



Commonwealth of Pennsylvania

STATE BOARD OF EDUCATION

REPORT OF THE PENNSYLVANIA STATE BOARD OF EDUCATION FINDINGS AND RECOMMENDATIONS BASED ON THE STUDY OF TEACHER PREPARATION, ASSESSMENT AND EMPLOYMENT

Prepared by the State Board of Education Study Liaison Committee
Helen S. Caffrey, Chair
Earl H. Horton
Karl R. Girton
January 14, 1998

Introduction

No factor in the improvement of teaching and learning is more important than the classroom teacher. New academic standards, curricular designs and delivery systems, instructional resources and technology can and will play their part in promoting quality in the classroom, however it is the teacher--and the skills and talents, attitudes and dispositions, and instructional strategies he or she brings to the job--who remains central to teaching and learning. Efforts should always be made to bring the highest quality individuals to teaching; however, the current "buyer's market" for teachers and the likely retirements of up to 60% of the current teaching force in the next decade create a great opportunity to bring teachers who are most able to promote student achievement into the classrooms of the Commonwealth.

The elements necessary to ensure that the highest quality, highest ability teachers are at work in our classrooms are many and varied. Similarly many parties are responsible for these elements: state policymakers establishing regulations governing the preparation process and determining acceptable levels of performance on assessments, college and university faculty designing programs and evaluating students' ability to meet the demands of teacher preparation programs, school boards and administrators responsible for hiring policies and practices, and for providing professional development programs.

Understanding the interrelations of these elements has led the Board to study carefully issues of teacher preparation, certification and professional development. In the spring of 1997 the Board had an opportunity to build on previous research and expand our knowledge of the elements necessary to ensure that the highest quality, highest ability teachers entered the Commonwealth's classrooms. A study was designed to look comprehensively at issues of preparation, certification and hiring processes and their relationship to student achievement. Major funding for the study was provided by the Vira A. Heinz Endowment, the Buhl Foundation and the Grable Family Foundation which supplemented the State School Fund of the State Board. Robert P. Strauss, professor at the H. John Heinz III School of Public Policy of the Carnegie-Mellon University was engaged to expand his earlier studies in the area. It was anticipated that the research study would enable the Board to engage policymakers, institutional leaders, school officials, and others in an ongoing discussion of policy options to improve teaching and learning.

Purpose and Methodology of Research Report

The research study was designed to assist the State Board of Education, the Department of Education, teacher-preparing institutions and boards of school directors in determining policies affecting the preparation, assessment and employment of newly-prepared teachers in the Commonwealth. The purpose of the research was to determine, based on careful research on assessment, preparation practices and employment practices, which policy options hold the greatest promise in assuring the quality of teachers and teaching and ultimately the achievement of students. By design, the research sought to document the veracity of widely held beliefs concerning teachers and teaching.

Research questions were developed in five areas:

Comparisons of Pennsylvania's teacher preparation and selection process with other comparable states .

Projections over the next ten years in the supply and demand for teachers .

Status of information and reporting on teacher employment.

Characteristics of hiring and employment patterns for teachers in the last ten years.

Nature of local school district employment process.

Sources of data for the study included certification records and test scores, school enrollment projections, reviews of other states' preparation and certification policies, and teacher retirement system demographics. A comprehensive survey of school district hiring policies and practices was conducted to which school officials responded in large numbers. Specific detail regarding the research questions, data sources and analytic design are found in the research report.

Interpreting the Results

An essential element in the design of the study has been the use of a review and reaction panel to discuss and deliberate findings emerging from research and the development and discussion of policy options for state, institutional and local action. A strategic review panel composed of representatives of the State Board of Education, the Pennsylvania Department of Education, the Professional Standards and Practices Commission, teachers and administrators, teacher preparation faculty and administrators, superintendents and school boards was convened to review the research and findings and to refine policy options. We are very thankful for the keen observations and insights of the members of the review panel.

Major Findings

The research report prepared by Dr. Robert P. Strauss and his associates at the H. John Heinz School of Public Policy provides a rich and detailed understanding of the factors associated with the quality of teaching and learning in the classroom . The research report will be available after final editing. Among the findings of the report, four broad areas have been chosen to highlight. These are: (1) the nature of the preparation and certification process; (2) the assessment of teachers and its relationship to student performance; (3) the need for greater understanding of the marketplace for teachers; and (4) the critical role of hiring policies and practices.

