This report examines the serious and worsening problems of teacher staffing in the Philadelphia School District. Staff turnovers are high, teaching applications are down, and reliance on emergency certified teachers is up. Barriers to attracting and keeping good teachers include low salaries, more stringent state certification requirements, and intense national competition for new teacher graduates. High schools are experiencing higher teacher turnover rates than before, and the proportion of uncertified high school teachers is rising. Shortages of certified high school teachers vary by subject area. Deteriorating staffing patterns hurt low-income students the most. Middle schools have the most serious teacher staffing problem. The percentage of uncertified middle school teachers has grown significantly, particularly at high poverty schools. Philadelphia's teacher residency policy is a barrier to the recruitment and retention of teachers, as it requires newly hired teachers to move into the city within three years. Teachers are more likely to stay in schools that have active principals with strong interpersonal and organizational skills and a management style that is respectful of teachers' skills and personal lives. The district has taken many steps to improve conditions, some of which are an aggressive teacher recruitment campaign, various bonuses, and an enhanced compensation system for more rapid salary advancement. (SM)
TEACHER STAFFING IN THE
SCHOOL DISTRICT OF
PHILADELPHIA

A Report to the Community

Philadelphia Education Fund

May 2001

This report is funded by a grant to the Philadelphia Education Fund from the Public Education Network, Washington, DC, as part of its national Teacher Quality Initiative, supported by a grant from the U.S. Department of Education, Office of Educational Research and Improvement.
Philadelphia has a serious and worsening teacher staffing problem.

Consider the following:

- Staff turnover is becoming unacceptably high in most schools. Retirements, resignations, and transfers are leading to distressingly high levels of turnover in the District’s schools, particularly in those serving mostly low-income children. For example, in the 6 highest-poverty middle schools, 46 percent of the teachers in 1999-2000 were new to their school in the last two years. Even in the 11 lowest-poverty middle schools, that figure was 34 percent.

- Some classes have no permanent teachers. At any given time during the school year, between 100 and 250 teaching vacancies exist across the District. Children in classes with vacancies are usually taught by substitute teachers or by a set of rotating teachers who are “covering” the class during their assigned preparation period. Substitutes are not available in most high-poverty schools.

- Teaching applications are down. As of May 2001, the number of applicants for teaching positions in Philadelphia’s public schools had dropped significantly compared to the previous year. At the same time, approximately 650 veteran teachers were eligible for retirement.

- Reliance on emergency-certified teachers is up. The School District of Philadelphia typically hires between 800 and 1200 new teachers each year. One fourth of the teachers hired for the 2000-2001 school year were emergency-certified Apprentices, meaning they have graduated from college but have no formal preparation for teaching. The percentage of such teachers making up the teaching workforce in middle and high schools (the school levels for which we have data in this report), increased significantly between the 1997-1998 and 1999-2000 school years.

- Key specialty areas have been especially hard hit. Shortages are most dire in bilingual education, special education, mathematics, science, and Spanish. The percentage of high school science teachers who were emergency certified, for example, rose from 14 percent to 22 percent between 1997-1998 and 1999-2000.

“Of all the problems confronting urban schools—poverty, violence, high drop-out rates, students who don’t speak English, unqualified teachers, dilapidated buildings, and a lack of resources and textbooks—the shortage of qualified teachers may be the most damaging to students.”

Wendy D. Puriefoy, President, Public Education Network
Many factors create barriers to attracting and keeping good teachers.

A teacher shortage exists across the country. Pennsylvania, however, produces a surplus of teachers, and many school districts across the state do not suffer a teacher shortage except in certain subject areas. Philadelphia is different from the rest of the state. It has special conditions that discourage teachers from applying to and staying in its public schools. At the same time, certain factors attract teachers to the city.

New conditions are reducing the supply of teachers for Philadelphia.

At a time when more demanding state and District requirements for promotion and graduation for students are being put into place, multiple factors are operating to decrease the supply of new teachers for the city and to reduce the District’s ability to hold on to its experienced teachers.

