

Remarks of Dara Barlin
Senior Policy Analyst
New Teacher Center @ UC Santa Cruz

Before the Education Committee and Program Review and Investigations Committee
February 27, 2008

Good afternoon, members of the Program Review & Investigations Committee and Education Committee. My name is Dara Barlin. I am Senior Policy Analyst for the New Teacher Center at the University of California, Santa Cruz, and I'm here to comment on Raised Bill 329 and Raised Bill 330, pertaining to the BEST program recommendations. I'd like to provide you with an overview of research on the impact of high quality mentoring.

Throughout the education and policy communities, teacher quality has come to the forefront as the single most important factor influencing student achievement. The National Commission on Teaching and America's Future noted in 2003 that the nation "has reached a consensus that well-prepared teachers are the most valuable resource a community can provide to its young people."¹ Empirical research justifies this contention, demonstrating that effective teachers are critical to student success. Students taught by high quality teachers perform dramatically better than students assigned to ineffective teachers.² Teachers near the top of the quality distribution "can get an entire year's worth of additional learning out of their students compared to those near the bottom of the distribution."³

However, the nation continues to struggle to provide all students with high quality teachers as well-qualified, experienced teachers rarely choose to work with poor and minority students in challenging schools. The students most in need of outstanding teachers instead are faced with a succession of beginning teachers, many lacking full certification.⁴ Despite their enthusiasm and good intentions, too many of these beginning teachers are ineffective and their students fail to reach the achievement levels of students taught by experienced teachers.⁵ New teachers are also the most likely to leave. All new teachers, not just those in difficult to staff schools, face such challenging working conditions and find teaching so difficult that approximately 56% leave the profession after only five years. This percentage increases significantly in low-income, underperforming urban areas.⁶

¹ "No Dream Denied: A Pledge to America's Children," 2003, National Commission on Teaching and America's Future, p. 4, <http://www.nctaf.org/article/?c=4&sc=16>

² Sanders, W. L. and Rivers, J.C. (1996). "Cumulative and Residual Effects of Teachers on Future Student Achievement," University of Tennessee Value-added Research and Assessment Center, Knoxville, Tennessee

³ Hanushek, Eric A., July 2002, "The Failure of Input-based Schooling Policies," National Bureau of Economic Research, p. 31

⁴ Shields, et. al., 2003, "Teaching and California's Future," "The Status of the Teaching Profession 2003," Santa Cruz, CA: Center for the Future of Teaching and Learning, www.cftl.org

⁵ Rice, Jennifer, 2003. *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute

⁶ Ingersoll, Richard, 2001, "Teacher Turnover, Teacher Shortages, and the Organization of Schools," Center for the Study of Teaching and Policy, University of Washington

The costs of new teacher turnover are significant, especially because it is not the least qualified, but the most promising teachers that usually leave the profession first. Teachers with the highest scores on certification tests are twice as likely to leave as those with the lowest scores⁷. Without guidance and support, these promising teachers fail to reach their peak level of effectiveness and generally leave out of frustration⁸.

This loss of critical human resources hurts the most disadvantaged students most. New teachers are disproportionately assigned to the most challenging schools and classrooms, which are typically populated by high percentages of low-income and minority students.⁹ Despite wonderful intentions, these new teachers have yet to develop their skills and knowledge in teaching. As a result, they are often less effective than experienced colleagues in helping students learn¹⁰. Thus, the students most in need of the most highly accomplished teachers are more likely to be taught by the least effective ones.

The inability to retain new teachers also has a significant fiscal impact on school budgets. The National Commission on Teaching & America's Future estimates that the nation loses \$7.3 billion annually due to teacher turnover¹¹. This hits state budgets hard as well. A 2000 Texas Center for Education Research study estimated the annual cost of that state's teacher attrition rate at between \$329 million and \$2.1 billion¹². The Center for Strengthening the Teaching Profession in Washington State found that it requires \$42,000 of taxpayer money to replace every new teacher who leaves the profession¹³. In Washington, that's \$21 million lost every year. This represents billions of lost taxpayer dollars due to inefficiencies in our system and our inability to hold onto teachers. At the local level, the National Commission on Teaching and America's Future looked at one city in Connecticut and estimated that Hartford Public Schools loses approximately \$4,462,500 in attrition related costs.

Outside of the fiscal and equity implications, a revolving door of staff inhibits the ability of schools to create highly functional environments where all children can learn. Consistency in the teaching workforce is a key element of understanding the student population, maintaining strong instructional programs, and ensuring cohesiveness and alignment across instructional programs.

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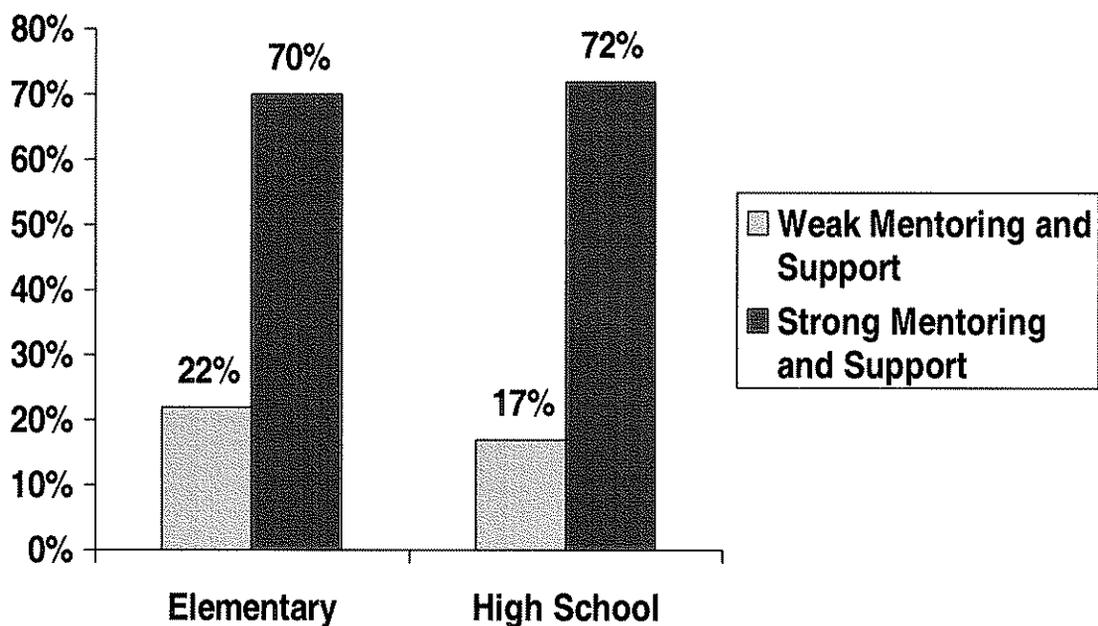
While some level of attrition may be desirable, high levels of turnover among the best new teachers significantly impede our efforts to provide a high-quality education for all students. These trends have damaging repercussions for our public schools, our taxpayer dollars and most importantly, the opportunities afforded to the next generation in our country.

However, when sufficient new teacher mentoring and induction programs are implemented with integrity, these trends can be either slowed or reversed. Research has found that when school systems incorporate a high quality induction program, attrition is decreased, the effectiveness of teachers improved, and cost savings are provided to school systems. The charts below illustrate the potential gains that can be made.

Mentoring and Support Cuts Teacher Turnover

Teacher Intent to Remain in Their Current School

Source: Consortium on Chicago School Research at the University of Chicago, 2007



One of the principal benefits of high-quality teacher induction is reduced teacher turnover, enabling schools and districts to hold onto their best and brightest educators. A recent survey of new teachers in some of the Chicago's most hard-to-staff schools shows that teachers who receive intensive induction are much more likely to report a good experience and to remain in the profession. The Chicago New Teacher Center has seen this impact on Chicago's South Side where its full-release induction model has strengthened teacher retention. Intensive induction programs can serve a critical tool for urban school districts that typically evidence disruptively high rates of within-district teacher transfer.

