

# EDUCATING SCHOOL TEACHERS

BY ARTHUR LEVINE

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The nation's teacher education programs are inadequately preparing their graduates to meet the realities of today's standards-based, accountability-driven classrooms, in which the primary measure of success is student achievement.

A new study conducted by Arthur Levine, who recently left the presidency of Teachers College, Columbia University to become president of the Woodrow Wilson National Fellowship Foundation, concludes that a majority of teacher education graduates are prepared in university-based programs that suffer from low admission and graduation standards. Their faculties, curriculums and research are disconnected from school practice and practitioners. There are wide variations in program quality, with the majority of teachers prepared in lower quality programs. Both state and accreditation standards for maintaining quality are ineffective.

The report, titled *Educating School Teachers*, provides an examination of the successes and failures of university-based teacher education programs, offers "criteria for excellence" on which to judge the quality of programs, and sets forth a comprehensive five-point plan for improving programs and changing teacher-education policy.

The report identifies several model teacher education programs at the nation's 1,206 university-based education schools.

But the study found that too often teacher education programs cling to an outdated, historically flawed vision of teacher education that is at odds with a society remade by economic, demographic, technological, and global change. Equally troubling, the nation is deeply divided about how to reform teacher education to most effectively prepare teachers to meet today's new realities.

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## Nine Criteria for Judging Program Quality

This study offers a nine-point template for judging the quality of teacher education programs.

**1. Purpose:** The program's purpose is explicit, focusing on the education of teachers; the goals reflect the needs of today's teachers, schools, and children; and the definition of success is tied to student learning in the classrooms of education school graduates.

**2. Curricular coherence:** The curriculum mirrors program purposes and goals. It is rigorous, coherent, and organized to teach the skills and knowledge needed by teachers at specific types of schools and at the various stages of their careers.

**3. Curricular balance:** The curriculum integrates the theory and practice of teaching, balancing study in university classrooms with work in schools alongside successful practitioners.

**4. Faculty composition:** The faculty includes academics and practitioners, ideally combined in the same individuals, who are expert in teaching, up to date in their field, intellectually productive,

and have their feet planted in both the academy and the schools. Taken as a whole, faculty members and their fields of expertise are aligned with the curriculum and student enrollment.

**5. Admissions:** Admissions criteria are designed to recruit students with the capacity and motivation to become successful teachers.

**6. Graduation and degree standards:** Graduation standards are high, students are adequately prepared for the classroom, and the degrees awarded are appropriate to the profession.

**7. Research:** Research carried out in the program is of high quality, driven by practice, and useful to practitioners and/or policy makers.

**8. Finances:** Resources are adequate to support the program.

**9. Assessment:** The program engages in continuing self-assessment and improvement of its performance.

profession like law or medicine, requiring a substantial amount of education before one becomes a practitioner, and those who think teaching is a craft like journalism, which is learned principally on the job. As a result, there are conflicting and competing beliefs on issues as basic as when and how teachers should be educated, who should educate teachers, and what is the most effective way to do so.

The debate over whether teaching is a profession or a craft has opened the door to greater variability in what is required to enter teaching and multiplication in the number of pathways into teaching. It has led to a diminished role for university-based teacher education programs. The federal government in its No Child Left Behind law defined “highly qualified” teachers as persons with subject matter mastery, but without preparation in traditional university-based teacher education.

Additionally, 47 states and the District of Columbia have adopted alternative-route programs, designed to speed entry of teachers into the classroom and reduce or eliminate education school coursework.

“Teacher education is the Dodge City of the education world,” Levine writes. “Like the fabled Wild West town, it is unruly and chaotic. Anything goes and the chaos is increasing as traditional programs

vie with nontraditional programs, undergraduate programs compete with graduate programs, increased regulation is juxtaposed against deregulation, universities struggle with new teacher education providers, and teachers are alternatively educated for a profession and a craft.”

In this rapidly changing environment, the report warns, America’s teacher education programs must demonstrate their relevance and their graduates’ impact on student achievement—or face the very real danger that they will disappear.

## Findings

*Educating School Teachers* marks the first major analysis of teacher education from an insider’s perspective. It is based on national surveys of education school alumni, principals, education school deans and faculty, visits to 28 education schools of various kinds throughout the country, and an examination, using a large-scale database of growth in student achievement, of the relationship between student achievement gains and teacher preparation. Among the key findings:

**Inadequate Preparation:** Many students seem to be graduating from teacher education programs without the skills and knowledge they need to be effective teachers. More than

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three out of five teacher education alumni surveyed (62 percent) report that schools of education do not prepare their graduates to cope with the realities of today's classrooms.

