

Putting a High-quality Teacher in Every Florida Classroom

Policy Brief

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Executive Summary

The most important school factor affecting student achievement is the quality of teachers. Yet there are misconceptions about what it means to be a quality teacher and how schools can attract and train more of them. This brief summarizes evidence about the characteristics of effective teachers, describes the characteristics of teachers and teacher policies in Florida, and recommends policy changes to help the state meet the significant challenges of meeting the demand for quality teachers in the coming decade.

Research suggests that teacher effectiveness depends both on the abilities of teachers and on the training they receive. Teachers are more effective when their preparation includes higher levels of formal education and in-service professional development, particularly when this training is focused on the specific fields in which they teach. Effective teachers also tend to have higher scores on tests of verbal and quantitative skills.

While generally there appear to be enough teachers, many individual schools in Florida face severe teacher shortages. These schools have large percentages of disadvantaged students, and the teacher shortages tend to be in subjects such as math, science, and exceptional student education. These shortages, as well as the disparities between schools, are likely to worsen significantly with upcoming class size reduction and growth in student population.

Although some aspects of Florida's policies appear to be steps in the right direction, the overall effort in the state has been incoherent and severely under-funded. Different groups of teachers are held to very different standards. Additionally, low salaries provide few economic incentives for the best and brightest college students to

choose teaching over more lucrative and prestigious positions. This is particularly true in math and science, where other job prospects are greatest and, not coincidentally, where teacher shortages are most severe.

Recommendations

The following changes in policy are recommended to ensure that there is a high-quality teacher in every Florida classroom:

1. Require high-quality teachers in all schools receiving public funds, not just in traditional public schools.
2. Continue alternative certification, but monitor it closely to ensure that teachers perform at a high level and stay in the profession.
3. Reduce restrictions on colleges of education that limit innovation and create an uneven playing field in relation to the alternate certification system.
4. Monitor out-of-field teaching in a rigorous manner, providing an accurate picture of teacher quality and facilitating the targeting of resources to shortage areas.
5. Increase funds for district-based professional development that accounts for school-specific needs and integrates subject matter with teaching skills.
6. Ensure salary increases for teachers willing to work in critical shortage areas and schools that have trouble attracting high-quality teachers.
7. Make teacher salaries competitive with salaries in other states.

8. Fund the state's Better Education for Students and Teachers (BEST) program to increase opportunities for career growth and to reward high performance.
9. Expand induction programs to increase retention and training for new teachers.

Putting a High-quality Teacher in Every Florida Classroom

Section 1: The Issue

The most important school factor affecting student achievement is the quality of teachers. Educators, politicians, and the general public generally embrace this assertion, and research supports it. Misconceptions abound, however, about what it means to be a high-quality teacher and how schools can attract and train more such teachers.

The issue is particularly important in Florida. Over the next decade, class-size reduction and a fast-growing student population will require a significant increase in the number of teachers. The federal *No Child Left Behind* (NCLB) program, which aims to put “a high-quality teacher in every classroom,” is likely to raise the standards that these teachers have to meet. All of this comes at a time when many schools, particularly urban schools, already face shortages in math, science, and special education. Any of these changes would challenge the state; all arising at the same time makes the challenge a daunting one.

Florida’s state government must meet two parallel challenges. One is increasing the *quantity* of teachers to address existing localized shortages and meet growing demands; the other is raising the *quality* of teachers in the classroom, which research shows to be an essential component of high student achievement. In short, the state needs both *more* teachers and *better* teachers.

The next section of this brief reviews the research on what makes teachers effective, what other states are doing to attract high-quality teachers, and how federal policies will affect Florida in the near future. This is followed by estimates of the number of new teachers that will be required over the next decade in Florida and a

description of the quality of the state's teachers. On the basis of this research and discussion, the state's current policies are evaluated and specific recommendations made to help Florida put a high-quality teacher in every classroom.

Section 2: Background

The idea that a quality teacher is necessary for quality education seems like common sense. It is also supported by research. Some recent path-breaking work in Tennessee finds large differences in teacher performance. Specifically, the most effective teachers appear to produce achievement gains that are 47 percent greater than the least effective teachers.¹ Although this research remains new and controversial, few researchers question that there is a big difference in performance among existing teachers. Indeed, the differences in performance among workers in other professions appear to be at least as large.²

The more important question then is, *what makes one teacher more effective than another?* Experience and education help. Teacher effectiveness appears to improve significantly in the first five to seven years on the job.³ A similar pattern is observed with regard to teacher education. Having a college degree is clearly important, as is training in the specific subject area being taught. But there is little evidence that obtaining advanced degrees—master's degrees and Ph.D.s—has much additional benefit for teachers who already have bachelor's degrees in their fields.⁴ Advanced degrees could be beneficial, however, in training existing teachers in new subject areas, particularly those where there are now teacher shortages.

There is also evidence that the specific types of training teachers receive in their subject areas are important. A recent review of research on the topic finds that subject-

matter knowledge and teaching skills are both important, in addition to general college degrees and experience.⁵ This means that, to do well, teachers must know their subjects, but must also know how to teach them. Indeed, there is a growing consensus in favor of “content-based pedagogical training” that integrates subject matter and teaching methods. For instance, math teachers should be specifically trained how to teach math. This sounds like common sense, but it is not uncommon for teachers to learn general theories of teaching in some classes, while learning math content in other separate courses. Research suggests that the two are more effective when taught together.⁶

Colleges of education (COE) at universities are often seen as part of the teacher quality problem because they appear to focus too much on teaching skills. Yet this criticism appears overstated. At the elementary level, the subject matter is relatively simple, but the best way to meet the needs of individual students may be a more complex issue. In higher grade levels, where coursework is more specialized, a large majority of COE graduates who teach in their fields *have* had extensive subject matter training.⁷ The main problem is that there are too few teachers who have the necessary, specialized, subject-matter knowledge and are also willing to stay in the profession. Schools are left with little choice but to reassign the teachers who remain to fill openings. These “out-of-field” teachers often *do* lack knowledge in the subject matter they are assigned to teach. Yet the fact that a COE graduate specializing in English is ineffective as a math teacher would not seem to be the fault of the COEs.

This does not mean that COEs cannot improve. Indeed, there are legitimate concerns about the academic rigor of some education courses, which would reduce the effectiveness of training and turn off high-performing students who are looking for

challenging and engaging work. Also, there appears to be a greater need for cooperation between COEs and other parts of universities that specialize in math, science, and other subjects.⁸ This cooperation is essential to the development of teacher training that integrates subject matter with teaching skills.

The idea of content-based pedagogy also extends to training provided for existing teachers, often called "professional development" or "in-service training, which teachers receive after they enter the profession. Professional development is also more effective when it takes into account the specific needs of teachers within the context of their specific schools. For example, providing generic training in math education will be difficult for teachers to apply in the classroom if the actual school curriculum is not adapted through changes in textbooks or materials. Effective teacher training integrates local needs with what is known about education in general.

Training versus ability

In many professions, there is a tendency to believe that the best workers are born, not made. The preceding evidence suggests that teacher training is important—that teachers are *made*—but other evidence suggests that the general aptitude of teachers plays a role in their effectiveness as well. Several studies have found a strong relationship between student test scores and teachers' own scores on college entrance exams such as the SAT.⁹ Similar relationships exist in other professions as well.¹⁰ This appears to reflect the fact that workers with strong verbal and quantitative skills are better able to learn their jobs and communicate effectively with their colleagues and customers. The role of these general skills is likely to be at least as great in teaching, particularly

considering that teachers use their verbal and quantitative skills to impart those same skills to their students.

Unfortunately, it appears that education majors in college have lower levels of general skills than do other students. For instance, education majors have lower average scores on college entrance exams such as the SAT, in comparison to college students in other majors.¹¹ This suggests that the problem of attracting high-quality teachers starts very early in the career path.

Improving the quality of teachers, then, requires not just improving training but also attracting able people into the profession. It is therefore important to consider how people with strong verbal and quantitative skills choose their occupations, starting as far back as high school and college. A person who does not receive teacher training in college is unlikely ever to become a teacher. Likewise, the overwhelming majority of new teacher hires are graduates of colleges of education.¹²

Even those who choose teaching in college are often unlikely to enter and stay in the profession for long. Research suggests that 40 percent of education college graduates do not immediately enter teaching¹³ and that 33 percent of new teachers leave within the first few years.¹⁴ Teacher turnover may not be any worse than in other professions, however; a new study finds teachers are no more likely to leave their profession than are workers in similar professions.¹⁵ The fact is that young workers are generally mobile and somewhat uncertain about the careers they want to pursue. In addition, teacher turnover often appears to be exacerbated by factors outside the direct control of state and local policymakers, such as the level of poverty experienced by their students.¹⁶

Attracting and retaining good teachers may be difficult, but is certainly not impossible. There is strong evidence that teachers are more likely to stay when they are paid higher salaries and receive good health benefits.¹⁷ In addition to these economic factors, there is evidence that improving the school environment would also improve matters. There appears to be lower turnover in schools with strong administrative support and fewer student discipline problems.¹⁸ Attracting and retaining able teachers will therefore require a combination of strategies.