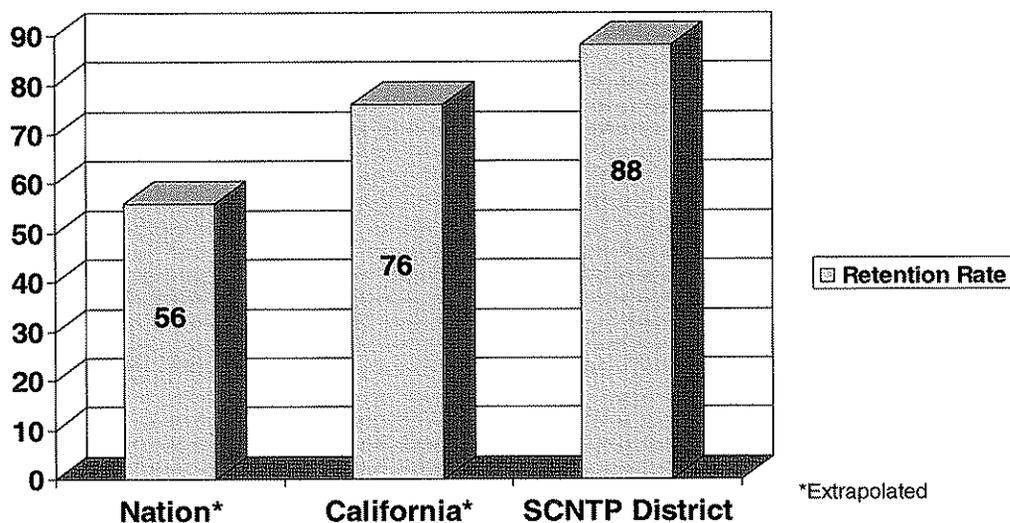
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Percent of Teacher Retention After Six Years

Comparing Rates of SCNTP Teachers to California & U.S. Statistics

Sources: Nation = Ingersoll (2002); CA = CCTC (2002); SCNTP = Strong & St. John (2001)

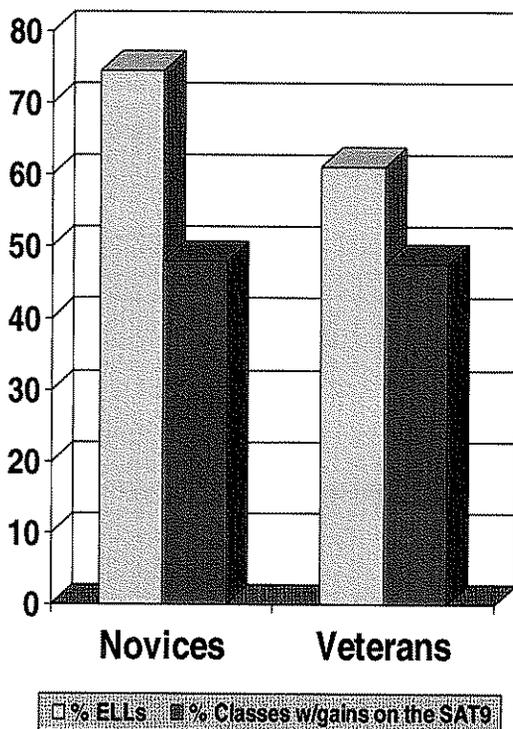


SCNTP teachers all receive comprehensive mentoring during first two years; CA teachers all receive some form of induction support; 83% of teachers throughout the nation receive some form of induction support

Two studies have shown that the Santa Cruz New Teacher Project's retention rate for new teachers is 88% after six years, as compared to the national rate of 56% after five years.¹ California mandates a beginning teacher support program with many elements of high quality induction. Based on experience, the New Teacher Center hypothesizes that the reason why California retention is not as high as in SCNTP districts is because quality of implementation of the elements vary widely across the state.

Class Assignment and Achievement: Comparison of Novice & Veteran Teachers in SCNTP District C

Source: Strong (2006)



Novice = 1-2 yrs experience Veteran = 10+yrs experience

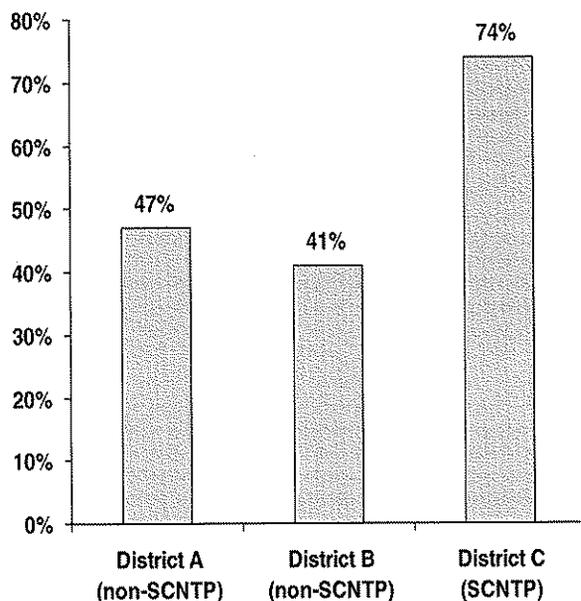
- Novices are assigned classes with more English Language Learners (ELLs) than are veterans
- Novices' and veterans' classes make similar gains

Probably the most important benefit of high quality induction is shown here, improvements in teacher effectiveness and a significant contribution to greater student learning. Two studies have shown that students taught by teachers who receive comprehensive induction support for two years demonstrate significantly greater learning gains. New teachers in these programs are about as effective as their more experienced peers, despite being assigned to classrooms with more English Language Learner students.

Source: Michael Strong. (2006.) *Research Brief: Does New Teacher Support Affect Student Achievement?* New Teacher Center: Santa Cruz, CA.

Maintaining Intensive Induction Results in Greater Student Learning Gains

Sources: • Fletcher, Strong, and Villar, . (2008) • Strong (2006)



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- For Year 2 Teachers, District A has a buddy system, District B has 1:35 ratio, whereas District C maintains 1:15 ratio.

Percent of Classes with Achievement Gains on SAT 9: Data for New Teachers in Three California Districts

The implications from this data reinforce the importance of maintaining the rigor and intensity of mentoring programs over, at least, the first two year's of a beginning teacher's career. This chart summarizes findings from a NTC study of induction programs in three California districts. All three districts had comprehensive mentoring for teachers in their first year, utilizing full-release mentors and caseloads of 1:15. Only District C retained this model for the teachers' second year, with District A reverting to a buddy system and District B increasing the mentor-new teacher ratio to 1:35. Students taught by District C's new teachers showed the greatest achievement gains.

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Comprehensive Induction Programs Provide a Positive Return on Investment

Source: Villar & Strong, 2007

Santa Cruz New Teacher Project

	Costs	Benefits	Marginal Return on \$1 after 5 yrs
Student	\$0	\$1,926	∞
Beginning Teacher	\$953	\$3,448	\$3.61
District	\$4,813	\$9,088	\$1.88
State	\$7,189	\$7,080	\$0.98
Society	\$12,955	\$21,542	\$1.66



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A recent New Teacher Center study measured the full range of benefits related to induction, demonstrating a significant return on investment from expenditures on high-quality induction programs. Using evidence from one medium-sized California school district, the study describes how every \$1.00 invested in a comprehensive induction program provides a return on investment of \$1.66 over a period of five years. The analysis includes all major and minor costs for providing high-quality new teacher support, including personnel, indirect costs (facilities, equipment & materials), program inputs (such as room rental and substitute teachers), and client inputs (such as teachers' personal time). Total costs for a district induction program supporting 119 new teachers are approximately \$786,000, representing a per teacher cost of \$6,605. Benefits include potential savings to districts in increased teacher retention, increased new teacher effectiveness, and the time savings to principals for reducing the need to monitor beginning teachers. The study compares published state and national retention data with district data for the program.

In addition, five years of student test score data are analyzed. Gains in student achievement for new teachers who had been mentored versus veteran teachers who had not previously been in a comprehensive induction program demonstrated that new teachers were, on average, as effective as fourth-year teachers. By looking at the salary differential between beginning and more veteran teachers, this apparent benefit afforded by the induction program is monetized. In total, the study found that 47% of the benefits were attributable to enhanced teacher effectiveness and 17% to turnover cost savings.

The study demonstrates that high-quality induction programs provide a positive return on investment both because beginning teachers stay in greater numbers and because those who stay are more effective.

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Difference between high quality and traditional mentoring programs

High-quality mentoring and induction programs are effective vehicles for improving teacher quality, reducing attrition, and lowering hiring and recruitment costs fueled by rampant teacher turnover. However, we draw an important distinction between high-quality mentoring and traditional or poor/mediocre mentoring. While high-quality programs focused intensively on instructional growth may lead to the positive outcomes described above, investments in traditional or poor/mediocre induction (a.k.a. “buddy systems”) generally yield little to no positive results in these areas. A focus on the elements of high quality induction is necessary in order to realize the full potential of such programs.

The chart in *Appendix A* provides insights into what the NTC identifies as the critical components of high quality induction and mentoring. This figure is generated from a mix of research and NTC’s 20 years experience in the field. It is important to note that very few school systems have both the funding and the capacity to implement all of the components listed under the “moving towards” category. Most school systems incorporate some components of best practice, and some components that are considered more traditional practice. This chart is not to suggest where programs should have been by now, but rather it exists to provide a vision for how programs can move forward to have greater level of impact on teachers and students in the future.