Principals give teacher education programs low grades. Fewer than half of principals surveyed thought that schools of education were preparing teachers very well or moderately well to integrate technology into their teaching (46 percent); use student performance assessment techniques (42 percent); and implement curriculum and performance standards (41 percent). Only about one-third of principals said that their teachers are very or moderately well prepared to maintain order in the classroom (33 percent) or to address the needs of students with disabilities (30 percent). A shockingly low percentage of principals said that their teachers were very or moderately well prepared to meet the needs of students from diverse cultural backgrounds (28 percent); to work with parents (21 percent); and to help students with limited English proficiency (16 percent).

**A Curriculum in Disarray:** Unlike law and medicine, in education there is no standard approach to preparing teachers. The length of programs varies from one to five years and programs are offered at the undergraduate level, the graduate level, or

both. Across programs, there is a chasm between theory and practice, and limited field work leaves many students unable to handle the realities of the classroom.

**Disconnected Faculty:** While almost nine out of ten (88 percent) education school professors have taught in a school at some point in their careers, alumni and students complain that too often the experiences of faculty members were not recent or long enough. As a result, they say, lessons are often out of date, are more theoretical than practical, and are thin in content. The curriculum is often fractured, with a lack of continuity from one course to the next and insufficient integration between course work and field work. In addition to being disconnected from schools, faculty members remain disconnected from the rest of the university because their research is considered lacking in academic rigor by their faculty peers.

**Low Admissions Standards:** Universities use their teacher education programs as "cash cows," requiring them to generate revenue to fund more prestigious departments. This forces them to increase their enrollments and lower their admissions standards. Schools with low admissions standards also tend to have low graduation requirements.

While aspiring secondary school teachers do well compared to the national average on SAT and GRE exams, the scores of future elementary school teachers fall near the bottom of test takers. Their GRE scores are 100 points below the national average.

**Insufficient Quality Control:** Both state quality control mechanisms and the peer review process of accreditation fail to maintain a sufficiently high floor for the nation’s teacher education programs because requirements focus on process, not substance. State requirements vary dramatically. For example, the amount of field work required ranges from 30 hours in one state to 300 hours in another, and the number of reading credits required ranges from 2 to 12.

Accreditation by the National Council for the Accreditation of Teacher Education (NCATE) does not assure program quality. Of 100 graduate schools of education ranked by *U.S. News and World Report*, three of the top ten are accredited as compared to eight of the lowest ten.

Using data compiled by a research and testing organization, the Northwest Evaluation Association (NWEA), the study examined the relationship between student classroom achievement and the accreditation status of the college or

university where the students’ teachers were prepared. Controlling for longevity as a teacher, this study found no significant difference in student math or reading achievement based on whether their teachers were certified at NCATE or non-NCATE accredited institutions.

**Disparities in Institutional Quality:** Almost nine out of ten (87 percent) university-prepared teachers graduate from just three types of institutions (using the Carnegie Classifications in existence at the time the study was done)—doctoral extensive, doctoral intensive, and Masters I universities. More than half (54 percent) are products of Masters I universities, but students at these universities have, on average, lower standardized admission test scores and high school grades than their peers at doctoral universities. The faculties at Masters I institutions are the products of less distinguished graduate schools than their colleagues at doctoral universities. Masters I schools also have higher student-to-faculty ratios and spend less money per student than doctoral institutions.

**Effects on Student Achievement:** With the help of NWEA, the study examined the relationship between a number of characteristics of nearly 2,400 K-12 teachers—from highest

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degree earned to undergraduate major to length and type of course-work—and growth of student achievement in the classrooms of these teachers. The study found a significant relationship between the type of university a teacher attended to prepare for certification and their students' achievement growth.

Controlling for experience, the study found that students with teachers prepared at Masters I universities have significantly lower growth in math and somewhat lower growth in reading than those with teachers who prepared at doctoral universities.

“This initial research provides further evidence of a critical imbalance in where we educate teachers. The data indicate that the Masters I institutions, which prepare a majority of teachers, are less effective than the research institutions that prepare relatively few teachers,” Levine says.

### **Exemplary Teacher Education Programs**

The report highlights four distinctive university-based teacher education programs that are exemplars in the field. The model programs: are all a central part of their education schools; offer a coherent, integrated, comprehensive and up-to-date curriculum that includes a field experience component that is sustained, begins early, and provides immediate

application; and connect theory to real classroom situations. All have high graduation standards.

The teacher education faculty at all four schools are committed both to their program and their students. Moreover, other faculty and administrators support the program, and the quality of each program and its graduates is recognized by important external publics, such as the schools that hire them and the experts who assess them.

