

**A CRITICAL LOOK AT TEXAS
COLLEGES OF EDUCATION**

**Dr. Joseph M. Horn, Professor of Psychology, University of Texas at Austin
Senior Fellow, Texas Public Policy Foundation**

Contents

Executive Summary

1. Introduction

Countering Educational Dogma

Dallas - Bad Teachers Can Be Identified

Chicago - Non-educators Make Better Judgments

Kansas City - Spending Money the Way Educators Want It Spent Does Not Improve Learning

2. Can Schooling Make us Equal?

Neglecting High Achievers

Dumbing Down the Textbooks

Dumbing Down the Tests

3. Prior Analyses of Colleges of Education

Egalitarianism

4. Grade Inflation and Social Promotion

Avoiding Accountability and Alternative Assessments

5. Survey of Attitudes and Curricular Preferences at the University of Texas at Austin and the University of Houston

Preference for Poor Students over Able Learners

Preference for Social/Emotional Development over Academics

Knowledge of Factors Influencing Academic Outcomes

6. Conclusions

Recommendations

[References](#)

[Survey](#)

I. Introduction

Educators have given themselves an impossible task: the manufacture of equality. Individual differences are the most prominent features of any group of public school children. This is true whatever part of the human constitution you choose to examine. Children are different in their personalities, their motivations, their interests, and their abilities. The remarkable thing is, when all these differences combine to profoundly influence the outcome of the educational experience, we act surprised, even shocked and disappointed. That children should differ in math achievement as much, if not more, than they differ in athletic or musical achievement seems impossible to us. We've tried so hard to get everyone to understand algebra. How could all our efforts have gone for naught?

"All children can learn!" is the chant that echoes through every school building in Texas. It is true, of course, but only in the most trivial sense. Can most children learn to sound out words? Yes: about 90% can. Afterward, do they all fully comprehend what they read in a chapter from a literary text or algebra book? No. To use reading for learning is a qualitatively different thing than learning to read. All children can learn to sound out words, but to go on to higher levels of mental abstraction, to use reading for learning, is much more difficult. Here equality continues to elude us.

The inequalities of outcome that we observe after 1, 4, 8, or 12 years of public schooling have become the focus of political programs designed to reduce individual differences in school achievement. But this is not new in America. Our schools have always been a battleground where contending philosophers have used our children as cannon fodder in their ideological wars. In the past we've seen the child-centered progressivists at war with the social efficiency experts who, in turn, have fought with the social meliorists over the hearts and minds of future generations. School children are just too available and too vulnerable for utopians of all stripes to resist the temptation at influence. Our children are the future and, for those who want to shape that future, the opportunity to mold our children is irresistible.

The document that follows is an attempt to make salient what is known or not known about the power of education to change us and, further, to explicate how colleges of education and other institutions comport themselves in this regard. Proposals for reform of our educational system abound, but few of them are really new and most of them derive from unrealistic views of human nature that, when implemented, can do harm as well as good. In addition, what we do know about the achievement of true educational excellence is so unpopular today that our most promising programs for improvement are being banished from consideration. I hope to make clear that Texas colleges of education are part of the problem, not the solution. Because colleges of education neither attract the best students nor provide the students they do have with a solid background in fact, it will be necessary for school districts to attempt to identify ineffective teachers so that they can be remediated or released.

Countering Educational Dogma

One purpose of this report is to encourage Texans to reexamine their views about education and to question the putative wisdom of the usual authorities. Too many of the ideas and policy recommendations coming from "established" sources such as our teacher training programs, the Texas Education Agency (TEA), and the Texas State Teachers Association (TSTA) are wrongheaded and turn out to have detrimental effects on student learning.

Three recent and dramatic developments in Dallas, Chicago, and Kansas City can help us appreciate how important it is to maintain a healthy skepticism when it comes to the pronouncements of educators. Each of these events illustrates a fact that is either resisted or ignored by major segments of the education establishment, including colleges of education, but which is essential knowledge if we are to learn how to improve our schools.

1. Dallas--**Bad teachers can be identified** and they actually retard academic development in their students. If we made the effort, these people could be screened out prior to entry into regular classroom teaching.
2. Chicago--Colleges of education seem unable to generate useful information or to produce people who can act decisively. **Non-educators make better judgments about schools** and have shown they can implement steps to improve learning.
3. Kansas City--**Spending money the way educators want it spent does not improve learning.** Money helps, but only if it is spent on what works.

Dallas - Bad Teachers Can Be Identified

Earlier this year, in the Dallas Independent School District, Executive Director of Institutional Research Robert Mendro announced some startling results from a comparison of the standardized test performance for sixth graders who had been unfortunate enough to have been assigned to "ineffective" teachers. These ineffective teachers had been identified earlier by noting the low scores obtained by their students in the past compared to the relatively higher scores other teachers were able to get from similarly situated students. Taking race, ethnicity, English proficiency, and poverty of the students into account, some teachers are much more effective in raising test scores than others. According to a February 18, 1998 report in *Education Week* "**the average reading scores of a group of 6th graders who had three of the most effective teachers in a row rose from just under the 60th percentile to about the 75th percentile while a similar group of students who had two of the least effective teachers, and then one of the most effective ones, dropped from just above the 60th percentile to just below the 50th percentile.**"

The resulting difference in performance attributable to the misfortune of being assigned two bad teachers in a row is quite substantial (50th versus 75th percentile) and the implication is dramatic: when it comes to learning, some teachers are helpful while others are outright harmful.

It is important to note that the Dallas researchers classified the teachers into five equal groups based solely on the previous test performance of their students. The bottom fifth were then categorized as "least effective." After having been identified as "least effective" these teachers continued to ply their trade and their future students suffered. One immediate application of this research should be the prompt successful remediation or dismissal of this group of teachers. There can be no excuse for the continuation of a teacher who consistently depresses the development of her pupils. In addition, other research is needed to compare the personal, professional, academic, and other characteristics of the ineffective and effective teachers so that predictors of future success can be utilized in the hiring of future teachers.

But even more dramatic than the possibility of reducing the number of performance-damaging teachers already in our schools is the simple demonstration that it is possible to use student performance on standardized tests to gauge teacher effectiveness. This is something that teacher organizations have vehemently opposed for decades. For example, the Texas State Teachers Association, in the January, 1997, issue of its magazine *Advocate*, states its position as "unalterably opposed to tying Texas Assessment of Academic Skills (TAAS) scores to individual teacher appraisal." This resistance to teacher evaluation through the use of student outcomes is tantamount to a denial that teachers have an effect on student learning, a contention the TSTA and other teacher organizations vigorously reject in every other context except when it comes to evaluating teachers themselves. The discovery in Dallas that some teachers, year after year, are associated with test score declines, while other teachers, with the same kinds of students, are able to reliably produce gains should be sufficient to expose the TSTA position for what it is: a hypocrisy engaged in solely for the purpose of protecting poor performing teachers. Uncovering this mentality in the leadership of the teacher establishment should serve as a wake-up call to the public. When it comes to the education of our children, it is too important a matter to be left to the so-called experts.

Colleges of education also have to acknowledge, finally, that graduating from a teacher training program and passing the certification exam is not good enough to secure a place in a classroom. The quality of students admitted and graduated from our teacher training programs must be improved. The methods utilized in Dallas for the study of teacher effectiveness should be incorporated into research efforts at

colleges of education so that screening can be implemented before poor quality teachers are admitted into our classrooms. The fact that upgrading teacher quality has never previously been a priority reveals much about what education faculty and administrators think are important versus what parents and citizens think are important about schools.

Chicago - Non-Educators Make Better Judgments

Other developments in education around the nation are equally informative. Two recent events in Chicago are specially interesting. First, the University of Chicago has shut down its Department of Education. According to Richard Saller, the Dean of the Social Sciences Division under whose administrative control the Department of Education existed, "he was troubled by the frequent lack of peer review for publication in education and the way in which government agencies or foundations sometimes set the research agenda by financing their own pet projects rather than the ideas generated by scholars themselves. He noted that some 20% of the Ph.D.'s earned in America are in education, yet the field has failed to live up to its promise" (New York Times, Sept. 16, 1997 and see E. D. Hirsch, 1997). Chicago thus joined Yale and Johns Hopkins among the top universities that have eliminated departments of education.

Critics of the closing of Chicago's Department of Education have accused the university of abandoning its commitment to school children. This criticism raises the more interesting point of what colleges of education have done for children and for education. In the 1980's the U. S. Department of Education declared the city of Chicago's public schools the worst in the nation. The University of Chicago's School of Education had been in existence since 1895 when John Dewey founded it. Apparently, these academics did little to prevent the decline of Chicago's schools. But could they have been responsible for the decline? Of course, not entirely. Too many factors were operating simultaneously for one element in the mix to carry all the blame. However, was the Department of Education at the University of Chicago on the side of the debate that resisted the decline in emphasis on academics or did it promote the ultimately prevailing argument that a school's function is less academic and more social, emotional, and political development? One thing seems undeniable, over the years education colleges have churned out people with advanced degrees by the tens of thousands without much identifiable academic benefit for children. This history weighs heavily against colleges of education.