No Child Left Behind

Every state in the country faces the challenge of raising teacher quality. Increasing the pressure are the new federal rules being implemented through NCLB. The legislation is known mainly for increased student testing, but it also includes detailed teacher quality guidelines, which schools are to meet by the 2005-2006 school year:

Under the terms of NCLB, to be highly qualified teachers must: hold a bachelor's degree from a four-year institution; hold full state certification; and demonstrate competence in their subject area. Newly hired elementary teachers working in core academic areas must also pass a rigorous state test of subject knowledge and teaching skills in [all] areas of the basic elementary school curriculum. Newly hired middle school and high school teachers in core academic areas can demonstrate their subject-matter competence by passing a rigorous exam of their content knowledge; majoring in their subject as an undergraduate [or graduate student] . . . or attaining an advanced certificate or credential.¹⁹

The focus here on subject-matter knowledge is clear. The NCLB requirements will require no training in teaching skills for middle and high school teachers, although they do allow the state to add such requirements on their own. Also implicit in the new rules is that “out-of field” teaching will be significantly restricted. This is consistent with the point made earlier that the problem is not mainly that traditional teacher training is inadequate, but rather that too few teachers are teaching within their area of specialization.

Another important assumption of NCLB is the fact that a paper-and-pencil test—rather than prescribed training or demonstrated classroom effectiveness—is adequate to determine whether teachers are “highly qualified.” This means, for instance, that a person who wishes to teach high school math could qualify by passing a math exam. No teaching experience or teacher training would be necessary. This is intended to allow easier access to the profession to reduce existing shortages, particularly in math and science.

The NCLB rules also send some broad, and perhaps contradictory, messages about the nature of the teacher quality problem. On the one hand, by deemphasizing teaching skills and allowing competence to be demonstrated through paper-and-pencil tests, the legislation suggests that traditional requirements, based in COEs, are part of the problem rather than part of the solution. The law’s focus on reducing out-of-field teaching suggests, instead, that the problem has to do with the dearth of teachers willing to enter the profession in certain specializations such as math and science. Arguments about poor training in COEs and out-of-field teaching represent very different ways of defining the problem. It is possible that the reduced training requirements will help

attract large numbers of new math majors to the teaching profession, reducing out-of-field teaching, but the evidence presented later regarding low teacher salaries suggests that burdensome training is only part of the problem of attracting better teachers.

The NCLB messages about what it means to be a high-quality teacher are also quite mixed. For instance, none of the NCLB rules governing teacher quality apply to charter schools or private schools that receive public funds.

These issues are key topics in the discussion that follows about the teacher quality situation in Florida.

Section 3: Data from Florida

To address teacher quality in Florida, it is necessary to understand the existing pattern of shortages, how many teachers will be needed in the coming years, and how current teachers perceive their jobs. The best source of information for comparing Florida with other states is the Schools and Staffing Survey (SASS) and other surveys conducted by the U.S. Department of Education (USDOE). For more detail on some aspects of teacher quality within the state, the Florida Department of Education (FDOE) is a good resource because it tracks individual teachers from college into school classrooms.

Teacher Supply and Demand

The FDOE regularly publishes a list of “critical shortage areas” of teachers in Florida. According to the most recent report, English as a second language (ESOL) and technology education have the highest percentages of teachers teaching out-of-field: 32.8 percent and 24.6 percent, respectively. Math, science, and reading are all in the range of

7-11 percent.²⁰ Because schools are able to classify as actually certified those teachers who have a plan to become certified *in the future*, these numbers may underestimate out-of-field teaching and fall short of an accurate reflection of actual teacher preparation.

Statewide averages also mask significant disparities between different types of schools. It is widely known that schools serving disadvantaged students face difficulty attracting qualified teachers. This is reflected in the previously cited evidence that teacher turnover is determined significantly by the student population and school environment.²¹ Also, there is strong evidence that teachers tend to return to the communities in which they were raised, often to the very same schools they attended as children.²² The fact that relatively few disadvantaged students go on to college therefore compounds the problem of attracting quality teachers to disadvantaged schools.

One implication of the foregoing analysis is that there probably is no aggregate teacher shortage, meaning that the total number of teachers willing to work at current salaries is large enough to meet the total number of position openings. In other words, when looking at the state as a whole, the supply of teachers equals the demand. This provides little comfort to those schools facing major shortages, but it does suggest that the teacher quality challenge is not one of enticing more teachers into the profession, but rather of getting them to go to work in the specific schools and subjects most in need of high-quality teachers.

However the numbers are broken down, shortages always depend on a combination of both supply and demand. The information below provides some basic facts about the supply of teachers in Florida:

1. Florida's COEs will graduate approximately 7,000 students per year over the coming decade.²³
2. From 56 to 60 percent of new Florida COE graduates are teaching in Florida school district after graduation.²⁴
3. Ten percent of Florida teachers resign each year, and 13-19 percent of these resignations are for retirement.²⁵
4. Eleven percent of new hires had taught in another Florida district in the previous year; an additional 62 percent were returning from more extended absences.²⁶
5. Each year, there are more than three times as many COE graduates in English and language arts as there are in either math or science, even though the demand for each group of teachers is similar.²⁷

These numbers show the many inflows and outflows from the teaching profession that make the problem multi-dimensional. The number of COE graduates is a useful starting point, since the majority of new teachers are COE graduates. Many of these teachers move in and out of the profession, however (see item 4 above).

There is a growing debate about the contribution of teacher retirements to the overall teacher shortage. The conventional wisdom has been that teacher retirements will play a major role as the Baby Boom generation ages and retires. Others have argued that the percentage of resignations due to retirements is quite low and will remain so in the coming years.²⁸ Indeed, the above numbers would seem to support this view at first glance. If 10 percent of teachers resign each year, and 15 percent of these are retirements, then currently only 1.5 percent of all teachers leave each year due to

retirements. While that is a small number, two additional facts bear on the discussion: first, the percentage due to retirements will grow in the coming years; second, teachers who retire have left the field *permanently*. Other teachers who resign are likely to return, however, as reflected by the fact that 62 percent of new hires are teachers returning from extended absences. Thus, the retirement problem is larger than it seems at first.

Item 5 above reinforces the suggestion that teacher shortages are subject-specific. The supply of English teachers appears greater than necessary, while the supply of math and science teachers appears too low. The same data also suggest that the problem is getting worse: the number of COE graduates specializing in math dropped 35 percent between 1995-96 and 1999-2000. While FDOE projections suggest that these numbers will rebound, they do not appear likely to reach 1995-96 levels.²⁹

The demand side of the teacher labor market also raises some difficult issues. Class size reduction and growth in student enrollment are the two key factors affecting the need for new teachers. Table 1 below summarizes the predicted effects of these changes.

Table 1: Projected Increase in Demand for New Teachers in Florida

Year	Increase in number of new teachers needed each year due to:	
	Class size reduction	Student Enrollment
2004-05	7,754	1,546
2005-06	7,230	1,408
2006-07	4,651	1,207
2007-08	2,768	1,065
2008-09	844	1,091
2009-10	377	1,221
2010-11	353	1,316
Totals	23,977	8,854

Sources: Class size calculations provided to the author by FDOE staff through personal correspondence. Student enrollment figures from: Office of Strategy Planning, Florida Department of Education (2001) Projected Number of Florida Public School Teachers Needed through 2020-2021, Tallahassee, Florida.

Table 1 shows that approximately 33,000 additional teaching slots will be created between now and 2010-11. By comparison, there are approximately 145,000 teachers in Florida today. The changes in Table 1 therefore represent a 23 percent increase above current levels. The projections from the FDOE do not suggest any comparable growth in supply, however.

The experience of California, which also tried a large-scale class size reduction, provides some lessons about what Florida can expect in the future. Most California schools were able to fill vacancies, but schools serving disadvantaged students saw a noticeable spike in the percentage of teachers who were uncertified and inexperienced.³⁰ This reinforces the conclusion that teacher shortage problems tend to be specific and localized.

There are several reasons to expect that Florida's situation will be much more difficult to deal with than was California's. First, the California program was limited to

grades K-3, which means that fewer additional teachers were necessary. In addition, teaching positions in grades K-3 tend to be the easiest to fill—elementary teachers do not show up on Florida’s critical shortage list. Also, unlike in Florida, the California program was entirely voluntary, allowing many schools and districts the option not to take part.

As in the rest of the nation, Florida’s existing teacher shortages tend to be clustered in specific subjects and schools. However, because Florida’s demand for teachers can be expected to grow faster than it has in other states as a result of its class size reduction requirements, Florida may also become one of the very states to have an aggregate teacher shortage.

Teacher Perceptions and Job Satisfaction

The discussion of supply, demand, and shortages is really about the quantity of teachers. Equally important is the quality of teachers in Florida classrooms. Unfortunately, there are no direct ways to compare the quality of teachers in Florida with the quality of teachers in other states. Instead, this section considers evidence about how teachers see their jobs and what this implies about the ability of Florida schools to attract quality teachers.

Evidence about teacher perceptions in Florida comes from surveys of teachers who describe their impressions of their jobs. Table 2 below provides a summary of teacher perceptions for states in the Southeast region of the U.S. and the nation as a whole, from the SASS.³¹ These data provide a mixed, but generally negative, picture of Florida compared with its neighbors and with the nation as a whole.

It is generally believed that supervised teaching practice is crucial to new teachers' success. Yet the SASS data show that new teachers in Florida, compared to those in other states, are less likely to receive this support when they begin teaching (see question #1). On a more positive note, Florida schools do apparently provide access to induction and training programs to help new teachers learn their jobs (question #2).

The average teacher in the state reports being pressured to achieve high performance on student achievement tests (question #5), which is not surprising given the state's strong efforts to increase accountability. Florida principals are less likely than principals in other states to talk with teachers about their instructional practices, however (question #4). The overall picture, then, is one of pressure rather than support. This is reflected in the relatively low percentages of teachers who would have become teachers if they could have done things over again (question #7), and the relatively high percentage who wish to leave as soon as they can (question #8).

Table 2: Teachers' Perceptions of Their Jobs³²

Survey question	Teachers in Florida	Teachers in Southeastern States	Teachers in the U.S.
1. Percentage of new teachers with no student (practice) teaching	21.8	15.0	10.4
2. Percentage of new teachers participating in induction	82.7	63.0	59.9
3. Percentage of new teachers taking part in school-sponsored seminars	80.5	64.5	63.0
4. Percentage of teachers who strongly agree that the principal talks with them about their instructional practices	9.6	14.0	11.0
5. Percentage of teachers who strongly agree that job security depends on student standardized test scores	19.4	11.0	7.1
6. Percentage of teachers who strongly or somewhat agree that they are satisfied with their salaries	20.6	27.6	39.4
7. Percentage of teachers who certainly would become a teacher again	28.4	34.7	40.3
8. Percentage of teachers who plan to leave the profession as soon as they can	5.9	4.5	3.3

Source: Berry, B., Luczak, J., & Norton, J. (2003) "The status of teaching in the southeast: Measuring progress, moving forward," Chapel Hill, North Carolina: Southeast Center for Teaching Quality.

It is important to emphasize that the data comparisons in Table 2 do not represent measures of teacher quality, which simply do not exist. Instead, this section attempts to paint a picture about how teachers perceive their jobs and how this might reflect the attractiveness of teaching. The data show that teachers are being held accountable for their performance, but they also raise doubts about whether Florida schools provide an

environment that helps novice teachers develop into effective teachers who want to continue in the profession for the rest of their careers.

Section 5: Florida's Teacher Policies

The quantity and quality of teachers in Florida is determined in part by state teacher policies. Several categories of policies are described in this section: policies inherent in colleges of education and traditional certification; alternative certification; and compensation, promotions, and incentives.

Florida's Colleges of Education and Traditional Certification³³

Colleges of education within state universities remain the main source of teachers in Florida. The state is unusual, though, in that 40-50 percent of COE graduates start their post-secondary education at community colleges. In addition, one community college is authorized to give bachelor's degrees in education that meet certification requirements.

The Florida Council for Education Policy Research and Improvement (CEPRI), appointed by the Governor and legislative leaders, has studied teacher education programs throughout the state, including COEs. In a recent report, the organization writes that "legislation for state-approved, baccalaureate programs in Education ties specific coursework to state certification and delineates credit hours that are required in specific disciplines." Indeed, the degree to which university-based teacher training is prescribed makes Florida unusual compared with other states that leave curriculum decisions to the college faculty and accrediting institutions. In addition, education is the only college major in which such prescriptions can be found.