#### **Alverno College**

Alverno College in Milwaukee includes as part of its academic program an education school that enrolls about 350 undergraduate and 125 graduate students, about one-quarter of whom are minority students. While Alverno is a largely open admission school, it has an outcome-based curriculum and high graduation standards and requires extensive field work.

All teacher education students must demonstrate mastery in eight areas, expectations and assessment criteria are clear and public, and unsatisfactory work is repeated until it becomes satisfactory. This distinctive method and a committed faculty, with arts and sciences professors deeply involved in teacher education, have made Alverno one of the most celebrated teacher education programs in the country.

**Emporia State University (ESU):  
The Teachers College**

ESU enrolls 1,150 undergraduates in its teacher education program, which is proclaimed by the university's president as "the jewel in our crown."

The hallmark of ESU's program is its involvement with professional development schools—public schools that are modeled after teaching hospitals—where teacher education students do much of their learning in real world situations, working with faculty and public school teachers.

Students complete 100 hours of supervised work with young people prior to entering the teacher education program and by the time they are seniors their program is 100 percent field-based.

ESU's faculty has a shared sense of identity and purpose; they are teachers of teachers first and scholars second. Faculty in the arts and sciences teach courses in their disciplines to education students and supervise student teaching. Their support ensures that 80 percent of student teachers are supervised by full-time faculty.

These partnerships have paid off. ESU graduates stay in teaching (92 percent of graduates are still in teaching after three years), and employers rate ESU teachers highly, reporting that ESU-trained teachers

were either very well or well prepared in a number of areas.

**University of Virginia:  
Curry School of Education**

The University of Virginia's Curry School of Education is a highly selective institution with a five-year teacher education program, where students earn a bachelors degree with a liberal arts major and a master's degree in teaching.

In the first four years, students complete a set number of credits in general education, a bachelor's degree in an arts and sciences discipline and begin to take education courses. By the time Curry students complete the fourth year of the program, they have had as many as six field experiences. Their fifth year is spent teaching full time in the fall, under the supervision of a faculty member and a clinical instructor.

The Curry faculty and administration are wedded to the five-year teacher education program, which is rooted in the belief that providing a broad liberal arts education with an arts and sciences major and ensuring extensive field work experience and pedagogical education cannot be done in four years.

Unlike Alverno and Emporia State, research is the highest priority for faculty at Curry. Teacher education research is seen as being on the

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same plane as research conducted by other departments at Curry. Despite its many differences with Alverno and ESU, Curry has a similar reputation for turning out strong teachers.

Curry was chosen by the Carnegie Corporation as having one of the top teacher education programs in the country. It is receiving up to \$5 million to develop state-of-the-art programs to strengthen teaching.

**Stanford University:  
Stanford Teacher Education  
Program (STEP)**

Stanford enrolls a small number of students (in 2004 the number was 69) in a one-year master's program in which students earn an M.A. in education and a preliminary California secondary teaching credential over the course of a summer and a full academic year. The curriculum was recently reworked by Linda Darling-Hammond, a leader in the field of university-based teacher education, and is rooted in an equity agenda. STEP students spend a minimum of 20 hours a week at a partnership high school and work with both a university supervisor and a cooperating teacher to integrate theory and practice.

As with Emporia, partnership is not simply a matter of rhetoric in describing the relationship between Stanford and the schools where it

places students. At one school with 10 STEP student teachers, the university has provided professional development on teaching students in heterogeneous groupings, faculty assistance in redesigning the math department, on-site support at least one day a week for cooperating teachers, assistance for the teachers in achieving the required California CLAD (Crosscultural, Language, and Academic Development) credentials, and a trip to New York City for a faculty team to visit small schools after the teachers had decided to reorganize their school into small learning communities.

In 2005, *U.S. News and World Report* ranked STEP the number three program in the country in secondary education.

## **Recommendations**

New and improved teacher education programs cannot compensate for needed state and local government and school board action on matters like teacher salaries, incentives and working conditions. However, better teacher education programs can improve the quality of the nation's teaching force which, in turn, will lead to improved student performance.

The programs can prepare teachers for the realities of the classroom and educate teachers for a world in which the only measure of success

has become student achievement.

This report offers five recommendations for strengthening teacher education:

**RECOMMENDATION ONE:**

**Transform education schools from ivory towers into professional schools focused on school practice.**

Rather than continue to try to fit into the arts and sciences mold, education schools need to embrace the reality that they are professional schools and refocus their work on the world of practice. Just as medical schools are rooted in hospitals and law schools focus on the courts, the work of education schools should be grounded in the schools.