- **A mounting salary gap between the city’s teachers and those in surrounding suburbs.** On average, suburban Philadelphia teachers’ starting salaries are more than $3000 higher than those offered in the city, and for veteran teachers with Bachelor’s degrees, the gap in maximum salaries approaches $10,000. This gap has widened in recent years.

- **Intense national competition for new teacher graduates.** Recruiters from other states actively court new graduates from Pennsylvania’s teacher education programs. Districts in many other states offer a package of generous financial incentives, including tuition reimbursement for graduate work; a rapid hiring process; and other supports, such as help with housing, to ease relocation.

- **More stringent state certification requirements for teachers.** Beginning in 2000, Pennsylvania began strengthening requirements for entry into and exit from teacher certification programs, a move that will ultimately provide more qualified teachers but that will, in the short run, shrink the numbers of newly trained teachers. Local colleges and universities that supply the greatest number of new recruits to Philadelphia estimate the number of newly minted teachers could drop by as much as a third as a result of these new requirements.

- **A metropolitan workforce that is no longer concentrated in the city.** Philadelphia has lost jobs and residents while employment and population levels in the suburbs have grown dramatically. Data from the 2000 U.S. census show that 70 percent of the area’s population lives outside the city. The regionalization of the job market and residence patterns make teachers less inclined to live and work in the city. The District’s residency requirement thus makes less sense today than it did when it was enacted in 1983.

- **A mindset among young professionals to look for better opportunities rather than staying with one employer their entire careers.** Young college graduates do not expect to stay in the same job for decades. They have a roving eye for positions with better pay, benefits, and working conditions. Philadelphia can no longer count on a workforce that will “stay forever.” This mindset increases turnover among young teachers in the District.
High school faculties are experiencing higher turnover . . .

Philadelphia's high school teaching staffs have typically had low rates of teacher turnover but many teachers in these schools are now retiring, transferring, or resigning. Schools serving the poorest students have the highest mobility. More than two fifths of the teachers (41 percent) in the highest-poverty high schools during 1999-2000 were new to the school within the previous two years compared to 31 percent at the lowest-poverty schools.

Staff turnover in high schools, by low-income quartile:
proportion of staff new to the school

... and the proportion of uncertified teachers is rising.

The percentage of uncertified high school teachers is on the increase, rising from 5 percent in 1997-1998 to 9 percent in 1999-2000. Only 5 percent of the teachers in the low-poverty schools are uncertified versus 10-11 percent in the higher-poverty schools.

Proportion of uncertified high school teachers,
by low-income quartile
Shortages of certified high school teachers vary by subject area.

Teacher certification patterns at the high school level vary substantially by academic subject areas. In the District data analyzed for this report, teachers were categorized in one of three ways: 1) as "certified," meaning they have any certification, not necessarily a certification to teach that particular area; 2) "not certified" to teach, i.e. emergency certified or long-term substitute; or 3) or "unclear," meaning that their status could not be determined from the available data.

- Overall, as of 1999-2000, foreign language and science teachers were least likely of the core academic teachers to be certified, with not quite 80 percent having a teaching certificate. Math teachers were a little more likely to be certified than science or foreign language teachers.

- In English and Social Studies, certification levels were quite high over the three years (more than 90 percent certified) and differences between high- and low-poverty schools in these easily staffed fields were not large.

- Mathematics suggests another pattern, starting out with relatively high certification levels in 1997-1998 (above 90 percent certified at both high- and low-poverty schools). Two years later, the proportion of certified math teachers dropped overall from 95 percent to 86 percent, with the decrease being much more pronounced in the high-poverty schools.

- Science represents a third pattern, with substantial differences between the highest- and lowest-poverty high schools already existing in 1997-1998. The percent certified dropped from 85 percent to 77 percent over that period, and the gap between the lowest- and highest-poverty schools widened.

