities embedded in the social, organizational, and financial arrangements of schools and schooling help to perpetuate dominance for dominant groups and oppression for oppressed groups. Power, privilege, and economic advantage and/or disadvantage play major roles in the school and home lives of students whether they are part of language, cultural, or gender majority groups or minority groups in our society . The history of racism and sexism in America and the ways "race" and "gender" have been constructed in schools and society are central, whether consciously or not, in the ways students, families, and communities make meaning of school phenomena as well as how they interact with school designates. Curriculum and instruction are neither neutral nor natural.

The academic organization of information and inquiry reflects contested views about what knowledge is of most value; part of the curriculum is what is present or absent as well as whose perspectives are central or marginalized, and whose interests are served or undermined. The social and organizational structures of instruction, including classroom and other discourse patterns, grouping strategies, behavioral expectations, and interpretive perspectives are most congruent with White mainstream patterns of language use and socialization and are more conducive to the achievement of boys than girls. Animated by these understandings, teaching for social justice is teaching that is openly committed to a more just social order (Freire, 1970; Nieto, 1996).

7. Earley attributes this phrase to Philadelphia School District teacher and researcher, Diane Waff.

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