

IV SUMMARY AND RECOMMENDATIONS

TEACHER ATTRITION

Research is clear that less experienced teachers are less effective at supporting student achievement. Research also suggests that schools with high attrition struggle at building a professional and collaborative community focused on improvement of student learning. In addition, attrition is costly, with the expense to hire and train each new teacher estimated to be \$10,000. Levels of teacher attrition have been found to be significantly related to teachers' age and experience, with higher levels of attrition for teachers more than 55 years old and those with less than five years experience.

Findings in Colorado

- Unsatisfactory and low performing schools in Colorado have more novice (less than 3 years experience) teachers than higher performing schools, increasing the likelihood of attrition and decreasing the expected teacher effectiveness in these schools. (Figure 4, page 47)
- Unsatisfactory and low performing schools in Colorado have higher attrition rates than higher performing schools, resulting in instability of the teaching workforce in schools that would benefit from more stability. (Figure 4)
- In three of Colorado's 12 largest school districts, more than a third of the workforce is over 50, increasing the likelihood of attrition due to retirements. (Figure 2, page 41)
- Four of Colorado's 12 largest districts employ at least two out of five teachers that are under 35, increasing the likelihood of attrition particularly if induction programs are weak. (Figure 3, page 42)

RECOMMENDATION #1: Increase the retention of highly effective teachers, especially in underperforming schools, by focusing state and local resources on this issue.

State

- The Colorado Department of Education should designate teacher retention as a priority issue when determining formula and competitive grant criteria, leveraging formula and competitive grants, when possible, to focus on the schools and districts facing the greatest challenges in retaining teachers.
- The Colorado Department of Education should establish a teacher retention task force that includes teacher representatives to examine and coordinate its role as a leader in addressing teacher recruitment and retention issues.
- The Colorado Department of Education should provide technical assistance and funding opportunities to enable districts to develop incentives (district, school, community conditions; financial bonus/salary stipend; and other) to recruit and retain highly effective teachers in low performing schools.
- The Colorado Department of Education should annually report school-, district- and state-level teacher retention data for teachers with three or less years of experience and for teachers with five or less years of experience.

- