When public schools proliferated in the United States early in the 20th century, women had few professional choices available outside of teaching. As the need arose, schools chose from this large pool, teachers entered a school, usually near home, and stayed there throughout their career. Given the lack of consensus on curriculum and standards and that aggregate or comparative student achievement data hardly existed, the nation had no means available to systematically evaluate or determine the quality of its teachers. And there was little reason to worry; this period also witnessed the rise of the United States as the preeminent global power; its students became the workers and leaders that fueled this rise to power; and its schools went virtually unquestioned as the premier flagship institution of its kind, a model for the world to follow.

This situation changed dramatically in the 1980s when an escalating cold war, a "literacy crisis," and concerns about U.S. competitiveness in the global economy precipitated reports such as *A Nation at Risk* (National Commission on Excellence in Education, 1983), which placed the national gaze more firmly on education in general and, along with that, the preparation of teachers. This report, targeted to improving teacher quality, emerged as the large pool of teacher candidates began to dry up. Women now had more choices of careers and fewer were choosing teaching. In addition, student populations grew rapidly during this time,
and class-size reduction initiatives exacerbated the need for teachers (Hess, Rotherham, & Walsh, 2005). The 1980s, then, became a decade of standards as states created language arts, math, social studies, and science standards for students. Teachers were now expected to teach to the standards, and standards guided curriculum decisions. States were also developing criterion-referenced tests to determine if students were mastering the content detailed in standards. In a short time span, teachers went from total freedom in what they taught to curricula constrained by standards with matching assessments.

Hess et al. (2005) reported that colleges of education responded to these challenges by attempting to professionalize teacher education. In 1997, the National Council on Teaching and America's Future (Darling-Hammond, 1997) requested that states standardize their programs and better integrate practice teaching with coursework. A second attempt at professionalism resulted in the creation of the National Board for Professional Teaching Standards; the standards were infrequently connected to colleges of education. This board established standards and a complex assessment system in which teachers could demonstrate that they taught to the highest standards in their specific teaching discipline (e.g., high school science, math, early childhood, and so on). A third attempt involved accreditation of teacher education programs through the National Council for the Accreditation of Teacher Education (NCATE). The newest standards required of this group expected that teacher-education students could effectively practice the skills and knowledge base they were taught in their education coursework. Furthermore, accreditation was determined by how well university programs documented the work of university students in classrooms and how they were affecting preK–12 student achievement.

It is important to situate our review of Knowledge to Support the Teaching of Reading: Preparing Teachers for a Changing World and related literature on teacher education and literacy education within a historical and political context. While it is important, even imperative, to acknowledge the need to improve teacher quality and student literacy achievement, we feel that it is important to recognize that the thrust of the public conversation has as much to do with changing literacy demands within an increasingly technologically sophisticated postindustrial economy (Alvermann, 2001) and the increase in competitors for global economic supremacy as it does with any decrease in the quality of literacy teachers in the United States. Simply put, U.S. teachers are being asked to do more with respect to literacy education, and a quality literacy education matters more now than it has in any time in the history of U.S. public schools. Given the historical and political significance of this moment in literacy teacher education, we felt compelled to bring this context to the analysis of the works that we discuss. If we are to successfully prepare tomorrow's literacy educators, we must begin with an acknowledgment of the very real increase in demands placed on teachers and the institutions that prepare them. Further, we must acknowledge the highly publicized nature of the conversations about teacher education and literacy education, and we must engage the public at large as a legitimate audience for research on literacy teacher education.

Within this broad historical and political framework, we focus on the Snow, Griffin, and Burns volume along with numerous articles, reports, and books dealing either with preparing teachers to teach reading or revamping teacher-education programs to better prepare teachers for reading instruction. Lately, the reports appear to be more numerous and emanate from a variety of sources, including the federal government and private foundations. While a great number of these documents argue for tinkering with reading-preparation coursework by adding to or modifying current curricula, others are critical of higher education's ability to prepare quality reading teachers and, in particular, are dubious about higher education faculty's capability to or will to lead such initiatives. In this essay book review, we focus on Knowledge to Support the Teaching of Reading: Preparing Teachers for a Changing World, an edited text that cumulatively outlines a research-based approach to improving the preparation of teachers of reading. This book, like many other reports, argues for comprehensive changes in the literacy coursework that preservice teachers receive. It represents an optimistic view, showing how coursework can be enhanced and result in more competent reading teachers with literacy professors leading the change process—a solution familiar to literacy faculty. However, other reports present very different solutions for the preparation of reading teachers—probably seen as pessimistic by literacy faculty. While readers may position themselves as within or against one or another perspective, the reality is that these different discourses must find common ground for the essential dialogue to occur in order to adequately prepare quality teachers of reading. At the very least, research supporting a strong teacher education role in reform efforts must account for and speak to the very public and very vocal critics of teacher education.
Looking within Knowledge to Support the Teaching of Reading

Knowledge to Support the Teaching of Reading: Preparing Teachers for a Changing World is a companion volume to Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able To Do (Darling-Hammond & Bransford, 2005). Preparing Teachers for a Changing World takes a broad look at the preparation of teachers while the Snow et al. book targets the essential knowledge new teachers need about the development, acquisition, and teaching of language and literacy skills to K–12 students. Knowledge to Support the Teaching of Reading: Preparing Teachers for a Changing World was composed by a subcommittee of the National Academy of Education's Committee on Teacher Education. Catherine Snow of Harvard University chaired this committee, which included M. Susan Burns, Gina Cervetti, Claude Goldenberg, Peg Griffin, Louisa Moats, Annemarie Sullivan Palincsar, P. David Pearson, Dorothy S. Strickland, and MaryEllen Vogt.

