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## Reforming Teacher Training and Recruitment

By: Dale Ballou, Ph.D. and Michael Podgursky, Ph.D.

### A Critical Appraisal of the Recommendations of the National Commission on Teaching and America's Future

#### I. Introduction

At the start of the 1996-97 school year, the National Commission on Teaching and America's Future (the Commission or the NCTAF) released a report entitled What Matters Most: Teaching for America's Future. NCTAF is a "blue-ribbon" 26-member commission chaired by North Carolina governor James Hunt. An accompanying press release described the report as a "scathing indictment" of the current system for training and recruiting teachers. The Commission argued that public schools employ large numbers of "unqualified" teachers and proposed an extensive set of recommendations to "put qualified teachers in every classroom."

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What is the NCTAF? Its name notwithstanding, the NCTAF holds no "commission" from any elected official. It is a private organization, funded by the Rockefeller and Carnegie Foundations. Although the NCTAF claims that its report is not the work of education insiders, the largest block of members come from schools of education that train teachers and from national education organizations, including the following:

- the two major teacher unions (the National Education Association [NEA] and the American Federation of Teachers [AFT]);
- the National Council for Accreditation of Teacher Education (NCATE); and
- the National Board for Professional Teaching Standards (the National Board).

The NCATE and the National Board figure prominently in the Commission's recommendations, and have a direct financial stake in their adoption.

The Commission's report comes thirteen years into a prolonged debate about education quality in the United States, ignited by the publication in 1983 of *A Nation at Risk*. The work of the National Commission on Excellence in Education (NCEE), a panel of educators appointed by Secretary of Education Terence Bell, *A Nation at Risk* also called attention to problems with teacher quality. Too many teachers had poor academic records and received low scores on tests of cognitive ability. Teacher education programs were graduating large numbers of marginal students who did not know enough about the subjects they were teaching. On college board exams, education students were below nearly all other majors, and had been declining through the 1970's (Weaver, 1983). According to the NCEE, the profession needed to attract more academically accomplished individuals, a conclusion reached by several other task forces and commissions whose reports came out soon afterward. For example, the 1986 Carnegie Forum for Education and the Economy concluded:

Teachers should have a good grasp of the ways in which all kinds of physical and social systems work: a feeling for what data are and the uses to which they can be put, an ability to help students see patterns of meaning where others see only confusion ... They must be able to learn all the time, as the knowledge required to do their work twists and turns with new challenges and the progress of science and technology ... We are describing people of substantial intellectual accomplishment (p. 25).

Now, more than a decade later, the Commission has issued another "scathing indictment" of teacher quality. But the message has changed. The Commission makes only passing reference to the need to recruit smarter teachers. (Indeed, this is no longer regarded as a major problem.) Instead, the Commission sees the problem as primarily one of training: teachers are not properly prepared to enter the classroom. Under the heading "Unenforced Standards," the Commission blames State education departments and some teacher education schools for this state of affairs.

Because most states do not require schools of education to be accredited, only about 500 of the nation's 1200 education schools have met common professional standards. States, meanwhile, routinely approve all of their teacher education programs, including those that lack qualified faculty and are out of touch with new knowledge about teaching (p. 28).

The Commission does find problems in other areas. Low pay and poor working conditions discourage teachers, raise attrition rates, and deter talented individuals from entering the profession. Master teachers receive inadequate recognition for their accomplishments. Nonetheless, the Commission's preoccupation with teacher preparation is evident in

the way it characterized other problems. For example, the Commission describes teacher recruitment as "slipshod." The basis for this claim? Districts hire too many teachers who lack the appropriate credentials for the subjects they are assigned to teach. Unlicensed instructors, who have not completed pre-service courses in pedagogy (i.e., teaching methods), are allowed to enter the classroom on "emergency certificates." The Commission also criticizes teacher education programs for admitting too many students who never reach the classroom, either because they drop out of these programs before graduating, or because they opt for other careers upon finishing. But this too is primarily a result of their training: if teacher education were more effective, these students would experience less of the frustration responsible for the high rates of attrition.

In short, while earlier commissions and task forces spoke clearly of the need to attract more capable individuals into the teaching profession, this concern is all but forgotten by the NCTAF. Instead, we are now told that the main problem is inadequate teacher training. The distinction has important implications, particularly for schools of education. If the nation needs to attract more talented, capable people into the teaching profession, policies need to be shaped with that end in mind. Raising standards for admission to teacher education would be a step in that direction, but only a beginning, since screening out weak candidates would do nothing in itself to attract bright, talented people into teaching. It is likely that the nation will need to cast a wider net for teachers, making greater use of alternative certification programs and other routes by which capable individuals can enter the profession. It may be that public schools, like private schools, should be permitted to hire teachers who have not completed formal training programs when these individuals show promise in other respects.

If the problem with the teacher work force is inadequate training, however, the policy response will differ. If teachers need to be better trained, it is to the schools, departments, and colleges of education that the nation will turn, pouring in resources, strengthening requirements, and ensuring that state-of-the-art practices are disseminated throughout the community of teacher educators. True, some teacher training programs may be closed down, if they fail to upgrade programs. But this would represent a transfer of resources within teacher education to the better programs, not a flow out of the professional education community. Schools of education would play a larger role, not a smaller one, in shaping the teaching work force.

Given the Commission's composition and its diagnosis of the problem, it is not surprising that it writes approvingly of a wide variety of initiatives designed to strengthen teacher education programs, such as:

- additions to the curriculum that would make an undergraduate education degree a five-year rather than a four-year program;
- professional practice schools that offer teacher education students clinical experience in schools run jointly by local education authorities and universities;
- internships in which beginning teachers are closely supervised by mentors and share their experiences with peers and more experienced

- instructors;
- requirements that secondary school teachers have a major in the subject they are to teach, as well as in education; and
- licensing examinations for new teachers and certificates of advanced professional standing based on videotapes and portfolios of student work for experienced "master" teachers.

To carry out these reforms, the NCTAF promotes a sweeping plan to "professionalize" teaching, shifting control of accreditation and certification from local school boards and State education agencies to private education organizations. The Commission's recommendations do not specify the curriculum of teacher training programs or the content of licensing examinations. Rather, their reform agenda is essentially one of empowering education professionals to set standards for how teachers will be trained, tested, hired and promoted. It will be up to these professional organizations to determine curriculum and other reforms needed to upgrade the teacher work force. Here are several of the Commission's specific proposals.

1. "All teacher education programs must meet professional standards, or they will be closed" (p. 63 of the Commission's report). By "meeting professional standards," the Commission means obtaining accreditation from the accrediting body, the NCATE, a private organization funded and governed by various education organizations. While all education schools must currently meet the standards required for accreditation by their State departments of education, most do not meet or seek to secure the approval of NCATE (though in a small but growing number of States, teacher training programs are required to secure NCATE accreditation).

2. "Establish professional boards in every State" (p. 69). In most States, teacher licensing (certification) requirements are set by State education departments. By contrast, in law and medicine these standards are set by professional boards composed of practitioners at the highest ranks of the profession. The Commission proposes similar boards for teachers in order to set higher standards for teaching and to "... create a firewall between the political system and standards-setting process ..." (p. 70).

3. "Set goals and incentives for National Board Certification in every State and district. Aim to certify 105,000 teachers in this decade, one for every school in the United States" (p. 100).

4. "Develop a career continuum for teaching linked to assessments and compensation systems that reward knowledge and skill" (p. 94).

National Board certification seems particularly popular. President Clinton mentioned it in his 1997 State of the Union Message and many States seem to be moving ahead in this area. The objective is to secure certification from the National Board for Professional Teaching Standards for the very best teachers—and pay them more. For example, in North Carolina, the salaries of National Board certified teachers are increased by four percent. Governor Hunt has proposed

raising this premium to fifteen percent in coming years.

Teachers demonstrate that their teaching is "state-of-the-art" by submitting portfolios to the National Board (located just outside Detroit). These portfolios include videotapes of their teaching, lesson plans, and samples of student work. These materials are reviewed by "experts"—moonlighting teachers who are trained by the National Board. Teachers are also required to take a test at a regional site. Input from supervisors or parents is not solicited.