Have Texas colleges of education done better or are they too on the wrong side in history? The poor reception that our colleges of education have given Governor Bush's Texas Reading Initiative (TRI) gives us the answer. These colleges did little to prevent the problem of low reading performance from occurring in the first place and now they resist the Governor's efforts. TRI is supported by research that shows improvement in reading levels when instruction includes a strong emphasis on "systematic instruction and sufficient practice in... phonemic awareness, alphabetic knowledge, alphabetic principle, decoding strategies, spelling and writing, [use of] manageable and decodeable texts, vocabulary acquisition, comprehension and understanding, and language activities." The Governor's approach also favors frequent formal and informal assessments and flexible grouping according to assessments of individual progress. Most of these methods and approaches are not popular in colleges of education where historically failed "whole language" approaches dominate. The political nature of the opposition to TRI is indicated by the hostility to the formal assessments and grouping by proficiency that are a part of TRI. All these provisions do is insure that accurate knowledge is routinely obtained about the progress of each child and that each child will be placed in the most appropriate and challenging learning environment. As reasonable and necessary as these provisions are they are often vigorously attacked on political grounds because equality of outcome is not the result. Later sections of this report will deal specifically with this problem. ¹

The second development out of Chicago is the takeover of the public schools by Mayor Daley in 1995. After enduring decades of failing schools, the Mayor lobbied the Illinois legislature for a bill that would give him control of the public schools. The legislators were also fed up with the failures of the educational establishment and granted the mayor's request. Daley immediately appointed non-educators to head a new emergency management team. These new managers saw immediately what the problems were: social promotion, low standards, and poor incentives for students to learn and teachers to teach. They promptly banned social promotion; holding back from promotion to the ninth grade 1,972 students who could not pass an 8th grade exit test by demonstrating beginning seventh grade proficiency. At low performing schools all the teachers were required to reapply for their jobs and only 63% were rehired (188 were actually fired). The vast majority of those fired had been teaching for over 20 years. Additionally, a

fifth of the city's schools were placed on probation and face the same faculty screening if performance does not improve. The results have been salutary. In math, the percentage of 3rd through 8th grade students performing at or above national standards rose from 31 to 35.6 % in one year and at the high schools the one year improvement was from 21.4 to 30.4 % of students at or above national norms (Education Week, June 4, 1997).

The takeover of the Chicago schools and subsequent events revealed two important facts about public schools. First, professional educators were unable to solve the low performance problem. Indeed, it may even be the case that educators today don't believe that academics are what the schools are about, hence, academic failure is not identified as a school problem only a political problem. Second, it was easy for the non-educators to see what was wrong and take immediate, successful action. These people recognized that social promotion was a fraud. Why is it that the Chicago educators were so obtuse?

A partial answer to this question is provided by the survey results obtained by Public Agenda, a private organization specializing in discovering and communicating the public's opinion on critical policy issues. Parents, teachers, community leaders, and the general public were asked to identify the most important characteristic determining a person's success in jobs and careers. There were four choices to pick from: being persistent and having inner drive, getting a good academic education, knowing how to deal with people well, and knowing the right people and having connections. Only 11% of the teachers picked education as the most important factor, while 83% chose inner drive or dealing well with people. The parents, general public, and community leaders chose education as the most important nearly 30% of the time ("Assignment Incomplete," Public Agenda, 1995). In the eyes of teachers, academic skills appear to be much less important for the future than personality traits or social aptitudes. No wonder then that academic failure is relegated to secondary importance while social factors assume an exalted role and tip the scales in favor of social promotion. Certainly inner drive is important, but the primary role of the schools is to educate. Different institutions have different roles.

Another answer lies in the opinions of those teaching the teachers. Professors of education are, on many issues, simply radical. According to another Public Agenda poll, less than 20% think that teachers should stress spelling, punctuation, and grammar; 92% believe that the teacher's role is that of a facilitator rather than conveyor of knowledge; only 12% expect students to be punctual and polite; and almost 80% believe that traditional teaching methods are either outdated or mistaken. ²

Kansas City -- Spending Money The Way Educators Want It Spent Does Not Improve Learning

Another recent event of singular importance is the failure of the court-ordered expenditures and school reorganization in Kansas City. If anything can finally bury the myth that more money is what our schools need it is this costly and useless intervention by a federal judge. The tragedy began in 1985 when Federal District Judge Russell Clark took control of the Kansas City School District. His ruling was that the district was unconstitutionally segregated and had impermissibly poor facilities and student outcomes. To solve these problems he ordered property taxes raised by 150%, imposed a 1.5% income tax surcharge, and ordered the state of Missouri to pay whatever else was needed to rid the K.C. schools of the aforementioned problems. After 12 years and over 2 billion dollars later, according to Paul Ciotti ("Cato Policy Analysis No. 298" 1998),

"Kansas City spent as much as \$11,700 per pupil--more money per pupil, on a cost of living adjusted basis than any other of the 280 largest districts in the country. The money bought higher teachers salaries, 15 new schools, and such amenities as an Olympic-sized swimming pool with an underwater viewing room, television and animation studios, a robotics lab, a 25-acre wildlife sanctuary, a zoo, a model United Nations with simultaneous translation capability, and field trips to Mexico and Senegal. The student-teacher ratio was 12 or 13 to 1, the lowest of any major school district in the country.

The results were dismal. Test scores did not rise; the black-white gap did not diminish; and there was less, not greater, integration."

The real problem was how the money was spent. These decisions were made by professional educators

who relied on their old theories about what works and what doesn't. They were wrong. They have always been wrong. What does work is high standards, performance incentives, and consequences for failure. These must be implemented at all levels: student, teacher and school. Money does help, but it has to be spent on those things known to improve student performance. One such characteristic is the verbal ability of the teacher. One can only lament that Kansas City did not try hiring smarter teachers. But such an acknowledgment, that brains matter, would have opened the educational equivalent of Pandora's box. Educators fear what other forces would be unleashed once the role of intelligence in teacher performance and student results is admitted.

The events just discussed show how discrepant the reality of our schools is from the theories and policies often promoted by the educational establishment. Instead of business as usual at our teacher training programs, we need to identify and screen out ineffective teachers before they are admitted to the profession. Instead of the current focus on social, emotional, and political development in our schools we need a stronger academic orientation. And instead of spending money on school facilities and reducing class size we need to raise performance standards and introduce consequences for failure. If we can't or won't make these changes the forecast is clear: continued failure for students near the bottom of the aptitude distribution and, as will be shown below, continued mediocrity for those at the top.

II. Can Schooling Make Us Equal?

Children are very different when they start school and as they move through the public schools these differences are elaborated into even sharper distinctions based on achievements and future expectations. Some people look at these outcome differences with horror and see the public schools as a source of inequality. In this view, we are morally bound to intervene and use the schools for leveling rather than magnifying preexisting differences. An alternative view acknowledges the importance of individual differences in input characteristics and does not expect equality in this area of human behavior any more than in personality development, athletics, or music. Whether one is hostile to individual differences or acknowledges them as a basic fact predicts much of one's attitudes about public schools.

The evidence is mostly in favor of the primacy of individual differences. James Coleman and his colleagues (1966) demonstrated that differences between a good school and a poor one mattered very little in the differing achievements of students; the characteristics the students brought with them to school being much more important, and Christopher Jencks et al. (1972) (1979) replicated and extended this finding when he showed that equalizing schooling would do very little to create equality in occupational status or income. Subsequent findings only added to the dominant influence of individual differences: additional years of exposure to more difficult subject matter benefits the already able learners more than the slower ones and, within current ranges, the amount of money spent on education bears only a scant relationship to achievement. Similarly, class size, teacher credentials, and other such "school" variables were shown to be poor predictors of student achievement (Hurn 1985) (Hanushek 1997, 1998).

And what was the reaction of the educational establishment to the research findings that a child's own abilities and the characteristics of his family were much more influential than school characteristics? They fought back by killing the messenger; they attacked the very idea of research. The problem, they said, was that empirical research using standardized achievement tests was insufficiently flexible to index the true goals of education in a democracy: social justice and equality. Rather than deal realistically with what they viewed as depressing facts about individual differences these apologists for the educational bureaucracy declared that education was in a state of "indeterminacy." The simple act of measuring what children know after they have been in school for some time was considered by these authors a task of such complexity that we cannot ever really know if children know. And even then, do we really know what we want them to know?

The core of this critique was an appeal to ignore the research if one didn't like the results. In the first chapter of *Indeterminacy in Education* Alexander M. Mood closes with this judgment: "[t]herefore policy makers must view all educational evaluation with considerable skepticism and be prepared to reject any particular instance of it on the basis of their own judgment of its plausibility." Similarly, in the introduction John F. McDermott concludes, "[g]iven the absence of adequate moral and social science standards, we are, in the final analysis, remitted at least in part to the political process for a sometimes arbitrary resolution of matters of educational policy." Had the research results gone the other way and supported the efficacy

of schooling in creating equality, it is hard to imagine these authors being so willing to dismiss it.

What was really bothering these critics were the vast differences among children in what had been learned at school and elsewhere. Some fifth graders are still reading at a second grade level while classmates are ready to tackle eighth or ninth grade texts. Some 10 year-olds can barely manage addition while others could handle algebra if given the chance. The magnitude of such differences and the consequences of them have been a concern of educationalists for some time. Atkinson (1974) was one of the first to write, almost casually, of the acceptability, even desirability, of restricting the educational opportunities of able learners in order to control the size of individual differences.

Neglecting High Achievers

Withholding educational opportunities from rapid learners in the interest of reducing individual differences in outcomes is more common than parents or the public imagines. We learned long ago that some children are able to learn very rapidly and, given freedom to sprint ahead, they would soon leave others in the class far behind. American educators have decided that it is legitimate to deny educational opportunities to rapid learners in order to minimize the achievement differences in their classrooms. This denial of opportunity is shocking to parents, but hardly even questioned by school officials or teachers any longer. Proof of this neglect of able learners is present in almost every school district in America. For one thing, there is an absence of much opportunity for curricular acceleration for rapid learners (Sadker and Sadker 1997).

