

# background

Report # 66

Pennsylvania's Teacher Supply

July 2004

## The State Of Pennsylvania's Teachers

# Enough Good Teachers?

*Spot shortages, recent trends raise concern*

**A**t first glance, the supply of qualified teachers to fill Pennsylvania classrooms does not appear to be a concern, as it is in several other fast-growing states. But spot shortages, new and tougher education standards and other trends suggest deeper problems on the horizon.

Pennsylvania is already experiencing a shortage of good higher mathematics, science, and minority teachers, and more than half of all teachers leave the profession after five years in the classroom, according to a study of the quality and availability of Pennsylvania teachers done by The Education Policy and Leadership Center (EPLC).

The qualifications of teachers is increasingly an important issue.

Quality teaching is perhaps the most necessary ingredient of student academic achievement. Studies suggest, for example, that teacher quality outweighs other school variables when it comes to student performance and that having high quality teachers can close the achievement gap between disadvantaged and non-disadvantaged students.

The No Child Left Behind (NCLB) Act, which sets academic performance standards for students across the nation, also mandates that all teachers be "highly qualified" by 2006. They must be fully certified. Grade school teachers must hold at least a bachelor's degree and pass a test of reading, writing, math, and other basic parts of elementary curricula. Middle and high school teachers must have a bachelor's degree and pass a core content area test or an academic major or equivalent coursework.

In 2003, the Education Policy and Leadership Center (EPLC) examined teacher quality issues, state policy, the increasing role of the federal government in shaping state policy, and the availability of qualified teachers in Pennsylvania. The review included surveying school superintendents and the education deans of the teacher preparation institutions, and concluded with a series of policy recommendations.

### Shortages By Subject

The EPLC reported that Pennsylvania is already experiencing shortages in teachers of physics, chemistry, biology, general science, world languages, special education, technology education or industrial arts, and mathematics, especially higher level math courses.

About 16% of the superintendents who responded to a EPLC survey report an insufficient number of candidates for hard-to-fill positions. Another 39% said there are not enough quality candidates

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*Strong evidence suggests that when attempting to raise student performance, nothing is more important than a quality teacher in the classroom .*

See Report 65

for those subjects.

### Certificates Down

The number of teaching certificates are down in all subjects superintendents say are hard to fill. World language certificates fell 33% from 1996-1997 to 2001-2002, and physics certificates fell 31%. Of all of the hard-to-fill subjects, only biology certificates increased over the past five years – but by less than 1%.

Another concern is a high rate of turnover among teachers in Pennsylvania who teach hard-to-fill positions such as biology and chemistry. The rate at which biology teachers and chemistry teachers left their districts increased 45% between 1997-1998 and 2001-2002.

### Few Minority Teachers

Racial and ethnic minorities are under-represented in public school classrooms across Pennsylvania, accounting

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for only about 6% of teachers in 2001-2002. In contrast, minorities account for 21.6% of all public school students and 15.8% of the state's general population.

Only about 5% of Pennsylvania's public school teachers are African American, .7% are Hispanic, and only .3% are Asian.

**Shortages In City Schools**

Urban school district, in particular, have difficulty hiring and keeping quality teachers. Evidence of the problem is reflected in the fact that in 2001-2002, half of the 5,174 emergency permits needed to fill vacant full-time positions were issued in the Philadelphia School District. Another 20% of emergency permits to fill full-time positions were in six other urban districts in the state.

**Emergency Permits Rise**

Urban schools are not alone. Pennsylvania schools were issued a total of 16,800 emergency permits during the 2001-2002 school year.

More than half of the permits were for day-to-day substitute positions – evidence of how difficult it is to find certified substitute teachers. The 5,174 emergency permits to fill full-time positions in 2001-2002 is a 350% increase over the 1,141 issued in 1999-2001.

**Exporting Teachers**

The pool of teachers certified by Pennsylvania's colleges and universities exceeds hiring demands. Each year, more teachers are certified in Pennsylvania than are hired by the state public schools.

Lately, Pennsylvania has been a net exporter of teachers with graduates going to Virginia, North Carolina, South Carolina, Texas, and other states. Recruiting pressure is likely to increase with demands that all classrooms are staffed with highly qualified teachers.

**Regional Imbalance**

Deans of education programs report that many graduates of teacher preparation programs who do not enter the profession decide they do not want to relocate where the jobs are, which is largely in urban districts. Such preferences contribute to teacher shortages in urban districts, particularly Philadelphia, York, Harrisburg, and Reading.

**Turnover Is High**

Teacher turnover is also high. Although Pennsylvania's 13% turnover rate is less than the national average of 16%, one-third of new teachers in Pennsylvania leave the profession within three years and half of them leave within five years.

National studies suggest they leave for reasons that include poor salaries, lack of administrative support, lack of student discipline, and poor student motivation.

**Addressing Shortages**

As part of the report, EPLC offers several suggestions for easing spot shortages and avoiding deeper problems in future years. Specifics of recommen-

dations are found in EPLC's report, *Head of the Class: A Quality Teacher In Every Pennsylvania Classroom*.

In general, EPLC recommends improving the state's ability to attract and retain high quality teachers by taking steps to recognize and value the profession, including modifying district planning requirements so that a teacher retention, support, and leadership development plan is part of each district's strategic plan, and reconsidering the raising the School Code minimum teacher salary, which sits at \$18,500 per year.

EPLC suggests policymakers explore ways to reinforce existing quality initiatives and to monitor their progress to ensure that the desired results are achieved without significant unintended consequences. Other recommendations include steps to ease specific staffing problems, such as a targeted teacher recruitment program focused on districts having trouble filling positions and relaxed restrictions on using retired teachers willing to return to the classroom.

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## references

*This report is based on the following publications:*

*Head of the Class: A Quality Teacher In Every Pennsylvania Classroom, The Education Policy and Leadership Center Teacher Quality and Supply Project.* Harrisburg, PA: The Education Policy and Leadership Center. 2003. (Available online at [www.eplc.org/teacherquality.html](http://www.eplc.org/teacherquality.html))

*References noted in the text follow:*

<sup>1</sup> Based on data from *Status Report on Pennsylvania's Level I Teachers*. Harrisburg, PA: Pennsylvania Department of Education. 2001 and 2002.

<sup>2</sup> Based on data from *Status Report on Pennsylvania's Level I Teachers*. Harrisburg, PA: Pennsylvania Department of Education. 2002.

<sup>3</sup> Ibid.

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