THE SOUTHEAST CENTER FOR TEACHING QUALITY

Teaching Quality RESEARCH MATTERS

Issue 4 • April 2003

Teacher Quality, Turnover, and Student Achievement in Alabama

The Public Affairs Research Council of Alabama (PARCA), a non-profit, non-partisan organization at Samford University, has produced a series of reports over the past three years tracking new teacher evaluations, teacher turnover, and student achievement across the state.

On behalf of the Governor's Task Force on Teaching Quality, PARCA researchers followed all new teachers hired in 1998-99 for three years, tracking teacher mobility and evaluation and connections to student achievement. The state's Professional Education Personnel Evaluation (PEPE), a performance-based evaluation system launched in 1997-98, uses multiple measures to rate teaching and highlight specific areas for improvement for each teacher for the first three years (less often for tenured teachers).

Results reviewed below are culled from four separate reports that, taken together, present a powerful set of understandings about the evolving profession in Alabama.

Novice teacher evaluations in 1999[1]

- Of Alabama's new teachers in 1999, 55% possessed K-6 certification. About 50% of all new teachers were teaching in early childhood grades, and most new secondary teachers taught social studies or language arts. Most new teachers (96%) were graduates of Alabama teacher education programs.
- PEPE rates teachers on a scale of 1 to 4 on eight competencies (planning, delivery of instruction, student assessment, classroom management, positive climate, communication, professional development/leadership, and professional responsibility). In 1999, new teachers were rated highest on exhibiting professionalism (3.26) and lowest on observed use of assessment results (2.96). Only 7% of new teachers received the highest rating (4) for use of assessment. The most scores of 2 were in orienting students to the lesson and managing student behavior (12% each). Clear communication and subject matter knowledge were also rated among the highest.
- Novice teachers in schools with low Stanford Achievement Test scores were more likely to have low PEPE scores in several areas: goals and strategies, orienting students to the lesson, providing practice and summarization, measuring student progress and using achievement results, managing student behavior, communicating high expectations, and positive affect.

First-Year Teacher Turnover in 2000[2]

- Of the 1,939 teachers who began in 1998-99, 1,739 (90%) were still teaching in Alabama public schools in 1999-2000, representing a 10% first year turnover rate. (The data system cannot determine whether or not these teachers are teaching in other states or have left the profession altogether.)
- Turnover rates of early childhood and elementary certified teachers were lower than those of middle and high school teachers. Only 7% of the state's early childhood teachers left teaching in the state while 19% of the state's middle school teachers left teaching.
- Math teachers had the highest one-year turnover rate of any subject area—with 17% leaving. Special education novices followed closely at 14% turnover.
- Teachers who returned for a second year scored higher in every competency area of the PEPE than those who left after one year. Classroom management scores diverged most dramatically, with a 10% difference, compared to 5% gap in most other areas.

Second-Year Turnover in 2001[3]

- Of the 1,939 teachers who began in 1998-99, 1,606 (83%) were still teaching in Alabama public schools in 2000-2001.
- After two years, early childhood and elementary certified teachers still had the lowest overall turnover rates, 17% and 18%, respectively. Secondary teachers turned over at a rate of 19%.
- Teachers assigned to science, physical education, special education, foreign language and math all had turned over at least 20% after two years.
- The direct relationship between teachers scoring high on PEPE and then continuing teaching for two years became even clearer in this analysis. Remaining teachers in 2001 scored 11% higher on classroom management in the first year than teachers who left the classroom at that point. Second-year teachers scored much higher than both sets of leavers in preparation, presentation, assessment, and positive learning climate—suggesting the importance of learning how to teach as a key predictor of teacher retention. (See also Ingersoll's analysis of national data for more evidence of this relationship.*)
- Overall, teachers fared better on the 2001 PEPE (compared to the previous year). However, while teachers' performance improved in the area of classroom management, their scores in the area of student assessment were still their lowest. This finding suggests that universities need to tend much more to this matter in teacher preparation.

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Faculty Stability as Potential for Teamwork[4]

- Short and long-term faculty stability and school size were combined into an index of potential for teacher teamwork by creating a score on these factors, ranging from 1-12. Schools scoring 12 were the most stable, with the fewest new teachers hired over five years and the smallest schools. Fewer points were awarded to schools with relatively higher turnover and larger size.
- When controlled for socio-economic influences, schools with fewer new teachers, less turnover, or smaller size were more likely to achieve expected student test scores. When combined (i.e., a high index), schools had the highest student test scores.
- Alabama schools with the highest teamwork potential met expectations for performance in 69% of grade levels in 2001. Schools with the lowest potential index met expectations for performance in 38% of the grade levels.

