The caliber of teachers is crumbling across the country and union contracts are partially to blame, a controversial study has found.

The chances of a high-performing female student becoming a teacher fell from 21% in 1964 to just 11% in 2000, according to a University of Maryland study.

Although the obvious culprit is new opportunities for women, fixed pay in education also contributed to the nosedive, said Caroline Hoxby, a Harvard University researcher who conducted the study with Andrew Leigh.

Smart women - those with impressive test scores and graduates of prestigious colleges - generally earn the same pay as teachers from easy-to-enter colleges in most school districts. That wasn't always the case.

In 1963, Hoxby and Leigh found, female teachers from topnotch colleges earned significantly more than women from so-called safety schools.

As of 2000, teachers earned the same regardless of their alma mater, the study found.

Offering teachers merit pay might lure smart women to the job, Hoxby suggests, but many unions resist paying teachers bonuses based on performance.

Mayor Bloomberg and the city teachers union are locked in a contract war, and merit pay is one of the core issues.

"Though exceptions undoubtedly exist, women with higher aptitudes can ordinarily be expected to be more effective classroom teachers than those with lower aptitudes," Hoxby and Leigh wrote in the spring issue of Education Next.

During the 1960s, many unions gained power and etched ironclad pay scales into thick contracts. Brainy women realized they could earn merit pay in nonunion, corporate jobs regardless of gender, Hoxby and Leigh imply.

"The overall timing of the decline in teacher quality corresponds to the rise of collective bargaining within education," they wrote.

Randi Weingarten, president of the United Federation of Teachers, countered that before the 1960s, pay was based on favoritism and patronage - not performance. "[Hoxby] is blaming the only measure to ensure fairness in teaching," she said.

The study is "10 years behind the times," said Jerrold Ross, dean of education at St. John's University in Queens.

Schools of education now are raising standards for aspiring teachers and more of them are meeting the bar, he said.
How do the new teachers measure up?

The "high-aptitude" women who once chose to teach are no longer filling America's classrooms, a study suggests.

By Teresa Méndez | Staff writer of The Christian Science Monitor

No longer your stereotypical schoolmarm, a schoolteacher today has a profile markedly different from a generation ago. She - teachers are still overwhelmingly female - is less likely to make teaching a lifelong career. Having possibly worked in another field first, she's a bit older than her counterpart 40 years ago. Chances are, she's also more educated.

But there's one shift in the new demographic of teachers that has drawn particular attention - and concern. It seems that fewer "high-aptitude" women - those from the most selective colleges with stellar SAT scores - are becoming elementary and high school teachers.

"These teachers were never a big share, but they were a non-negligible share," says Caroline Hoxby, a professor of economics at Harvard University in Cambridge, Mass., whose research focuses on the economics of education. "People say they were important leaders. They weren't in every classroom but they were mentors." Ms. Hoxby and Andrew Leigh of the Australian National University have authored the latest study on aptitude in the newest generation of schoolteachers.

In a sense, their findings simply underscore a broader issue - the widespread need for talented teachers to step up to the chalkboard as baby boomers begin retiring. To fill the vacancies, as many as 2.2 million teachers are needed between 2000 and 2010. Certainly most experts would agree that creative new strategies must be employed to ensure the brightest are included in this bunch.

But lost in talk of how best to recruit a fresh crop of teachers has been the equally pressing problem of retention. More than 20 percent of beginning teachers quit after four years, and many barely survive the first year's baptism by fire. Some educators
believe that this tough work environment and the sink-or-swim attitude toward new teachers are keeping people away.

In "Wage Distortion," however - which appears in the current issue of Education Next, a journal published by Stanford University's Hoover Institution - Hoxby and Mr. Leigh suggest that pay is the reason so few high-aptitude women opt to teach. Specifically, they cite "pay compression," whereby the salary differential between high- and low-aptitude public school teachers has narrowed since the 1960s, so that today "those with the highest aptitude earn no more than those with the lowest."

Even more troubling, say Hoxby and Leigh, pay compression has not only diminished the number of smart female teachers, but it has also increased the share of women from bottom-tier colleges who performed poorly on achievement tests.

This explanation defies conventional wisdom. Most experts hold that fewer women are going into teaching than in the past because such an array of appealing career options is open to them - both service-oriented and more lucrative. Women looking to help people can become doctors or work for public-interest groups. More graduates consider law and engineering, while investment banks and management consulting firms recruit women from selective schools on campus.

As a result, the so-called "hidden subsidy of education," those talented, well-educated women - and minorities - who traditionally filled the ranks, is disappearing, says Susan Moore Johnson, director of the Project on the Next Generation of Teachers at Harvard's Graduate School of Education.