Nature of the Preparation and Certification Process

There is an abundance of colleges and universities preparing teachers in Pennsylvania: Ninety-one institutions have one or more programs approved to prepare teachers--only New York with 103 institutions has more. The size and range of offerings varies greatly from over 2,000 students in a comprehensive set of programs at the larger institutions to less than 20 students in one or two programs at the smallest. Member institutions of the State System of Higher Education graduate almost half of the teachers prepared in the state in a given year. While all programs must comply with standards established by the Pennsylvania Department of Education, there is a great variety in the ways in which colleges and universities structure their programs. Currently, the standards which programs must meet for continuing approval focus on inputs, processes and procedures rather than demonstrated success. Results of NTE (Praxis) tests across the institutions suggests that where some are very successful in preparing students to succeed on these measures of basic competence for teaching, others continue to be less successful. Available output measures such as these have not yet been incorporated in the approval process.

The grant of certification from the Commonwealth to teacher candidates is largely based upon two factors: successful completion of an approved program and satisfactory scores on the NTE (Praxis). Understanding that, to ensure that only the most able candidates become certified, great rigor in both the preparation program and the tests is necessary. Reviewing program standards in other states and acceptable minimum test scores, this research finds that neither element is particularly rigorous in Pennsylvania; that is, other states have more stringent program standards, including disciplinary majors, higher entry criteria and higher thresholds of achievement necessary to pass teacher exams.

Assessment of Teachers and Relationship to Student Performance

That the quality of teachers is linked to the performance of students in their classrooms is so obvious as to often be forgotten. Research documents the relationship between the quality of teachers and the performance of students and should be the focus of renewed conversations about the importance of hiring the best teachers for our classrooms. Some may contend that this relationship fails to take into account other less measurable skills and qualities necessary for teaching success since it is based largely on the NTE as the measure of quality and on a limited number of student achievement test results. To be sure, other measures of teacher quality and student achievement should be explored to enrich our understanding of what factors about teachers and teaching are most highly related to student achievement so they might also be used in the preparation, certification and hiring process. We should explore greater use of performance assessment in pre-service preparation and as an important element in the granting of certification.

Greater Understanding of the Marketplace for Teachers

Pennsylvania colleges and universities produce a large number of teachers. This research finds that there is great competition for nearly every vacancy created in a year. In surveying local districts, the researchers found some school districts swamped with hundreds of applicants for openings in certain disciplines even as other disciplines had few applicants. While we understand that many private institutions attract students who intend to return to teach in their home state, that many Pennsylvania students are looking for employment as teachers in other states, and that many certified teachers seek employment in related fields outside of teaching, we are convinced that too many newly-prepared teachers have little chance of being hired in a market saturated with new teachers.

We are concerned that many national studies and reports of them in the popular press create a belief that teacher shortages are occurring everywhere. Looking across the states and regions we find pockets of shortages, but in states like Pennsylvania, there are no widespread shortages nor are ones likely to occur in the next decade. Students deserve to be fully informed on market conditions when they enter preparation programs and when they are close to entering the job market.

Critical Role of Hiring Policies and Practices

Screening and hiring applicants for teaching positions remains a local responsibility. Decisions about hiring should be made closest to the classroom and the students to be educated. The research finds that policies and practices at the local level, however, are not working to take full advantage of the current market for teachers. Without interference, an oversupply of teachers in the labor market should result in more able teachers being hired. There is little evidence that such is occurring. Looking at the NTE (Praxis) test scores of those hired does not demonstrate that the highest ability teachers are being selected, and in many cases, lower ability teachers (as measured by the NTE) are hired in districts. We are beginning to understand there is a pattern in teacher hiring: newly certified teachers return home where living expenses are frequently subsidized by parents and relatives, seek substitute appointments in their home or neighboring districts until a full-time position opens. Such substitutes, familiar to district officials, are often selected despite hundreds of other applicants. Where current conditions permit schools to choose from the best, it appears that propinquity and individual tenacity may be more valued than quality. This pattern does not mean that highly able teachers are not selected; it simply suggests that the choice of the high quality teacher may be serendipitous.

Specific findings about hiring in local districts also concerns us: half of districts participating in the survey do not have formal hiring policies. Screening and interview processes are very uneven across the Commonwealth, and the professional staff of schools frequently represents little diversity in terms of geography or preparing institutions.

There is a strong message in the fact that school districts employing more rigorous screening processes are hiring more able teachers as measured by the NTE (Praxis). Research conducted by others cites the same phenomenon.