Methods, Issues, and Implications of the complete research line

- Alabama's PEPE instrument serves as a valid predictor of educator success and quality control, given that the lowest scorers are those who leave teaching. The instrument also allows teachers and administrators to target support for those eager to improve.
- Knowing that classroom management and student assessment are such common concerns and weaknesses of new teachers should motivate universities and school districts to shore up preparation and support in these areas.
- The authors suggest that team-based professional activity, such as the Alabama Reading Initiative, serves as an ideal model to encourage teachers in close and stable school conditions to work together toward common goals.
- PARCA plans to post graphic data for all Alabama schools on the web with annual updates. Extensive tabular data available from the set of studies are valuable to district, higher education, and state stakeholders interested in improving teacher quality. This illustrates the kind of data the Center is working to assemble regionally through its Teaching Quality Indicators Project.

[1]State of Alabama Governor's Task Force on Teacher Quality. (2000, June 30). *Report on 1999 Professional Education Personnel Evaluation (PEPE) scores for novice teachers*. Available: http://parca.samford.edu/PEPEpage1.html

[2]State of Alabama Governor's Commission on Teacher Quailty. (2001, October 24). *Turnover among 1999 novice teachers after one year of teaching.* Available: http://parca.samford.edu/Turnover%20Among%201999%20Novice%20Teachers.htm

[3]State of Alabama Governor's Commission on Teacher Quailty. (2002, May 2). *Teaching performance and turnover, 1999-2001, among novice teachers hired in 1999*. Available: http://parca.samford.edu/P%20and%20T%201999%20Novices.htm

[4]Public Affairs Research Council of Alabama. (2002, December). *The payoff from faculty teamwork: Student performance is higher in Alabama schools with a stable faculty and moderate size.* A Report prepared for the Governor's task force on teacher quality. Available: http://parca.samford.edu/Payoff%20from%20Faculty%20Teamwork.htm

*Ingersoll, R. (2003, January). Teacher preparation reduces attrition of first year teachers 2000-01. In National Commission on Teaching and America's Future, *No dream denied: A pledge to America's children* (Figure 6). Washington D.C.: Author. Available: http://www.nctaf.org

Emergency Permit Teachers in California

California schools with higher proportions of emergency permit (EP) teachers were more likely to have lower test scores in 1999-2000.

Key Findings

- California schools with the lowest student performance averaged 23% EP teachers, while highest-performing schools had only 5%.
- Urban schools employed 14.6% EP teachers, compared with 7% in rural areas or small towns and 11.5% statewide. These EP teachers are more likely to teach in high-minority and high-poverty schools and those serving more English Language Learners.
- EP teachers are more likely to teach at the middle school level, which also has higher teacher turnover rates (compared to teachers in elementary and high schools).
- Using multiple regression techniques, the factors predicting low test scores were, in order of descending impact: percentage of free and reduced lunch, percentage of Latino students, percentage of parents without a high school diploma, school size, percentage of African American students, percentage of EP teachers, and percentage of first year teachers.

Methods, Issues, and Implications

- EP teachers generally have bachelor's degrees in content, but no teacher preparation, student teaching, or teaching experience.
- EP teachers are more likely than fully certified teachers to be minorities. This is an important point, since the state's public school students are increasingly minority. Minority teachers might also be more likely to teach and remain in high-minority schools.
- Increasing demand for teachers has cut short EP's preparation before they enter the classroom. State policy actually encourages the EP teachers to begin teaching before they are fully prepared. (See RM Issue 1 for the connection to teacher distribution).
- The author suggests a state policy focus on preparing and retaining EP teachers, as well as redistributing credentialed teachers to serve in more high-need schools. Financial incentives connected to mentoring EP's are one possibility.

Goe, L. (2002, October 14). Legislating equity: The distribution of emergency permit teachers in California. *Education Policy Analysis Archives, 10*(42). Available: http://epaa.asu.edu/epaa/v10n42/

The purpose of *RESEARCH MATTERS* is to summarize and evaluate the most recent research for our partners who are working to improve teaching policy in their states and school districts. To surface the most significant new information from educational researchers, we review studies reported in peer-review journals, conference papers, government reports, commissioned reports or books, and public opinion polls. • In education, as in many other scientifically based disciplines, no one study or method of inquiry can capture the whole truth; therefore, we review a wide range of studies employing a variety of qualitative and quantitative methods. We would argue that while no one study can answer all questions, we can recommend policy action by piecing together evidence from an array of studies, all with particular strengths and weaknesses. • To subscribe, send email to ResearchMatters-on@teachingquality.org. To unsubscribe, send email to ResearchMatters-off@teachingquality.org. Alternatively, you can join or leave the list at www.milepost1.com/archives/researchmatters.html. Archives of RESEARCH MATTERS can be found at www.milepost1.com/archives/researchmatters.html. • If you have any questions, comments, or problems, send email to Contact_ResearchMatters@teachingquality.org or visit the Center's website at www.teachingquality.org. • *RESEARCH MATTERS* is a publication of the Southeast Center for Teaching Quality. •