Recommendations

Based on the above testimony, the NTC recommends to the Joint Committee that they create policy options that enhance existing mentoring programs, support strategic implementation of the key elements of high quality induction, and build quality and rigor within programs in ways that impact teacher retention and student achievement. In order to accomplish this, NTC recommends that State leaders:

- 1) Conduct research on the quality of mentoring programs across the state, and the relative impacts being made. Look for outcomes related to both teacher retention and student achievement.
 - 2) Assess current policies on mentoring to understand whether elements of high quality induction are required and if they are being implemented with fidelity across the state.
 - 3) Ensure there are sufficient resources to allow districts to implement elements with quality and integrity.
 - 4) Provide a laser-like focus on support to new teachers in hard-to-staff school systems and potential model sites to allow for intensified programs. Ensure funding for research to assess program impact regularly.
 - 5) Provide technical assistance to help districts implement programs with quality and integrity.
 - 6) Create a state-wide review process to ensure that programs “on the ground” mirror programs described in documentation. Fund research to measure program impact on teacher and student outcomes annually.
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APPENDIX A

APPENDIX B



Research Brief

The Costs and Benefits of a Comprehensive Induction Program

Michael Strong, Ph.D., *Director of Research, and*
Anthony Villar, *Research Specialist, New Teacher Center @ UCSC*

Even when educational administrators acknowledge the growing evidence that comprehensive induction programs produce positive outcomes for beginning teachers during their first two years in the profession, they often balk at the cost of such programs. Offered the option of a form of induction support that is less demanding on resources, maybe one that uses in-school mentors with no release time and little training, administrators may decide on the less costly alternative because they have no information about the potential returns on investment of different kinds of mentoring programs. If they had such information, they may make a different decision. In the same way, legislators could benefit from understanding the potential returns on such educational investments, since it is often a financial justification that is ultimately needed to pass costly reforms.

Until now there have been no benefit-cost studies of mentoring programs for beginning teachers to provide legislators, educational administrators, and program leaders with the kind of economic information they need for informed decision making. In a benefit-cost analysis we estimate the financial benefits of a given course of action against the actual costs, and use the resulting balance to guide decision making. Costs are either one-time, or may be ongoing. Benefits are most often received over time. In its simple form, benefit-cost analysis is carried out using only actual financial costs and financial benefits. A more sophisticated approach attempts also to put a financial value on intangible costs and benefits, a process that can be highly subjective.

In order to provide an estimate of the potential return on the investment in a comprehensive mentoring program for beginning teachers we collected actual cost data for the Santa Cruz New Teacher Project across all its local contexts,

calculated the measured benefits, assigning them a monetary value where possible, and computed the net present value over five years. We looked at net benefits or costs from multiple perspectives: the state, the district, the school, the teacher, and the student. The total of all these represents the net benefit or cost to society.

We included all major and minor costs in the analysis, including Personnel, Indirect Costs (Facilities, Equipment & Materials), Program Inputs (such as room rental and substitute teachers) and Client inputs (such as teachers' personal time). As can be seen in Table 1, "Total Ingredients Costs" for a district project supporting 119 new teachers are approximately \$786 thousand, representing a per teacher cost of \$6,605. Disaggregated by the funding constituencies, the district pays about \$274 thousand (35%), the state pays about \$436 thousand (56%) through the BTSA program, and the remaining \$76 thousand, 9%, come from time inputs imposed on new teachers and site administrators as part of implementing the program.

In assessing benefits, we included potential savings to districts and teachers on increased teacher retention, potential benefits to the state and district

Table 1: Summary of Costs of a Comprehensive Induction Program for One District

	Project Cost	District Cost	State BTSA Cost	Teacher & Principal Costs
Personnel	623,084	240,250	382,834	
Indirect Costs	51,170	19,730	31,440	
Program Inputs	35,581	13,719	21,862	
Client Inputs	76,181			76,181
Total	786,016	273,699	436,136	76,181
Per teacher costs	\$6,605	\$2,300	\$3,665	\$640

The costs of new teacher turnover are significant, especially because it is not the least qualified, but the most promising teachers that usually leave the profession first. Teachers with the highest scores on certification tests are twice as likely to leave as those with the lowest scores⁷. Without guidance and support, these promising teachers fail to reach their peak level of effectiveness and generally leave out of frustration⁸.

This loss of critical human resources hurts the most disadvantaged students most. New teachers are disproportionately assigned to the most challenging schools and classrooms, which are typically populated by high percentages of low-income and minority students.⁹ Despite wonderful intentions, these new teachers have yet to develop their skills and knowledge in teaching. As a result, they are often less effective than experienced colleagues in helping students learn¹⁰. Thus, the students most in need of the most highly accomplished teachers are more likely to be taught by the least effective ones.

The inability to retain new teachers also has a significant fiscal impact on school budgets. The National Commission on Teaching & America's Future estimates that the nation loses \$7.3 billion annually due to teacher turnover¹¹. This hits state budgets hard as well. A 2000 Texas Center for Education Research study estimated the annual cost of that state's teacher attrition rate at between \$329 million and \$2.1 billion¹². The Center for Strengthening the Teaching Profession in Washington State found that it requires \$42,000 of taxpayer money to replace every new teacher who leaves the profession¹³. In Washington, that's \$21 million lost every year. This represents billions of lost taxpayer dollars due to inefficiencies in our system and our inability to hold onto teachers. At the local level, the National Commission on Teaching and America's Future looked at one city in Connecticut and estimated that Hartford Public Schools loses approximately \$4,462,500 in attrition related costs.

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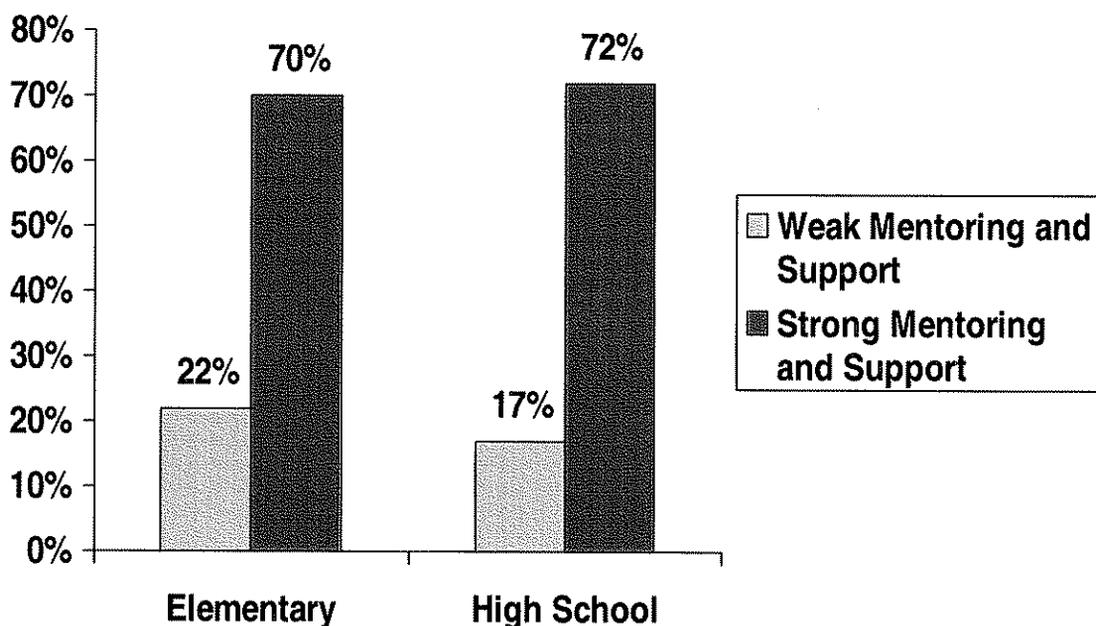
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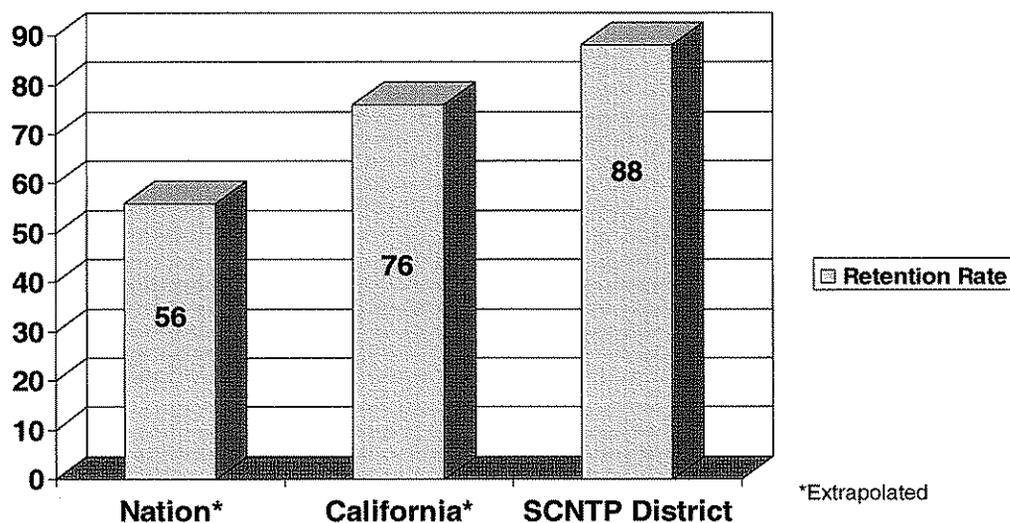
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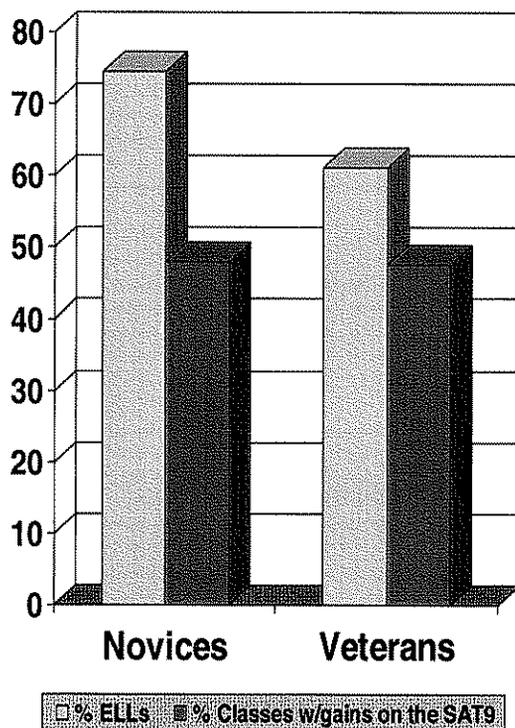