The book is organized around six chapters, each written by different authors or teams of authors. The first chapter—Yet Another Report About Teacher Education—grounds the book in the importance of using the relevant information that is currently available as a foundation for preparing effective teachers of reading. The authors begin this chapter by acknowledging that the research base is not sufficient. They write,

We simply do not have the research base we need—a convergent program of research in which content and method in teacher preparation or professional development programs have been manipulated, and accompanying changes in teacher knowledge, teacher behavior, and child outcomes charted. Nor can we wait for that research base. (p. 2)

Their stance is to take the best evidence that is currently available to use as the basis for recommendations for the reading education portion of teacher-preparation programs.

The authors urge teacher educators to model the ways that exemplary teachers work, by engaging in a cycle of reflection of their own teaching. It is in this recommendation that the foundational structure of the book is established through a cycle of learning that includes enactment, assessment, and reflection. This model assumes that teacher educators practice a form of teacher education in reading that is based on current research; they then assess the effectiveness of this instruction; this reflection results in possible improvements and thus generates new learning. These components recur throughout the book.

Within this chapter, Snow et al. argue why this book is important today and how it is different from other books about the preparation of teachers with a focus on reading. They purport three justifications for the unique contribution of this text:

1. They provide a developmental view of adult learners and document a model of teacher knowledge across a teacher's career (e.g., from preservice through to master teacher).

2. They focus on usable knowledge or practice-based knowledge (i.e., it contributes to ongoing differentiation of teacher knowledge).

3. They present the required knowledge in a systematic way with the inclusion of disciplinary perspectives such as linguistics and cognitive psychology.

Chapter 2—Students Change: What Are Teachers to Learn About Reading Development—is the heart of the book and consumes most of the book's pages. The title is a bit deceiving, though, as the chapter includes the content that these authors expect to be a part of teacher-education programs as well as development, with content often winning out over development. The content of this chapter covers a knowledge base for teachers from kindergarten through high school. Early in the chapter the authors also discuss the importance of language and literacy before children come to school.

The beginning portion of this chapter targets four expectations for children as they enter school: (a) metacognitive growth, during which students notice the structure of language among other aspects; (b) understanding of literacy events such as book reading; (c) understanding of concepts of print; and (d) knowledge of letters. Throughout this presentation, it is clear that the authors view bilingualism as a strength to be built upon by teachers.

The next major section of this chapter considers the systems and subsystems of language and literacy. It begins with comprehension and the importance of word identification in comprehension. After a brief discussion of influences on reading instruction and learning, the authors move to the types of genres or texts to be read and understood by students. Within this section, they emphasize the importance of students learning to read like a historian or scientist as they engage in expository text. The chapter then shifts focus to a discussion of language, including information about dialectical differences and reading. Building on this discussion is information about phonological awareness and phonics. The authors conclude the chapter with in-
Chapter 3—Students Vary: How Can Teachers Address All Their Needs?—begins with case studies of students from kindergarten to high school to highlight potential student variation and teacher response. The chapter then shifts in form to include myths and responses to them. The first set of myths center on students who speak languages other than English at home. A parallel structure is set up for students who speak African American English and for students living in poverty.

Chapter 4—Students Encounter Difficulties: When Teachers Need Specialized Knowledge—parallels the structure of Chapter 3. It begins with cases of students, although these students have special needs that require support from special education teachers. The chapter then includes myths and responses for students with developmental disabilities, moderate to severe cognitive deficits, severe hearing loss, and visual impairments. The recommendation is that all of the teachers and specialists work collaboratively to support the learning of these students.

Chapter 5—Learning to Use Assessments Wisely—utilizes a different structure in that it begins with a vignette and a brief section on what teachers need to know about assessment. Following this overview, the authors share the principles underlying assessment and examples of assessment tools that are available. They also highlight assessments that are particularly useful in middle and secondary school settings. The chapter ends with short segments that target using assessments to guide instruction, communicating assessment results, and recommendations for teacher-preparation programs and how they can support teachers in using assessments wisely.

The final chapter—A Model of Professional Growth in Reading Education—returns to the discussion initiated in Chapter 1, and brings the book full circle. It includes a section on the research centered on effective teacher-education programs. Perhaps the strongest part of this chapter is the developmental progression of teachers and the connections between preservice programs and ongoing professional development. It provides key principles for teacher-preparation programs and assumes that faculties will use these to guide program revisions.

1. Programs that address the ideas and beliefs about teaching that teachers bring with them are more likely to foster dispositions of openness to new ideas and reflection on their own assumptions about effective teaching and learning.

2. Programs that foster the expectation of and skills required for continuous learning are more likely to support the development of career learning paths.

3. Programs that ensure the development of a comprehensive and useable knowledge base are more likely to sustain successful initial teaching experiences.

4. Programs that help teachers apply what they have learned in teacher-education programs to particular contexts and students ease the transition to classroom teaching.

5. Programs that promote articulation among the key components (standards, coursework, and internship experiences) are more likely to help teachers develop the sense of personal efficacy and professional responsibility they will need to achieve an integrated understanding of theory and practice.

6. Programs that stay the course are more likely to succeed than those that change frequently.

7. Programs that are sensitive to local context are more likely than generic approaches.

8. Programs that encourage careful analyses of teaching and the generation of shared knowledge are more likely to nurture a sense of collective responsibility for instruction.