Initial Recommendations for Action

The following recommendations are made after careful review of the research study, other current research, and detailed discussions with the members of the Strategic Review Panel. We have and will continue to encourage those parties responsible for preparing and hiring teachers as well as those responsible for developing the rules under which this occurs, to commit to action. To those parties who have a stake in preparing, certifying and employing teachers, we offer the following initial recommendations:

Teacher Preparing Institutions

In order to ensure that all candidates applying for certification have mastered basic skills, have frequent and meaningful involvement in the teaching process and, are educated and supervised by knowledgeable faculty, it is recommended that teacher preparing institutions:

1. require students applying for entry to the institution's teacher preparation programs successfully complete the basic skills and general knowledge portions of the NTE (Praxis).
2. require students applying for entry to the institution's teacher preparation programs to successfully complete at least six credits each in mathematics and English content areas courses or their equivalent in Advanced Placement courses.
3. Engage in substantial supervision of teacher candidates (especially during the teaching practicum) in all field work and practice teaching experiences.
4. Establish meaningful frequent and comprehensive collaboration between collegiate faculty engaged in preparing teachers and school faculty with local schools. The purpose of this collaboration is to ensure that college faculty are familiar with current conditions, opportunities and challenges of teaching and that school faculty have access to research and scholarship to improve their craft.

Pennsylvania Department of Education

To raise standards for preparation and certification and to improve the quality of information on the job market for teachers, it is recommended that the Pennsylvania Department of Education:

1. Require institutions of higher education as a condition of program approval to have all teacher candidates major in a content area.
2. Selectively raise the current passing score for the NTE (Praxis) exam.
3. Conduct and publish annual detailed supply and demand studies for teachers by field of preparation and geographic region of the Commonwealth.
4. Provide a detailed report of student retention and certification rates for teacher candidates.
5. Gather data on postgraduate placement from teacher preparation institutions and report on employment rates for teacher candidates: within teaching, in careers outside of teaching, and in out-of-state employment.
6. Revise standards for program approval to ensure that teacher candidates have sufficient knowledge and practice to teach effectively in classrooms presenting a range of student ability and exceptionality.

School Boards and Administrators

In order to ensure that screening and selection processes for teachers yield the most able teacher hires, it is recommended that school boards and administrators:

1. Establish or revise hiring policies designed to identify high quality candidates with the greatest potential to promote student achievement.
2. Study carefully hiring practices which may serve to advantage the most familiar candidates (substitutes, district graduates, and candidates prepared where the majority of existing teachers were educated) to determine if such practices promote the best quality in the teaching force linked to student achievement.

State Board of Education

In order to ensure that the quality of teachers continue to improve and that discussions and conversations regarding teacher preparation, assessment and hiring continue, it is recommended that the State Board of Education:

1. Review current requirements for program approval and certification to determine if changes are necessary to ensure the most able candidates are granted certification.
2. Ensure integration of emerging academic standards for K-12 education with preparation standards for teachers.
3. With the Department of Education, continue to review requirements for performance assessment throughout preparation and certification to ensure that demonstrated excellence in teaching is necessary for certification.
4. Work with educational organization to engage in a variety of strategies to continue discussions, at both the state and local levels, based on this study and others designed to raise awareness and understanding of the factors related to quality teaching and learning.

Next Steps

This summary, the research report and further recommendations should form the basis of continued review of and discussion of the quality of teachers and teaching in Pennsylvania. During the discussions of the research study by the Strategic Review Panel, commitments were made by a number of parties to work with their colleagues to understand the findings and their implications for policy and practice. We are hopeful that a number of those discussions and further commitments will occur this spring.

In addition, we encourage all parties who review this research to define area of further research which will add to our understanding of teacher quality and student achievement. In particular two areas for further research emerged in our discussions with the Strategic Review Panel. These are:

1. A study of the SAT scores of students accepted to teacher preparation programs, those not and the SAT scores generally of students at the host institution. Evidence is beginning to suggest that SAT scores are increasing for teacher candidates. An understanding of this in Pennsylvania would help our understanding of teacher quality.
2. A study of the credentials of the available pool of candidates for teaching positions. We know (through this study and others) the credentials of those hired, but we do not know empirically the credentials of those in the applicant pool who were not hired.

Conclusion

Continuing study of important issues such as the design of teacher preparation, teaching experience prior to certification, performance assessment and employment practices are necessary if policymakers and decision-makers at all levels will be able to make informed choices to promote the quality of teaching and learning in the classroom and ultimately improve the level of student achievement. Too often, past experience, personal anecdote and conventional wisdom drive our choices rather than empirical evidence. We are pleased that the Board, Pennsylvania foundations, Dr. Strauss and his associates at Carnegie Mellon University, and hundreds of educators collaborated to produce important research that can focus our discussions and decisions.