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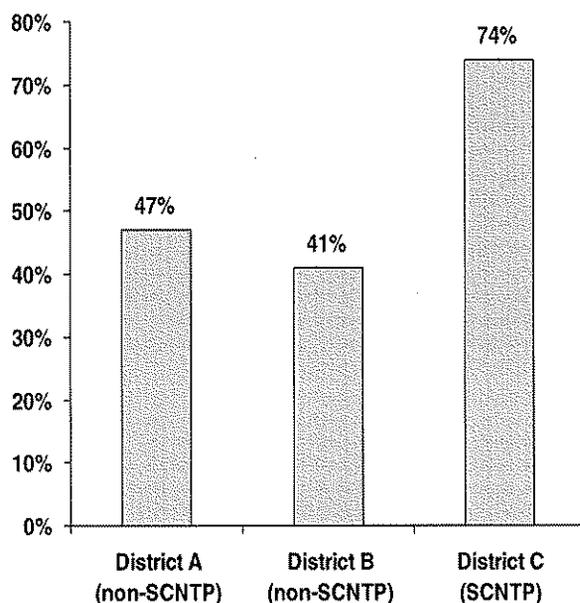
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The chart in *Appendix A* provides insights into what the NTC identifies as the critical components of high quality induction and mentoring. This figure is generated from a mix of research and NTC’s 20 years experience in the field. It is important to note that very few school systems have both the funding and the capacity to implement all of the components listed under the “moving towards” category. Most school systems incorporate some components of best practice, and some components that are considered more traditional practice. This chart is not to suggest where programs should have been by now, but rather it exists to provide a vision for how programs can move forward to have greater level of impact on teachers and students in the future.

Recommendations

Based on the above testimony, the NTC recommends to the Joint Committee that they create policy options that enhance existing mentoring programs, support strategic implementation of the key elements of high quality induction, and build quality and rigor within programs in ways that impact teacher retention and student achievement. In order to accomplish this, NTC recommends that State leaders:

- 1) Conduct research on the quality of mentoring programs across the state, and the relative impacts being made. Look for outcomes related to both teacher retention and student achievement.
 - 2) Assess current policies on mentoring to understand whether elements of high quality induction are required and if they are being implemented with fidelity across the state.
 - 3) Ensure there are sufficient resources to allow districts to implement elements with quality and integrity.
 - 4) Provide a laser-like focus on support to new teachers in hard-to-staff school systems and potential model sites to allow for intensified programs. Ensure funding for research to assess program impact regularly.
 - 5) Provide technical assistance to help districts implement programs with quality and integrity.
 - 6) Create a state-wide review process to ensure that programs “on the ground” mirror programs described in documentation. Fund research to measure program impact on teacher and student outcomes annually.
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APPENDIX A

APPENDIX B

Research Brief

The Costs and Benefits of a Comprehensive Induction Program

Michael Strong, Ph.D., *Director of Research, and*
Anthony Villar, *Research Specialist, New Teacher Center @ UCSC*

Even when educational administrators acknowledge the growing evidence that comprehensive induction programs produce positive outcomes for beginning teachers during their first two years in the profession, they often balk at the cost of such programs. Offered the option of a form of induction support that is less demanding on resources, maybe one that uses in-school mentors with no release time and little training, administrators may decide on the less costly alternative because they have no information about the potential returns on investment of different kinds of mentoring programs. If they had such information, they may make a different decision. In the same way, legislators could benefit from understanding the potential returns on such educational investments, since it is often a financial justification that is ultimately needed to pass costly reforms.

Until now there have been no benefit-cost studies of mentoring programs for beginning teachers to provide legislators, educational administrators, and program leaders with the kind of economic information they need for informed decision making. In a benefit-cost analysis we estimate the financial benefits of a given course of action against the actual costs, and use the resulting balance to guide decision making. Costs are either one-time, or may be ongoing. Benefits are most often received over time. In its simple form, benefit-cost analysis is carried out using only actual financial costs and financial benefits. A more sophisticated approach attempts also to put a financial value on intangible costs and benefits, a process that can be highly subjective.

In order to provide an estimate of the potential return on the investment in a comprehensive mentoring program for beginning teachers we collected actual cost data for the Santa Cruz New Teacher Project across all its local contexts,

calculated the measured benefits, assigning them a monetary value where possible, and computed the net present value over five years. We looked at net benefits or costs from multiple perspectives: the state, the district, the school, the teacher, and the student. The total of all these represents the net benefit or cost to society.

We included all major and minor costs in the analysis, including Personnel, Indirect Costs (Facilities, Equipment & Materials), Program Inputs (such as room rental and substitute teachers) and Client inputs (such as teachers' personal time). As can be seen in Table 1, 'Total Ingredients Costs' for a district project supporting 119 new teachers are approximately \$786 thousand, representing a per teacher cost of \$6,605. Disaggregated by the funding constituencies, the district pays about \$274 thousand (35%), the state pays about \$436 thousand (56%) through the BTSA program, and the remaining \$76 thousand, 9%, come from time inputs imposed on new teachers and site administrators as part of implementing the program.

In assessing benefits, we included potential savings to districts and teachers on increased teacher retention, potential benefits to the state and district

Table 1: Summary of Costs of a Comprehensive Induction Program for One District

	Project Cost	District Cost	State BTSA Cost	Teacher & Principal Costs
Personnel	623,084	240,250	382,834	
Indirect Costs	51,170	19,730	31,440	
Program Inputs	35,581	13,719	21,862	
Client Inputs	76,181			76,181
Total	786,016	273,699	436,136	76,181
Per teacher costs	\$6,605	\$2,300	\$3,665	\$640

from increases in new teacher effectiveness, and the time saving to principals for having to monitor beginning teachers less. Using historical retention data from teachers who had been in the program, we compared these to published state and national data in order to estimate the benefits added by the comprehensive induction program. We analyzed the student test score data for all teachers in the district over five years, computing the value-added gains for new teachers and comparing them to those of experienced teachers who had not previously been in the program. This analysis demonstrated that first- and second-year teachers were as effective as fourth-year teachers on average, sans the induction program. By looking at the salary differential we could monetize this apparent benefit afforded by the induction program. The benefits are displayed in Table 2.

Table 2: Summary of Benefits of a Comprehensive Induction Program for One District

	State	District	New Teachers	Students
Preliminary credential cost savings			3,394	
Recruitment and Orientation Savings		3,736		
Induction Cost Savings	762	479		
BT Increased Effectiveness	6,318	3,965		
CLEAR Credential Tuition Savings			54	
Student benefit from Having an effective teacher				1,926
Principal time savings		908		
Total	\$7,080	\$9,088	\$3,448	\$1,926
TOTAL Benefit to Society \$21,542				

When costs and benefits are computed over five years (costs are incurred only in the first two years, but benefits continue to accrue), we are able to provide the net present value of the program to each interested constituent. These numbers are displayed in Table 3.