Morgaen Donaldson, a doctoral student on Professor Johnson's research team, says that during her first year teaching in a Boston public school she would be asked, "You went to Princeton. Why aren't you a lawyer?" She'd respond by asking why someone with an undergraduate degree from Princeton University shouldn't be a teacher. But Ms. Donaldson worries that some elite colleges may be sending their graduates the message that teaching is an "anti-intellectual profession."

Not all research suggests that today's teachers are less able than their predecessors. According to a 2000 study by Public Agenda, the public opinion research group, about half of superintendents and principals believe the quality of new teachers has improved in recent years.

In 1999, the Educational Testing Service in Princeton, N.J., found teachers did as well as or better than other college-educated adults on three measures of literacy, including reading comprehension and math.

Of course there are other, intangible qualities effective teachers have that may not appear in studies or on tests. "How do you measure a caring teacher?" asks Jacqueline Ancess of Columbia University's Teachers College in New York.
As a group, special education teachers tend not to perform as well on standardized tests, often because they grapple with learning disabilities of their own. But it's this experience, says Barnett Berry, president of the Southeast Center for Teaching Quality in Chapel Hill, N.C., that enables them to pass adaptive strategies on to students.

To lure talented women back to teaching, Hoxby and Leigh suggest that teachers' pay be tied to performance rather than seniority, as is often the case now.

Johnson says the Project on the Next Generation of Teachers has found that new teachers do expect differentiated pay that reflects their value and skills. It's a controversial idea that teachers unions have fought in the past. Now, all eyes are on Denver, where, with union support, the school district recently embarked on an experiment with performance pay. Still, Johnson and others warn that "performance" must be evaluated carefully, incorporating factors beyond student scores.

At the Bronx Preparatory Charter School in New York's South Bronx, performance is evaluated, among other ways, by conversations with students in addition to test scores.

Recruiting talented teachers is always a challenge, says founder and director Kristin Kearns Jordan, but she believes it's one all sectors face. Ms. Jordan graduated from Brown University in Providence, R.I. Before that she attended Phillips Exeter Academy, the preparatory school in New Hampshire - where her former history teacher told the alumni magazine, "You could see Kristin as a lawyer or investment banker. She's brought the same sort of acumen to the world of education and her vision to make a difference to children."

For a group that has proven to be inspired more by intrinsic than extrinsic motivation, pay may not be as important as economists think. Jordan says, "The people we recruit see this as a way of changing the world."

Research indicates that while most teachers do feel underpaid, unless salaries were increased substantially, other factors are more important to them. (Although Donaldson does suggest that burdensome college loans may prevent some women from the Ivy League from choosing to teach.)

In the 2000 survey, Public Agenda found that given a choice between better student behavior and parental support or a significantly higher salary, 86 percent of new teachers would choose better behavior and support; 82 percent would choose a more supportive administration over higher wages.

If Hoxby and Leigh are right, and a differentiated pay scale based on performance would draw more of the brightest women to teaching, a better working environment, with more mentoring and support, may be the key to keeping them. Teachers interviewed by the Project on the Next Generation of Teachers also said they crave
more teamwork, room to grow into leadership positions, and tracks that combine teaching with other responsibilities such as curriculum development and mentoring.

Public Agenda's survey "A Sense of Calling: Who Teaches and Why" concluded that new teachers' passion for teaching is "palpable, vastly underappreciated, and a valuable asset that money can't buy."

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March 25, 2004

ECONOMIC SCENE

Getting the Most Out of the Nation's Teachers

By VIRGINIA POSTREL

PUBLIC-SCHOOL teachers just aren't as smart as they used to be. After all, women have more job opportunities. Bright women who once would have taught school today become doctors and lawyers. The gain for individual women is a loss for education.

Or so many people believe. The story is plausible, but is it true? As a Ph.D. student at the University of Maryland, the economist Sean P. Corcoran wondered just that. "The more I started to think about it, the more I started to think that it wasn't really a given that teacher quality has fallen over time," he said in an interview.

Women make up about three-quarters of teachers 25 to 34 years old, a proportion that has remained fairly constant since the early 1960's.

As women's job opportunities have increased, so has the chance that they'll go to college. Even women near the top of their high school classes are twice as likely to earn a college degree today as in the early 1960's.

That might swamp the effects of greater opportunities outside teaching. So what did really happen to teacher quality?

The first problem is to define "quality" in a measurable way. Research over the last decade has demonstrated that teachers' aptitude test scores, particularly their verbal scores, are the best predictors of how their students will achieve.