Remarkably, there has been very little public discussion of the merits of these recommendations. While the Commission's report received wide coverage in the media when released in the summer of 1996, most of the publicity focused on its claims that public schools were employing large numbers of poorly trained and poorly qualified teachers. Given this, their proposals to strengthen teacher training and licensing seemed uncontroversial, if not irresistible. Thus they succeeded almost at once in setting the terms of public debate about the way the nation will recruit and train new teachers. The Commission remains active, vigorously promoting its proposals. Among other efforts, they have issued a State-by-State report card grading States on their efforts to professionalize their teaching work forces. According to a Commission press release, eleven States have formed "partnerships" with the NCTAF "...to create programs and policies advancing [their—the Commission's] recommendations...."

It is time for a closer look at the Commission's report and agenda. In section II, we consider the way the NCTAF has characterized the problem. Is the NCTAF correct to focus on the inadequacy of teacher training? In section III, we examine the evidence for NCTAF's policy recommendations. Does the research literature indicate that the changes which the Commission envisions will substantially improve schools? Finally, in sections IV & V, we explain how their policy prescriptions could impede educational reform, doing more harm than good.

## ***II. Teacher Preparation — How Bad Is It?***

The NCTAF claims that public schools are hiring large numbers of poorly trained and poorly qualified teachers. To support its case, the Commission offers what appear to be factual statements about the work force. Let us consider the evidence on two phenomena that concern the Commission most: teachers who do not have the training in teaching methods required for a standard license, and instructors who do not have adequate knowledge of the subjects they teach.

### ***Substandard Licenses***

The Commission claims that schools are hiring many teachers who are not fully certified:

In recent years, more than 50,000 people who lack the training required for their jobs have entered teaching annually on emergency or substandard licenses ... Twelve percent of all newly hired teachers have no training [in teaching methods], another fourteen percent enter without having fully met state standards.

Although the Commission is vague about the source for these numbers, by all indications they are based on the 1990-91 Schools and Staffing Survey (SASS), the most comprehensive source of nationally representative information on the make-up of the teaching work force. However, in our own tabulations of these data we were unable to reproduce the statistics cited by the Commission. First, only 4.6%—not 12 percent—of newly hired public school teachers indicated they had taken no courses in teaching methods. The Commission's claim that districts have been hiring 50,000 new teachers each year with emergency or substandard certificates is even more of an overstatement. In fact, only 16,000 new public school teachers held "temporary, provisional, or emergency certificates" in 1993-94.

Yet this figure is still too high. In many States, regular teacher certification proceeds through two or more stages. The first stage license is known as a "provisional" certificate. Teachers advance beyond the provisional level in various ways, depending on the regulations in force in their State—either by completing additional college courses or professional development programs, or by obtaining a master's degree, or by teaching for a specified period of time. Thus, it is likely that many teachers who responded that they held "provisional" certificates were simply in the first stage of the normal certification process. Fortunately, the next administration of the SASS, conducted in 1993-94, distinguished teachers with a "temporary certificate" (which "requires some additional college coursework and/or student teaching before regular certification can be obtained") from those holding an "emergency certificate or waiver" (which is "issued to persons with insufficient teacher preparation who must complete a regular certification program in order to continue teaching"). Our tallies of these data show that of public school teachers who started work in 1993 or 1994, only 7.6% had a temporary certificate and only 2.5% an emergency license.

In exaggerating the problem, the NCTAF has also overlooked an important matter: how long it takes new instructors to correct deficiencies in their preparation. After a year or two many of those teachers who enter with substandard licenses may be indistinguishable from their colleagues. In fact, of the teachers first hired in 1992-93, only 1.7% were still teaching on emergency licenses in February, 1994, during their second year of service; and only 5.6% had temporary certificates. Both figures are smaller than the corresponding proportions among 1993 new hires, suggesting that with the passage of time, unqualified teachers are either dismissed or correct their deficiencies. As a result, "unprepared" teachers constitute a negligible proportion of the entire work force. In 1993-94, fewer than one-half of one percent of all public school teachers held emergency certificates. Slightly more than one percent had temporary certificates.

Finally, there remains the possibility that teachers hired on emergency or temporary licenses may have something extra to offer, explaining why they are hired in preference to fully licensed candidates. This possibility does not appear to have occurred to the Commission, which acknowledges that some of these hires may be in response to teacher shortages. Otherwise, they attribute it to administrative incompetence or misplaced priorities.

In many states, standards are simply waived whenever school districts want to hire teachers who cannot make the grade. Sometimes this is a function of genuine

shortages in fields of short supply. Often, however, it occurs due to short-sighted hiring procedures, administrative convenience, efforts to save on teacher costs in favor of more 'important' areas, and plain old-fashioned patronage (p. 15).

The Commission does not explain how its proposals, which would close some schools of education and make it more difficult to obtain a license, would relieve shortages. More to the point, there is no recognition that districts might have good reasons for making offers to unlicensed applicants.

Consider the qualifications of new science teachers hired by school districts on substandard licenses. Of the eighteen biology teachers in the 1993-94 SASS who were hired on temporary or emergency licenses, two-thirds held degrees in biology. Three others held degrees in another science. Altogether, of the thirty-nine science teachers hired with substandard licenses, twenty-seven had majored in one of the sciences (though not necessarily the subject they were first assigned to teach). This ratio exceeds that for science teachers overall and strongly suggests that districts exploit loopholes in certification requirements to offer employment to individuals whose subject matter preparation is superior to conventional candidates. Are these the instructors the Commission has in mind when it writes of teachers who "cannot make the grade"?

### ***Teaching Out of Field***

According to the Commission's report, many teachers are assigned courses they are not qualified to teach:

Fifty-six percent of high school students taking physical science are taught by out of field teachers, as are 27 percent of those taking mathematics and 21 percent of those taking English (p. 15-16).

These statistics are based on tabulations from the Schools and Staffing Survey of 1990-91. They have been widely cited in the media as evidence that America's teachers lack adequate subject matter preparation.

We share this underlying concern. However, the NCTAF distorts the evidence on this point, exaggerating the problem. By so doing, the Commission reinforces its claim that the problem with the workforce can be solved through additional training.

For example, the passage quoted is misleading in two respects. First, the term "out of field" is employed in an idiosyncratic sense. In conventional usage, an "out of field" teacher is one who lacks certification in the subject he or she teaches. The NCTAF uses this term to refer to teachers who lack either a major or a minor in their subject. The problem with this definition is that many college students do not declare minors even though they may have taken several courses in a field and completed the requirements (or nearly so) for a formal minor. By setting an arbitrary standard that most teachers are not currently asked to meet, the Commission is able to inflate the conventional estimates of the number of out of field instructors. The difference is

considerable. For example, only 14 percent of high school students taking physical science have instructors who lack a certificate as well as a degree or a minor in one of the physical sciences—far below the Commission's figure of 56 percent.

The NCTAF obtained these statistics from a study that investigated the preparation of secondary school teachers (Ingersoll and Gruber, 1996). The Commission substituted the words "high school," a subtle but important change, since secondary school includes the seventh and eighth grades. The preparation of secondary school teachers tends to be stronger the higher the grade level. As one would expect (and hope), upper-level courses that demand stronger subject matter knowledge are more likely to be staffed by faculty who have that background. By effacing this distinction, the Commission has exaggerated the problem. For example, among high school English students, the proportion taught by instructors lacking a major or a minor in English or a related field (e. g., communications) is 14 percent—less than the Commission's statistic by a third.

There are other important distinctions the Commission overlooks. For example, high school English covers a wide range of courses. If we consider only literature courses, the proportion of students taught by "out of field" instructors falls to just nine percent. (The proportion whose teachers are not certified in English—the conventional meaning of "out of field"—is a trivial three percent.) Other subjects that fall under the broad heading of "English" are composition (11 percent out of field, using the Commission's definition), reading (27 percent) and "other" (16 percent). Whether one needs a minor in English or a related field to teach these subjects is debatable. The largest share of out of field teachers is in reading. Yet reading at the high school level is apt to be a remedial subject or a program for students with limited English proficiency, calling for teachers whose credentials are in English as a second language or special education.