- Foreign language is similar to science in that substantial differences between the highest- and lowest-poverty schools already existed in 1997-1998. By 1999-2000, the percent certified declined from 86 percent to 78 percent with differences among school types remaining about the same.

Proportion of certified high school teachers, by subject area, 1999-2000

![Bar chart showing proportion of certified high school teachers by subject area, 1999-2000.](chart.png)
Deteriorating staffing patterns hurt low-income students the most.

By any measure, whether it is teachers’ certification status, degree of school staff turnover, or years of teaching experience, students in higher poverty schools get less-qualified teachers than their counterparts in schools with more advantaged students.

<table>
<thead>
<tr>
<th>9 Highest-poverty high schools</th>
<th>10 Lowest-poverty high schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>(82.2 - 90.7% low income)</td>
<td>(42.5 - 60.6% low income)</td>
</tr>
</tbody>
</table>

- **Percent of teachers not certified:**
  - Foreign language: 27%
  - Mathematics: 17%
  - Science: 27%
  - Teachers average 13 years of experience

- **Percent of teachers not certified:**
  - Foreign language: 16%
  - Mathematics: 7%
  - Science: 8%
  - Teachers average 24 years of experience

- 41% of staff new in last 2 years
- 31% of staff new in last 2 years
Middle schools have the most serious teacher staffing problem.

Philadelphia's 43 middle schools have higher teacher turnover than other school types, contributing to a greater feeling of instability and turmoil. The District's 47 K-8 schools have an easier time attracting and retaining teachers.

Teachers in middle schools are more likely than teachers in other school types to:

- Be dissatisfied with their teaching placement. Most new middle school teachers want to be with younger children, and most have student taught in the lower grades. Only about 10 percent of the new teachers assigned to Philadelphia's middle schools prefer to be teaching young adolescents.

- Lack deep subject-area expertise since they are certified only for the elementary grades (K-6).

- Transfer out of their school to another school level, usually to an elementary school, creating staff instability. In recent years, new teachers have made up more than 20 percent of the teaching staff in 10-12 middle schools each year.

- Rotate among subject areas from year to year, thereby undercutting the growth of their subject-area content knowledge and pedagogical skill.

As the chart below shows, Philadelphia middle school teachers as a group have far less experience than high school teachers.

**Teachers' median years of district service, 1999-2000**

<table>
<thead>
<tr>
<th>Quartile</th>
<th>Number of middle schools</th>
<th>Low-income range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>46-70%</td>
</tr>
<tr>
<td>2</td>
<td>14</td>
<td>79-86</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>87-92</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>95-96</td>
</tr>
</tbody>
</table>

*eligible for free/reduced price lunch
Some quartiles contain many more schools than others because a number of middle schools have identical low-income rates.

Staff turnover in middle schools has reached alarming levels ...

The changeover in schools' staff due to retirements, resignations, and transfers has reached disturbingly high proportions in middle schools. In the highest-poverty middle schools, 46 percent of the teachers in 1999-2000 were new to the school in the last two years. In the lowest-poverty middle schools, the figure is 34 percent. It is almost impossible for school staffs to address serious problems together when faculty turnover is so high.

... and the percentage of uncertified middle school teachers has grown significantly, especially at high-poverty schools.

The difficulty in staffing middle schools with qualified teachers has become more critical in the last few years. Uncertified teachers made up 8 percent of the middle school teaching force in 1997-98, doubling to 16 percent in 1999-2000. In the highest-poverty middle schools, 22 percent of the teachers were uncertified in 1999-200.
Philadelphia’s teacher residency requirement makes matters worse.

Given the growing difficulty of staffing Philadelphia’s public schools, the District’s residency requirement no longer seems wise. In 1983, the District mandated that all newly hired teachers move into the city within a year, a time period extended to three years in 1999. Teachers in Philadelphia’s 34 public-charter schools (up to as many as 43 in 2001-2002) do not have to live in the city.