In Texas, gifted and talented programs do not receive their fair share of money directed toward education. In the 1996-1997 school year, \$174 million of the state's public education funds went for gifted and talented education, whereas almost \$1.2 billion of the state's public education funds was earmarked for special education. There are only 1.5 times more children in special education than in gifted and talented; thus, the per-pupil funding disparity is \$2,164.08. Compensatory education, career/technical education, bilingual education, and athletic programs all receive more money than gifted and talented programs. This is indicative of the educational establishment's attitude toward academic excellence.

The fact that some 10 year-olds are ready to read Dickens and some 6th-graders are ready to do algebra is of little interest to the educational establishment. I inquired of a previous Dean of the College of Education at the University of Texas at Austin how much attention the faculty gave to the education of gifted and talented children. The reply surprised me at the time: "Almost none. We have a half-time person with some interest, but we really focus on kids with problems. We have over a dozen faculty who specialize in the different types of at-risk children." Public Agenda has also documented this bias. In their survey of how teachers of teachers view public education, Public Agenda found that 43% of teacher education faculty reported their program placed a lot of emphasis on "identifying students with learning disabilities" but only 15% reported a lot of emphasis on "identifying gifted students" ("Different Drummers," Public Agenda, 1997).

This neglect has even begun to attract some attention, but the prediction for the future is bleak. Sadker and Sadker (1997) comment:

"To many Americans it seems downright undemocratic to provide special services to children who already enjoy an intellectual advantage. Even the parents of gifted children have been reluctant to request appropriate educational programs for their children.... Many gifted students do not make it on their own. Instead of thriving in school, they drop out. Often those who do stay in school become bored and apathetic, and their intellectual talents go unnoticed and unnurtured. The result is that many of our nation's brightest and most competent minds are lost to neglect and apathy... Research shows that the number of gifted students contemplating suicide continues to increase. Factors contributing to such thoughts include feelings of personal worthlessness, a sense of isolation and loneliness, pressure to achieve, and fear of failure. Talent, giftedness, and creativity set adolescents apart at a time when the push is for conformity and for being 'normal'... Recognition of the special needs of the gifted has been slow in coming... Currently most school systems provide (some) special gifted services to between 7 and 12 percent of their students. However, with the current trend away from ability grouping, tracking, and special programs, it is possible that fewer resources will be available for the gifted student in the years ahead.... In the final analysis, it is not only the

gifted who have suffered from our national neglect and apathy, it is all of us. How many works of art will never be enjoyed, how many medical breakthroughs and how many inventions have been lost because of our insensitivity to the gifted? We will never know the final cost."

Other researchers are less reluctant to estimate the economic costs of this neglect of the gifted. Hanushek and Kim (1996) reported on international comparisons of test scores and found that "one standard deviation in measured cognitive skills translates into one percent difference in average annual real growth rates; an effect much stronger than changes in average years of schooling, the more standard quality measure of labor force skills." The continued neglect of the intellectually gifted, those one to two standard deviations above the mean, will limit economic development in the long term.

Dumbing Down the Textbooks

The average 6th, 7th, and 8th- grade reader is simpler than the average 5th- grade reader of forty or fifty years ago.

For able learners, one of the most damaging developments in education may have been the utilization of Readability Indices to gauge the reading level of textbooks. These indices measure properties of texts such as average sentence length, number of long words, and word rarity. After World War II, readability indices were applied to most textbooks in an effort to gauge the impact of text difficulty on student achievement. The concern was with the lower performing students and the result was that harder words and longer sentences were eliminated from many textbooks. This dumbing down of textbook vocabulary and simplification of sentence structure so that lower achieving students would have an easier time is an obvious example of favoring poor students over able ones. The opportunity to encounter new and more difficult words that able students could have mastered and used for still further growth was sacrificed in the interest of helping those at the bottom. It should come as no surprise that the students who've lost the most over the years on their SAT's are the more capable ones and that the vocabulary of our more recent birth cohorts are substantially below that of adults who went to school before the 60's (Alwin 1991; Hayes et al. 1996).

Hayes (1996) reports on an extensive study of the lexical difficulty found in a sample of over 800 readers used in the United States between 1919 and 1991. The results indicated a dramatic decline in text difficulty for books published after the war. Also found was a continuing decline into the 80's and 90's for 4th through 8th-grade texts so that these books are now at their lowest level in American history. The average 6th, 7th, and 8th-grade reader today is simpler than the average 5th-grade reader of forty or fifty years ago. Sentence length in these texts has also been reduced from 20 to 14 words, "the equivalent of dropping one to two clauses from every sentence. This reduced the students' experience in working out the meaning of more complex sentences." Restoring readers to their former levels of difficulty could do a lot to improve the verbal skills of most of our children.

Dumbing Down the Tests

An important point to make in connection with individual differences is that colleges of education and many other groups don't want to publicize how large they truly are. The easiest way to minimize individual differences is to administer assessments and examinations that are so easy that the better students all look the same; bunched together at the top of the distribution. Such tests are said to have a low ceiling. Individual differences increase dramatically when more difficult items are included in the test, but this exposes just how far behind the poorer students really are. This is not something many educators want to deal with in today's politicized environment for schools.

A prime example of a low ceiling test in Texas is the mathematics section of the TAAS test: a minimum proficiency test for graduation from high school that only goes up to items of eighth grade difficulty (In order to pass, it is not necessary to do any of the eighth grade items. A 70% on the exam is sufficient.) What would the individual differences look like if the test included real algebra instead of pre-algebra, and threw

in some trigonometry and solid geometry as well, perhaps even including probability and statistics? The answer is that the differences between the best and the worst students would be much larger than the differences obtained with the easier test. The most profound and devastating commentary about our educational system is that we choose to yoke ourselves to the lower standards because we are not comfortable with individual differences. By using assessments that are too easy we choose to render invisible the talent of the better students so that the others don't look quite so bad.

Why do we give an achievement test for graduation from high school that only goes up to the eighth grade in level of difficulty? The answer is that we want to keep the graduation rate as high as we can. More difficult tests would result in fewer students passing, and it is judged that the political costs to schools and teachers of higher failure rates would be too difficult to manage. Similarly, parents have come to equate high school graduation as a minimum to be expected out of their public schools. Having adapted to the historically high graduation rates of today, it isn't clear that the public would tolerate a major decline in the graduation rate.

And what price do we pay for calibrating our educational product against such low standards? According to one perspective we don't suffer at all. The bright students are thought to be able to take care of themselves and we gain in being able to shape the curriculum around the slower students and boost more of them up to minimum levels of proficiency.

Recent developments show the folly of such minimal expectations. The results from the Third International Mathematics and Science Study (TIMSS) revealed that American 4th graders were about average in comparison with other nations, but by the 8th grade our students were down to the bottom quarter in achievement (TIMSS United States website, Michigan State University).

The worst was yet to come: by the 12th grade our achievement scores were down to the bottom fifth with the most talented segment of our student body, those taking advanced math or physics, finishing next to last (math) and last (physics) among the sixteen nations compared (TIMSS Homepage, Boston College).

Commenting on these shocking results, William H. Schmidt, U. S. TIMSS National Research Coordinator, stated: "What is surprising is not the profoundly disappointing results but rather failing to realize how predictable those results were given what we already knew." Schmidt goes on to acknowledge that our curriculum is unorganized and watered-down. Our math and science curricula across the grades is simply too weak to expect other than bottom level results (Press statement, February 24, 1998, TIMSS United States, Michigan State University). And Texas students are a big part of this poor performance: only 24% of Texas students are at or above grade level in the sciences (National Assessment of Educational Progress 1998).

Our schools are too easy! And there are no consequences for poor performance! If we don't face up to this reality soon and begin to ask much more of our average and even more of our talented students, we may end up needing to import much of the expertise needed for our technologically advanced society to function. Indeed, a bill increasing the number of special visas by 177% for high skilled immigrants passed the U.S. House in September 1998.

III. Prior Analyses of Colleges of Education

In September of 1979 Gene Lyons provided a critical view of all Texas colleges of education in the magazine Texas Monthly. Over a decade later, in 1991, Rita Kramer published her book, Ed School Follies, where she reviewed the goings on at three Texas institutions, the University of Houston, Texas Southern University, and the University of Texas at Austin. The similar conclusions of these two authors provide an outsider view of educational professionals that many parents and citizens find shocking. My synthesis of their major points is:

1. Many teachers can't teach effectively because they themselves are academically deficient.
2. Schools of education have been transformed into agencies of social change with mandates to achieve equality at all costs.

3. Colleges of education no longer believe that knowledge should be the center of the educational enterprise.

4. Colleges of education don't serve the interests of children or parents. Instead they serve the interests of an educational bureaucracy by pushing the growth of the profession, protecting it from competition and warding off outside scrutiny.

Because these conclusions are so damning and, if true, so pessimistic in their implications for change, I will consider each in some detail.