Mathematics offers another case in point. The Commission claims that 30 percent of high school mathematics teachers do not hold "even a minor" in their field. This is correct. However, it is important to recognize that teachers with weaker backgrounds in mathematics are more likely to teach math as a secondary assignment. They are not responsible for most of the math instruction conducted in secondary schools. Furthermore, they are concentrated in low-level courses.

This is brought out in Table 1, which displays the percentage of students in various math courses by the preparation of their instructors. Students enrolled in general math or business math are, indeed, likely to have a teacher with less than a minor in mathematics (though even here, most instructors have more than three college courses in the subject). However, as soon as we look above this level to the next course—elementary algebra—we see a sharp shift in the numbers. At this level, only 23 percent of students are taught by an instructor who has less than a college minor in the subject. Ninety percent have teachers who are certified in math. From this point on the qualifications of teachers rise. Among calculus students, for example, more than 90 percent have teachers with a major or minor in mathematics or mathematics education.

**Table 1**

***Percentage of Students Taking Mathematics  
By Course and Teacher Qualifications***



	<b>Course Taught by Teacher</b>			
<b>Teacher Preparation</b>	General Math	Business Math	Elementary Algebra	Calculus
<b>Teacher has:</b> Mathematics degree	14.1	23.0	31.3	51.4
Mathematics education degree	21.6	14.1	35.3	37.2
Mathematics minor	9.6	5.1	10.8	3.3
Less than a minor	54.7	57.8	22.6	8.1
<b>Totals:</b>	100.0	100.0	100.0	100.0
<b>Teacher has taken:</b> More than 3 undergraduate Math courses	59.3	44.7	79.7	82.4
1-3 undergraduate Math courses	26.8	34.5	11.0	6.6
No undergraduate Math courses	14.0	20.8	9.3	11.0
<b>Totals:</b>	100.0	100.0	100.0	100.0
Teacher has Mathematics Certification	72.5	43.3	90.0	96.0

Source: 1993-94 Schools and Staffing Survey

In short, the Commission's figures gloss over important distinctions. Instructors with less formal training in mathematics tend to be assigned general math and business math courses. The content of these courses is far below the level of college mathematics. This is not to say that students in these courses do not deserve good teachers. But it is not evident that a college math background is needed. In higher level courses, the great majority of instructors are qualified even by the Commission's idiosyncratic criteria.

### ***Academic Ability***

Many studies have pointed to the low academic ability of education majors, whose SAT, ACT, and GRE scores are significantly below the average for college graduates. Many States have found it necessary to institute tests of basic academic competency for new and veteran teachers. The failure rates on these tests are disconcerting and are further evidence of the low academic standards in many education programs. One would think that these facts would receive some attention in a document concerned with teacher qualifications. Yet the NCTAF report is silent on this issue except for the following rather remarkable assertion:

Furthermore, talented recruits are entering schools of education in record numbers. Due to recent reforms, both standards and interest have been steadily rising. By 1991, graduates of teacher education programs had higher levels of academic achievement than most college graduates, reversing the trends of the early 1980's (p.52).

A reader encountering this statement would probably assume that it referred to scores on the ACT, the SAT, or other standardized achievement tests. In fact, the Commission's evidence for this proposition consists solely of self-reported college grade point averages, obtained from a series of U.S. Department of Education surveys of recent college graduates. Because the average GPA of education majors is higher than engineers, the Commission concludes that education majors have "higher levels of academic achievement."

This is preposterous. The Commission's claim ignores differences in grading criteria familiar to virtually everyone in higher education. Data gathered by the Department of Education from 1992-93 graduates speak to this point. The average grade awarded in education courses was 3.41 on a four-point scale. By contrast, the average in the social science courses was 2.96. In science and engineering it fell to 2.67. Yet science and engineering majors have significantly higher college board scores than education majors (Henke et al., 1996).

This is not the only dubious claim in this short passage. The Commission indicates that education majors have recently overtaken others, "reversing the trends of the early 1980's." In fact, there has been no such reversal. Department of Education surveys have consistently found that the GPA's of education majors have exceeded other majors as far back as the data have been collected (1976). The Commission's statement leaves the impression that while concerns with academic ability may once have been warranted, that problem has since been solved. In this manner it clears the field for the promotion of its self-serving agenda.

### ***Teacher Preparation: Summary***

To conclude, while we do not dispute that the preparation of American teachers could be improved, the NCTAF's handling of evidence on this point exhibits a clear bias. The Commission makes idiosyncratic use of common terms, thereby inflating estimates of the number of poorly prepared teachers—yet without acknowledging that it has done so. The Commission fails to draw appropriate distinctions between courses that

require advanced subject matter knowledge and those that do not. Some of the statistics presented without attribution, such as the percentage of new teachers who have had no training in teaching methods, cannot be verified by independent tabulations of the data. Moreover, virtually every one of these errors and distortions has the same effect: to bolster the Commission's contention that the problem of teacher quality can be remedied by having teachers take more courses.

By contrast, the Commission all but ignores one of the principal concerns raised by earlier task forces and commissions, namely, the low level of academic ability and weak cognitive skills of many teachers. In its effort to dismiss this concern, the Commission cites evidence that cannot begin to support its claim. Once again, this can hardly be an accident, given the focus on teacher training in the Commission's program for reform. In the Commission's agenda there is no place for the notion that the profession needs to attract brighter people and that it might even be a good idea to relax some traditional licensing requirements in order to get them.

### ***III. The NCTAF Recommendations:***

#### ***How Strong is the Evidence?***

While there is a problem with teacher quality in American schools, it is not clear that the NCTAF has identified the principal factors responsible. At this point, however, let us suppose that the Commission's diagnosis is correct. How should the nation improve the way it recruits and trains new teachers?

As noted, the Commission offers few specifics in its recommendations, leaving the details to the councils and professional organizations it would entrust with the accreditation of teacher education schools and the licensing of instructors. Nonetheless, the discussion throughout the Commission's report leaves little doubt that it anticipates that prospective teachers will be required to take additional courses before they can enter the classroom. The Commission writes approvingly of five-year programs (as opposed to the conventional four-year undergraduate degree), and applauds States that require teachers to obtain a master's degree. It disparages reforms that reduce the amount of pre-service training in order to streamline entry into the profession (as in many alternative certification programs). According to the Commission, the formal training teachers receive ought to reflect "state-of-the-art practices," "incorporating new knowledge" and an evolving "knowledge base for teaching" that makes clearer than ever before just what teachers should be doing in the classroom.

The NCTAF report contains numerous citations to education research literature. The sheer number of these citations is apt to create the impression that the recommendations of the Commission are supported by a vast body of scientific findings. Readers are led to believe that there is a growing consensus about what teachers ought to know and do, resting firmly on research, and that the chief remaining obstacle is a lack of political will to insist that teachers meet these standards. For the following reasons we would caution readers against this conclusion.

1. The research cited by the NCTAF was not conducted by disinterested parties. Virtually all of the research cited in the NCTAF report was carried out by faculty in schools or departments of education. It appeared in journals published by these schools or in anthologies edited

by faculty from these programs. Much of it was presented at conferences for education professionals dominated by education school faculty. Some of it was based on dissertations written under the supervision of these professors. In short, the research evaluating teacher education is carried out by people who work in departments and schools that train teachers. In many instances the same persons perform both tasks. It is hardly surprising under these circumstances to find that much of this research concludes that the right kind of pre-service training significantly improves teacher performance.

Remarkably, the conflict of interest here appears to have passed unnoticed in public debate over education policy, which routinely defers to "experts" from education schools even when the advice these experts offer is self-serving. This is not to say that education school faculty intentionally deceive the public. But it would be naive to suppose that those conducting research in these circumstances are immune from professional pressures and biases that color their findings. Regrettable as it may be, the prior beliefs of researchers in the social sciences frequently have a profound influence on what the research finds. It is only natural for the faculty of schools of education to believe that their work (and the work of their colleagues) in preparing teachers is socially beneficial and that there is something amiss with research that fails to support this conclusion. Moreover, journal editors are more likely to publish research that contains positive results. This publication bias reinforces the aforementioned "professional bias," making it all the more likely that "acceptable research" will indicate that schools of education make a positive contribution to teacher performance.

2. Much of the research on the relationship of teacher training to teacher performance is of questionable quality. One might reasonably question whether two economists are competent to make such a sweeping judgment of research in a field that is not their own. However, it is not necessary to take our word for it. Authorities cited by the Commission itself are as negative as we.

[A]lthough the number of studies relating to teacher education is large, the research is often of dubious scientific merit and frequently fails to address the types of issues about which policy makers are most concerned. ... The investigations on teacher education effects do not represent a strong body of research. ... [M]ost studies comparing teachers prepared through education courses and those not formally trained do not seek to control for possible differences in the intelligence or general academic competence of the teachers. ... Other background or context variables that might account for differences in teacher effectiveness are infrequently accounted for in selecting samples or analyzing data (Evertson, Hawley, and Zlotnik, 1985).

It is difficult to draw any conclusions about the role of academic preparation on student achievement from the studies that have been conducted. They are fraught with methodological weaknesses that limit the likelihood of finding significant relationships

(Ashton and Crocker, 1987).

3. The research cited by the Commission frequently fails to support the Commission's recommendations. One of the most surprising things about the research cited in the NCTAF report is how little support it provides for the Commission's recommendations. On many key points the evidence contained in the research literature turns out to be considerably weaker than one would have imagined, given the Commission's claims. We describe a few such instances.

(i.) The Commission strongly disapproves of nontraditional "alternative" certification programs that weaken licensing requirements. The NCTAF report states:

Studies of such efforts consistently reveal severe shortcomings: Recruits are dissatisfied with their training; they have greater difficulties planning curriculum, teaching, managing the classroom, and diagnosing students' learning needs. Principals and other teachers typically rate them lower on key teaching skills ... Most important, their students learn less, especially in areas like reading and writing, which are critical to later school success (p. 53, emphasis added).

A footnote directs the reader to an article by the Commission's executive director for a review of this literature (Darling-Hammond, 1992). Someone turning to this source for evidence that students learn less in classes taught by alternative recruits would probably be surprised to find that none is offered. Indeed, in the reviewer's own words:

Current literature provides very little data concerning the question of adequacy of program preparation. ... Though studies sometimes note similarities and differences between the design of AC [alternative certification] programs and traditional teacher education, they generally do not describe how these differences affect recruits' capacities or experiences in the classroom (Darling-Hammond, p. 137).

The article goes on to describe how the preparation of alternative-route teachers differs from that of traditionally-trained instructors. Not surprisingly, the former are less well prepared by the traditional criteria. This is virtually axiomatic, since alternative certification routes were designed to bypass traditional training. On the issue described as "most important" by the Commission—whether students learn less from alternative-route teachers—the literature cited fails to support the claim in the NCTAF report. As one of the Commission's own authorities notes:

[M]any studies...show that training makes a difference in producing specific desired behaviors. The big question that remains is whether the behaviors are valid (Greenberg, 1983).

There is no indication in the NCTAF report that this central question remains unresolved.

(ii.) The Commission recommends that all beginning teachers participate in an induction program, working under the supervision of an experienced teacher and participating in a variety of in-service training programs. Yet the background paper commissioned by the NCTAF on teacher recruitment, selection, and induction contains these sobering remarks about such programs:

There are innumerable claims that formal mentoring programs produce dramatic changes in new teachers: retention goes up, attitudes improve, feelings of efficacy and control increase, and a wider range of instructional strategies is demonstrated. ... However, there is little empirical evidence as to the effects of different mentoring programs—on both new teachers and their students. ... [T]he current landscape provides no clear answers to such questions as: the degree to which induction should focus on assistance or assessment; the efficiency of induction-related internships as an alternative to university-based teacher education; and what standards (if any) should apply to the role, selection, and preparation of mentors (as well as the organizational time necessary for effective mentor/mentee relationships) (Berry and Haselkorn, 1996).

(iii.) It is a commonplace that the mere presence of a statistical association does not establish a causal relationship. Yet the Commission assumes precisely this in endorsing policies whose effectiveness has not been proven.

For example, the Commission supports extended pre-service training that adds an extra year to the traditional four-year undergraduate degree. The Commission argues that graduates of five-year programs are better prepared and experience less of the difficulty and frustration that lead to high rates of attrition among new teachers. By way of proof, the NCTAF cites research comparing graduates of four- and five-year programs which found that the latter entered teaching at significantly higher rates and remained in teaching longer (Andrew and Schwab, 1995).

Yet one would expect differences of this kind even if the extra year of training per se had no effect. Individuals who enroll in a five-year degree program are more likely to be committed to teaching from the start than those who enter four-year programs, since the former will have lost an extra year if teaching turns out to be the wrong career decision. Moreover, the investment of an extra year may make them more willing to persevere if their initial experience in the classroom is unsatisfactory. In short, while the NCTAF claims that the greater "success" of five-year graduates demonstrates the superiority of the training they received, there is every reason to think that these groups differed before they ever enrolled in teacher education.

This phenomenon—where the mere fact of self-selection into the five-year program creates a difference between the two sets of graduates apart from any difference due to the programs—is well-known among researchers in the social sciences. Indeed, there is much literature that addresses the effect of self-selection on statistical analysis and procedures for dealing with it. Yet neither the NCTAF nor the researchers they have cited acknowledge this problem.

(iv.) A striking example of the disjunction between the research the Commission cites and the spin the Commission puts on it arises in a discussion of teacher training and the skills effective teachers must possess. It is worth quoting the passage at length.

Students will not be able to achieve higher standards of learning unless teachers are prepared to teach in new ways and schools are prepared to support high-quality teaching. ... Teaching in ways that help diverse learners master challenging content is much more complex than teaching for rote recall or low-level basic skills. Enabling students to write and speak effectively, to solve novel problems, and to design and conduct independent research requires paying attention to learning, not just to 'covering the curriculum.' It means engaging students in activities that help them become writers, scientists, mathematicians, and historians, in addition to learning about these topics. It means figuring out how children are learning and what they actually understand and can do in order to plan what to try next. It means understanding how children develop and knowing many different strategies for helping them learn.

Teachers who know how to do these things make a substantial difference in what children learn. Furthermore, a large body of evidence shows that the preparation teachers receive influences their ability to teach in these ways. However, many teachers do not receive the kind of preparation they need... (p. 27, emphasis added).

This passage is quite vague about the things teachers must do to achieve such wonderful results. But clearly the Commission is claiming that effective programs of teacher education equip their graduates with specific teaching strategies and techniques that result in higher levels of student achievement. Indeed, the passage quoted above appears in a section of the report in which the Commission deplores the fact that programs of teacher education are not held to a single high standard—a standard that reflects state-of-the-art knowledge about teaching methods. One would expect, then, that the "large body of evidence" (mentioned in the second paragraph quoted) would not only identify what these strategies and techniques are, but would document the superiority of these state-of-the-art methods.

The first citation to the literature that accompanies this passage is to

Evertson, Hawley, and Zlotnik (1985), which contains the following assessment of the research literature:

Because the research reviewed examined a broad range of teacher behaviors, and because measures of effectiveness are not specifically tied, in most cases, to those behaviors, the available evidence does not allow identification of how differences in teachers' capabilities that might be related to their pre-service preparation accounted for differences in their performance. Quite clearly, teachers learn to do some things through their education courses that might reasonably be expected to improve student achievement.

To paraphrase but slightly, prospective teachers learn to do something in their education courses that helps them later, but we aren't sure just what it is. The researchers cited here expressly disavow the notion that the literature identifies state-of-the-art pedagogical practices that all training programs should teach. They are saying precisely the opposite of what the Commission claims the research literature shows. Nor is this the only cited study to reach this conclusion. Reviewing research on the relationship of a teacher's professional education and subject matter coursework to the subsequent performance of that teacher's students, Ashton and Crocker (1987) conclude:

[W]holesale adoption of a single approach to reform is unwarranted in view of the weak empirical evidence that can be mustered in support of a given position.

To summarize, the research literature provides far less support for the Commission's recommendations than the NCTAF claims. The quality of the research is suspect, and the possibility of bias, induced by professional conflicts of interest, is considerable. On close examination the literature is frequently found to contain statements at variance with the conclusions drawn by the Commission.

Fortunately, the research literature is not the only source of evidence on the merits of the Commission's proposals. Many of the reforms advocated by the NCTAF have been implemented in various States. What does the track record show?

### ***States' Progress on Teacher Professionalization***

The Commission has issued a scorecard indicating how much each State has done to professionalize teaching according to its recommendations. Points were awarded for such factors as:

- establishing an independent professional board,
- employing a high proportion of teachers trained in NCATE-accredited programs, and
- obtaining national board certification for experienced teachers.



Several States received scores of zero, while the top score on the ten-point scale went to Minnesota—a seven.

We find no evidence of a statistically significant positive relationship between these scores and available State-level indicators of student performance. In Table 2 we present the correlation between the NCTAF's "professionalization" scores and State-level scores on the National Assessment of Educational Progress (NAEP), for 8th grade math (1990 and 1992) and 4th grade reading (1992). Although the point estimate of the correlation between the NAEP scores and NCTAF scores is on the order of .2, the standard error is so large that the true correlation may be zero—a hypothesis we cannot reject. In Table 2, we also present the estimated correlation between NCTAF scores and State-level SAT scores for States in which more than 40 percent of graduating seniors took the test. In this case, the estimated correlation was negative but also statistically insignificant. We also computed the correlation between changes in SAT and NAEP scores and NCTAF scores. In both cases the estimated correlation, while positive, was statistically insignificant.

**Table 2**

***Correlation Between Measures of NCTAF Teacher Quality and Student Test Scores***

	<b>State mean (sample size)</b>	<b>Correlation with NCTAF State Grades (p-value)</b>
NAEP Reading, 4th Grade  (1992)	214.6  (38)	.21  (.21)

NAEP Math, 8th Grade (1992)	265.6 (42)	.24 (.13)
NAEP Math, 8th Grade (1990)	262.3 (35)	.22 (.20)
NAEP Math, 8th Grade	3.3 (35)	.24 (.16)
SAT 1993-94	887.8 (24)	-.13 (.56)
SAT 1990-91	885.1 (24)	-.16 (.45)
SAT 1990-91 to 93-94	2.1 (24)	.08 (.72)

Sources: State Teacher Professionalization Scores were taken from *What Matters Most*, Appendix F, pp. 146-147; NAEP and SAT scores from *Digest of Education Statistics, 1995*. SAT calculations were restricted to States in which more than 40 percent of graduating seniors take the SAT.

### ***Professional Boards***

The medical and legal professions are largely self-regulated by professional boards. The NCTAF argues that similar boards of educators would set higher standards for teacher training and licensing and notes with approval the fact that twelve States currently have such boards. However, no attempt is made to assess whether boards have raised student performance. The cross-sectional data provide no support for this proposition. By the Commission's own teacher quality measures, there are no significant differences between the twelve States with professional boards and those without such boards. (See Table 3 below.)

**Table 3**

### ***Professional Boards for Teaching and Educational Outcomes: State Comparisons***

	<b>States with Professional Board</b>  <b>(standard error)</b>	<b>States withoutProfessional board</b>  <b>(standard error)</b>	<b>Difference (1) - (2)</b>
NAEP Reading, 4th Grade  (1992)	214.9  (3.0)	214.6  (1.5)	.3
NAEP Math, 8th Grade  (1992)	268.6  (3.5)	264.7  (1.8)	3.9
NAEP Math, 8th Grade  (1990)	265.2  (3.4)	261.2  (2.0)	4.0
NAEP Math, 8th Grade	3.4  (.69)	3.3  (.43)	.1
SAT 1993-94	884.6  (13.5)	888.7  (5.1)	-4.1
SAT 1990-91	878.6  (13.8)	886.8  (5.1)	-8.2

SAT 1990-91 to 93-94	6.0 (3.4)	1.9 (2.8)	4.1
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Sources: Professional boards were taken from What Matters Most, Appendix F, pp. 146-147; NAEP and SAT scores from Digest of Education Statistics, 1995. SAT calculations were restricted to States in which more than 40 percent of graduating seniors take the SAT.

A consideration of the track record in States that have such boards does not inspire much confidence. California, for example, has had an independent professional board since 1970. Yet in 1983, public concern over the presence in the classroom of incompetent teachers led legislators to mandate that new teachers, as well as incumbents seeking administrative positions, pass a very basic test of reading, writing and numeracy skills. Nearly one in five teachers failed the exam, including a substantial number seeking administrative positions (Hill, 1996).

### ***NCATE Accreditation***

The Commission recommended that all teacher training programs be required to obtain accreditation from the National Council on Accreditation of Teacher Education (NCATE). NCATE approval, it is believed, would do much to ensure that teachers are carefully selected and receive instruction in state-of-the-art pedagogical methods. According to the Commission, graduates of NCATE-accredited programs will be better prepared for the challenges of the classroom, and, as a result, their rate of attrition will be lower. They will exhibit a higher degree of professionalism in their relations with students and colleagues.

The Commission report contains no data to support the claim that NCATE-trained teachers are superior, nor does it cite any research studies on this issue. Fortunately, two surveys conducted by the Department of Education allow us to compare recently trained NCATE to non-NCATE teachers on a number of dimensions. By most measures there is little difference between the two groups. Table 4 compares responses to questions on the 1993-94 Schools and Staffing Survey that deal with teacher professionalism and commitment. More than half of both groups intended to spend their entire careers as teachers. A substantial majority (80% in both cases) would still elect to become teachers, had they the choice to make over again. Fewer than a fourth (and more NCATE than non-NCATE) indicated that they sometimes felt it was a waste of time to do their best in the classroom. During the week preceding the survey, NCATE teachers spent somewhat more time on instruction-related activities (preparing lessons, grading papers, etc.) outside school than did non-NCATE teachers. However, the difference between the two groups was not significant at conventional levels. A slightly larger proportion of NCATE teachers moonlighted during the school year, but again, the difference was not statistically significant.

**Table 4**

### ***Attitudes and Behaviors of***

	<b>NCATE</b>	<b>NON-NCATE</b>
Committed to Teaching Profession (%) <sup>1</sup>	58.6	58.4
Would Become a Teacher Again (%) <sup>2</sup>	80.2	79.7
Good Job a Waste of Time (%) <sup>3</sup>	24.4	18.9
After School Time: preparation, grading, parent conferences (hours/wk) <sup>4</sup>	10.4	9.7
Non-Teaching School Year Moonlighting (%) <sup>5</sup>	13.2	12

1. "How long do you plan to remain in teaching?" Percent of teachers responding "As long as I am able"; or "Until I am eligible for retirement."

2. "If you could go back to your college days and start over again, would you become a teacher or not?" Percent of teachers responding: "Certainly would become a teacher"; or "Probably would become a teacher."

3. Percent of teachers who "strongly agree" or "somewhat agree" with the statement: "I sometimes feel it is a waste of time to try to do my best as a teacher."

4. "During the most recent full week, how many hours did you spend AFTER school, BEFORE school, and ON THE WEEKEND on each of the following types of activities?" ... "Other school-related activities? (e. g., preparation, grading papers, parent conferences, attending meetings)."

5. Percent of teachers who report that they earn additional compensation during the current school year from a job outside the school system and unrelated to teaching.

Source: 1993-94 Schools and Staffing Survey. Sample restricted to persons who earned their bachelor's degrees in 1990 or later and who started teaching no earlier than 1992. Values denoted by "\*" indicate that the difference between NCATE and non-NCATE means are statistically significant at 5%.