Subtraction of per-teacher costs of about \$13,000 from the benefits of almost \$21,500 shows each investment in a new teacher yields returns a little over \$8,500 per teacher after five years. The present study suggests that increasing teacher effectiveness provides far greater benefits (47%) than does simply reducing teacher attrition costs (17%). When each constituency is taken to account, the returns on time and program resources expended show that all four groups—students, new teachers, districts and the state—all benefit from the investment in comprehensive induction. Students, who invest not a dollar, proportionally benefit the most,

Table 3: Costs, Benefits, and Marginal Returns for One District

Constituency	Costs	Benefits	Marginal Return on \$1
Student	\$0	\$1,926	
New Teacher	\$953	\$3,448	\$3.61
District	\$4,813	\$9,088	\$1.88
State	\$7,189	\$7,080	\$0.98
Society	\$12,955	\$21,542	\$1.66

followed by new teachers who earn a return of \$3.61 per dollar, and the district at \$1.88 per dollar invested. Even the state manages to recoup 98 cents on the dollar from its original investment. When costs and benefits are summed up for society the program secures a return of \$1.66 for every dollar invested after five years. Clearly this type of educational investment is a winner from all perspectives.

Most discussions of induction benefits and costs focus on the savings from reduced turnover to justify program investments (see Fuller, 2000). By measuring the full range of benefit streams accruing to induction, we were able to demonstrate that induction returns extend far beyond mere retention questions. The influence on new teacher practice is by far the most important benefit and potentially extends farther if we consider the benefits to children assigned to effective teachers over the course of their K–12 careers.

While we valued as many theoretical effects from the program as possible, we could not include those that accrue far into the future. For example, assignment benefits to students were limited to two years, but properly analyzed, could extend out to include valuations on increased access to colleges and universities, or on increased earnings by the time the students are ready to join the work force. Another item not valued in this design is the benefit represented by a fully trained mentor returning to the classroom. It is highly likely that the mentoring experience adds value to the teaching skills and raises the pedagogical level of the veteran teacher. Nonetheless, we captured what we believe is the most important impact of new teacher induction, the change in classroom practice and its effect on students. For a full list of theoretical benefits please refer to the full paper.

While mentoring programs for beginning teachers have become more visible during the past ten years, no rigorous analysis, to our knowledge, has been performed to assess the potential return on investment for such programs. The analysis described here provides educational decision-makers, either at school, district or policy levels, with information to initiate similar discussions of their own programmatic efforts that may guide them in spending education dollars.

Fuller, E. (2000). *The cost of teacher turnover*. Report prepared for the Texas State Board for Educator Certification (SBEC). Austin, TX: Texas Center for Educational Research.

NTC Policy Brief

NEW TEACHER CENTER AT THE UNIVERSITY OF CALIFORNIA, SANTA CRUZ

FALL 2007

New Teacher Support Pays Off:

A Return on Investment for Educators and Kids

The quality of a child's teacher is the most important school-based factor determining how much that child learns.¹ Research provides convincing evidence that students taught by effective teachers perform dramatically better than those assigned to ineffective teachers.² These high-quality teachers, however, are not equally distributed across schools and districts; poor and minority students are less likely to have fully-licensed, highly qualified teachers.³ One study found that poor and minority students that have an effective teacher four years in a row can achieve at the same levels as their more affluent white peers.⁴

New teacher support is a critical component of a comprehensive solution to achieving excellence in teaching quality. High-quality support programs for new teachers—often referred to as **induction programs**—not only increase the retention of beginning teachers, but also their impact on student learning. The staff of the New Teacher Center at the University of California, Santa Cruz (NTC), has two decades of experience developing induction programs that support and strengthen new teacher practice.

This Policy Brief describes why high-quality induction programs are an efficient and effective use of public resources. This evidence should help to convince policymakers to invest in such programs. Equally important, it also makes the case for public policies that strengthen the quality of induction programs, maximizing their beneficial impact on educators and the students they teach.

- 1 Steven G. Rivkin, Eric A. Hanushek, and John F. Kain. (2005.) "Teachers, Schools, and Academic Achievement." *Econometrica*: Princeton, NJ.
- 2 William L. Sanders and June C. Rivers. (1996.) "Cumulative and Residual Effects of Teachers on Future Student Achievement," University of Tennessee Value-added Research and Assessment Center, Knoxville, Tennessee. June C. Rivers-Sanders. (1999.) "The Impact of Teacher Effect on Student Math Competency Achievement." Ph.D dissertation. University of Tennessee: Knoxville, TN. Jennifer Presley, Bradford R. White and Yubin Gong. (2005.) "Examining the Distribution and Impact of Teacher Quality in Illinois." Illinois Education Research Council: Edwardsville, IL.
- 3 Daniel C. Humphrey, Julia E. Koppich and Heather J. Hough. (March 3, 2005.) "Sharing The Wealth: National Board Certified Teachers and The Students Who Need Them Most." Education Policy Analysis Archives: Tempe, AZ. [Available at: <http://epaa.asu.edu/epaa/v13n18>.] Charles Clotfelter, Helen F. Ladd, Jacob Vigdor and Justin Wheeler. (March 2007.) High-Poverty Schools and The Distribution of Teachers and Principals (Working Paper). Urban Institute, National Center for Analysis of Longitudinal Data in Education Research: Washington, DC. [Available at: http://www.caldercenter.org/PDF/1001057_High_Poverty.pdf.]
- 4 Robert Gordon, Thomas J. Kane, and Douglas O. Staiger. (2006.) "Identifying Effective Teachers Using Performance on the Job." The Brookings Institution: Washington, DC.

High-Quality Induction

Not all programs that support new teachers are created equal. They vary in quality from old-fashioned "buddy systems" to comprehensive, systematized induction programs that use trained mentors and provide structured time for interaction focused on improving new teachers' content, classroom management, and instructional skills. In order to be effective, induction programs must move beyond informal mentoring that provides periodic or haphazard logistical and psychological support to new teachers. Comprehensive induction models that focus on improving classroom practice and offer opportunities for continuous professional growth are needed to develop more confident and more effective teachers.

Elements of High-Quality Induction

NTC research and experience suggests some critical elements that high-quality induction programs have in common:

- A multi-year program, spanning at least the first two years of teaching;
- Sanctioned time for mentor-new teacher interaction;
- Rigorous mentor selection criteria;
- Initial training and on-going professional development and support for mentors;
- Pairing of new teachers and mentors in similar subject areas and grade levels; and
- Documentation and evidence of new teacher growth.

Induction programs coincide with a formative stage of a teacher's career. Research shows that teacher experience is unrelated to effectiveness, except during the initial years in the profession.⁵ High-quality induction programs can address this challenge by accelerating new teachers' professional growth and making them more effective practitioners during their early years in the classroom.

High-quality induction programs also improve teacher retention, where lesser quality approaches do not. Research by Thomas Smith of Vanderbilt University, and Richard Ingersoll of the University of Pennsylvania, has shown that more than half of all teachers receive only

basic on-the-job support that provides no significant benefits. The one-year attrition rate for these teachers is almost identical to that for teachers who receive no induction support at all (39% vs. 41%). High intensity induction programs reduce the one-year attrition rate to 18%. Despite the power of this approach, less than 1% of new teachers currently benefit from high intensity induction programs.⁶

While all schools and students can benefit from more effective teachers, the power of high-quality induction holds special promise for hard-to-staff schools that serve disproportionately low-income and minority students, where teacher turnover is rampant, and which often employ a disproportionately high percentage of inexperienced and out-of-field teachers. High-quality induction programs can develop the human capacity that these high-need schools require for success. Without teachers at the heart of a functioning learning community that nurtures professional growth, the academically-disadvantaged students who overwhelmingly populate these schools will continue to flounder.

The cost of high-quality induction programs often dissuades policymakers and school administrators from authorizing and implementing them. The annual per teacher cost of such programs can run as high as \$6,000-\$7,000; however, a recent study pegged the cost of a single teacher leaving urban school districts including Milwaukee Public Schools and Chicago Public Schools at \$15,325 and \$17,872, respectively.⁷

Numerous school districts and some states have begun to recognize the importance of supporting new teachers through high-quality induction. States such as California and Oregon and urban districts such as Chicago, Boston, and Durham are examples of places that have prioritized the development of policies and program infrastructure to implement comprehensive, robust induction programs.

Policymakers should consider comprehensive policy strategies to address teacher preparation and recruitment—particularly in hard-to-staff schools and subject areas—but they also must focus on supporting these new educators to succeed and stay in the profession.

5 Eric A. Hanushek, John F. Kain, Daniel M. O'Brien, and Steven G. Rivkin. (2005.) "The Market for Teacher Quality." NBER Working Paper 11154. National Bureau of Economic Research: Cambridge, MA. [Available at: <http://www.nber.org/papers/w11154>.]