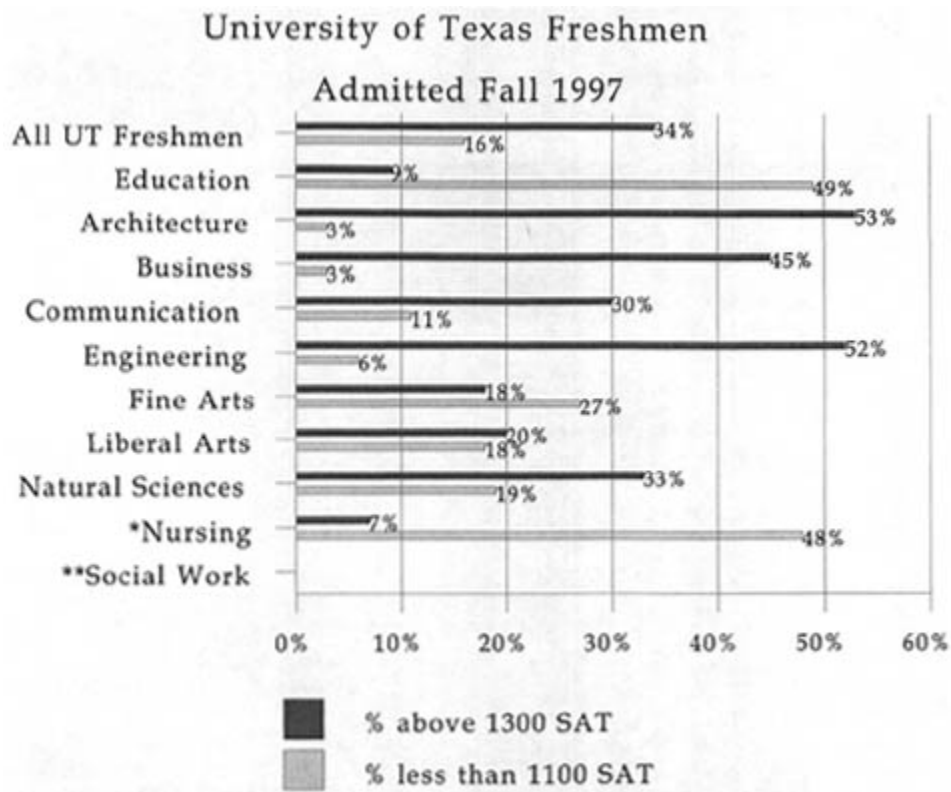
1. Many teachers can't teach effectively because they themselves are academically deficient.

This conclusion requires some moderation because of the large individual differences in aptitude among education majors, but, on the average, there is considerable truth to the generalization. The same observation was made as long ago as 1938 by Learned and Wood who concluded that a large percentage of education majors intending to teach high school knew less about fine arts, history, social studies, foreign literature, and natural sciences than many of the high school students they would soon be teaching (Willerman 1979).

Lyons noted that over half of the first year teachers in Dallas could not pass a simple verbal analogies and mathematics test and that the teachers were outscored by the juniors and seniors from a private high school in North Dallas. Similarly, Houston school officials discovered that half of its teacher applicants scored lower in mathematical achievement than the average high school junior.

This concern with teacher ability and knowledge is justified by a considerable body of research showing consistent relationships between verbal abilities of teachers and the performance of their students. Unlike most of the other teacher variables examined for relationships to student learning, verbal ability comes up again and again, in different grade levels, schools, and states with significant correlations. Smarter teachers consistently do better for their students in the classroom. The same cannot be said for teacher experience, teacher credentials, teacher pay, or any other teacher characteristics (Ballou and Podgursky 1997; Hanushek 1981).

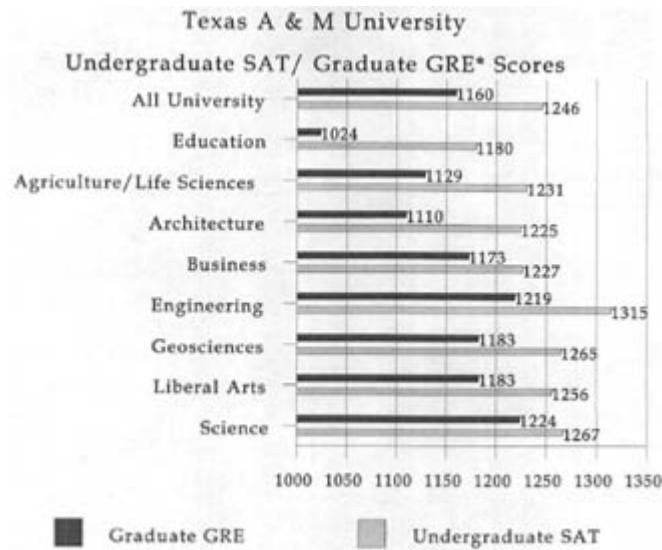
Education colleges typically include many students who barely meet the minimum entrance requirements on their campus. Often the differences in average qualifications between education majors and students in other majors are so large that it appears the different students really come from different segments of the ability distribution. Consider the SAT scores for the freshmen admitted to the University of Texas at Austin for the Fall of 1997: (See Chart 1)



The results are clear. With the surprising, but explainable*, exception of the College of Nursing, the students majoring in education are alone at the very bottom of UT's aptitude scale. The proportion of students in the lowest SAT range reported by UT (less than 1100) is more than three times greater than for all UT freshmen. Readers should also be aware that these SAT scores are from the "recentered" version of the test introduced in 1995. An 1100 on this new version is only equivalent to a 1000 on the old test.

Regarding the 49% of education majors in the lowest reported SAT range, of most concern is the appreciable numbers who would be found with much lower scores if the reporting format permitted them to be seen. Perhaps even as many as a quarter of UT education majors may score lower than 1000 (900 on the old test). Coleman (1966) was among the first to document that students whose teachers had a better vocabulary actually scored higher on verbal achievement tests themselves. And this was after the influences of family background, peers, and other school variables had been controlled. All other things being equal, the teacher's vocabulary made a difference.

Entry test scores from Texas A & M University show the same pattern of average scores by major found in the SAT scores for the University of Texas at Austin. Again, education majors have the lowest average test scores at the university. In addition, the information available from Texas A & M includes scores from the Graduate Record Examination (an SAT type test for graduate students) from the different colleges. These results indicate that the quality problem gets worse at the graduate level.



The preceding chart shows that undergraduate education majors have the lowest average SAT at Texas A & M, 66 points below the all university average, and that the deficit more than doubles (to 136 points) among graduate students. It seems remarkable that those whom we are placing in charge of our schools--most school administrators have graduate degrees--should show such low levels of academic aptitude themselves.

The average SAT scores for education majors at Texas A&M and UT Austin are around 1200. What is the situation at teacher training programs where admissions standards are very much lower than at these "flagship" institutions? Lyons reported that at Southwest Texas State University the average SAT (old test) for education majors was only 825; the lowest for any major at SWTSU, and quite below the national average. SWTSU graduates more teachers each year than does UT - bad news for our children if the research on verbal ability of teachers is believed.

The ability data gathered statewide are equally dismal. According to the SAT scores compiled by the State Board for Educator Certification in 1995-6, the average score was only 858 (old test) for all the prospective teachers in Texas; a figure 34 points below the average for all college students in Texas and about 45 points below the national average for all SAT takers ("Texas Teachers, Reality vs. Myth," 1997). It is important to remember, once again, that the 858 figure is an average. Half of these prospective teachers score lower. From normal curve statistics we know that about a fifth of the prospective teachers in Texas have scores below 750. Will they be the "ineffective" teachers of the future?

The situation doesn't get much better when you look at only the students who graduate and were certified and teaching in 1995-6. The average for these individuals was 911, a figure far below the averages for students who graduate in other majors. Not all the education graduates chose to teach; those opting for other occupations had higher SAT scores (935 on average) than did the graduates who became teachers. It is clear that teachers in Texas come mostly from the lower ability ranges of Texas college students and that those who graduate and become teachers are less able as a group than those who decide against teaching. These and other results - teachers still teaching after five years have lower scores than those who leave teaching - are solid findings that are replicated in other research. Some of these studies are considered next.

The drift of lower ability individuals into education starts back in high school. Looking at the SAT and career choices made by high school seniors, Clifford and Guthrie (1988) draw the following conclusions:

"According to analyses conducted by Schlechty and Vance, teaching has conventionally attracted 7 percent of the individuals from the top ability quintile (20%) and 13 percent from the second quintile.... It is encouraging that teaching can attract 20 percent.... in the top two quintiles of intellectual abilities. On the other hand, teachers attracted from the top quintiles are the ones most likely to abandon the field; indeed, 85 percent of those recruited

from the topmost quintile leave teaching after relatively brief careers. Equally distressing, teaching also draws heavily from the bottom quintiles of ability. Almost 50 percent of the individuals in the two lowest ability quintiles measured by Schlechty and Vance in North Carolina identified teaching as their intended career. Furthermore, lower-ability individuals are those most likely to remain in teaching as a career."

Weaver (1983) also reported that teaching is most attractive to the lowest ability high school students and that education colleges did little to improve these abilities or select out the poorer students. He states:

"It has been argued that education faculties sort out the academically weak students prior to student teaching and graduation. The NLS data do not support that argument, at least insofar as basic skills in reading, mathematics, and vocabulary are the selection criteria. Instead, teacher education is the field showing the least selectivity, from college-bound applicant to completion of degree...."

The data Weaver refers to are important. Here are the figures for the improvement in SAT from high school to college graduation for students from different majors [numbers in () are average SATs for those graduating from college]:

College Major *	Vocabulary Gain (college grad VSAT)	Mathematics Gain (college grad MSAT)	Total Gain (total SAT)
Education	+27 (445)	+26 (475)	+53 (920)
Business	+67 (476)	+66 (529)	+123 (1005)
Engineering	+64 (524)	+76 (624)	+140 (1148)
Social Science	+33 (509)	+42 (532)	+75 (1041)
Physical Science	+43 (548)	+61 (631)	+104 (1179)
Agriculture	+45 (472)	+44 (515)	+89 (987)
Health	+79 (498)	+69 (513)	+148 (1013)
Biology	+100 (540)	+122 (573)	+222 (1113)
Mathematics	+67 (548)	+36 (631)	+103 (1179)

* The uncertain major designation of "Vocational" was omitted from this table. Physical Science and Mathematics have the same total SAT for college graduates because physics and mathematics were combined in that tabulation.