Findings were similar in a comparison of NCATE and non-NCATE teachers who responded to the Baccalaureate and Beyond Longitudinal Survey conducted in 1993-94. (See Table 5 below.) Virtually identical percentages applied for teaching jobs after graduating and expected to be teaching long-term. Few teachers in either group felt they had been assigned to teach a subject for which they were unprepared.

**Table 5**

***Labor Market Experiences of Recent College Graduates  
Who Hold Teaching Certificates***

<b>Variable</b>	<b>NCATE</b>	<b>NON-NCATE</b>
Expect to be teaching in two years	78%	79%
Expect to be teaching long term	67	68
<b>If respondent taught since graduating:</b>		
Would teach if choosing a career over again	82	87
Felt unprepared to teach a field you were assigned	9	8
Applied for a teaching job?	92	90
Received an offer, conditional on having applied	82	84

Mean teaching salary

\$19,843

\$20,076

Source: Baccalaureate and Beyond Longitudinal Study, First Follow-Up, 1993-94. Values denoted by "\*" indicate that the difference between NCATE and non-NCATE means are statistically significant at 5%.

In short, there is little evidence here that teachers trained in NCATE-accredited schools are more professional, more likely to continue teaching, and more satisfied with their career choice. Perhaps more revealing, there is no evidence that those hiring new teachers think so either. The percentage of non-NCATE applicants who found a teaching job was as high as NCATE applicants who found teaching jobs. (See Table 5 above.) And the jobs they received paid as well.

NCATE and non-NCATE teachers do differ significantly with respect to ethnicity and race. Although non-NCATE schools supply only 41 percent of all teachers, they supply 52 percent of minority teachers and 65 percent of Hispanic teachers. (See Table 6 below.) Their graduates are significantly more likely to work in inner cities and to teach in schools with large shares of minority students. Non-NCATE teachers are also more likely to have Limited English Proficient (LEP) students in their classrooms and to be trained to deal with such students. Shutting down programs that are unable to obtain NCATE accreditation is therefore likely to increase recruitment problems for schools which already confront some of the most difficult teaching challenges.

**Table 6**

***Race, Ethnicity, and Employment of New NCATE and Non-NCATE Teachers***

	<b><i>NCATE</i></b>	<b><i>NON-NCATE</i></b>
Percent of all Teachers	59.5	40.5
Racial Minority (%)	8.1*	13.7*
Black (%)	6.6	7.7

Hispanic (%)	5.3*	14.6*
Teaching in Central City (%)	24.9*	36.5*
Minority Enrollment at Teacher's School (%)	29.2*	42.6*
Teaching Limited English Proficient (LEP) Students	32.7*	49.0*

Source: 1993-94 Schools and Staffing Survey. New teachers who began their first teaching job during the 1993-94 school year. Values denoted by "\*" indicate that the difference between NCATE and non-NCATE means are statistically significant at 5%.

Many schools and departments of education have shown by their decision to forgo NCATE accreditation that they do not believe this stamp of approval is of great value. Small liberal arts colleges and the more selective universities are among the institutions least likely to have sought NCATE approval. Indeed, the offices of the Commission and its executive director are at Columbia Teachers' College, an institution whose teacher education program is not accredited by NCATE.

It might be argued that the better colleges and universities have not sought accreditation because they do not need it—everyone recognizes the quality of their programs. Left unexplained is why NCATE has accredited teacher education programs in some of the least selective institutions of higher education in the country. As shown in Table 7 below, 30 percent of the teachers who graduated from NCATE approved programs attended colleges that were rated less than competitive in Barron's *Profiles of American Colleges*. Since the "competitive" category is not in fact very selective (between 75% and 85% of applicants are accepted; and median SAT scores were between 450 and 525 on the old scale), one thing seems clear: whatever the other requirements for NCATE accreditation, it is not necessary to be a particularly good college.

**Table 7**

***NCATE Accreditation and College Selectivity: New Teachers***



Selectivity of College or University	NCATE	NON-NCATE
Most or Highly Competitive	2.3*	14.1*
Very Competitive	17.1*	19.3*
Competitive	50.0*	48.7*
Less Competitive	17.4*	12.5*
Non-Competitive	13.3*	4.8*
<b>Total:</b>	100.0	100.0

\* Test of identical distribution of NCATE and non-NCATE teachers rejected at 1%.

Sources: 1993-94 Schools and Staffing Survey. Selectivity classifications from Barron's Profiles of American Colleges, 18th edition (1991).

A substantial body of research has found a positive relationship between student achievement and the quality of the colleges teachers attended or the scores of those teachers on tests of verbal ability (with which college quality is correlated). Yet the academic ability of students graduating from a teacher education program plays virtually no role in determining whether the program will be accredited. While NCATE requires that a program use a test to screen applicants for admission, it does not specify the test to be used or the passing score. Criteria for successful completion are even more vague. NCATE stipulates,

a candidate's mastery of a program's stated exit criteria or outcomes [be] assessed through the use of multiple sources of data such as a culminating experience, portfolios, interviews, videotaped and observed performance in schools, standardized tests, and course grades (NCATE, 1997).

This is a requirement that program administrators use various means of assessment, not that graduates be held to any particular standard, which NCATE leaves unspecified.

The list of NCATE-accredited colleges suggests that politics are at least as important as educational quality in determining whether a school is accredited. Where governors have led, colleges have sought and obtained accreditation. Thus, every college in North Carolina offering a teacher education program has obtained NCATE accreditation. In Arkansas, all but two have it. By contrast, New York has 103 State-accredited programs, but only three accredited by NCATE (Canisius College, Fordham, and Hofstra). Massachusetts has 61 State-accredited institutions of which only eight hold NCATE accreditation. All

are non-selective institutions (e.g., Bridgewater State College). The State's selective private schools (e.g., Harvard, BU, Brandeis, Smith, and Mt. Holyoke) are not NCATE-accredited (NASTEC, 1996).

#### ***IV. Are Stricter Licensing and Accreditation Standards Helpful?***

As the foregoing discussion shows, there is good reason to doubt that the reforms endorsed by the Commission would significantly raise the standards for teacher licensing and for the accreditation of programs of teacher education, let alone measures of student achievement. Still, why not proceed in the hope that something good will come? What harm can it do to try?

Analysis of this question turns on the fact that licensing and accreditation erect barriers to market entry. These barriers function as disincentives that can leave education consumers worse off.

#### ***Accreditation***

Mandating NCATE accreditation could make it more difficult for talented students to become teachers, should the cost of acquiring accreditation drive small liberal arts colleges from the market. Programs that serve only a few students a year would be particularly vulnerable, leaving the supply of teachers to be dominated by large diploma mills. Is it better for these programs to shut down than for school districts to have their present choice of NCATE and non-NCATE graduates? Even if NCATE teachers were better on average (contrary to the evidence cited in the last section), the range of individual ability is great, ensuring much overlap between the groups. It follows that many non-NCATE graduates would be better than many NCATE trainees. Why prohibit public schools from hiring the former?

#### ***Licensing***

The Commission endorses reforms that would require prospective teachers to take more courses and devote more time to pre-service training in the form of induction programs and internships. This would raise significantly the time and money that prospective teachers would be asked to invest in their careers before obtaining regular employment.

Obviously, such a policy will tend to deter some from teaching careers. This might be of little importance if those affected should not have become teachers in the first place. But there is no reason to expect such a happy outcome. On the contrary, protracted pre-service training will deter those who place the greatest value on their time. This includes individuals already in the work force who are contemplating career changes. The practical experience and maturity of many of these individuals make them attractive candidates for teaching. Precisely for these reasons many States have adopted alternative certification routes that waive many of the standard requirements for certification, facilitating the entry of such persons into the profession. Yet the Commission, while nominally endorsing the concept of alternative certification, is opposed to programs that would reduce pre-service training. The model of alternative certification that the Commission supports would have career-changers spend a year in a master's program before they begin to teach.