Education schools should follow the example of other professional schools in making the education of the practitioner their primary activity. Medical schools see their work as preparing doctors, and law schools have the mission of educating lawyers. So, too, must education schools have as their fundamental purpose the education of teachers.

Education schools should follow the model of professional development schools, the education equivalent of teaching hospitals. These public schools bring together faculty and their students with school teachers and their students to enrich education, research, and professional development.

**RECOMMENDATION TWO:**

**Focus on student achievement as the primary measure of the success of teacher education programs.**

The measure of a teacher's effectiveness is the performance of the students in her class. The measure of a teacher education program's success is how well the students taught by its graduates perform academically.

To assess teacher and teacher education program performance, each state will need to develop a longitudinal data collection system that will permit the state to follow each student's academic progress.

A number of states are already doing this or moving in this direction. The data collected by such systems can be used not only to improve schools and enhance the achievement of the students who attend them, but to ascertain the impact of recent graduates of particular teacher education institutions on student achievement.

The data would also enable us to begin answering a number of basic, but still unanswered, questions about teacher education, including: What type of teacher preparation is most effective in promoting classroom learning? What curriculum produces the best teachers? What faculty qualifications are the most helpful?

Using this research, the states

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would have the capacity to redesign teacher education program approval requirements based on the staffing and curriculum that produce teachers who are effective in promoting student achievement.

**RECOMMENDATION THREE:**

**Make five-year teacher education programs the norm.** Teacher preparation programs should be designed as an enriched major rather than a watered-down version of the traditional undergraduate concentration.

This means teacher education students should be required to complete a traditional major in a subject area such as English, mathematics, or history. This will provide them with mastery of a content area.

Then future teachers need to complete advanced study into how to effectively communicate that subject matter. This will provide them with an education in teaching and child development.

Introducing the combination of an enriched major and advanced study in education will necessitate making programs five rather than four years in length.

**RECOMMENDATION FOUR:**

**Establish effective mechanisms for teacher education quality control.** If teacher education is the Dodge City of the education world, teacher education accreditation

bodies are weak sheriffs. It is time to rethink accreditation and to encourage the participation of top schools in developing standards and enforcement mechanisms.

New accreditation standards should root measures of success in hard data on student achievement and expand accreditation to include non-collegiate education programs offered by new providers.

The report suggests that these changes can be made by redirecting efforts of the existing accrediting associations. If it should prove necessary, these groups could be bypassed and a blue-ribbon panel created by a neutral party, such as the Carnegie Corporation of New York, could be established. Carnegie has spent the past several years working on teacher education reform.

States can advance this effort by creating longitudinal databases that track how well students of relatively new teachers perform on standardized tests. They can link what is learned about the impact of teachers on their students to the institutions from which these teachers have graduated. This data will help paint a picture of institutional effectiveness.

In addition, states should raise quality by establishing common, outcomes-based requirements for certification and licensure for students educated via both traditional and nontraditional routes.

**RECOMMENDATION FIVE:**

**Close failing teacher education programs, strengthen promising ones, and expand excellent programs. Create incentives for outstanding students and career changers to enter teacher education at doctoral universities.**

Teacher education in the United States is principally a mix of weak and mediocre programs.

Universities have an obligation to evaluate the quality of their teacher education programs. They should establish a timetable of no more than five years for closing poor programs, strengthening promising programs, and growing strong programs.

Many of the programs that should be closed will be found among Masters I-granting universities. Programs to be expanded will be found disproportionately among research universities, particularly

Doctoral Extensive Universities.

In order to expand enrollment at these institutions, there will be a need to provide incentives for both research universities and prospective students. States will need to seed the cost of program expansion and offer scholarships targeted at future teachers with the requirement that they teach in their state's public schools after graduation.

The federal government and private philanthropy also should establish the equivalent of a Rhodes Scholarship to attract the best and brightest to teaching and upgrade the status of the profession.

This could involve establishing a teaching fellowship program for highly accomplished graduates to earn teaching certificates at research universities, which could have the effect of increasing the proportion of teachers prepared in this sector.

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*The study of university-based teacher education programs is the second report in a four-part series to be released by the Education Schools Project. The first report, Educating School Leaders, found that university-based education leadership programs ranged from “inadequate to appalling” and triggered a heated national debate over the future of education leadership programs.*

*The Education Schools Project promotes well-informed and non-partisan policy debate on how best to prepare the teachers, administrators, and researchers who serve the nation’s school children. The Project’s*

*reports are drawn from the most extensive study ever conducted into the strengths, weaknesses, and overall performance of the more than 1,200 schools and departments of education at colleges and universities across the country.*

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Copies of the report are available at the Education School Project’s Web site, [www.edschools.org](http://www.edschools.org).

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