Findings from studies done by the Philadelphia Education Fund, in collaboration with the Office of Human Resources of the School District demonstrate that the residency requirement is a major barrier to the recruitment and retention of teachers in Philadelphia’s public schools:

Surveys of student teachers. Survey data from Philadelphia’s student teachers collected at the end of every academic semester since the fall 1998 show that the residency requirement is one of the three major factors discouraging student teachers from seeking employment in the District. Prior to the 1999 change loosening the requirement, it was the most commonly selected barrier to employment, chosen by about 60 percent of those surveyed. Since then, a little more than 40 percent identify it as a dis-incentive. Student teachers are the District’s largest single source of new hires.

Interviews with new teachers. An interview study (Spring 2000) of all the 60 teachers new to the District working in seven high-poverty middle schools found that the residency requirement was the most frequently cited reason for these new teachers’ desire to leave the District. A third of the teachers said the residency requirement would cause them to leave the District, another third said it might cause them to do so, and only a third said it was not a problem for them.

Surveys of teachers who turned down an offer of employment with the District. Surveys conducted in 1997 and 1998 found that a third of those who declined the offer of a teaching position in the District said the residency requirement was a significant consideration in their decision to turn down the position. Among those who were already non-residents of the city (nearly half of the respondents), 9 cited the requirement as a crucial barrier.

Surveys of teachers who accepted an offer of employment with the District. Surveys of new teachers carried out in 1997 and 1998 revealed that 38 percent of them found the residency requirement to be a problem for them.

Survey of Temple University education students. A 1999 survey of Temple University elementary/early childhood education student teachers placed in both suburban and Philadelphia schools found that of the 42 percent currently living in the suburbs, only 23 percent were willing to relocate into the city if they were offered a teaching job in the District.
Teachers are more likely to stay in schools that have good principals.

Philadelphia’s staff shortage is fueled in large part by the rapid departure of many new teachers. Factors that increase teacher retention would go a long way to solving the teacher quality crisis. Schools with a stable teaching force and a reputation for being a “good place to work” are invariably headed by principals who are effective leaders.

In the spring of 2001, the Philadelphia Education Fund looked at the practices of the principals in middle schools with high rates of teacher retention and found that teachers want to work at schools where principals do the following:

- Actively involve themselves in teacher recruitment;
- Implement strong induction programs for new teachers;
- Create safe and orderly school environments;
- Are welcoming and respectful to teachers, children, and parents;
- Delegate authority and develop the leadership skills of other school staff;
- Provide materials and supplies to teachers in a consistent and timely way;
- Make accommodations for teachers’ personal and family emergencies.

In sum, principals with strong interpersonal and organizational skills and a management style that is respectful of teachers’ skills and personal lives are much more likely than other principals to retain their staffs. These principals demonstrate to teachers in tangible ways that they care about their daily work lives in the classroom.

It should be noted that middle schools that are small (fewer than 450 students) and/or that have somewhat lower rates of poverty are more likely to retain teachers over a long period. Even strong principals at very high-poverty, large middle schools have difficulty holding on to teachers.

<table>
<thead>
<tr>
<th>Philadelphia’s teachers</th>
<th>Other publications on this topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male: 26%</td>
<td></td>
</tr>
<tr>
<td>Caucasian: 62%</td>
<td></td>
</tr>
<tr>
<td>African American: 34%</td>
<td></td>
</tr>
<tr>
<td>Hispanic: 3%</td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander: 1%</td>
<td></td>
</tr>
<tr>
<td>Number eligible to retire by Fall 2001: 659</td>
<td></td>
</tr>
</tbody>
</table>
The District has taken some important steps to make things better:

- an aggressive teacher recruitment campaign;
- a hiring bonus of $4500 ($1500 after six months; $3000 after three years);
- a $2000 bonus for teaching in 19 hard-to-staff schools;
- a 5-year $1500 bonus for teaching in certain subject areas—mathematics, Spanish, chemistry, physics, special education, and bilingual education;
- an incentive for departing teachers to give timely notification to the District, thereby allowing earlier hiring of new recruits;
- permission for schools to hire their own teachers from among a pre-qualified pool as long as two-thirds of the teachers in a building agree to it;
- an Enhanced Compensation System for more rapid salary advancement.