Most of these SAT changes come from the lower ability students leaving one major for another or dropping out of college. Some improvements in these basic skills could result from four additional years of higher education. The point is that among education majors there is hardly enough gain to justify worrying about which mechanism, additional learning or selection against lower ability, is responsible. While students from other majors are showing gains of 89 to 222 points, education majors are dead last in this comparison with a trifling change of 53 points. The teacher education curriculum is apparently the least demanding and/or the least educational of all the courses of study available in college.

Another point of comparison is the total SATs of the college graduates. Again the education graduates came in last, and decidedly so, with other majors exceeding education majors from 67 to 259 points. It is worth repeating that the score of 920 for college of education graduates is an average. Approximately half of these future teachers score below 920. And these are the ones most likely to choose a long career in teaching.

- **Across Texas and the U.S., SATs for education majors and education graduates are consistently the lowest of all college majors --from 100 to 200 points lower in most cases.**

But colleges of education do not seem to be taking the necessary steps to raise entrance standards into the profession. The response of Texas educationalists to data about the SAT and other measures of individual differences in abilities (IQ, standardized achievement tests, and exit tests) is to consistently denigrate their information value and usefulness in education. For both teacher performance and student learning, the importance of abilities is minimized. That such an important variable as ability could be so readily neglected, given the vivid evidence of its true importance, is the best indicator I know that schools of education have something else in mind when they talk about education--something different from what parents and citizens want. This brings us to the second and third of the four conclusions from Lyons and Kramer.

2. Schools of education have been transformed into agencies of social change with mandates to achieve equality at all costs.

3. Colleges of education no longer believe that knowledge should be the center of the educational enterprise.

Parents want their children to excel. Many educationalists want equality. Parents want their children to move up in social status. Many educationalists want to attack differentiations based on social status. Parents want their own values to be supported in the schools. Many educationalists want to emphasize the relativity of all values. Clearly these two groups are not on the same page when it comes to what ought to happen in school.

It is not that teacher education faculty are politically radical or liberal. Indeed, Public Agenda (1997) reports that 51% are moderates, although among the rest liberals outnumber conservatives by two to one. What does seem to be operating is a strong commitment to the public schools as a democracy-building institution. Over 95% respond "very close" or "somewhat close" to the question:

"Public education is the nation's most critical democratic institution and should be protected at all costs. Is this very close, somewhat close, not too close, or not at all close to your own view?"

The troublesome part of this commitment is that, in an urgent desire for the public schools to succeed with all students, the teacher educators may be willing to tolerate low levels of academic performance. For example, although 78% agree very closely or somewhat closely with the proposition that academic standards in today's schools are too low and kids are not expected to learn enough, only 49% are then willing to say that much good would come from "raising the standards of promotion from grade school to junior high and only letting kids move ahead when they pass a test showing they have reached those standards." The general public supports the promotion test idea by an overwhelming 70%.

There are a number of other questions in the Public Agenda survey to indicate that teacher education professors are willing to endorse the idea of standards but unwilling to endorse an actual implementation of them. Much of this discrepancy may come from the knowledge that standards have had a disparate impact on some minority groups. If more difficult promotion tests were adopted, the failure rates could increase dramatically. And rather than deal with the resulting political fallout, most professors, regardless of personal politics, may be willing to try almost any proposal that remotely promises to avoid a fight that could only tarnish the image of the public schools as a democracy-building institution. This brings us to egalitarianism.

Egalitarianism

The best way to see how egalitarian politics dominates the field of education today is to read the journals. Education journals devoted mostly to research are less afflicted with egalitarianism than the more classroom-oriented journals, but there is even a problem in some of these. Take most any of the teacher

journals and choose an issue at random; here's what you're likely to find and what you'll almost never see:

Likely Topics	Rarely Encountered
1. Educating high-risk children.	1. Educating rapid learners.
2. Promoting better attitudes toward disabilities.	2. Promoting....high achievement.
3. Socially constructing gender.	3. Biological influences on gender.
4. Literacy = power to oppose the dominant culture.	4. Literacy from common culture.
5. Importance of self-esteem.	5. Importance of genuine achievement.
6. Alternatives to standardized tests.	6. Advantages of standardized tests.

This list is not intended to be comprehensive of the ways educationalists bias the conversation about education, but it is indicative of a strong preference for the emotional over the intellectual, for the below average over the better student, and for the left over the right in interpretation of social phenomena.

Two excerpts from recent articles in the journal *Action in Teacher Education* may serve to illustrate how academic concerns can be displaced by political objectives for classroom instruction:

Ava L. McCall and Ann Andringa, "Learning to Teach for Justice and Equality in a Multicultural Social Reconstructionist Teacher Education Course," *Action in Teacher Education*, Winter 1997, Vol. 18, No. 4, pp. 57-67.

"As a new elementary teacher and an experienced teacher educator, we are committed to teaching toward a goal of building a more equal, just world. We recognize the increasing diversity among students in our schools and how we need to provide more equal educational opportunities for students of color and poor working class students. During one semester as we met in a teacher education course, we struggled as a student and a teacher with how to prepare preservice teachers to meet the needs of diverse students and address educational inequalities. Our commitment to teaching for social justice comes from our personal experiences with oppression, the pain and harm it has caused us, and our desire to interrupt our own sexism, racism, and classism. Conceiving of teaching as a collective struggle allows us to find the strength and support to continue to teach toward justice and equality."

Patrice R. LeBlanc and Cindy Skaruppa, "Support for Democratic Schooling: Classroom Level Change via Cooperative Learning," *Action in Teacher Education*, Winter 1997, Vol. 18, No. 4, pp. 28-38.

"...we define democratic classrooms as places where students are educated to develop free and independent thought and to build common ground across diverse experiences and ideas. In essence, democratic classrooms create a community from the sharing of multiple perspectives and develop 'the kinds of conditions in which people can be themselves'....Democratic classrooms also foster the development of emotional intelligence, enhance students' abilities to view a problem from multiple perspectives, and develop the social skills involved in conflict resolution such as negotiation and compromise. These skills have been recognized as necessary to promote peace and to maintain a democratic way of life."

These teachers are much less interested in children knowing how to read, write or multiply than in their students acquiring the correct attitudes for what the authors personally define as the "democratic" way to live. Attitude adjustment rather than skill acquisition is their concern. As a matter of fact, the development of individual differences in math and reading skills are often interpreted by such teachers as threats to equality and democracy. Hence, a desire on the part of many such teachers to move away from standardized assessments to more subjective approaches where outcome differences can be softened and self-esteem

can be, they suppose, manipulated.

And how have these ideas gained such prominence over the years? The answer is ideological control of research and publication. Consider the views of the prominent educational researcher E. D. Hirsch (1997):

"The premier journal of educational research is Educational Researcher. Recently, an article was submitted that refuted the claims of situated learning (situated learning is the supposed scientific basis of such teaching methods as project learning, integrated learning, and thematic learning). The article also refuted the claims of constructivism, which is a supposedly scientific foundation for such teaching methods as inquiry learning, discovery learning, and hands-on learning. After a so-called peer review, Educational Researcher turned down the article, and agreed to print only a section of its critique of situated learning. This decision would have been unremarkable except that the three authors of the article happened to be among the most distinguished cognitive scientists in the world, John Anderson and two colleagues at Carnegie Mellon, Lynn Reder, and Herb Simon. The latter happens also to be a Nobel prize winner.

No knowledgeable and disinterested person should doubt that Anderson, Reder, and Simon are far more likely than their journal reviewers to be expressing the consensus view at the core of mainstream psychology. It is a safe bet that they are much more likely to be right than the peer reviewers chosen by Educational Researcher. This is a rather clear example of how educational Lysenkoism closes off important and sometimes critical sources of scientific information.

*Research can't flourish under such intellectual conformity. It's our collective duty to make sure that journalists, educators, and policy makers have access to the best information from mainstream science. **If scientific information had been allowed to flow more freely during the past two decades, the school scene would have a different face than it does now.**"*

It should be repeated that the fundamental process behind all of this is fear of individual differences and fear of what those differences mean for our view of humanity. Many in education today cannot abide either inequality of educational outcomes or the inequalities that these outcomes are built upon (Benbow and Stanley 1996). Erroneously, these teachers view inequalities as subversive to democracy, and this additional fear spurs them on to even greater commitments to educational policies and practices that preserve, as much as possible, their fictions about human nature. As Hirsch points out, they will even impose ideological control over research in order to bias the information available to others.

4. Colleges of education don't serve the interests of children or parents. Instead they serve the interests of an educational bureaucracy by pushing the growth of the profession, protecting it from competition, and warding off outside scrutiny.

America's teachers are "the most unionized occupation in the country, with 80% of public school teachers belonging to a union, as contrasted with only 12% of college graduates employed full time year-round" (Kramer 1991). Nationwide, the priority of teachers' unions, just as with all unions, has been job security and pay. Fair enough, but where do children fit in? According to an increasing number of critics, learning is way down on the list of important concerns (Brimelow and Spencer 1993, 1995; Lieberman 1994). "Teachers' unions are driving out good teachers, coddling bad ones, and putting bureaucracy in the way of quality education" (Toch 1996). It is ironic that teachers' unions and colleges of education both should place such a low priority on the academic skills of students and teachers.