"If we think of teacher quality as those things that matter for student outcomes, then these test scores seem to be a pretty good measure," said Professor Corcoran, who is now at California State University, Sacramento. With William N. Evans and Robert M. Schwab of the University of Maryland, he analyzed the test results and career choices of individuals in five high school classes, from 1964 to 2000. All five surveys include math and verbal aptitude tests and follow the students over time, allowing the researchers to match students' test scores with their eventual occupations.


The results both confound and support the conventional wisdom. Through the entire period, the average female teacher scores below the average female college graduate. But the teacher score falls only
modestly over time. On average, teachers score about the same today as they did a generation ago.

But averages hide the real story. The best female students - those whose test scores put them in the top 10 percent of their high school classes - are much less likely to become teachers today.

"Whereas close to 20 percent of females in the top decile in 1964 chose teaching as a profession," making it their top choice, the economists write, "only 3.7 percent of top decile females were teaching in 1992," making teachers about as common as lawyers in this group.

So the chances of getting a really smart teacher have gone down substantially. In 1964, more than one out of five young female teachers came from the top 10 percent of their high school classes. By 2000, that number had dropped to just over one in 10.

The average has stayed about the same because schools aren't hiring as many teachers whose scores ranked at the very bottom of their high school classes. Teachers aren't exactly getting worse. They're getting more consistently mediocre.

Professor Corcoran and his co-authors assume that the brightest young women don't become teachers because other jobs have opened up to them. But new research by Caroline M. Hoxby, a Harvard economist, and Andrew Leigh, a doctoral student at Kennedy School of Government at Harvard, suggests a more complicated story here, too.

High-scoring women aren't the only women with greater opportunities today. All sorts of jobs, including those that require only average abilities, have narrowed the gender pay gap over the last generation. "We see the doctors and lawyers," Mr. Leigh said in an interview, "but I don't think we're as aware that the same thing has happened to bookkeepers."

He and Professor Hoxby examine the effects of two different trends: changes in the ratio of male and female pay across all professions and changes in the level of unionization among teachers. Unionization tends to compress the range of salaries, raising the average but reducing the premium to top teachers.

To separate the two effects, they divide teachers by state, since both pay-equity and unionization laws changed at different times in different places. Surveys with individual test scores aren't large enough to break down by state, so the economists use a larger data set that records where each person went to college. As a proxy for each woman's aptitude, they use her college's mean combined SAT score. (The paper, "Pulled Away or Pushed Out? Explaining the Decline of Teacher Aptitude in the United States," which will also be published in the American Economic Review's Papers and Proceedings issue, is available at http://post.economics.harvard.edu/faculty/hoxby/papers.html.) While imperfect, this measure isn't correlated with either unionization rates or pay equity, so it's good enough to answer the researcher's question: Are women from top colleges leaving teaching because of the "pull" of better pay elsewhere or the "push" of reduced earnings at the top of teaching?

To their surprise, they find that wage compression explains a huge 80 percent of the change. If women from top colleges still earned a premium as teachers, a lot more would go into teaching.

"Women who went to a top 5 percent college earned about a 50 percent pay premium in the 1960's and earn about the same as other teachers today," Mr. Leigh said. "By comparison, somebody who went to a bottom 25 percent college earned about 28 percent below the average teacher in the 1960's, and they have the earnings of about the average teacher today."
In hiring teachers, we get what we pay for: average quality at average wages.

*Virginia Postrel is the author of "The Substance of Style: How the Rise of Aesthetic Value Is Remaking Commerce, Culture and Consciousness" (HarperCollins).*
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Editor's Note: Due to a technology glitch some readers received the previous Bulletin with letters transposed or a truncated table of contents. A correct version is available on PPI's website at: http://www.ppionline.org/ppi_ci.cfm?knlgAreaID=110&subsecid=900001&contentid=252388
We apologize for any inconvenience.