But much more remains to be done:

The School District of Philadelphia should:

- abolish the residency requirement;
- assist teachers with tuition reimbursement for advanced coursework;
- automate its hiring process and implement a screening system for recruits that includes scrutiny of a candidate’s transcript and suitability for urban teaching;
- undertake high-quality leadership training for principals;
- aggressively implement the school-based hiring option.

The Commonwealth of Pennsylvania should:

- provide greater fiscal support for Philadelphia’s school system so that it can offer more attractive salaries, smaller classes, and more ample supplies and materials;
- fund its loan forgiveness program for prospective teachers;
- pay for multi-year new teacher induction programs;
- implement stiffer preparation requirements for middle-grades teachers;
- fund advanced degrees in teachers’ academic content areas.

About this report

This report is published by the Philadelphia Education Fund (PEF), a non-profit local education fund that supports reform in the School District of Philadelphia. The District provided PEF with a dataset of the middle and high school teachers who taught in its school system between 1997-1998 and 1999-2000 school years for the purposes of this study. The data were analyzed and reported on for PEF by Professor Ruth Curran Nold at the University of Pennsylvania, along with doctoral assistants in the Department of Sociology, Jennifer McKnight and Sheila Kennedy. PEF gratefully acknowledges the cooperation of the Office of Human Resources of the School District of Philadelphia.

This report is co-authored by Dr. Elizabeth Ussen, Director of Research, Philadelphia Education Fund (uszenn@philadelphiafund.org) and Dr. Ruth Curran Nold, Graduate School of Education, University of Pennsylvania (rnold@gse.upenn.edu). Illustrations by Christian Castrell, Layout and design by Rebeca Marcano.

Philadelphia Education Fund, 7 Benjamin Franklin Parkway, Philadelphia, PA 19103
215.665.1400 www.philadelphiafund.org
Reproduction Release

I. DOCUMENT IDENTIFICATION:

| Title: Teacher Staging in the School District of Philadelphia: A Report to the Community |
| Author(s): Elizabeth Usenn and Paul Curren NoB |
| Corporate Source: Philadelphia Education Fund |
| Publication Date: May 2001 |

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

<table>
<thead>
<tr>
<th>The sample sticker shown below will be affixed to all Level I documents</th>
<th>The sample sticker shown below will be affixed to all Level 2A documents</th>
<th>The sample sticker shown below will be affixed to all Level 2B documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY. HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
<td>PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY. HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
<td>PERMISSION TO REPRODUCE AND DISSEminate THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
</tr>
<tr>
<td>Level 1</td>
<td>Level 2A</td>
<td>Level 2B</td>
</tr>
<tr>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits.

If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

http://ericfac.piccard.csc.com/reprod.html
Reproduction Release

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

<table>
<thead>
<tr>
<th>Signature</th>
<th>Printed Name/Position/Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Useem</td>
<td>Dr. Elizabeth Useem</td>
</tr>
<tr>
<td></td>
<td>Director, Research and Evaluation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization/Address:</th>
<th>Telephone:</th>
<th>Fax:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seven Ben Franklin Parkway Philadelphia, PA 19103</td>
<td>(215) 665–1400</td>
<td>(215) 864–2494</td>
</tr>
</tbody>
</table>

E-mail Address: buseem@philaedfund.org  Date: July 6, 2001

---

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

<table>
<thead>
<tr>
<th>Publisher/Distributor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Price:</td>
</tr>
</tbody>
</table>

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
</tr>
</tbody>
</table>

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

http://ericfac.piccard.csc.com/reprod.html

7/5/01