Colleges of education are not the only educational entities with conflicting interests when it comes to the job of teaching. And, with respect to these final conclusions from the Lyons and Kramer observations, it seems arbitrary to lay more of the blame on our colleges than on school boards, administrators, or other education agencies and teacher organizations (e.g., TEA or TSTA). There is enough blame to go around. The

important thing is to know what is happening and then act on all fronts to correct the problems. With this in mind, we now focus on the only way we can learn what needs to be done. We have to subject the entire educational process to close public scrutiny, and we have to know how the truth gets hidden from view. There are three culprits here: grade inflation, alternative assessments, and social promotion.

IV. Grade Inflation and Social Promotion

The best way to ward off scrutiny is to keep the public thinking everything in education is going along as it should be; that is, all children are learning up to grade level. Until the advent of state mandated exit tests, this pretense was easy to maintain. Plenty of A's and B's sprinkled across a grade report kept parents from worrying too much about just how much their children knew. However, employers and other third parties were not fooled. The huge skill deficits shown in the workplace by many high school **graduates** were too obvious. The fact that it was necessary to force schools to institute exit tests as a check on the veracity of school grades is sufficient to show that the grading policies in our schools were not about learning. It is common knowledge now that grades are given in accordance with policies designed to keep pass rates at politically acceptable levels, regardless of what is being learned.

The ease with which the educational establishment drifted toward grade inflation in the 60's and 70's (Copperman 1978) and the resistance to standardized testing of students and teachers so prominent in the 80's and 90's speaks volumes about the prevailing educational ethos. In addition, a neo-Marxist analysis (Freire, The Pedagogy of the Oppressed) of our schools in relation to the larger society has begun to exert considerable influence among educational theorists. In this view, grading and standardized tests are just a few of the many tools used to keep powerless groups in their currently wretched state. This approach views the academic orientation of schools as the problem rather than the solution. School performance standards are merely the class-based sorting mechanisms used to maintain existing inequities.

Avoiding Accountability with Alternative Assessments

Grade inflation is an uncomfortable practice for teachers as long as they remain aware of the discrepancy between what the children actually know and the false feedback provided through the assignment of inflated grades. If grading itself cannot be eliminated, this discomfort motivates the search for different definitions of success that can ease the sense of dishonesty. Here is where the notion of alternative (more "authentic" ?) assessments becomes very appealing. While standardized reading tests are accused of measuring only what is "in" the students and displaying each student's performance relative to national norms--a discouragement and blow to self-esteem for poorer readers--authentic assessments are praised for their acknowledgment that it takes a village to make a reader. If a child is not reading well, the home, school and community deserve a low grade as much as the student. "Authentic assessments" take the approach of "contextualizing" performance. This allows the teacher to find many reasons for discounting the student's portion of responsibility for performance. With all this emphasis on context, it would be interesting to read an attempt by these theorists to explain why adopted siblings reared together from birth show no correlation in reading performance (Willerman et al. 1977).

Alternative assessments also focus as much on process components as on outcome. This is an appropriate stratagem since Stanovich et al. (1984) have shown early reading progress to be influenced by three relatively independent abilities: general verbal ability, phonological awareness, and decoding speed. However, alternative assessments are not limited to measures of the known correlates of reading acquisition. They are sometimes designed to be highly subjective judgments that incorporate interviews, opportunistic observations, student self-assessments, and anecdotal accounts (Braunger and Lewis 1997). Advocates of these approaches to assessment provide very little reliable and valid data with which decisions could be made about the appropriateness of these methods. Standardized tests, while always open to improvement, have proven their ability to predict reading success and provide explicit information about student performance. Alternative assessments are a long way from reaching this degree of utility.

As discussed earlier in this report, social promotion is a failed policy. And everyone seems to recognize it except the school boards, administrators, and assorted educationalists whose policies sanction it. We also reported earlier that teacher educators overwhelmingly condemn the practice of social promotion but very frequently refuse to endorse policies that would end the practice. The problem is that retention in grade, the usual option to social promotion, doesn't work either. Some research indicates that while socially promoted

students remain at the bottom of the class they do slightly better than retained students (Allington and McGill-Franzen 1995).

Social promotion became popular because of our inability to remediate. Poor students seemed to fall further and further behind as they went through school and there didn't seem to be much we could do about it. Social promotion seemed like the lesser of two evils. However, an additional consideration weighs heavily against social promotion: its impact on the motivation of all students, not just the slow ones, after it is understood that real learning is not required. Students who could be doing much better often take the easy road and slide through school without much effort. Social promotion is a problem for the entire school population not just the bottom 10-20%. As Mayor Daley's abolishment of social promotion in the Chicago schools is showing, children will do better if it is required.

The preceding interpretation of the effects of low standards, including social promotion, is supported by a Public Agenda survey of high school students themselves. Strong majorities of these teenagers acknowledged that they would do more work if it was required of them (75%) and favored passing students on to the next grade only when they learn everything they are supposed to learn (74%). For the latter question, teachers supported the proposition only to the extent of a 62% endorsement.

V. Survey of Attitudes and Curricular Preferences at the University of Texas at Austin and the University of Houston

Our review of the literature indicated that exposure to an education curriculum and/or education faculty may predispose a student to a variety of biases that are inimical to sound educational practice from an academic point of view. We wanted to know if future teachers in Texas have the attitudes associated with curricular preferences for lower ability students and a deemphasis of academics in the service of social and emotional development. Another goal was to see which variables influencing educational outcomes would be acknowledged as important by these groups of students and future teachers. The premise for this latter concern was that, if truly important variables are not recognized and appreciated as such, the paradigm actually employed for instructional guidance will prove to be ineffective or harmful. The final two domains targeted by our questionnaire were the academic rigor, or lack thereof, in education classes, and education majors' support for "honors" programs.

Our methodology was centered on replication. We decided to sample both education and liberal arts seniors on the campuses of UT-Austin and the University of Houston. The liberal arts majors would serve as controls for sex, and location and type of school while the education majors would provide two samples with which to test our hypotheses. We adopted a conservative approach to interpreting our findings. Only if both education samples differed in the same direction from their same-campus controls were the results considered reliable enough to discuss.

Our survey was designed to establish if senior education majors in Texas show the effects of self selection into the college of education or of having been through the education curriculum. Either of these mechanisms could produce differences between education and liberal arts majors but, in terms of the consequences for our children, it doesn't make any difference which is responsible.

Recognizing that college students and education majors may be reluctant to admit to some of these attitudes, we embedded the questions of interest within a larger number of items designed to elicit other interesting responses but also to dilute the focus of the questionnaire and draw attention away from the items of greatest interest. The complete survey is reproduced in the appendix where target items are identified with an asterisk.

Another methodological point is that we chose to make it hard to find differences. By comparing education majors to liberal arts majors (both groups overwhelmingly female) rather than to business or engineering majors, we recognized that we were comparing groups that have similar attitudes and values across many dimensions. We anticipated that these larger similarities would make it somewhat difficult to find large differences between education and liberal arts majors. From the standpoint of anticipating the impact on future classroom behavior of differences obtained with our approach there is no reason to prefer a comparison of education majors to liberal arts majors rather than to engineering majors, but we did not want to take advantage of any differences that might arise just because of sex differences or differences in

personality that influence the choice of college major. As nearly as possible we wanted to identify differences that exist solely because of curricular exposure or to the effects of self-selection into education from within a more homogeneous group of attitudinally similar students.

The survey procedure was as follows for both the University of Texas at Austin and the University of Houston. On each campus 150 senior education majors were first chosen at random from the student directory and another 150 liberal arts majors were similarly chosen from the same directory, provided that each liberal arts student matched the sex of a previously chosen education major. This made for a total mailing of 600 questionnaires. College students move frequently and 81 questionnaires were returned as not deliverable. A total of 177 of the 519 delivered questionnaires were returned for a participation rate of slightly over 32%:

The participation rates did not differ significantly by university or college major.

One of the largest differences found in our survey relates to the putative lack of academic rigor in education courses. Compared to liberal arts majors at the same institution, education majors were much more likely to disagree with the statement (item 37) "In my (education) classes I have to study the textbook thoroughly to get an A in the class." Similarly, education majors agreed less with the statement (item 32) "In my (education) classes I take detailed notes on what the professor is talking about." And finally, liberal arts majors rated courses in their major as more difficult than other courses at their institution whereas education majors rated their education courses as slightly easier (item 47). However, these items are not the primary concern in this report. Here we focus more on those items that deal with preferences for poorer students over able learners, preferences for social/emotional development over academics, and knowledge of factors influencing academic outcomes.

Preference for Poor Students Over Able Learners

A core concern of this survey was whether or not education majors were being trained to orient instruction around students of lower than average abilities to the neglect of more able learners. Item number 34 on our survey asks directly which quarter of the ability distribution the teacher should make her instructional focus. The results are striking: whether at the University of Texas at Austin or the University of Houston more education majors picked the bottom quartile than any other ability group while the liberal arts majors at both institutions gave the next to the top quartile the plurality. These results are complicated somewhat by the 13% of liberal arts majors and 24% of education majors who declined to pick a single quartile. These students circled all four options, clearly indicating their view that the teacher should focus on all quartiles equally. However, the results for the large majority of students picking a single quartile are given in the table below.