The CEPRI report also indicates that “these mandates result in a narrow educational path for teacher candidates and often lengthen the time-to-degree.” This suggests that the state rules may reduce both the quality and quantity of teachers. Moreover, the state rules are at odds with other policies, described below, that are reducing requirements and making it easier to enter teaching. As a result, the CEPRI report argues that these rules “impede innovation and flexibility” and recommends that they be repealed.³⁴

Florida’s Alternative Certification System

There are various ways to become a fully certified teacher in Florida, in addition to the traditional undergraduate major in teacher education. “Alternative certification” is a new and developing approach that reduces the training requirements and is intended to minimize barriers and attract more teachers. According to a report commissioned by the FDOE:

Alternative certification programs in Florida provide competency-based, on-the-job, professional education preparation to newly hired teachers who have demonstrated subject-area expertise but who have not graduated from a traditional teacher preparation program. All alternative certification programs are either developed or approved by the Florida Department of Education and implemented by Florida school districts.³⁵

The fact that training occurs “on-the-job” is a key distinguishing feature of this system, because it means that teachers can begin teaching without any prior training or experience. The only requirement is that these teachers demonstrate subject-matter expertise on a paper-and-pencil test. It is also important to distinguish this from the

“supervised training” mentioned earlier as an important component of teacher education. The on-the-job training required in alternative certification does not require the type of classroom supervision that can assess and improve a prospective teacher’s effectiveness.

There are 12 specific competencies that alternative certification must help to develop, including “communication,” “critical thinking,” and “diversity.” The training itself provides little additional subject knowledge because it is assumed that these skills have already been demonstrated in written tests. Also, there is no requirement for integrated training in how to teach specific subjects.

The main strength of the alternative certification program is that it makes the path to teaching much easier: it requires less time of prospective teachers and less money for tuition. Alternative certification also allows people who are interested in teaching to move quickly into the profession without having to wait until they have met all certification requirements.

This strength may also be a weakness of the program, however. Economists argue that the easier it is for a person to enter a profession, the more likely it is that the person will leave the profession because the job candidates would have invested less in the profession and therefore will be less committed to it. It will therefore be important to observe whether teachers who go through alternative certification remain in the profession. Also, given the lack of on-the-job experience and integrated training provided these teachers, careful attention should be paid to their effectiveness.

Florida’s alternative certification program is only a few years old, so it is too early to tell what impact alternative certification will have on the quantity and quality of teachers in Florida. The FDOE has commissioned a long-term study, and preliminary

results are generally encouraging.³⁶ The program is apparently succeeding in expanding the pool of teachers, including those in critical shortage subjects, and in attracting teachers who perform at high levels.

Finally, it is important to distinguish alternative certification, which generally reduces requirements, from more advanced certification, particularly the National Board for Professional Teaching Standards (NBPTS). Florida is one of a growing list of states that provides monetary incentives for teachers to receive NBPTS certification, which is widely regarded in education circles to be extremely rigorous. Because of the difficulty in receiving this certification, teachers who pursue it tend to be highly motivated, yet large numbers still do not meet the difficult requirements. Those who reach this high standard should be considered among Florida's best teachers.

Compensation, Promotions, and Incentives

Florida teachers are paid 11 percent less than the national average.³⁷ This is a significant gap, but the more important comparisons have to do with differences between teachers and other professionals. Salaries for college graduates have increased steadily in recent years, particularly for women, who now have access to professions previously open only to men. This greatly affects teaching, because 75 percent of all teachers are women. Women with graduate degrees earn 40 percent more in other fields than they do in teaching; and women with undergraduate degrees earn 10 percent more in other fields than they do in teaching. Both salary gaps are widening quickly: by contrast, in 1987, women with graduate degrees earned 17 percent more in other fields than they earned in teaching, and women with undergraduate degrees earned more in teaching than they did in other occupations.³⁸

It is therefore not surprising that Florida teachers report concerns about their salaries. The SASS survey discussed in Table 2 suggests that Florida teachers are even less satisfied with their salaries than are teachers in other states. Nationally, only 39.4 percent of teachers report satisfaction with their salaries. Yet the number is only roughly half that in Florida—20.6 percent.³⁹

The state has allocated some additional resources towards efforts to recruit teachers, but these have been mostly symbolic. Programs involving loan forgiveness, tuition reimbursement, and forgivable loans are available to people who teach in critical shortage areas, for example. The state has provided little or no funding for these programs in recent years, however. This fact has been pointed out by CEPRI, which has also recommended increasing funding for these targeted efforts.

An examination of teacher pay must also look at how compensation is determined, not just at average salary levels. Traditionally, teachers have been paid based on their level of education and years of experience. This is a reasonable starting point, given the evidence that these two factors are positively associated with teacher effectiveness, but such a system provides few direct incentives for high effort and performance.