Career changers are not the only prospective teachers likely to put a higher-than-average value on their time. This category also includes

undergraduates majoring in rigorous disciplines (e.g., the sciences) who will find it difficult to fit additional education courses into demanding course schedules. More generally, raising the requirements for teacher education will deter students who are wavering between teaching and other careers that require specific course work. Any increase in the requirements for a teaching license will have an obvious opportunity cost—less time for the courses that make them more marketable should they pursue other options. Enacting the Commission's proposals would therefore tend to screen out (by their own choice) prospective teachers with the interest and ability to pursue other careers, leaving the applicant pool to those who never thought of themselves as anything but teachers. This would have precisely the opposite effect of other policies that are intended to improve the quality of the teaching pool (e.g., raising salaries). Those who advocate higher pay for teachers do so with the express hope of attracting individuals who are now choosing more attractive careers in other professions. It is the very purpose of such policies to draw into education persons who are wavering between two careers. By contrast, raising entry barriers discourages those who have attractive options and leaves teaching to those who won't or can't do anything else that pays as well.

Higher entry barriers are also more costly for individuals who want to try teaching before making a lifelong commitment to it, or who enter in the expectation that after several years they will be ready to move on. Since attrition from teaching rises with academic ability, higher entry barriers are likely to reduce the quality of the work force. More capable students can anticipate having fewer years in which to amortize their investment in a credential that has no value outside the teaching profession. The result is to turn away promising students.

In a society with abundant opportunities for talented college graduates and a tradition of labor market mobility, it will never be possible to persuade two million of them to teach their whole lives. Public rhetoric that implies personal failure when a teacher leaves the classroom after successfully teaching for a number of years may deter many of them from ever setting foot in a classroom (Murnane et al., 1991).

### ***Teaching and Other Professions***

The Commission report frequently draws comparisons between teaching and the medical profession, whose members spend far more years in study and internships than would teachers under the Commission's proposed reforms. Yet high entry requirements do not deter interested and qualified persons from pursuing careers in medicine. Why should we fear it in education?

The foregoing discussion has brought out some of the important differences. Attrition from teaching (unlike medicine) is high, and is highest among those who were the most capable in college and who are likely to have the most attractive options outside education. The testimony of countless beginning teachers reminds us that teaching is what economists call an "experience good"—it is hard to know whether one will like it without trying it. It is not, in short, the kind of career where it makes a great deal of sense to erect high entry barriers before entrants have a chance to find out whether teaching is for them.

This might not be a telling objection if there were strong evidence that prolonged pre-service training is essential to teaching performance (as with medicine). But the evidence, as we have indicated elsewhere, is not strong.

[S]ignificant additions to what teacher candidates should know and be able to do before embarking on a career in education not only [have] large economic costs, but there is reason to question whether students can learn and effectively transfer to practice all or even much of the pedagogical knowledge and skills that would be taught in extended programs. Considerable evidence exists that experienced teachers think differently about their work than do novices. ... Teachers may learn some things best, such as cooperative learning strategies, once they have an experiential base upon which to build (Evertson, Hawley and Zlotnik, p. 7).

The greater the relative importance of on-the-job learning, the weaker is the case for high entry barriers. These barriers deter promising candidates who would have learned on the job most of what they need to know, merely to ensure that no one is hired who has not completed pre-service training of comparatively modest value.

In addition, the study of medicine (or to take another example, law) is of considerable intrinsic interest, apart from its indispensable role in professional preparation. These disciplines attract individuals who seek and appreciate the intellectual content of their programs of study. By contrast, academically talented students are apt to find education methods courses intellectually unsatisfying, or at a minimum to anticipate an unsatisfactory experience, given the low regard in which such courses are held. Adding more professional education onto existing teacher licensing requirements strengthens this deterrent.

Thirty-five years ago, a widely-cited study of teacher training by the president of the Council on Basic Education concluded that the subject matter taught at education schools exhibited "intellectual impoverishment" and was filled with jargon that "masks a lack of thought, supports a specious scientism ... and repels any educated mind that happens upon it" (Koerner, 1963). A more recent study does not inspire confidence that there has been much improvement in the interim (Kramer, 1991). Boston University President John Silber has written: "The willingness to endure four years in a typical school of education often constitutes a negative intelligence test" (Finn, 1991). The rhetoric is extreme, but whether Silber is right is not the issue. The point is that no one would think of saying such a thing about the study of medicine or law. Deserved or not, the reputation of education courses puts off the kinds of students who are attracted to the study of medicine and law in part because of the intellectual satisfaction these disciplines offer.

In short, the argument that entry requirements for teaching should be raised because such requirements are higher still in medicine and law is based on a superficial analogy between these professions. That doctors are held to high licensing standards does not mean that requiring more pre-service training will improve the teaching profession. Circumstances in the two professions are different; the argument for teaching must be

assessed on its own merits.

### ***Market-Based Reforms***

The NCTAF report has arrived at a watershed in American educational policy. Major experiments are underway to deregulate public schools while increasing their accountability for performance. The rapidly expanding charter school experiment is a case in point, though States are experimenting with other incentive and accountability systems as well. Such experiments require that local administrators have the authority to make critical personnel decisions; otherwise, they cannot realistically be held accountable for results. By restricting access to the teacher labor market and tying decisions about pay and promotion to credentials and external assessments, the "professionalization" plan proposed by the Commission would reduce the authority and accountability of local administrators.

The movement to deregulate public schools while holding them accountable for outcomes is inspired by the comparative success of the private school sector. In this sector, competition and consumer choice—not regulation—are the principal means by which schools are held accountable for student achievement. It is a market in which relatively well-informed parents shop for educational services, and in which school administrators are under considerable pressure to deliver value for parents' tuition dollars. Although many of these parents are shopping for services that public schools do not provide, notably religious instruction, a large segment of the market is made up of non-religious schools. Moreover, many religious schools also serve the college prep market.

To find out whether the NCTAF's recommendations would complement reforms predicated on deregulation and enhanced accountability at the local level, it is useful to examine practices in the private sector. If the reforms advocated by the Commission are sound, there would presumably be some indication of this in the behavior of private school administrators, who would recognize for themselves the value of the credentials promoted by the Commission.

Our research on personnel policy in private schools has turned up no evidence that such credentials as National Board certification or NCATE accreditation are valued in the private sector. Indeed, private schools, particularly non-religious schools, often bypass the certification system entirely to hire large numbers of non-certified teachers. During the 1987-88 school year, for example, only 55 percent of all teachers in non-religious private schools held State certification in their primary teaching area. This percentage dropped to just 35 percent in secondary schools. Private schools use this flexibility to tap the very large pool of liberal arts majors for capable, knowledgeable instructors.

Interest in National Board certification seems to be almost entirely a public sector phenomenon. While national figures are unavailable, it seems that very few private school teachers have sought National Board certification. Nor have private school administrators shown much interest. For example, only one of 118 National Board certified teachers in North Carolina is employed at a private school, and this teacher acquired it in a pilot program in which the \$2,000 fee was waived. It seems clear that very few private school teachers or schools attach enough value to this certificate to make it worth the investment of a teacher's time and money.

The behavior of private school administrators clearly indicates that when schools are accountable to the public through consumer choice, little or no value attaches to the kinds of credentials the Commission promotes. Indeed, these schools hire many instructors who have had no formal training in pedagogical methods. The burden of proof is on the Commission to show why public schools must be compelled to submit to regulations that do not apply to private schools—regulations that would impair the efforts of the latter to supply the educational services demanded by the parents who support them. That burden has not been met.

### ***V. Conclusion: Who Will Control Teacher Training, Licensing and Recruitment?***

The NCTAF envisions a wide range of reforms to "professionalize" teaching. However, its report falls far short of demonstrating that these proposals will significantly improve educational performance, let alone that the proposed improvements will be achieved in a cost-effective manner. However, this is a question rarely asked in the education research literature—a field where it is usually taken for granted that any activity which furthers teacher professionalization is desirable. Since most research on education and teachers is conducted by faculty in schools of education, this is hardly surprising. Yet many in the general public and the business community also find appealing the notion of "getting serious about standards" and have endorsed the Commission's call for greater professionalization. Who, after all, wants an "unprofessional" teacher?