Item 34: In a classroom with students of differing levels of ability the teacher should focus on the students whose abilities are in the:

	Bottom quarter (4) % choosing (4)	Next-to-Bottom quart. (3) % choosing (3)	Next-to-Top quart. (2) % choosing (2)	Top quart. (1) % choosing (1)
Education Majors Austin: Houston:	35.9 50.0	33.3 23.3	25.6 26.7	5.1 0.0
Liberal Arts Majors Austin: Houston:	27.8 25.6	25.0 28.2	38.9 41.0	8.3 5.1

Consider the impact of these results for the teaching of reading. One of the more common approaches to daily reading instruction involves reading from a single text in heterogeneous-ability groups. When a text is chosen because the children in the lowest ability category are not able to read any higher level book the result is clearly a restriction in the opportunity to move ahead for the better readers. Supplementary reading on their own may permit the more able students to avoid stagnation; but, clearly, yoking the better readers to the performance levels of the poor readers represents a lack of concern for the ultimate outcome for already capable students. How will these children ever move from capable to excellent? Similarly, if the math curriculum is pegged to the achievement levels of the bottom quartile, what opportunity is there for the better students to master more difficult material? The results of the Third International Mathematics and Science Study confirm that the best performing American students in the 12th grade are at or near the bottom in comparison with the best students from the rest of the world. David Geary (1996) notes that our math courses are just too easy. We shouldn't be surprised. Our colleges of education and teachers don't see more capable students as being in need of advanced instruction.³

The problem may be much more than benign neglect. In her book, Democratic Education, Amy Gutmann, professor of politics at Princeton, follows John Rawls in outlining what is permissible in terms of individual differences. They are allowed only to the extent that they work to the ultimate advantage of the least well-off in our society. To devote time and resources to the further educational development of above average students is unfair unless the advantages these able learners ultimately accrue can be recycled back to the least capable in a way that boosts them up as high as they can go. This philosophy sees talented children from the perspective of a resource to be developed mostly for the reason that others can benefit from their achievements. The intrinsic worth and educational needs of these more capable individuals is clearly secondary to their value as generators of redistributable wealth. Implied in Gutmann's analysis is also the notion that larger individual differences in school achievement are inherently damaging to the self-esteem of those at the bottom of the achievement continuum--and also, more than coincidentally, damaging to the presumptions of egalitarianism. This is why able learners should not be allowed to rush too far ahead of the others and why Gutmann opposes tracking even though it might improve the academic achievement of students (p. 287).

Gutmann's analysis is mostly bluff. Her purpose seems to be that of providing a justification for the current educational proposals of liberal democrats and she never bothers to prove her assertions. Here is one example of her groundless pronouncements: "History suggests that without state provision or regulation of education, children will be taught neither mutual respect among persons nor rational deliberation among ways of life (p. 30-1)." Another is the equally incredible : "Children are no more the property of their parents than they are the property of the state" (p. 33). This is not the place to provide a lengthy critique of such notions; suffice it to say that such arguments are easier to defeat on rational grounds than to dislodge from the consensus position they occupy in colleges of education.

Gutmann's work is also notable for the primacy she gives to political education-- preparing future citizens for "political participation" in their society. By political education she seems to mean encouraging the beliefs that support egalitarianism and feminism; and by political participation she means taking the "democratic" (as defined by her) side in the political arena. She is particularly enthusiastic about turning out students who as adults will support busing and racial preferences. She recognizes academic achievement as an important outcome of schooling, but since academic outcomes always present themselves in the form of differences among students they have to be well managed in order not to interfere with the acquisition of the correct political values. This clear subordination of academics to "democratic values" among a significant segment of educational theorists today is another reason to wonder if academic reform is possible from within the educational establishment.

Preference for Social/Emotional Development Over Academics

Five items dealt with the issue of social/emotional development versus academic development. For each of these items the respondents indicated the strength of their agreement by circling one of the following options: Strongly agree (scored as 1), agree (scored as 2), neutral (scored as 3), disagree (scored as 4), and strongly disagree (scored as 5). Therefore, any score less than 4 indicates agreement or, at worst, no disagreement. The items themselves are listed below and the average scores for each group of respondents is given next to each item.

23. For social reasons, I think that a non-special education fourth grader who is reading at a second grade

reading level should nevertheless be passed to the fifth grade.

UT-ED	UT-LA	Hou-ED	Hou-LA
3.90	4.15	3.76	4.09

24. I think that the primary goal of education is to develop a collective sense of social responsibility and promote self-confidence.

UT-ED	UT-LA	Hou-ED	Hou-LA
2.38	2.73	2.68	2.69

50. I believe that it is more important for students to have high self-esteem and a good experience in school than to score well on achievement tests.

UT-ED	UT-LA	Hou-ED	Hou-LA
2.13	2.30	2.15	2.43

52. In designing a curriculum for elementary or secondary schools, if I had to choose between an emphasis on social and emotional development and an emphasis on knowledge growth I would choose social and emotional development.

UT-ED	UT-LA	Hou-ED	Hou-LA
2.62	2.93	2.67	3.02

54. I believe that reading, writing, and arithmetic are still the core of a good education.

UT-ED	UT-LA	Hou-ED	Hou-LA
2.43	2.27	2.13	1.93

With the exception of item 24, which fails our requirement of similar differences for both institutions, each of these items indicates the relative preference by education majors for social/emotional development over academics. It should be pointed out, however, that there is more agreement than disagreement between the groups of respondents. On item 23, all four groups were solidly on the side of not passing the 4th grader who could only read at the 2nd grade level. The liberal arts majors' average fell on the strongly disagree side of 4.0 whereas the education majors' average fell on the disagree side of 4.0. Similarly, on item 54 all four groups endorsed the 3Rs as the core of a good education. The liberal arts majors were slightly but consistently stronger in their endorsement than the education majors.

Bearing in mind that we designed our survey so as to compare groups of students that are very similar in many relevant attitudes and that had we included business and engineering majors among our control groups, the possibility of larger differences is quite real, we believe the small but consistent differences reported above are indicative of genuine differences in preferences for social/emotional development over academic development on the part of education majors in Texas. This is in agreement with the stated views of teachers already in the classroom. Recall from the Public Agenda survey presented earlier that only 11% of teachers pick "getting an excellent academic education" as the most important factor that could determine people's success in their jobs and careers. 83% of the teachers nationwide chose "being persistent and having inner drive" or "knowing how to deal with people well." Given these views, it is perhaps not at all surprising that academic considerations are given short shrift in today's schools.

But another possibility must be discussed at this point. Perhaps teachers and education majors are more in tune with the larger culture than those of us who want an increased emphasis on academics in school. According to Public Agenda, Americans are ambivalent about "too much education."

For many Americans, the term "highly educated" seems to have negative, rather than positive, connotations. Highly educated people are often seen as aloof, impractical, and perhaps a little "too big for their britches." Most Americans apply a very pragmatic gauge when they look at the value of knowledge. If they haven't used it in their own lives, and they don't understand its practical value for their children, they see it as "icing on the cake."

Both survey results and focus groups suggest that three different strands of thinking are intertwined when people voice reservations about their children becoming too highly educated. One is the extraordinary premium people place on the quality of well-roundedness. People want their children to succeed socially and academically, but some seem to see the proposition as a zero-sum game. Most people just don't want their children to be "nerds." Second is the common assumption that many highly educated people are so impractical and narrow in their thinking that they can't get anything done. And finally, there is the fear of elitism, a sense that too much education severs the highly educated from the rest of humanity and results in sheer snobbery ("Assignment Incomplete," Public Agenda, 1995).

These fears might be exacerbated when it comes to providing a higher level of education for rapid learners. Maybe the concern previously expressed about teachers not wanting to make individual differences larger by letting the more capable students race ahead of the other students is a concern of the general public rather than just an ideologically biased education college faculty and teacher corps. If this is true, and there are some indications that it is, the task of improving the environment for better learning in school is going to prove more difficult than initially envisioned.

Knowledge of Factors Influencing Academic Outcomes

The survey items designed to tap into knowledge of factors influencing educational outcomes were items 48, 64, 65, and 66:

48. Except for the five to ten percent of children with mental disabilities, all children are capable of performing at the higher skill levels:

Strongly agree (Scored 1)	Agree (Scored 2)	Neutral (Scored 3)	Disagree (Scored 4)	Strongly disagree (Scored 5)
------------------------------	---------------------	-----------------------	------------------------	---------------------------------

64. When children are not doing well in school the major problem is usually with (circle one):

Family	Student	Teachers	Society	School
--------	---------	----------	---------	--------

65. When children are doing well in school the credit usually belongs with (circle one):

Family	Student	Teachers	Society	School
--------	---------	----------	---------	--------

66. When teachers have difficulty getting good results from their students, the major reasons are (please limit yourself to three choices):

Poorly motivated students	Inadequate curriculum
Societal injustice	Inadequate budgets
Low school morale	Low teachers' salaries
Too much bureaucracy	Low standards for student performance

Poor teaching
Uncaring parents

Bad influences from peers
Low scholastic aptitudes of students

The results from question 48 revealed no consistent differences between education and liberal arts majors. At each institution the average score was about 2.5, indicating widespread ignorance of the true facts about individual differences in school achievement. Any knowledgeable person should have circled strongly disagree, or at least disagree, yielding an average score for an informed group of at least 4.0. There is no credible evidence that any group of randomly chosen public school children can be expected, under any combination of favorable circumstances, to all perform at the higher levels of academic performance. The only way to achieve this degree of outcome homogeneity would be to select out of the general population a group of academically talented children and send them all to the same school. It is nothing less than remarkable that our two groups of senior education majors do not recognize this most fundamental of all facts about educational outcomes.