9. Programs that achieve a balance between school or program needs and the needs and goals of individual teachers are more likely to support teachers' movement along the developmental continuum toward becoming expert adaptive practitioners.

These principles, while not very specific, do include important points that will appear in other reports, such as collaboration between programs and classrooms and sensitivity to local contexts. However, most of these principles are not mentioned in reports critical of higher education and teacher-certification procedures.

The book ends with the following quote, which sums up the underlying goal of the book:

We must take seriously our own learning—from the first day one makes a commitment to become a teacher until the day that one decides to retire from the profession—and make it as high a priority as eliminating the achievement gap that robs so many students of the opportunity that, as Americans, they are entitled to. We cannot, we believe, eliminate the achievement gap in our schools without closing the knowledge gap in our profession. (p. 223)

This quote explicitly indicates that Snow et al. see teachers' knowledge gap about teaching reading to be key in changing achievement results, especially for children of poverty. While all of the reports shared in this essay are concerned with narrowing the achievement gap, they do not all agree with Snow et al.'s solutions.
What others within the literacy field have said about teacher-education programs targeted to reading

As we stated in the introduction, the Snow et al. volume must be viewed not only within its historical and political contexts but also within the context of the numerous expert reports that have been created to respond to the crises in teacher education and literacy education. We use this section of the essay to draw several of these reports into our analysis. While not all of these reports have been vetted through a process of academic peer review, we chose them because of their high visibility, their wide readership, and their impact on conversations about "reform" in teacher education or literacy education.

**Reports from the International Reading Association—focus on content.**

The International Reading Association (IRA), for instance, has created several documents to detail standards of reading-teacher preparation programs. In IRA's most current position statement (2003) about teacher preparation programs, *Prepared to Make a Difference: Research Evidence on How Some of America's Best College Programs Prepare Teachers of Reading*, the Association identifies the preparation of reading teachers to be a top priority in the United States, so that the achievement gap can be closed (a similar goal to Snow et al.). The report documents the great variability in the credit hours devoted to reading instruction in teacher-preparation programs, which range from 3 to 24 hours. It groups expectations for undergraduate reading curriculum around three central areas: (a) foundational knowledge and dispositions (reading development, oral, and written language, and how to read reports and enact them in classrooms); (b) instructional strategies and curricular materials (how to select materials, knowledge to develop strategic readers, and matching materials to student needs); and (c) assessment, diagnosis, and evaluation (assessing students and matching instruction, communicating results to parents and stakeholders). IRA builds from undergraduate expectations to practicing-teachers to more clearly align materials with the current scientific reading knowledge base.

Snow et al. volume, it does recommend readings that support the statement. We find that the IRA position statement is similar in content to Snow et al. It argues for the same content knowledge that Snow et al. does. Similarly, it makes a case that teachers need to understand student development and that teaching is a lifelong endeavor requiring ongoing professional development.

The Professional Standards and Ethics Committee of IRA has also produced a document, *Standards for Reading Professionals* (2003), that details five standards: candidate knowledge and performance; instructional strategies and curriculum materials; assessment, diagnosis, and evaluation; creating a literate environment; and professional development. Within each standard and subcategory are detailed expectations for administrators, teacher educators, literacy coaches, classroom teachers, and paraprofessionals. As a companion to the standards document, the organization compiled a compendium of articles focused on preparing reading professionals (IRA, 2004) called *Preparing Reading Professionals*. The articles are grouped by each standard so that readers can link the standard to the current research base.

These volumes once again closely match Snow et al.'s recommendations for preparation programs. They also move beyond Snow et al.'s work in that they target standards for all professionals working in the area of reading, from paraprofessionals to teacher educators. Although there is this minor shift, these materials are philosophically aligned. They encourage teacher educators to refine program content to match the current scientific reading knowledge base.

**Literacy experts—a view toward content**

Knowledge to Support the Teaching of Reading: Preparing Teachers for a Changing World is not the first book that Snow has written about preparing teachers in reading. In 2002 she collaborated with Strickland on a similar volume (Strickland & Snow, 2002). The book, *Preparing Our Teachers: Opportunities for Better Reading Instruction*, is filled with the content and scientific base for such content that should be present in teacher-preparation programs (e.g., oral and written language, language development and comprehension, sounds and spoken words, and assessment). Throughout the book there are activities for teachers in which to engage to better understand the literacy content. The major difference in this book compared to the current Snow et al. volume is the narrower focus on young children.

Braunger and Lewis (2006) have written a book on the knowledge base for teachers in reading. This
book once again contains similar content to Snow et al., with respect to both its topics and its emphasis on providing a developmental continuum. The book has the same age range as well—from young students through high school. In addition, it addresses children with special needs in a chapter focused on poverty, English-language learners, and special education.

Finally, Lenski, Grisham, and Wold (2006) have edited a book that targets 10 truths about literacy-teacher preparation. Within this book, they focus on truths about teacher education, such as literacy-teacher preparation is based on research, or that literacy courses provide coursework that integrates theory and practice. Similar to the vignettes shared in Snow et al., there are vignettes in each chapter to personalize each topic and provide reflection.

As can be seen in the selected books shared in this section, many in the literacy arena are writing about teacher preparation in reading. The content of these books is similar, and all argue for the importance of quality teacher preparation to the improvement of literacy achievement.