Economists have long had a different understanding of the matter. From Adam Smith to Milton Friedman, economists have taken a skeptical view of occupational licensing and similar restraints on trade. These policies exploit the power of the government to restrict access to an occupation, thereby raising earnings. By their very nature, professional regulatory boards are controlled by incumbents in the profession (as well as approved suppliers of licenses), who stand to gain by restricting supply or otherwise restraining competition. Sometimes this type of producer control serves the public interest; usually it does not.

Enacting the Commission's agenda would strengthen the position of education providers vis-a-vis consumers in a sector where producer interests already carry enormous weight with policy-makers. Both the Commission and NCATE have close links with the National Education Association and the American Federation of Teachers. Of the current thirty-one member NCATE executive board, seven are NEA- or AFT-appointed, and include the following: the president, vice-president and secretary-treasurer of the NEA; and the president and vice-president of the AFT. All examining teams sent to a college include at least one teacher. That teacher is drawn from a pool of examiners selected by the NEA and AFT. The NEA's 1997-98 budget contains \$366,600 for NCATE. The same budget contains \$306,550 to support certification through the National Board of Professional Teaching Standards, and \$213,765 to support efforts "to make licensure ... a process controlled by the profession."

Is it any surprise, then, that in a 151-page report devoted to a discussion of teacher quality the NCTAF has not one harsh word for teacher unions? Indeed, in a section entitled "Fatal Distractions," the Commission discounts a number of "myths," among them the notion that teacher tenure and teacher unions have been impediments to reform. On the contrary, unions are praised for having embraced "teacher

professionalization."

For all the discussion of higher standards and improved training contained in the NCTAF's report, it is important to remember that at base the Commission's recommendations are about control. The Commission would turn over the accreditation of teacher preparation programs to NCATE. Licensing examinations would be prepared by the Interstate New Teacher Assessment and Support Consortium (INTASC), another private professional organization. The National Board for Professional Teaching Standards would decide who qualifies as a master teacher. Overseeing and guiding all of this activity would be independent professional boards whose members would be drawn, not from the public's elected representatives, but from organizations of professional educators—who are in large measure from schools of education and teacher unions.

It is naive to think that the impact of these changes would be limited to improving the training teachers receive (if it would even accomplish that). These organizations have a vested interest in opposing charter schools and other forms of school choice, and in opposing alternative certification programs that bypass traditional teacher training. The prospects for such reforms will be much bleaker if power is shifted away from parents and their elected representatives who will promote changes of this kind, and given to the groups of education professionals aligned with the NCTAF.

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## **Appendix A**

### **National Commission on Teaching and America's Future (NCTAF)**

**James B. Hunt Jr.**  
*NCTAF Chairman*  
Governor, State of North Carolina

**Anthony J. Alvarado**  
Superintendent, Community School District Two, New York, NY

**David L. Boren**  
President, University of Oklahoma, Norman, OK

**Ivy Chan**

Special Education Teacher, Garfield Elementary School, Olympia, WA

**James P. Comer, MD**

Director, The School Development Program, and Maurice Falk  
Professor of Child Psychiatry, Yale University of Child Study Center,  
New Haven, CT

**Ernesto Cortes Jr.**

Southwest Regional Director, Industrial Areas Foundation, Austin, TX

**William G. Demmert Jr.**

Visiting Professor, Woodring College of Education, Western Washington  
University, Bellingham, WA

**Jim Edgar**

Governor, State of Illinois

**Dolores A. Escobar**

Dean, College of Education, San Jose State University, San Jose, CA

**Norman C. Francis**

President, Xavier University of Louisiana, New Orleans, LA

**Keith Geiger**

Former President, National Education Association (NEA), Washington,  
D.C.

**Christine (Cris) Gutierrez**

Teacher and Assistant Coordinator, Thomas Jefferson High School  
Humanitas Program, Los Angeles, CA

**James Kelly**

President and Chief Executive Officer, The National Board for  
Professional Teaching Standards, Birmingham, MI

**Juanita Millender-McDonald**

Member of Congress, State of California

**Lynne Miller**

Professor of Education Administration and Leadership, University of  
Southern Maine, Gorham, ME

**Damon P. Moore**

Teacher, Dennis Middle School, Richmond, IN

**Annette N. Morgan**

Former Representative, District 39, Missouri House of Representatives,  
Kansas City, MO

**J. Richard Munro**

Chairman, Executive Committee of the Board of Directors, Time Warner  
Inc., New York, NY

**Hugh B. Price**

President and Chief Executive Officer, National Urban League, Inc.,  
New York, NY

**David Rockefeller Jr.**

Chairman, Rockefeller Financial Services, New York, NY

**Ted Sanders**

President, Southern Illinois University, Carbondale, IL

**Albert Shanker**

President, American Federation of Teachers (AFT), Washington, D.C.

**Lynn F. Stuart**

Principal, Cambridgeport School, Cambridge, MA

**Robert Wehling**

Senior Vice President, The Procter and Gamble Company, Cincinnati,  
OH

**Arthur E. Wise**

President, National Council for Accreditation of Teacher Education  
(NCATE), Washington, D.C.

**Richard Wisniewski**

Director, Institute for Educational Innovation, University of Tennessee,  
Knoxville, TN

**Appendix B**

**National Council for Accreditation of Teacher Education  
(NCATE)**

The following table lists the current members of the NCATE Executive Board, highlighting those appointed by NEA or AFT. In addition, Robert Chase, President of the NEA, chairs the four-member Finance, Personnel, and Membership Subcommittee of the Executive Board. Note that the NEA and AFT have seven members on the Board, while the National School Board Association has just one.

**Wilmer S. Cody**

*NCATE Executive Board Chairman*

Commissioner of Education, Kentucky Department of Education

**Gordon M. Ambach**

Executive Director, Council of Chief State School Officers

**Dale Andersen**

Provost's Special Advisor on Education, College of Education,  
University of Nevada-Las Vegas

**Roseann Bentley**

Missouri State Senate (At-Large 98)

**Pauletta Bracy**

School of Library and Information Sciences, North Carolina Central  
University

**Linda Bunnell-Shade**

Chancellor, University of Colorado at Colorado Springs

**Ruth Cage**

Resource Teacher, Robertson County School System **(NEA)**

**Dennis Cartwright**

Director of Teacher Education, Northwest Nazarene College

**Robert Chase**

President, **National Education Association (NEA)**

**Antonia Cortese**

Vice President, **American Federation of Teachers (AFT)**

**Dr. Josue Cruz**

Professor, University of South Florida

**Sandra Feldman**

President, **American Federation of Teachers (AFT)**

**Allen Glenn**

Dean, School of Education, University of Washington

**Betty Greathouse**

Dean, School of Education, California State University-Bakersfield

**David G. Imig**

Chief Executive Officer, American Association of Colleges for Teacher  
Education

**William B. Ingram**

President, **National School Boards Association (NSBA)**

**James Kelly**

President, National Board for Professional Teaching Standards

**Steve Kortie**

Classroom Teacher **(NEA)**

**Thomas McCracken**

Professor, English Department, Youngstown State University

**Charles "Chuck" Myers**

Professor, Vanderbilt University

**Barbara S. Nielsen**

State Superintendent of Education, South Carolina

**Dennis Van Roekel**

Secretary-Treasurer, **National Education Association (NEA)**

**Ted Sanders**

President, Southern Illinois University

**Marilyn Scannell**

Executive Director, Indiana Professional Standards Board

**Anthony Schwaller**

Professor, Industrial Studies, and Institutional Assessment Director, St. Cloud State University

**Joseph A. Spagnolo, Jr.**

Superintendent of Education, Illinois, and State Partnership Board Chairman

**Lajeane Thomas**

Professor, Louisiana Tech University

**Judith Wain**

Executive Secretary, Minnesota Board of Teaching

**Allen R. Warner**

Dean, College of Education, University of Houston

**Reg Weaver**

Vice President, **National Education Association (NEA 99)**

**Brenda Welburn**

Executive Director, National Association of State Boards of Education

**Appendix C**

**National Commission for Teaching and America's Future  
(NCTAF)**

**"Partner States"**

Illinois

Indiana



Kansas

Maine

Maryland

Missouri

Montana

North Carolina

Ohio

Oklahoma

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