

Teacher and Principal Effectiveness

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This white paper provides information to help those working on the Colorado Great Teachers and Leaders Race to the Top (R2T) Committee, and is intended to complement information provided by the Colorado Department of Education (CDE). It starts with an overview of teacher and principal effectiveness issues, background on Colorado's education system, and information on R2T, and then provides information on the strengths, weaknesses, opportunities, and threats to Colorado's ability to create a system of continuous improvement in the quality of teachers and principals in Colorado.

Introduction

The research on teachers is clear: Effective teachers are the single most important factor in student learningⁱ. A series of effective teachers can help children who have fallen behind catch up and help schools close the achievement gap. Unfortunately, while we know that teachers are very important, the research is less clear on how to create an education system that produces, identifies, supports and retains effective teachers.

The research on principal effectiveness is less clear. The question of how principals affect student learning is contested by researchers, although recent studies suggest principals may play a very important role in student learningⁱⁱ. What is clear is that the job of the principal is evolving from simply administering a building to also leading instructional improvement. This has created a series of questions: How do we prepare principals for this new job? How do we support principals in this work? And simply, can one person do this job?

There also are systemic issues. Effective teachers and principals may have the necessary skills, knowledge and ability to help students learn. However, much more is required. Effective teachers and principals need to work in environments that enable student learning. Such factors as curricula and resource allocation (such as time and materials) that are aligned with expected student learning, as well as systems to help ensure that student behavior does not disrupt learning are critical. Thus, principal and teacher effectiveness is not only a product of what people know and can do, but also a product of the system in which they work.

Colorado Background

There are about 820,000 students and 49,000 teachers in Colorado K-12 schools. Colorado is one of the few states that constitutionally requires local control of education. As a result, our state department of education traditionally has been fairly small, and many important decisions

about education are made in our 178 very diverse school districts. Colorado school districts range in enrollment from 54 students to over 85,000, with half of the state's students in the 10 largest districts and the large majority of districts (108) facing declining enrollment. These districts serve student populations that include isolated rural poor, urban immigrant, and affluent suburban populations. Colorado education offers students a great variety in how and where to learn. In addition to the traditional neighborhood school, a student can choose to take classes through an online school, or attend either a charter school, another school in the district, or even a school outside the district. Colorado ranks 40th in per-pupil expenditures adjusted for regional cost differences, and per-pupil revenues are nearly \$1,500 below the national average. Although the state tends to perform well on national exams, it struggles with achievement gaps; that is, low-income and Hispanic students (who represent over one-quarter of the student population) have much lower achievement, graduation rates and college attendance than white and middle/high income students.

Race to the Top

The Race to the Top (R2T) is a competition for \$300 million to \$500 million per state of stimulus funds to be awarded by the U.S. Department of Education. Awards will be based on the strength of state plans to address four reform areas:

- Adopting rigorous college- and career-ready standards and high-quality assessments;
- Establishing longitudinal data systems and using data for improvement;
- Increasing teacher and principal effectiveness; and
- Turning around the lowest-performing schools.

It is possible that additional expectations around higher education and early childhood education will be included in the final Department of Education R2T guidelines to be issued in October. Initial applications are expected to be due in December 2009.

The challenge for those working on the Great Teachers and Leaders Race to the Top (R2T) Committee (and for Colorado education leaders in general) is to create a system of continuous improvement in the quality of teachers and school leaders in Colorado. The draft R2T criteria from the U.S. Department of Education outline key elements of a system that is based on continuous improvement through data collection, monitoring and policy adjustment. In particular, the RFP asks for the state to create a plan that has the following elements:

1. Developing a way to identify effective and ineffective leaders and teachers in a way that takes into account student growth, and using this information to:
 - a. Evaluate and develop
 - b. Compensate and promote
 - c. Grant tenure and dismiss teachers and leaders
2. Ensuring that all children have access to effective teachers and principals
3. Using data on teacher and leader effectiveness to report on preparation programs
4. Developing systems to use data on student learning to develop teachers and leaders