**Literacy experts—a view toward reading preparation**

Snow et al. (2005) report that there is a limited database on effective teacher-education programs, especially with respect to reading preparation, and once again they are not alone in this view. Hoffman (2004), in another essay book review published in *Reading Research Quarterly*, described a limited research base to use to renovate teacher-education programs. An earlier piece that he cowrote with Pearson (Hoffman & Pearson, 2000), articulated a research agenda to determine what an effective program might include. They argued that teacher educators must take a leadership role in researching what it takes to build an effective reading program. They cautioned that if teacher educators do not engage in such research, others will (more about this later). Within their list of recommendations, they included the following:

- Create a database for reading-teacher education;
- Develop better tools to evaluate the impact of teacher education;
- Listen carefully and respond to the concerns of the public and policymakers; and
- Place issues of diversity at the top of the priority list for research.

Hoffman (2004) and the International Reading Association (Hoffman & Roller, 2001) moved beyond merely writing about effective teacher-education programs; they studied eight programs using a quasi-experimental design. In their study they investigated teacher programs, teachers’ transitions into teaching, and student achievement data. Their critical features of effective reading-teacher education programs are similar to Snow et al.'s in content, apprenticeship, and assessment. In addition to these features, they discovered other important elements that support developing effective teachers of reading, which are (a) a clear vision of a program, resources, and mission centered on quality teacher preparation; (b) personalized teaching geared to valuing diversity, and being prepared to teach children representing diverse backgrounds; (c) autonomy where teacher educators negotiate within their institutions to provide the best program possible; and (d) community where students, teacher education faculty, and school-based faculty collaborate. These core essentials vary from the recommendations provided by Snow et al. They consider organizational structures within programs and universities and how they support or hinder quality teacher-education programs with a focus on reading preparation. It is important to note that they are among the first to acknowledge the concerns of the public and policymakers and to suggest listening and responding to these concerns.

**Broadening the view of preparing teachers in reading**

We moved beyond the literacy community to include reports produced by two national educational research centers, North Central Regional Educational Laboratory (Young, 2001) and WestEd, who have also written extensively about preparing reading teachers. These reports depart from those written by literacy experts in that they are much more critical of higher education’s efforts at reading-teacher preparation, and they do not narrow their focus to the content of reading courses.

In *Finding the Teachers We Need* (Hess et al., 2005), the authors report the four areas about which policymakers and teacher-education reformers agree. These points of agreement are (a) the current system is not providing enough high-quality teachers; (b) high-poverty schools have the fewest high-quality teachers; (c) teacher-preparation programs are not teaching important skills; and (d) "there is little prospect that left to their own devices, either schools of education or school districts will be willing or able to correct these problems any time soon" (p. 1).

The report acknowledges that, with systematic achievement data, it is possible to more explicitly study the preparation of teachers and their resultant success or lack of success with students. Unlike the other reports we presented earlier on teacher-preparation programs, this report shares research that questions whether teacher-education programs are effective at all, and thus questions whether renovation of programs is efficacious. Further, it provides a long commentary concerning the need for colleges of education to screen out unsuitable teacher candidates as the majority of teacher candidates successfully complete their programs; thus making questionable the quality of teacher-education programs. (While teacher educators may question the veracity of this report, it offers data to support this finding.) The report also suggests that because colleges of education do not screen out marginal candidates, more qualified individuals do not apply. Finally, it synthesizes the research base on quality teachers and reports that the only consistent findings on teacher effectiveness are centered on a teacher’s verbal ability and knowledge of content to be taught.

There are numerous recommendations with respect to enhancing teacher quality in this report that include linking student-achievement data to teacher-preparation programs. The report suggests that states identify teachers with high student performance to determine quality teachers. If, for example, teachers with lower achievement data all come from one teacher-preparation program, the state would have leverage for this program to be changed or discontinued, or to not hire teachers from this institution. This type of linkage could also provide evidence of the successes of teachers who have been prepared through nontraditional pathways, such as alternative programs. Following this logic, if these teachers are as effective as teachers from traditional teacher-preparation programs, there would be a stronger argument that traditional programs are no more effective than less traditional preparation.

In the second WestEd report, *Knowledge Know-How Needed for Teacher Quality* (2005), the conversation expands to a discussion of preparing teachers with an adequate knowledge base and developing strategies to retain quality teachers. This report further argues that there is no connection between teacher licensure and quality teaching. It recommends that quality teachers be rewarded so that they stay teaching—not surprisingly, the rewards are tied to student achievement data.

The North Central Regional Educational Laboratory wrote a policy report (Young, 2001) with a narrower target to teachers of reading. It argues that "a comprehensive redesign of the preservice curriculum used to prepare teachers to give reading instruction" (p. 1) is required. The report relies on the work of Moats and Lyon (1996), which indicates that pre-service teachers are not provided sufficient content knowledge. The laboratory conducted a study of all of the teacher-education programs (50) in its region (Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin) and found that not one met the IRA literacy standards of at least 15 credit hours in reading, language arts, children’s literature, and developmentally appropriate practices. Many programs required only six hours in reading for instance. The report concludes with three recommendations:

1. Require that teacher-education programs align with research-based standards for teaching reading.
2. Require school districts to provide professional development opportunities targeted to reading within all content areas.
3. Require states to align teacher testing at each certification step with research-based standards for teaching reading.

Further, the report indicates critical areas that must be included in preservice and inservice instruction. The areas include (a) understanding the psychology of reading development, (b) possessing knowledge of language structures and application, (c) understanding and effectively using best instructional practices, and (d) using a variety of assessments to inform instruction.

Within Snow et al.’s book and these reports, there is congruence concerning the content of reading coursework. The only issue is the reluctance of colleges of education to revise their programs to include this content or for state departments of education to require it for licensure. These reports explicitly target the need for colleges of education and state departments of education to change and make their programs and licensure more rigorous.
with enhanced expectations in reading curriculum and requirements, although these issues will be contested in other reports described later in this essay.