Beginning in the 2004-05 school year, the state is requiring school districts to base teacher pay and promotions on student test scores and other factors. This “BEST” program creates a four-tier promotion ladder ranging from uncertified teachers, called “associate teachers,” to the highest performing, called “mentor teachers.” Mentor teachers will have a reduced teaching load and focus their teaching time on the most disadvantaged students. Non-teaching time is spent helping less experienced teachers

improve their skills. In addition to promotions, teachers will be eligible for 5 percent bonuses for outstanding performance. Both promotions and performance are to be based mainly on student test scores.

The basic structure of the BEST program is relatively sound. In theory, the program would raise teacher salaries, reward high performance, and provide incentives for the most effective teachers to stay in the profession. As is the case with other recent initiatives at the state level, however, the state has allocated no funding for the program, despite its considerable expenses.

The mentoring component of the BEST program is part of the larger category of “induction” programs that attempt to ease and facilitate the transition for new teachers. Nearly all forms of induction include some form of mentoring, which can be complemented by reduced teaching loads and fewer responsibilities for serving on school committees. Induction programs are sometimes criticized for taking the most effective teachers out of the classroom (to serve as mentors) and for further increasing the need for more teachers (because of the reduced teaching loads). Nonetheless, they are long-term investments that can pay off by providing teachers who are more experienced, better prepared, and more satisfied with their jobs.

Section 6: Recommendations

The approach used to attract and retain high-quality teachers in Florida can be summed up in four simple words: *all sticks, no carrots*. The state places tremendous pressure on teachers to work hard. Florida teachers report receiving little support and are, as a result, unsatisfied with their jobs. At the same time, high performance goes unrewarded and unappreciated. Many of the programs designed to rectify the problem

have so little funding that they are little more than symbolic. This includes the BEST program and various recruitment tools.

While many of the individual efforts to improve teacher quality have a sound basis, the collective approach has been incoherent. Students entering the profession through colleges of education have strict requirements for the number and types of courses they must take to receive certification; yet, alternative certification allows people to enter the classroom with no experience or training. Likewise, NCLB requirements have one set of standards for public school teachers, but no standard for those in charter schools. Florida's policymakers have gone back and forth on this issue.

The following changes in policy are recommended to ensure that there is a high-quality teacher in every Florida classroom:

1. Require high-quality teachers in all schools receiving public funds, not just in traditional public schools.
2. Continue alternative certification, but monitor it closely to ensure that teachers perform at a high level and stay in the profession.
3. Reduce restrictions on colleges of education that limit innovation and create an uneven playing field in relation to the alternate certification system.
4. Monitor out-of-field teaching in a rigorous manner, providing an accurate picture of teacher quality and facilitating the targeting of resources to shortage areas.
5. Increase funds for district-based professional development that accounts for school-specific needs and integrates subject matter with teaching skills.

6. Ensure salary increases for teachers willing to work in critical shortage areas and schools that have trouble attracting high-quality teachers.
7. Make teacher salaries competitive with salaries in other states.
8. Fund the state's Better Education for Students and Teachers (BEST) program to increase opportunities for career growth and to reward high performance.
9. Expand induction programs to increase retention and training for new teachers.

Notes and References

¹ Sanders, W. L. & Horn, S. P. (1998). Research Findings from the Tennessee Value-added Assessment System (TVAAS) Database: Implications for Educational Evaluation and Research, *Journal of Personnel Evaluation in Education*, 12(3), 247-256.

The “most effective” teachers are those whose student achievement gains are at the 90th percentile. The “least effective” teachers are those at the 10th percentile by this measure.

² Hunter, F. & Schmidt, J. (1998). The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years. *Psychological Bulletin*, 74, 262-74.

The difference in performance between the most and least effective workers, across occupations, is calculated to be 85 percent, versus 47 percent for teachers. These specific differences should not be considered definitive, however, because performance is measured very differently, and with varying degrees of validity, across professions.

³ Rice, J. (2003). *Teacher Quality: Understanding the Effectiveness of Teacher Attributes*, p.17. Washington, DC: Economic Policy Institute.

⁴ *Ibid.*, p.20.

⁵ *Ibid.*

⁶ *Ibid.*, p.19.

Despite these patterns in the characteristics of effective teachers, the differences in teacher performance are only partially explained by these commonly measured factors. This may be due, however, to statistical issues that researchers have not yet resolved.

⁷ The vast majority of colleges of education require extensive subject matter training outside of COEs. For instance, in Florida, the state government requires for certification a minimum of 21 credit hours of English or mathematics courses, for certification in those respective fields in grades 6-12.

⁸ Berry, B. (2003). *Taking Action to Improve Teacher Quality: Addressing Shortcomings in The Teaching Commission Report*. Chapel Hill, North Carolina: Southeast Center for Teaching Quality, Inc.