Colorado's plan should take into consideration that R2T is a one-time investment in education reform over a short period. R2T funds should not be spent to develop new programs if those programs cannot be sustained or are not aimed at generating new, lasting capacity for the Colorado education system. Funds should be invested in developing capital and capacity to improve education. This can include physical capital such as computer systems as well as

human capacity such as the knowledge and skills of educators, policymakers and parents. This knowledge capacity can also include things such as new curricula, assessment systems, and training modules. Finally, the R2T offers the opportunity to drive and accelerate reforms that would not be possible without the capacity development opportunities R2T presents.

Strengths: Innovative Teacher Preparation

Colorado also has a robust and innovative system for training its teachers and principals. About 49,000 teachers and 2,800 principals work in Colorado public schools. The teacher preparation system in particular is diverse. There are three main sources of new teachers in Colorado. About half of Colorado's teachers are trained in other states. Compared to other states, it is relatively easy for teachers prepared elsewhere to be licensed to teach in Colorado. About a fifth of new teachers are prepared through alternative routes. These are programs run by districts, nonprofits or universities that allow teachers to work while they receive their training. Colorado has nine alternative principal preparation programs and close to 40 alternative teacher programs. Alternative teacher preparation programs in Colorado include the nationally known New Teacher Project, which recruits high achieving college students into teaching, and locally developed programs such as the Teacher Institute at La Academia (TILA) run by a local nonprofit focused on preparing special education teachers. Colorado has recently reformed its alternative programs to make them easier to enter, less administratively complex, and more accountable. Colorado also has 19 preparation programs located in our colleges and universities (both public and private) that prepare about a third of Colorado's new teachers. These programs serve both graduate and undergraduate students with the largest programs at the University of Northern Colorado in Greeley and Metropolitan State College in Denver.

Weaknesses: Old Standards, Shortages, and the Teacher Gap

The standards used to hold teacher preparation programs (the Performance-Based Standards for Teachers) are almost 10 years old and may not address the expectations of teachers given the new emphasis on standards and our growing English language learner population, which grew by 350 percent between 1996 and 2008.

Despite the diversity of routes into the field, Colorado faces shortages of teachers. These shortages are not system-wide, but are focused in particular places and subjects. The places that have a hard time finding qualified teachers are generally Colorado's most urban schools and isolated rural schools. And while there are alternative (and university-based) programs focused on training teachers for urban schools, fewer alternative approaches are available for training teachers for rural schools. Subject areas facing shortages include math, science, special education, those who can teach English language learners, and speech-language pathologists.

A focus of the R2T is ensuring that students have equal access to effective teachers. The limited available data indicate that Colorado students do not have equal access to effective teachers. This issue is sometimes called the teacher gap. Research in 2006 found that white and non-poor students were more likely to be taught by well qualified teachers (i.e. teachers who were experienced or had master's degrees) than minority students or those who qualify for free and reduced-priced lunch. The Colorado data also show that schools with less qualified teachers had lower levels of student learning and at the district level, larger teacher gaps are associated with larger achievement gaps (i.e. differences between white and minority student

achievement). The size of the teacher gap varies by district and in 2006 there were several districts that did not have a teacher gapⁱⁱⁱ.

R2T is also focused on the entire education system from early childhood through higher education. The state collects much more information about teachers working in public K-12 schools than it does about those teaching children before kindergarten or those working in Colorado higher education. However, a couple of issues are clear. First, pay levels may not be high enough to sustain a highly effective workforce for those working in early childhood and in many of our community colleges. For example, part-time faculty make up the majority of faculty in the Colorado community college system and pay for a three-hour class ranges from \$1,800 to \$4,500 a semester. These pay rates make it very difficult for a part-time faculty member to cobble together a livable salary. Similar low-pay issues affect early childhood education. Second, there limited infrastructure to support the improvement of instruction in early childhood or higher education. There is great room for growth in systematic support for improving instructional improvement.