Preparing teachers of reading around the world

We also consulted literature that examined the preparation of literacy teachers around the world. Botzakis and Malloy (2006) informally asked representatives from several continents (Africa, Asia, Australia, Europe, North America, and South America) to respond to a survey about teacher preparation. One question targeted reading preparation—Do teachers report feeling adequately prepared to teach reading and writing? Teachers from Australia, Chile, Estonia, Hong Kong, and Oman thought teachers were adequately prepared. Representatives from Canada felt that teachers were underprepared to teach reading. They wanted teachers to be better able to use assessments and match instruction to assessment results. Similar to Canada, representatives from Iran and Nigeria said that teachers were inadequately prepared. In fact in Nigeria anyone who can read or write can be a teacher. There are no higher education requirements. The representatives noted that they are all moving toward nationally regulated standards in teacher preparation. The reason is that standardization is required to meet the variability of student needs. All of the responders acknowledged the difficulty of supporting first-year teachers.

While there is variability in what countries believe about the quality of their reading teachers, there are similarities in their move to nationally regulated preparation programs for teachers. We questioned whether the United States might also be considered to be moving to more nationally regulated higher education preparation of teachers. The next set of reports touch on this possibility and in some cases dismiss higher education curricula altogether.

Reports that criticize teacher preparation in reading

Similar to the numerous reports centered on the reading content in teacher-education programs, there are multiple reports questioning the need for teacher-preparation programs. These reports provide a much more critical perspective on the preparation for the teaching of reading, which is often uncomfortable to teacher educators.

Perspectives about teacher education and teachers

One of the most dramatic reports is *Different Drummers: How Teachers of Teachers View Public Education* (Farkas & Johnson, 1997). In this report, funded by Public Agenda, the lens was targeted on teacher educators. A summary statement from the report states, “Professors of education have a distinctive, perhaps even singular, prescription for what good teachers should do—one that differs markedly from that of most parents and taxpayers. To a surprising extent, the professors’ views also differ from those of most classroom teachers” (p. 8).

The report teases out the most contentious points of disagreement. The first is that teacher educators value the process of learning, a collaborative process, in which struggling to arrive at an answer is as important as the answer. However, teachers and parents believe that classroom management; lesson preparation; and students who are neat, on time, polite, careful spellers, and so on are most important. When teacher educators were questioned directly about preparing teachers to run an orderly classroom, only about 30% responded that this is emphasized in their programs. They believed that engaging learning will remedy discipline problems.

The second finding is that teacher educators devalue competition, reward-and-punishment structure, and memorization or multiple-choice question formats. Teacher educators find that standardized tests are problematic; they want students to apply the knowledge they acquire rather than respond convergently to questions.

The third finding is that teacher educators are at “Odds with public school teachers, students, and the public” (p. 15). The report indicates that teacher educators put the public’s priorities at the bottom of their list, which is vividly illustrated in their discussion of discipline. Moreover, while teacher educators realize that their beliefs are very different from those of the public, they just respond that the public’s beliefs are outdated or mistaken.

The fourth finding is quite critical to the central discussion of this essay—teacher educators have doubts that they can prepare teachers to be successful. Furthermore, they have been out of the classroom and are not conversant with the everyday realities of public schools. Half of the respondents to this survey said that they had not been teachers for over 15 years. Building from this discussion, 75% of the teacher educators commented that they worried about the future of some of their students as teachers. However, only 4% of the teacher educators acknowledged that they dismissed students from their programs. This re-
result is similar to the concern described in the WestEd report regarding marginal undergraduate students' continuation in programs. This finding also fuels the discussion that teacher educators are not up to the task of revitalizing their programs, and in fact they are doubtful of their ability to prepare reading teachers for current classroom complexity.

The fifth finding is contradictory in nature. Teacher educators support core curricula and high standards, but they are discomfited by having university students pass a test to demonstrate basic academic skills and knowledge. When pushed about the reasons why, teacher educators questioned the validity and reliability of such tests. The public and policymakers see this as further evidence that programs are not adequately preparing teachers, and teacher educators are worried about what such evaluations might reveal.

The sixth finding relates to public education and the value placed on it by the public. The teacher educators argued that public schools are a critical part of a democratic society. They argue that teachers make a difference to the lives of high-poverty students. However, when asked where they would send their own children to school, about 26% said private schools, and 34% were worried about the education their children would get in public schools. When asked about teacher-education programs, teacher educators felt they received all of the blame for the difficulties in public schools. They complained that teacher-education programs are not valued at their institutions and as a result did not have adequate funding or personnel. They believed that alternative routes to teacher licensure further devalue their programs and will result in a weakened teacher pool.

This report highlights important differences between teacher educators and the public. The report closes with a caution: "How can we possibly serve the nation's children well if more than 100,000 graduates of education programs—nursed by their professors' vision—enter the nation's classrooms each year prepared for an ideal, but unarm'd for the reality?" (p. 29).

In a follow-up report, Johnson and Duffett (2003) conducted an assessment of attitudes about teaching from parents, administrators, teachers, and the general public. When just considering teachers, parents, the public, principals, and superintendents indicate that most teachers are qualified, with just a few inferior ones. Further, they do not question teachers' command of content knowledge; rather, they worry about classroom management and student motivation. We found this interesting as so much of Snow et al.'s book and the other reports are centered on teacher knowledge. When the respondents were asked about teacher-education programs and alternative licensure, they did not have priorities. They wanted teachers who were ready to deal with the realities of the classroom, and they did not believe that content knowledge would necessarily lead to quality teaching.