6 Thomas M. Smith and Richard M. Ingersoll. (2004.) "What Are The Effects of Induction and Mentoring on Beginning Teacher Turnover?" *American Educational Research Journal*: Washington, DC. [Available at: http://www.gse.upenn.edu/faculty_research/Smith&IngersollAERJInductionMay2004.pdf.]

7 Gary Barnes, Edward Crowe, and Benjamin Schaefer. (2007.) *The Cost of Teacher Turnover in Five School Districts: A Pilot Study*. National Commission on Teaching and America's Future (NCTAF): Washington, DC. [Available at: http://www.nctaf.org/resources/demonstration_projects/turnover/TeacherTurnoverCostStudy.htm.]; Thomas G. Carroll. (2007.) *Policy Brief: The High Cost of Teacher Turnover*. NCTAF: Washington, DC.

Without assistance and mentoring from a carefully-selected and trained veteran teacher, most new teachers will struggle, some will leave the school or the profession entirely, and all will fail to be as effective as they could be given such professional support.

The NTC has research evidence, demonstrating that high-quality induction programs not only increase the retention of beginning teachers (consistent with Ingersoll and Smith's work), but also improve their teaching practice and raise student achievement. Two studies documented the Santa Cruz/Silicon Valley New Teacher Project in California as having a new teacher retention rate of 88% after six years.⁸ Another found that the students of beginning teachers who received comprehensive, multi-year induction support achieved reading gains at rates not significantly different from those of more experienced teachers in the same district.⁹ More than just a response to teacher shortages, high-intensity educator induction programs strengthen the capacity of educators to improve student learning.

NTC Research Study:

Is Mentoring Worth the Money?

A Benefit-Cost Analysis and Five-Year Rate of Return of a Comprehensive Mentoring Program for Beginning Teachers

While most discussions of the benefits of induction focus on the savings from reduced teacher turnover to justify program investments,¹⁰ a new NTC study demonstrates induction's potential for improving student learning, in addition to keeping teachers in the classroom. By measuring the full range of benefits related to induction, this study demonstrates a significant return on investment from expenditures on high-quality induction programs.

The November 2007 issue of *ERS Spectrum*—a peer-reviewed research journal for researchers and administrators—publishes the findings of this benefit-cost study by NTC researchers Anthony Villar and Michael Strong. Using evidence from one medium-sized California school district, the article describes how every \$1.00 invested in a comprehensive induction program

produces a return of \$1.66 after five years, adjusted for inflation.¹¹

Costs

In order to provide an estimate of the potential return on the investment in a comprehensive mentoring program for beginning teachers, NTC researchers collected actual cost data for the Santa Cruz New Teacher Project across all its local contexts, calculated the measured benefits, assigning them a monetary value where possible, and computed the net present value over five years. They looked at net benefits and costs from multiple perspectives: the state, the district, the school, the teacher, and the student. The total of all these represents the net benefit or cost to society.

The analysis included all major and minor costs for providing high-quality new teacher support, including personnel, indirect costs (facilities, equipment & materials), program inputs (such as room rental and substitute teachers), and client inputs (such as teachers' personal time). Total costs for a district induction program supporting 119 new teachers are approximately \$786,000, representing a per teacher cost of \$6,605. The district pays about 35% of these costs, the state of California pays about 56% through the Beginning Teacher Support and Assessment Program, and the balance reflects the additional time burden of implementing the program on administrators and teachers.

Benefits

Benefits include potential savings to districts in increased teacher retention, increased new teacher effectiveness, and the time savings to principals for reducing the need to monitor beginning teachers. The study compared published state and national retention data with district data for the program. In addition, five years of student test score data were analyzed. Gains in student achievement for new teachers who had been mentored versus veteran teachers who had not previously been in a comprehensive induction program demonstrated that new teachers were, on average, as effective as fourth-year teachers.¹² By looking at the salary differential between beginning and more veteran teachers, this apparent benefit afforded by

8 Michael Strong. (2005.) Research Brief: Mentoring New Teachers To Increase Retention. New Teacher Center: Santa Cruz, CA. [Available at: <http://www.newteachercenter.org/pdfs/NTCResearchBrief.05-01.pdf>.]

9 Michael Strong. (2006.) Research Brief: Does New Teacher Support Affect Student Achievement? New Teacher Center: Santa Cruz, CA. [Available at: <http://www.newteachercenter.org/pdfs/NTCResearchBrief.06-01.pdf>.]

10 Ed Fuller. (2000.) The cost of teacher turnover. A Report prepared for the Texas State Board for Educator Certification. Texas Center for Educational Research: Austin, TX; Carroll. (2007.) Policy Brief: The High Cost of Teacher Turnover.

11 Anthony Villar & Michael Strong. (November 2007.) "Is Mentoring Worth the Money? A Benefit-Cost Analysis and Five-year Rate of Return of a Comprehensive Mentoring Program for Beginning Teachers." *ERS Spectrum*: Alexandria, VA. In press. [Available at: http://www.newteachercenter.org/cgi-bin/nortl_area/research.cgi.]

12 Michael Strong, Stephen Fletcher, and Anthony Villar. (2008.) "An Investigation of the Effects of Variations in Mentor-Based Induction on the Performance of Students in California." *Teachers College Record*: New York, NY. In press.

the induction program can be monetized. In total, the study found that 47% of the benefits were attributable to enhanced teacher effectiveness and 17% to turnover cost savings.

comprehensive induction. Students, who invest not a dollar, proportionally benefit the most, followed by new teachers who earn a return of \$3.61 per dollar, and the district at \$1.88 per dollar. Even the state recoups 98 cents on the dollar from its original investment.

Analysis of Costs and Benefits			
net present value of return on investment			
	Costs	Benefits	Return on \$1.00
Student	\$0	\$1,926	∞
New Teacher	\$953	\$3,448	\$3.61
District	\$4,813	\$9,088	\$1.88
State	\$7,189	\$7,080	\$0.98
Total	\$12,955	\$21,542	\$1.66

This study takes a conservative approach to estimating the benefits that accrue as a result of high-quality induction. Other possible program benefits not measured in the study include the impact on student achievement beyond the five-year period studied, and the influence of the mentoring experience on the teaching skills, leadership capabilities, and job satisfaction of the mentor teacher.

For a more detailed summary of the study, please refer to the NTC Research Brief, *The Costs and Benefits of A Comprehensive Induction Program*, June 2007.

Cost-Benefit Analysis

The study demonstrates that high-quality induction programs provide a positive return on investment both because beginning teachers stay in greater numbers and because those who stay are more effective. Specifically, the study shows that subtraction of per-teacher costs of about \$13,000 from the benefits of almost \$21,500 results in a return of a little over \$8,500 per teacher after five years. When costs and benefits are summed up for society the program secures a return after five years of \$1.66 for every dollar invested.

Because costs are incurred only in the first two years, but benefits continue to accrue, the net present value of the program can be calculated for each interested constituent. When each constituency is taken to account, the returns on time and program resources expended show that all four groups – students, new teachers, districts and the state – benefit from the investment in

Conclusion

Too often overlooked in the quest for school improvement is a focus on the professionals who can make it happen. Strengthening the capacity of public school teachers is a cost-effective way to accomplish what policymakers, practitioners and parents each seek: greater student learning. However, such professional development must be structured in a way that serves the best interests of teachers and students. High-quality induction for new educators meets that test.

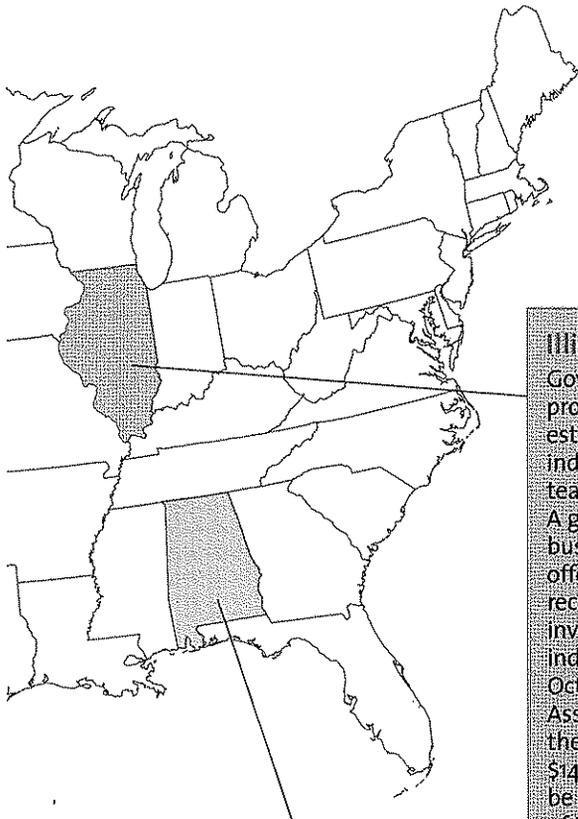
The cost-benefit analysis described in this Policy Brief makes the case that comprehensive, intensive support programs for new educators are both an effective and an efficient public investment. High-quality teacher induction and mentoring programs can reduce the rate of new teacher attrition, accelerate the professional growth of beginning teachers, and provide a positive return on investment through reduced personnel costs and enhanced student learning. Hopefully, this evidence will provide education policymakers and administrators with valuable information to guide them in the effective allocation of public education dollars.