Fact to Consider:
In 2000-01, 58 percent of all post-secondary degrees were awarded to women. (Source: National Center for Education Statistics, http://www.nces.ed.gov/programs/quarterly/5_2/q4_4.asp)

News and Commentary

1. Three Questions for President George W. Bush

There is no doubt that No Child Left Behind will be an issue in this year's presidential campaign. With Howard Dean out of the race it appears that the prospects of a silly debate about whether or not to repeal the law are mercifully dimmed. Still, it's an open question what the debate over NCLB will look like. We hope it is one where the president is forced to answer some tough questions about how his administration has handled NCLB but where Democratic critics champion real accountability for poor
B. Fordham Foundation. On one side, ADP looked at state-level high school standards documents, assessments, and other requirements to determine what students must know and be able to do to earn a diploma. On the other, they worked with and surveyed employers and college professors to determine what skills graduates need to succeed in college and work. According to ADP, most state high school assessments are set only at the 8th or 9th grade level. Although state standards -- particularly in math, though less so in English -- often match up reasonably well with what employers and colleges require, the tests on which students are actually assessed and courses they are required to take often aren’t aligned with the standards. Perhaps most striking, the study found that students need the same academic skills whether they are going to college or the workforce, but schools persist in sorting students into college bound versus non-academic groupings, failing to equip the latter with the skills they need for middle-class jobs. The report also includes recommendations for states, the business community, and the federal government to address the concerns it raises.

On a related note, in California, state superintendent of public instruction Jack O’Connell recently proposed new graduation requirements to mandate all students take the college preparatory curriculum required for admittance into California’s public universities. Currently, fewer than half of California students complete this curriculum. The proposal was made in a "State of Education" address by O’Connell that also included plans to address teacher quality, encourage high schools to use endorsed curricular materials, and provide greater budgeting flexibility for local districts in how they use state funding streams.

Further Reading:

The American Diploma Project:
http://www.achieve.org/achieve.nsf/AmericanDiplomaProject?OpenForm

"Too Tough, or Not Tough Enough?"
By Jay Mathews, WashingtonPost.com, (02/10/04):

"Stricter Grad Rules Urged,"
By Bill Lindelof and Deb Kollars, Sacramento Bee, (02/12/04):
http://www.sacbee.com/content/news/education/story/8254462p-9185098c.html

4. Teacher Compensation

The teachers union and school board in Denver have reached preliminary agreement on a new teacher compensation system designed to de-link teacher pay from the traditional "steps and lanes" scales focused on coursework and years experience and reward teachers instead for demonstrated knowledge and skills, student improvement, and difficult assignments. The new system is based on a pilot project that has been tested in a sample of Denver schools since 1999, and was found in a recent evaluation to have “promising results.” Next month, teachers will vote on whether or not to change from current compensation to the new system, and later this year Denver voters must approve a $25 million levy to fund it. A lot of credit is due to Brad Jupp who coordinated the effort on behalf of the Denver Classroom Teachers Association and was tireless in his efforts to bring the initiative to fruition.

One of the tools to help Denver teachers consider this decision is an online salary calculator to help teachers compare how much they would earn under the current versus proposed systems. In exchange for giving up guaranteed raises, teachers would have the opportunity to earn much higher performance-based wages. We’ve long argued that this bargain is critical to significantly improving teacher quality; a new study by Harvard’s Caroline Hoxby and Andrew Leigh lends further support to this argument. Hoxby and Leigh note that the academic aptitude of teachers has declined relative to other professions in recent decades, a phenomenon usually blamed on increased market opportunities for
women. However, Hoxby and Leigh use economic analysis to argue that compression of teacher salaries due to unionization is a bigger driver here than women's labor market opportunities. Similarly, in a recent Education Week commentary, economist Donal Cymrot argues that targeting teacher pay to productivity and difficult assignments is a cost-effective approach to improve quality.

The notion of rewarding exceptional teachers for knowledge, skills, and performance rather than just experience and coursework is one of the rationales behind the National Board for Professional Teaching Standards. However, a recent essay by M. O. Thirunarayanan argues that teachers certified by NBPTS actually need meet no higher requirements than entry level teachers and as a result the certificate "awards mediocrity." It's important to note that Thirunarayanan's piece is only an essay, not new research about Board certified teachers. It's still stimulating heated discussion on the Teachers College Record's website. The National Board is currently sponsoring a variety of research to quantify Board certified teachers' impacts on student learning.

Further Reading:

Denver Pay for Performance Pilot: http://www.denverteachercompensation.org


Departments

5. Charter Schooling News

Colorado, Virginia and Utah: Charter school legislation is under consideration in many states this year. The Colorado, Virginia, and Utah Legislatures are all considering amending their charter laws to help create more charter public schools. Virginia's state House just approved a measure that would create an appeals process for charter school applicants and give charter schools more leeway in hiring teachers. The Utah legislature is considering a bill that would create a charter-friendly state authorizing board. Colorado State Representative Terrance Carroll is proposing to expand charter authorizing and refocus charter school efforts there on underserved communities. Rep. Carroll is also profiled this week as the Democratic Leadership Council's "New Democrat of the Week" for his efforts in the legislature to improve Colorado's charter authorizing process.