The survey asked for a listing of major concerns related to teacher-preparation programs. The respondents noted that teachers are knowledgeable; however, they want teachers to make instruction more interesting and motivating, have better control of classroom management, and work more effectively with struggling students. Once again, the priorities of teacher educators are in conflict with the those of the public and teachers. The public wants teachers who develop students who are neat, on time, and polite. They value work habits as essential to student achievement. They want teachers to prioritize reading, writing, and math with a focus on correctness. And they want teachers who know how to manage a classroom of students.

**Criticism of teacher-education programs and certification**

The criticism of teacher-education programs gained more attention (Finn, 1999) when the Fordham Foundation called for the abolishment of teacher certification. The foundation wanted the process to licensure to be grounded in content, not teacher-education courses in general pedagogy. It believed that schools and districts should hire teachers they felt best met the needs of students, with licensure not a requirement. This dialogue has continued (Finn, 2003), with the Fordham Foundation urging states to move away from traditional certification processes for superintendents, principals, and teachers. Following closely on this criticism of traditional routes to licensure, the American Board for the Certification of Teacher Excellence created tests that would demonstrate knowledge of content. This process was supported by the U.S. Department of Education with grant funds to support the development of the tests. What we find interesting is that the focus turned to content for these tests. Yet the public and teachers, as reported in the Public Agenda documents, were less concerned with content and more concerned with classroom management. The issue of classroom management once again moved to the foreground.

Following these reports and test development, a series of critical studies centered on teacher-education programs were published. A group of economists, Podgursky, Ballou, Goldhaber, and
Brewer, used student-achievement data and found no evidence that teacher-preparation coursework made a difference in student outcomes (Ballou & Podgursky, 2000; Goldhaber & Brewer, 2000). Raymond and Fletcher (2002) studied Teach for America teachers and those who came out of traditional teacher-education programs. They reported that there were no real differences between the two groups indicated in the student data.

One of the most current critical papers on teacher education comes from the Hamilton Project. Gordon, Kane, and Staiger (2006) discuss the identification of effective teachers by using their performance. They argue that in most attempts to improve teacher quality, certification expectations become more rigorous. For instance, rather than 6 credits in reading, soon-to-be-teachers would need to have 9 or 12. The authors find these efforts futile, arguing that paper qualifications have little predictive power in identifying quality teachers. They recommend that the federal government measure the effectiveness of teachers through student achievement, and evaluations by the principal and peers, and parent evaluations. They support states having decision power in identifying effective teachers, but they insist that student achievement data be the key component. They believe that the federal government, through its support to schools, could pay bonuses to effective teachers who teach in high-poverty schools. However, schools would not be allowed to tenure teachers who do not have good evaluations. They also want an open door to teacher certification.

When one considers these reports, it is clear that they have bypassed teacher education. The measure of an effective teacher is primarily high student-achievement data. Other inputs are added, but the fundamental test for quality teaching is student achievement. And these reports have used the currency of literacy educators, research, to fuel their arguments.

The newest critical report on teacher education comes from the National Council on Teacher Quality, What Education Schools Aren’t Teaching About Reading and What Elementary Teachers Aren’t Learning, and documents what colleges of education are not doing to prepare elementary teachers to teach reading (Walsh, Glaser, & Wilcox, 2006). The authors randomly studied 72 of the 1,272 colleges of education in the United States for their analysis. Once the colleges were selected, they collected syllabi from the required reading courses for K–5 elementary teachers, resulting in 222 required courses. (All details are available within the report at www.nctq.org.)

The authors evaluated the syllabi on the basis of how well they indicated that the courses taught the five elements of reading (phonemic awareness, phonics, comprehension, vocabulary, and fluency). They also evaluated the texts that faculty chose for their courses and their assignments. The report details nine findings and several recommendations. The findings are quite negative about the reading preparation that elementary teachers are receiving:

1. Most are not teaching the science of reading. The science base centers on the teaching of phonemic awareness, phonics, guided oral fluency, vocabulary, and reading comprehension, as detailed in the National Reading Panel report. Only 15% of the selected schools taught all five of the elements. The authors go on to list the results by university.

2. Courses that claim a balanced approach ignore the science of reading.

3. National accreditation does not result in the science of reading being taught. (To get this result, the authors compared 13 NCATE-accredited schools with 13 others that did not have NCATE accreditation.)

4. Phonics is taught most frequently, with comprehension following closely. Fluency and phonemic awareness were taught least frequently.

5. Much of the instruction provided is incompatible with the science of reading.

6. Most teacher educators see the science of reading as just one approach, no better or worse than others.

7. Many courses do not expect much from students, and there is little evidence of college-level work. Faculty assigned few research papers and favored literacy memoirs.

8. Faculty selected poor textbooks that contain little to no hard science about reading.

9. There is no agreement in what might be considered a seminal text. There was great variability in text selection.

The report concludes with several recommendations to solve the dismal situation in colleges of education: (a) States should develop strong standards. (b) Schools that do not teach the science of reading should not be accredited. (c) The American Association of Colleges for Teacher Education (AACTE) should provide leadership in requiring schools to teach the science of reading. It should also provide professional development to increase the skills and knowledge of teacher education faculty. (d) The federal government should require that elementary-education candidates pass a test in reading to achieve highly qualified status. The federal government should allow education schools to use Title II funds for professional development. (e) Textbook companies should identify legitimate experts to write textbooks. (f) Education schools are expected to build the reading expertise of their faculty.
What is missing in the reports

After reviewing the numerous reports that provide the context for the Snow et al. volume, we returned to Snow et al. for an additional critical reading. Following this reading, we identified two critical areas that we found missing or minimally detailed in this book that we believe are important to the success of teachers of reading. In presenting these areas, we are acknowledging our bias in that we believe teacher educators are capable of preparing teachers of reading for today's complex classrooms and suggest that reading teachers must be able to meet the needs of English-language learners and should be well grounded in the new literacies in order to be considered adequately prepared.