Opportunities: Innovation

Colorado's local control policy environment has led to great innovation. For example, Colorado has a strong history of innovation in teacher compensation. Several districts have developed new compensation systems to improve teacher performance, knowledge, skills, and to respond to shortages. Douglas County has experimented with incentives for teachers to improve their knowledge and skills as well as performance since 1994. Denver has implemented alternative compensation for both teachers and principals. Other smaller districts, including Eagle County, Harrison, Commerce City 14, and Fort Lupton also have implemented changes in their compensation systems.

The development of these systems highlights the capacity in Colorado for school districts, teachers and teacher unions to work together to develop reforms to improve teacher quality. Research is also emerging that suggests that once teachers work within these innovative compensation systems, they like it.

Threats: Lack of a Systematic Approach to Effectiveness

The fundamental threat to improving principal and teacher quality in Colorado is the lack of a systematic way to identify, create, recruit, and support quality educators (teachers or principals). While there may be pockets of excellence at the school, district and teacher-preparation level, Colorado lacks mechanisms for identifying or increasing the use of effective practices, policies or programs. The goal should be a system that supports the continuous improvement of individuals, organizations and programs. While a component of a continuous improvement system revolves around improving our longitudinal data system, there remain deep threats to our ability to systematically or continuously improve educator effectiveness across the state, including:

- A lack of clear responsibility to improve and monitor teacher and principal quality at a level higher than the district. That is, there is no one agency or organization responsible for creating or coordinating strategies for improving teacher and principal quality across Colorado.
- While the responsibility for developing an effective workforce rests at the school and district level, these organizations often lack the ability and the systems to identify and act on

information about the effectiveness of programs and practice. Schools and districts play a central role in developing an effective teacher workforce. Districts and schools recruit, hire, induct, place, train, and decide whether to retain teachers. However, districts and schools generally lack the systems to determine whether their programs and practices are working.

- There is no system for identifying or providing feedback on K-12 teacher or principal quality between those who prepare teachers and principals and those who hire them. Not only do we not identify preparation program strengths and weaknesses, there is no mechanism for encouraging preparation programs to build on their strengths and address their weaknesses.
- Our state system for evaluating teachers is weak, requiring only one evaluation every three years for teachers with tenure. Key to a good evaluation system is creating clear definitions of effective teaching. The state has no single description of good teaching (or school leadership), and one definition may not be appropriate given the diversity of schools and students in our state. However, there are also no mechanisms for districts to work together to identify and support the identification of effective teaching and school leadership.
- These problems extend to early childhood education and higher education. The policies and programs to systematically address educator quality in early childhood and higher education will be different than in K-12 education. However, at this point the state lacks coordinated mechanisms or approaches to address educator effectiveness in these important sectors within the education system.

The reality is that no state has perfected a continuous improvement system approach to teacher and principal effectiveness. Colorado's local control system and education culture will not support top-down measures that may work in other states. However, the innovation and creativity that is fostered through a local control system can be a source of strength. To capitalize on our innovation, Colorado must develop systems for identifying, supporting, and sharing programs and practices that work to build teacher, principal and educator effectiveness.

ⁱ Paone, J. J., Whitcomb, J. A., Rose, T., and R. Reichardt (2008). *Shining the Light II: State of Teacher Quality, Attrition and Diversity in Colorado*. Denver, CO: Alliance for Quality Teaching, www.qualityteaching.org

ⁱⁱ Robinson, V. M. J., Lloyd, C. A. and K. J. Rowe (2008). The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types. *Educational Administration Quarterly*, 44(5). 635-674

ⁱⁱⁱ Reichardt, R. & J. J. Paone (2006). *Shining the Light: The State of Teaching in Colorado*. Denver, CO: Alliance for Quality Teaching