⁹ See, for example:

Strauss, R. & Sawyer, E. (1986). Some New Evidence on Teacher and Student Competencies. *Economics of Education Review*, 5, 41-48.

¹⁰ Hunter, F. & Schmidt, J. (1998). The Validity and Utility of Selection Methods in Personnel Psychology: Practical and Theoretical Implications of 85 Years. *Psychological Bulletin*, 74, 262-74.

¹¹ Manski, C. (1987). Academic Ability, Earnings, and the Decision to Become a Teacher: Evidence from the National Longitudinal Study of the High School Class of 1972. *Public Sector Payrolls*. Chicago, IL: University of Chicago Press.

¹² According to the FDOE, 73 percent of new teacher hires in Florida had previous teaching experience. Most of the rest are new graduates from colleges of education, as suggested by the data in section #3. It is possible that some new hires with previous experience may not have graduated from colleges of education, but these numbers are not a large portion of the total.

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¹³ Council for Education Policy Research and Improvement (2003). *Florida Teachers and the Teaching Profession*. Tallahassee, FL: State of Florida.

- ¹⁴ Harris, D. & Adams, S. (2004). *Is Teacher Turnover High or Just Different? A Comparison with other professionals*. Paper presented at the 2004 annual conference of the American Education Finance Association, Salt Lake City, Utah.
- ¹⁵ *Ibid.*
- ¹⁶ Hanushek, E., Kain, J., & Rivkin, S. (2001). *Why Public Schools Lose Teachers*. NBER Working Paper #8599. Cambridge, MA: National Bureau of Economic Research.
- ¹⁷ Harris, D. & Adams, S. (2004). *Is Teacher Turnover High or Just Different? A Comparison with other professionals*. Paper presented at the 2004 annual conference of the American Education Finance Association, Salt Lake City, Utah
- ¹⁸ Ingersoll, R. (2001). *Teacher Turnover, Teacher Shortages, and the Organization of Schools*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.
- ¹⁹ Office of Postsecondary Education, U.S. Department of Education (2003). *Meeting the Highly Qualified Teachers Challenge*, p.65. Retrieved March 10, 2004, from <http://www.ed.gov/about/reports/annual/teachprep/2003title-ii-report.pdf>
- ²⁰ Office of Policy Research and Improvement, Florida Department of Education (2003, November). *Critical Teacher Shortage Areas, 2004-2005*. Retrieved March 7, 2004, from http://www.fldoe.org/meetings/2003_11_18/CritTeaShort.pdf
- ²¹ Ingersoll, R. (2001). *Teacher Turnover, Teacher Shortages, and the Organization of Schools*. Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.
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- ²² Lankford, H., Loeb, S., & Wycoff, J. (2002). Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis. *Educational Evaluation and Policy Analysis*, 24(1), 37-62.
- ²³ Florida Department of Education (2003). *Trends in the Supply of New Teachers in Florida*. Tallahassee, FL. Retrieved March 6, 2004, from <http://www.firn.edu/doe/opri/pdf/tnoct2000.pdf>
- ²⁴ Council for Education Policy Research and Improvement (2003). *Florida Teachers and the Teaching Profession*. Tallahassee, FL: State of Florida.
- ²⁵ *Ibid.*
- ²⁶ *Ibid.*
- ²⁷ Florida Department of Education (2002). *Trends in the Supply of New Teachers in Florida*. Appendix, Table 1.
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- ³¹ Berry, B., Luczak, J., & Norton, J. (2003). *The Status of Teaching in the Southeast: Measuring Progress, Moving Forward*. Chapel Hill, North Carolina: Southeast Center for Teaching Quality.
- ³² Columns 2 and 3 in Table 2 include Florida, in addition to the other states
- ³³ Full disclosure: The author of this brief is a faculty member in the College of Education at Florida State University.
- ³⁴ Council for Education Policy Research and Improvement (2003). *Florida Teachers and the Teaching Profession*, p. 7. Tallahassee, FL: State of Florida.

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- ³⁶ Full disclosure: The author of this brief is playing a small role in the evaluation of Florida's alternative certification program.
- ³⁷ National Center for Education Statistics, U.S. Department of Education, Digest of Education Statistics, 2000.
- ³⁸ Temin, P. (2003). Low Pay, Low Quality. *Education Next*. Retrieved March 12, 2004, from www.educationnext.org/20033/8.html.
- ³⁸ All numbers relating to comparisons of salaries across professions are derived from this source.
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