English-language learners

The Snow et al. volume does consider students learning English as a new language; however, it focuses on myths associated with these students rather than strategies to support them in classrooms. We find that addressing the myths is important information to consider, but the Snow et al. book does not provide sufficient detail for teacher educators to consider in revamping their programs to better prepare teachers to meet the needs of English learners.

For example, a survey conducted in California of over 5,000 teachers indicated that they did not feel prepared to work effectively with second-language learners (Center for the Future of Teaching and Learning, 2005). They also reported the need for additional time and instructional resources to meet the needs of their students. Among the recommendations listed in the report is the critical need for professional development of these teachers targeted to English-language learners. Many of the teachers reported receiving only one inservice training session in the last five years targeted to English-language learners.

While one might discount this issue as one that is localized to California or Texas, the data surrounding English-language learners does not support this view. States like South Carolina and North Carolina have had a fivefold increase in English learners over the last 10 years (Shreve, 2005). And 19 states report an increase of over 200% (Shreve). These numbers support a trend of increased numbers of English-language learners who speak a variety of home languages throughout the United States.

If colleges of education do not also include preparation that involves content directed to English-language learners, they will be faulted once again. Most often the success of English-language

This report targets improvement within teacher-education programs by attacking the content within courses and the materials and instruction used to deliver this content. It is obvious the authors of the report are suggesting that reading courses across the United States become much more similar in content and textbook selection, leading to a national curriculum for the preparation of reading teachers. They also indicate that reading courses have more academic rigor with students writing more reports. In addition, this is the only report to identify colleges of education and their placements on the scoring rubric, to name textbooks and those they see as inferior, and to publicly criticize the syllabi of individual faculty members.

This report has received much criticism. Teacher educators find the methodology so flawed that the results should be negated. However, while teacher educators dispute the quality of this report, others see it as further substantiation of the ineffectiveness of teacher-education programs in providing qualified reading teachers. They view the report as rigorous, as it is based on a scientific experiment with random selection.

The reports shared in this final section are very different from the reports and articles provided by those within the literacy field. Those written by literacy experts talk more about tweaking the content in courses, adding courses, and providing practical application of knowledge in classrooms. Opponents question the value of higher education preparation, want quick placement of teachers in classrooms, and look to student achievement as the measure to judge effectiveness. The final report written by the National Council of Teacher Quality marginalizes university faculty in that most of the recommendations are from entities outside of the university and are to be imposed on faculty. The federal government, state departments of education, and AACTE are the key players in the expected changes to colleges. This report implies that teacher educators are not up to the challenge of making revisions to their curriculum. Perhaps one result of this criticism would be a mandatory national curriculum for the preparation of reading teachers. Our purpose in presenting such a wide array of reports is not to dismiss the importance of teacher-education programs or to minimize the significance of research in literacy-teacher education. Rather, we feel that any discussion that seeks to advance literacy-teacher education needs to acknowledge and respond to the content and the tenor of these reports. It is in that spirit that we present these critiques and it is in that spirit that we return to the Snow et al. volume.
learners in reading and writing is critical to the status of a school as to whether it is considered high achieving or in need of improvement. If schools find repeatedly that teachers have not been prepared to work with these students, there will be more strident discourse about the inadequacies of higher education in the preparation of teachers.

New literacies

The Snow et al. book also does not directly address recent technological advances, their impact on our definitions of literacy, or their impact on the training of literacy teachers. For the past two decades, scholars in the New Literacy Studies have expanded our aesthetic and our conceptions of literate behaviors and literacy practitioners. Moving beyond academic reading and writing, these scholars have argued that literacies are multiple and that they are socially situated cultural practices (Barton, Hamilton, & Ivanić, 2000; New London Group, 1996; Street, 1984). They further argued that literacies are defined in relation to the most recent transformations in communications technologies. Historians of literacy have chronicled the significant changes wrought from the invention of the alphabet or the Gutenberg press, for example. Contemporary scholars point to the rapid transformations in literate practice that are accompanying the onset of the new media age. Kress (2003) contended that linguistic theory can no longer, by itself, explain what literacy "does or is" (p. 35) and argued instead for a transition to semiotics, which includes space for interrogating signs and images as "text." Mahiri (1998) investigated the multiple ways that young people often written off by schools are engaged in sophisticated out-of-school literacy practices via their participation in popular culture, and considered the pedagogical applications of these practices. Gee (2003) meticulously documented the various literacies young people draw upon and acquire as they navigate the virtual-fantasy world of video games. Knobel and Lankshear's research (2002) uncovered a web of literacy practices associated with youth participation in emergent cybercultures. We grant that none of these changes alters the importance of teachers helping their students to develop basic literacy skills, but they do underscore the importance of literacy teachers and teacher educators understanding how emergent technologies are transforming everyday literacy practices even as they transform our very notions of literacy itself.