This Policy Brief was produced with grant support from the Joyce Foundation.

Some State Policy Initiatives

This year has seen a wealth of state and federal policy proposals focused on strengthening support for beginning educators.

—Liam Goldrick



Illinois

Governor Rod Blagojevich proposed \$40 million to establish and fund statewide induction programs for new teachers and administrators. A group of education, business, and labor leaders offered their "Burnham Plan," recommending a \$60 million investment in new educator induction programs. As of October, the Illinois General Assembly had not finalized the state budget, but about \$14 million was expected to be set aside for expansion of induction and mentoring. Funded through the Chicago-based Joyce Foundation, the NTC informs and facilitates a statewide induction policy committee on induction funding, policy, program standards, and research.

Alabama

In November 2006, Governor Bob Riley's Commission on Quality Teaching recommended the immediate implementation of a statewide mentoring program for every new Alabama teacher. This year the Legislature authorized the program and appropriated \$4.9 million to fund it.

Federal Policy

The Teacher Excellence for All Children (TEACH) Act

Sponsored by U.S. Senator Edward Kennedy (MA) and U.S. Congressman George Miller (CA), the Act has been incorporated into early drafts of a reauthorized NCLB by the U.S. House Committee on Education & Labor. It includes: (1) a \$200-million career ladder program to augment the salaries of teachers in high-need schools who accept new professional and leadership roles; (2) a \$300-million grant program to allow states and high-need local educational agencies to develop state-of-the-art teacher induction programs; and (3) a \$100-million principal training and induction grant program for 10 states to develop, implement, and evaluate pilot programs for performance-based certification and training of exemplary principals.

The School Improvement through Teacher Quality Act

U.S. Senator Jack Reed (RI) has introduced legislation to amend Title II of NCLB to create a new \$500 million funding stream of targeted assistance to low-performing, high-poverty schools to help develop effective teachers and principals through the implementation of: (1) comprehensive, high-quality multi-year induction and mentoring programs for beginning teachers; and (2) systematic, sustained, team-based, job-embedded professional development for experienced teachers.

The Innovation Districts for School Improvement Act

Proposed by U.S. Senator Barack Obama (IL), this bill would authorize a \$1.5 billion annual grant program for local educational agencies (LEAs) to support a number of allowable reforms, including teacher mentoring and career ladders for mentor teachers. The bill would require LEAs to establish Teacher Academies based upon models of successful induction programs and residency-based teacher training.

Oregon

In the 2007–09 biennial state budget, Oregon appropriated \$5 million and created a statewide induction program for all new teachers and administrators. It will provide \$5,000 for each first- and second-year educator. The Oregon Department of Education (ODE) will spend the next year developing program standards and designing mentor trainings, prior to initiating the program in 2008–09. The program will be fully phased in by the 2010–11 school year at a total cost of \$27 million. This effort was supported by Governor Ted Kulongoski, the Oregon Legislature, the ODE, and key educational organizations such as Stand for Children. See page 7.

California

Proposed legislation (Senate Bill 961) would establish a leadership coaching program for public school administrators. The bill would require a state allocation of \$5,000 per year per principal and the local education agency to contribute \$1,000 per year for each participating principal.

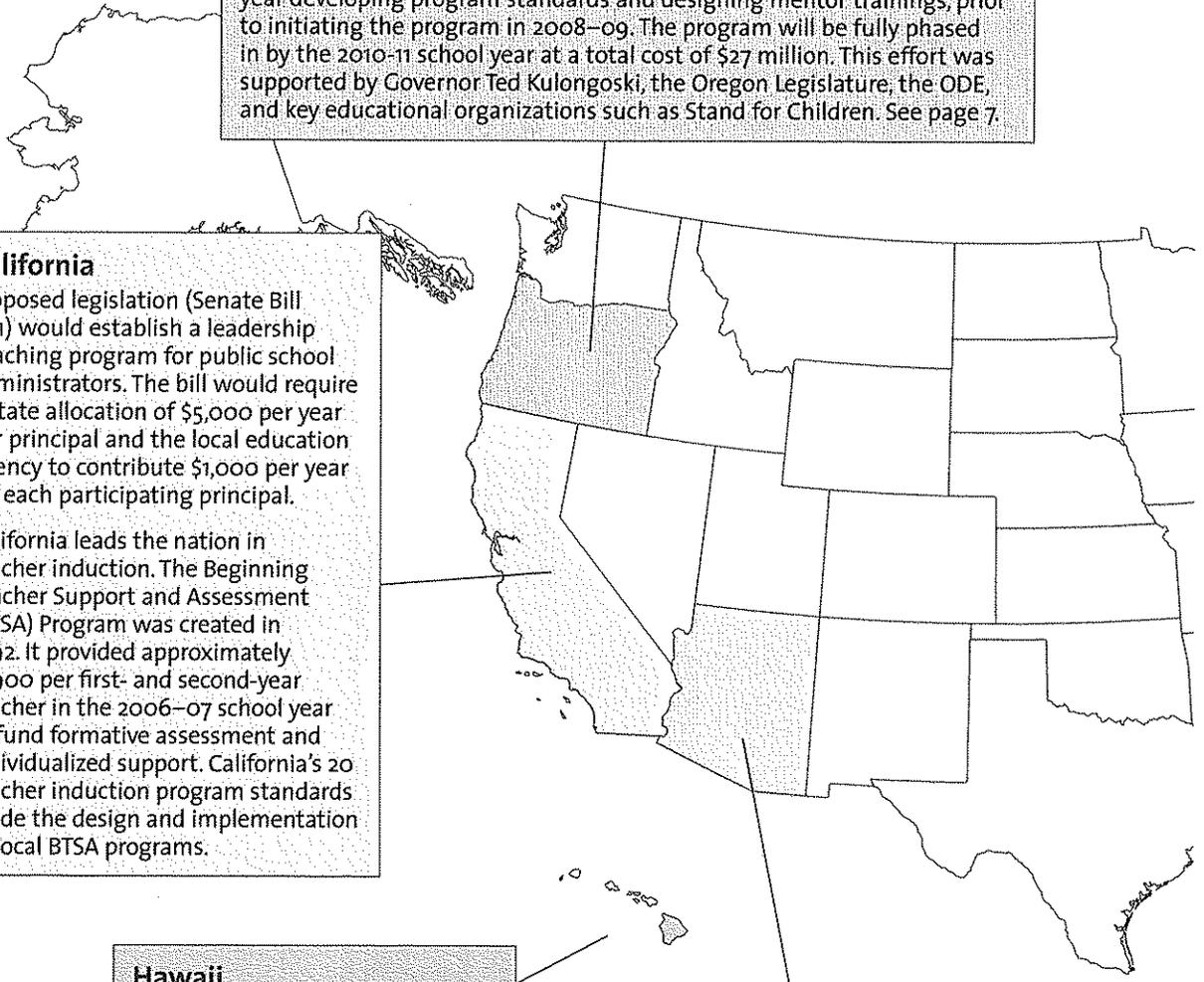
California leads the nation in teacher induction. The Beginning Teacher Support and Assessment (BTSA) Program was created in 1992. It provided approximately \$3900 per first- and second-year teacher in the 2006–07 school year to fund formative assessment and individualized support. California's 20 teacher induction program standards guide the design and implementation of local BTSA programs.

Hawaii

The Hawaii Legislature appropriated \$575,000 this year for up to five complex areas to better coordinate and expand their support of teacher mentoring and professional development during the 2007–08 school year. The law requires that the funding be targeted toward schools with high teacher turnover or hard-to-fill positions.

Arizona

Arizona tripled funding for Governor Janet Napolitano's Master Teacher Program. Operated in partnership with the Arizona K–12 Center, the \$3 million program taps exemplary teachers to serve as mentors in high-need schools. It funds mentor training, a \$5,000 stipend for the master teacher, and provides up to \$40,000 for each mentor's release time. See page 8.



Making a Case for Policy Investments that Help New Teachers Succeed

Research shows that teacher quality is the single most critical factor in whether students succeed.¹ However, efforts to improve teacher quality are often thwarted by the high rates of turnover, with 40-50 percent of public school teachers leaving within the first five years², and even higher rates in schools serving less advantaged students.³ Such levels of attrition have significant consequences for our nation's schools.