The evidence for the potency and persistence of individual differences in educational outcomes derives primarily from the study of siblings. Living together from birth and sharing the same parents, socioeconomic conditions, neighborhoods, and schools through childhood provides as much standardization of the environment as is possible in a free society. Nevertheless, individual differences in academic outcomes among siblings remain roughly the size of differences found for unrelated individuals paired at random, the unrelated people providing an estimate of the maximal total variation in educational outcomes for the general population.

The reason siblings show such a small reduction in outcome differences when the environment is made as similar as possible is that environmental circumstances, by themselves, have very limited influences on educational outcomes. The reduction in variation achieved by looking only among siblings is obtained largely because biological siblings share, on average, 50% of their genes, and it is this genetic similarity among biological siblings that makes them less different in educational outcome. When this genetic similarity is nonexistent, as among adopted siblings, there is almost no accompanying reduction in outcome differences in academic achievement. Adopted siblings, in spite of considerable environmental similarity, end up as different from one another as people from the general population paired at random (Rowe 1994; (Willerman et al. 1977).

The evidence points strongly in the direction of important genetic influences on educational outcomes. The attempts made thus far to override these genetic potentials by manipulating environments and schooling have proven ineffective (Spitz 1986, 1992). For our education majors to be so unaware of this outcome research is as serious a condemnation of teacher education as can be leveled. The liberal arts majors have some excuse for their ignorance, these research results are not a part of what they study, but how can it be that education majors are equally out of touch with reality? The answer has to be that teachers' training programs systematically exclude such information from the curriculum (See also E. D. Hirsch, 1997). Purged of the facts regarding the importance of individual differences, teacher training programs are then free to nurture egalitarian delusions.

Items 64 and 65 tap into the ideas education majors have concerning the locus of educational success or failure. Here again there are no consistent differences across institutions between education and liberal arts majors. When it comes to blame for failure, the family is overwhelmingly seen as the culprit. Right at 60% of the respondents located the reasons for failure in the family with only 21% blaming the student. Society was seen as the source of the problem by 8% of the respondents whereas only 7% attributed failure to the teachers and a mere 4% thought the school was the problem.

When it comes to giving credit for the success of students, the results differ in interesting ways from locating blame for failure. The family is given less credit for success than it is blamed for failure. Only 38% of our respondents credited the family for success compared to the 60% who blamed it for failure. The other differences can be easily seen in the table below. Since there were no consistent differences by college major, the results for the education majors and liberal arts majors are combined.

67. When children are doing well in school the credit usually belongs with (circle one):

Family Student Teachers Society School

	Family	Students	Teachers	Society	School
Blame for Failure	60%	21%	7%	8%	4%
Credit for Success	38%	42%	17%	1%	3%

In some ways these results are compatible with what is known from other research. Student characteristics and family background are the more powerful predictors of educational success and failure with school and teacher variables lagging far behind, but it was shown in the Dallas study of "effective and ineffective" teachers that the teacher does matter. What seems less clear from a research perspective is why students and teachers should get more credit for success and families get more blame for failure.

One thing does seem certain from these data - both education and liberal arts majors see educational outcomes as determined primarily by factors outside the realm of teachers and schools. This is a correct view and not really incompatible with the results presented previously concerning the belief that all students are capable of performing at the higher levels. Seeing family and student characteristics as very important is a statement about existing individual differences and their current relationship to learning. Believing that all students could, under the right circumstances, perform at the higher levels, is a statement about the putative malleability of traits and the possible ease with which individual differences can be reduced. These are separate empirical questions and it is quite possible to be right about the former, but wrong about the latter. Indeed, this is just the profile presented by our respondents.

The final item relating to knowledge of factors that influence academic success was designed to get more specific than the previous items about possible explanations for failure. Item 66 offers the respondents 12 possible reasons for students being in difficulty and allows for the choice of 3 important contributing factors. Again, the education majors and liberal arts majors did not differ in their responses but the results are presented separately by major so that the reader can see just how similar the two sets of responses really are.

68. When teachers have difficulty getting good results from their students, the major reasons are (please limit yourself to three choices):

Poorly motivated students	Inadequate curriculum
Societal injustice	Inadequate budgets
Low school morale	Low teachers' salaries
Too much bureaucracy	Low standards for student performance
Poor teaching	Bad influences from peers
Uncaring parents	Low scholastic aptitudes of students

Total Number of Choices		
	Education Majors	Liberal Arts Majors
poorly motivated students	65	64
societal injustice	7	6
low school morale	5	11
too much bureaucracy	4	8
poor teaching	40	26

uncaring parents	55	56
inadequate curriculum	11	14
inadequate budgets	8	5
low teacher salaries	2	3
low standards for performance	21	30
bad influences from peers	27	30
low scholastic aptitudes of students	6	5
	251	258

These results clarify to a considerable degree what was meant by our respondents on the occasion in item 64 when they blamed students for school failure. They did not mean that the students lacked scholastic aptitude. Instead they meant low motivation. The fact that out of 509 total choices only 11 referred to low scholastic aptitudes of students indicates just how far we have gone in the college culture toward banishing scholastic aptitude as a permissible explanation for school failure. The explanation has to be in the college culture because the liberal arts majors, without influence from the education curriculum or teacher trainers, were just as likely to downplay aptitudes as education majors were. Of course, the facts about school failure are much the opposite of what these two groups of students believe. Nothing predicts school failure better than a measure of pre-school IQ.

The results from our survey are disappointing but not surprising. We were able to confirm that education majors show a bias in favor of poorer students when it comes to designing a curriculum and implementing a course of instruction. The resulting neglect of more able learners was acknowledged by the education majors, but the favoring of poorer students was endorsed nevertheless. The education majors were also slightly, but consistently, more in favor of an emphasis on social/emotional development over academics than were the liberal arts majors. It was noted however that this preference may be in accord with a general suspicion and distrust of well-educated people on the part of much of the general public in America. Finally, it was noted that there is not much appreciation on the part of either group of students for the true importance of individual differences in scholastic aptitudes. Variables that are the best predictors of academic success are not acknowledged as important, and unrealistic egalitarian views of potential for educational success are widely held.

These results force us to admit that any hopes for a great "awakening" on the part of the educational establishment and the general public to the true importance of abilities, rigorous standards and consequences for failure will be a long time in coming. However, there are trends that are encouraging--most of which are the result of non-educators insisting that things be done differently from the way educators would prefer. The takeover of the Chicago public schools by Mayor Daley is one instance in a growing trend toward the imposition of higher standards for educational success. Governor Bush's Texas Reading Initiative is another positive development. What remains unclear is if this trend can be sustained until we can finally use more than 8th, 9th, or 10th grade standards as criteria for high school graduation. Other trends are headed in the wrong direction. The abolition of honors programs and the widespread use of heterogeneous grouping has accelerated the neglect of able learners to the point that our very best students are now ranked at the bottom in international comparisons.

VI. Conclusions

Texas colleges of education have standards for admission to undergraduate teacher training that are too low. After admission, academically weak students are not screened out efficiently. These problems result in a steady stream of marginal teachers entering the teacher corps each year. These teachers can retard the academic development of their students.

Undergraduates in teacher training show evidence of preferences for poor students over able ones and for social/emotional development over academics. These future teachers also give little indication that they understand the important role that individual differences in ability play in educational outcomes. These

preferences and beliefs can undermine the academic component of a public school education.

International comparisons reveal that American 12th-grade students are near the bottom in tested knowledge of math and science. Texas students are a big part of the problem--only 24% of Texas students perform at or above grade level in the sciences.

Colleges of education and teacher training programs are part of the problem. The lack of response to the critiques offered by Lyons, Kramer, and others shows solutions will have to come from outside the educational establishment.

Recommendations

- All school districts should identify "inefficient" teachers. The Dallas Independent School District has demonstrated the negative consequences that follow from students being assigned to these teachers. If "inefficient" teachers cannot be remediated they should be released.
- The State Board of Educator Certification should begin research efforts to identify the characteristics of students and programs that predict later "inefficiency" in the classroom. Teacher trainees who are at high risk for later inefficiency should be barred from classroom teaching.
- Texas schools must have higher standards and more serious consequences for failure. Serious consideration should be given to the adoption of an 8th-grade exit examination that would ensure at least 7th-grade proficiency in core academic areas before entry into high school. The TAAS test for high school graduation should be increased in difficulty so that a passing grade can only be reached by demonstrating at least a 10th-grade level of proficiency in all subjects.
- Academically talented children in Texas are being neglected. All school districts should have programs for academic acceleration for the top 20% of each class. All students who so qualify should be allowed to take college courses and count them toward high school graduation requirements.
- The facts about what works in education are hard to come by. Colleges of education do not contribute much to the generation of accurate information. An independent body of scientists and citizens should be appointed in Texas to review and disseminate scientifically valid education research findings.
- School districts should become more selective in the teachers they hire. Teachers with low priorities for academics and/or low academic qualifications themselves should be considered marginal candidates.
- The level of difficulty of the exit exam in colleges of education should be increased and the results for each such college should be published.
- College of education graduates who intend to teach math or science should be required to take the advanced GRE (Graduate Record Examination) in those subjects.
- TAAS pass rates of public school students should be linked to the colleges of education their teachers attended.
- State funding of research in the colleges of education should be more greatly restricted to scientifically valid research. A key element of such research is the random assignment of subjects to experimental and control groups yielding replicable results.