For example, they have been developing cases to help teacher candidates observe expert teachers and then analyze their behaviors to better understand the complexities involved in teaching. Their cases utilized the Internet and computer technology. This ability to observe, analyze, and reflect on a case, facilitated the content/practice aspect of teacher preparation. The CTELL project involves the development of cases and research to determine the effectiveness of this use of technology. So far they have found that teacher candidates engage in high-level problem-solving thinking and gain confidence and expertise. To find out more about this project, visit http://ctell.uconn.edu.

The use of technology by students opens up a very different way to engage in reading. Reading is no longer a linear endeavor, and multiple texts can be considered simultaneously. These new technologies require teachers who are competent in using them themselves and guiding students in their use. For instance, K–12 students learn about the tools available on a computer such as spell checkers, spreadsheets, and word processing. When connected to the Internet, they learn about the research capabilities available to them, communication possibilities, and the importance of critically evaluating websites. Computers become more than a once-a-week visit in the computer lab. They become essential tools in literacy and in sharing reading and writing (Bruce, 2003; Teale et al., 2002).

Again, colleges of education cannot rely on a simple computer course that centers on spreadsheets, tables, and word processing. Teacher candidates will need to be prepared to use computers and other new media technologies as tools to facilitate the development of academic and new media literacies. As part of this undertaking, preservice teachers not only will need to develop their own technical competencies but also become ethnographers who are able to continually assess and draw upon the multiple ways that their students engage technological literacies in their out-of-school experiences.

Concluding thoughts: Is it too late?

When we read the Snow et al. book and the various reports and articles mentioned in this essay, we wondered if teacher educators are recognizing the escalating concerns centered on teacher-education programs. Are the arguments waged by colleges of education strong enough and compatible with the concerns of others? If, as in the Different Drummers
report (Farkas & Johnson, 1997), teacher educators are focusing on concerns and content that do not match what teachers believe to be important, who will support the work of colleges of education in the preparation of teachers? Does the Snow et al. volume represent the critical knowledge to change the public's perception about colleges of education?

Hoffman (2004) wrote that teachers and teacher educators have never been more antagonistic to one another than they are now. And this situation places U.S. teacher education in a crisis situation. While there are many reasons for these disagreements, a few key ones center on how teachers are prepared and the shortages of teachers to fill the growing needs in many schools.

Many of the articles, reports, and books described earlier in this essay speak to the preparation of teachers with a focus on reading. Authors like Snow et al. provide a roadmap for the content of literacy courses to prepare teachers. Their work focuses on the academic as they consider the knowledge and skills necessary for a teacher to be successful with students. They see the improvement of teacher content knowledge, resulting in more effective teachers, as a way to revitalize teacher-education programs.

As teacher educators look internally toward the content of their programs, the public and the federal government are criticizing the quality of teachers coming from traditional teacher-preparation programs. In 2002 when former Secretary of Education Rod Paige wrote a report on teacher quality, he recommended that teacher qualification should be redefined with fewer requirements for formal preparation. In his report he described certification processes as roadblocks to getting teachers in place. He argued, as did the report Finding the Teachers We Need from WestEd (2005), that the critical variables for teachers are content knowledge and verbal ability. With these being the critical elements, teacher-education pedagogy courses and student-teaching experiences are unnecessary.

Darling-Hammond and Bransford (2005) have led the argument against such beliefs. They have provided evidence from research studies about the importance of teacher preparation. However, their work is dismissed and criticized by scholars outside of education. (See Gordon et al., 2006, for an example.) Similarly, teacher educators' criticism and marginalizing of reports from those outside the literacy community has supported disparate paths to the improvement in the preparation of reading teachers. As Hoffman (2004) reported, "This is not an academic debate. This is public policy in formation" (p. 123). Unfortunately, a reliance on academic discourse by literacy educators is not convincing the public that teacher-education programs are essential to the preparation of teachers.

We believe that teacher educators need to move away from strictly academic discourse to persuade the public, and in particular foundations, think tanks, and state and federal governments, that they are worthy and necessary to teacher preparation. With the huge shortages of teachers looming, colleges of education will need to convince states and districts that their programs do make a difference to the quality of teachers that work with K-12 students. If not, then colleges of education will become just one way among many for teachers to be prepared for work in schools. If teachers leave teaching in a short time, there will be multiple paths to replace teachers. The issues that are so important today—preparing a quality teaching force to match the needs of public schools—will be dissipated through multiple paths to teacher certification and relaxed regulations for teacher licensure.

Snow et al.'s book guides teacher-education programs to specific content. Certainly, revising content matters to future teachers, or in the view of teacher educators it does. Will a close look at content be sufficient to convince those outside of education that teacher-education programs are worth the investment? We believe not. Rather we believe that teacher educators have three important tasks that require immediate attention. First, they must ensure that their programs provide the necessary content in teacher preparation so that new teachers can succeed. They should not do this revision alone. This is an opportunity to form alliances with teachers, and together they should create teacher-education programs that address the ideal as well as the day-to-day realities of classrooms. Second, they must continue to build bridges with public school personnel and state departments to support teachers through continuing professional development opportunities. Finally, they must develop ambitious research agendas that explicitly tackle the issues of teacher quality and preparation programs, relating teacher preparation to student literacy achievement. Perhaps the new report on the horizon from the National Research Council due in fall of 2007 will provide the foundation for such research. And teacher educators must disseminate their findings through public forums in addition to traditional academic research journals. In essence, considering the historical and political contexts of current debates, teacher educators must develop multiple rhetorical approaches to appeal to multiple publics when detailing the significance of their programs, especially as they concern the preparation of tomorrow's literacy teachers.
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REFERENCES