The Question:

WHAT ARE THE CONSEQUENCES OF TEACHER TURNOVER?

- **Perpetuating Inequity**

New teachers are disproportionately assigned to the most challenging schools and classrooms disproportionately populated by low-income and minority students.⁴ Despite wonderful intentions, these new teachers have yet to develop their skills and knowledge. As a result, they are often less effective than experienced colleagues in helping students learn.⁵ Thus, the students most in need of the most highly accomplished teachers are more likely to be taught by the least effective ones.

- **Loss of Highest Quality Teachers**

It is not the least qualified, but the most promising teachers that usually leave the profession first. Teachers with the highest scores on certification tests are twice as likely to leave as those with the lowest scores.⁶ Without guidance and support, these promising teachers fail to reach their peak level of effectiveness and generally leave out of frustration.⁷

- **Loss of Education Dollars**

The inability to retain new teachers has a significant fiscal impact on school budgets. For example, Houston Public Schools loses \$35 million in costs related to teacher turnover, while New York City public schools lose about \$115 million each year. The National Commission on Teaching & America's Future estimates that the nation loses \$7.3 billion annually due to teacher turnover.⁸ This represents billions of lost taxpayer dollars due to inefficiencies in our system and our inability to hold onto teachers.

- **Reduced School Capacity**

A revolving door of staff inhibits the ability of schools to develop human capital, create strong instructional programs, and create educational environments where kids can thrive.⁹ While some level of attrition may be desirable, high levels of turnover among the best new teachers significantly impede our efforts to provide a high-quality education for all students.

Supporting new teachers is a critical strategy for improving retention and achieving excellence in teacher quality. High-quality mentoring and induction can reduce the rate of new teacher attrition, accelerate the professional growth of new teachers, and provide a positive return on the investment through reduced personnel costs and greater student learning gains.

The Answer:

HIGH-QUALITY INDUCTION CAN HELP PROVIDE A SOLUTION

- **Reduced New Teacher Attrition**

One of the principal benefits of high-quality teacher induction is the reduction in the rate of teacher turnover, enabling schools to hold onto their best and brightest teachers. Two studies have shown that 88% of new teachers remain in teaching after six years after participating in a support program that incorporates the key elements of effective induction. Retention rates increase to 94% when including teachers who move into school and district leadership positions.¹⁰

- **Improved Student Learning**

High-quality induction improves teacher effectiveness and contributes to greater student learning. Two studies have shown that students taught by teachers who receive comprehensive induction support for two years demonstrate significantly greater learning gains. New teachers in these programs are about as effective as their more experienced peers, despite being assigned to classrooms with more challenging students.¹¹

- **Return on Investment/Cost Savings**

An upfront investment in high-quality induction yields cost savings and improved student outcomes. A recent analysis found that, in Chicago, the cost of recruiting and training a replacement for each teacher who leaves the classroom is between \$17,000 and \$22,000.¹² New teacher support programs cut those costs dramatically by slashing attrition rates and accelerating the growth of new teacher effectiveness. A NTC cost-benefit study shows that every \$1.00 spent on high-quality induction provides a return on investment of \$1.66 over a period of five years.¹³ These potential savings make the cost of high-quality induction models a wise and affordable investment.



¹ Ronald F. Ferguson. (1991). "Paying for public education: New evidence on how and why money matters." *Harvard Journal on Legislation*: Cambridge, MA. William L. Sanders and June C. Rivers. (1996). *Cumulative and Residual Effects of Teachers on Future Student Academic Achievement*. University of Tennessee Value-Added Research and Assessment Center: Knoxville, TN. Linda Darling-Hammond. (2000). "Teacher Quality and Student Achievement: A Review of State Policy Evidence." *Education Policy Analysis Archives*: Tempe, AZ.

² Richard M. Ingersoll. (2003). *Is There Really A Teacher Shortage?* Consortium for Policy Research in Education, The University of Pennsylvania: Philadelphia, PA.

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High Quality Mentoring & Induction Practices

A resource for education leaders seeking to create and/or improve induction programs with practices that support teacher retention, teacher development, and improved student learning

MOVING TOWARD...

Rigorous mentor selection based on qualities of an effective mentor

Qualities may include: evidence of outstanding teaching practice, strong intra- and inter-personal skills, experience with adult learners, respect of peers, current knowledge of professional development.

Ongoing professional development and support for mentors

Effective teachers don't always know what it is about their teaching that is effective. Many mentors are also surprised to find that translating knowledge to students is not the same as translating knowledge to adults. High quality and ongoing training, as well as a professional learning community, are needed to help mentors develop the skills to identify and translate the elements of effective teaching to beginning teachers.

Sanctioned time for mentor-teacher interactions

Mentors need sanctioned time to focus on beginning teacher development. Mentors and beginning teachers should have 1.25-2.5 hours per week to allow for the most rigorous mentoring activities. That time should be protected by teachers and administrators.

Multi-year mentoring

Mentoring should be intensive and ongoing (for at least two years) in order to improve teacher practice and consequently student achievement. NTC and other research suggest that most deep learning about instruction (through mentoring) happens during the second and third years of teaching.

MOVING AWAY FROM...

Choosing mentors without criteria or an explicit process

Without strong criteria and a rigorous selection process, there is a risk that mentors may be chosen based more on availability or seniority, rather than their qualifications to engage in meaningful interactions with beginning teachers.

Insufficient professional development and support for mentors

Without initial, and ongoing, high-quality training to support their development, mentors miss out on the guidance and professional community they need to support the developing practice of beginning teachers and address the challenges they face.

Meetings happen occasionally or 'whenever the mentor and teacher are available'

Often both parties are so busy that meeting time gets relegated down the list of priorities. The short fragments of time that may be found are typically insufficient for fostering real relationships and growth.

Mentoring for first year teachers only

One-year mentoring programs are great at providing the initial support first-year teachers need to survive but are insufficient to help teachers reach optimal effectiveness.

MOVING TOWARD...

Intensive and specific guidance moving teaching practice forward

Mentors who are trained to draw upon professional teaching standards and appropriate content area standards can focus their support on instructional growth and concrete steps to help new teachers improve their practice. Example: "Let's look at your assessment data and talk about what strategies will help you address the concern you had about reaching your struggling English Language Learner students."

Professional teaching standards and data-driven conversations

Just like student learning, beginning teacher learning should be data-driven and standards-based. To be effective, feedback to beginning teachers must be grounded in evidence about their practice, including information gathered through classroom observations and student work. Use of professional teaching standards, documentation of mentoring conversations, and data collection on various components of classroom practice ensures a solid structure for focusing on continuous instructional growth.

Ongoing beginning teacher professional development

Beginning teachers benefit from a professional learning community that is guided by professional teaching standards and the appropriate content area standards, and focused on teacher development, problem solving and mutual support. Opportunities such as regularly scheduled seminars and online learning communities provide a context for rich networking, professional dialogue and reflection, as well as combating isolation.

Clear roles and responsibilities for administrators

Administrators play a critical role in setting the stage for beginning teacher and mentor success, creating time for induction, and establishing a positive culture for teacher development in their buildings and in the system. Professional development for administrators and ongoing communication with them about the needs of new teachers, and the nature of the program ensures that they understand their role in fully supporting induction.

Collaboration with all stakeholders

Strong communication and collaboration among stakeholders, including administration, school boards, union/association leadership, and professional partners, creates a culture of commitment and ensures success.

MOVING AWAY FROM...

Non-specific, emotional or logistical support alone

Emotional support is important, but alone is not sufficient to improve teacher practice. Without specific instructional feedback, mentoring can not impact student learning. Example: "You're doing a great job, Jane. Keep it up!"

Informal and non-evidenced based feedback

The rigor of the program may be compromised when interactions are too often based on informal conversation and opinions not drawn from evidence. Without a structure and focus on real-time data derived from beginning teacher practice, interactions may not result in improved teaching practice.

Professional development NOT specifically tailored to the needs of beginning teachers

Novices are in a unique developmental phase that can not be addressed by "one size fits all" workshops or trainings. Professional development disconnected from teacher needs can feel irrelevant, at best, and in many situations, only serves to overwhelm beginning teachers.

Lack of training/communication with administrators

Without clearly articulated strategies to support beginning teachers, and protected induction activity time, principals may inadvertently undermine the prospects of beginning teacher success (e.g., assigning beginning teachers the most challenging classes, assigning additional responsibilities, or not anticipating their needs for basic resources).

Isolated programming and lack of alignment

Without strong partnerships and alignment, instructional initiatives can be undermined. Beginning teachers may receive mixed messages from varying support providers, and feel overwhelmed, confused and frustrated by all the different layers of information coming at them.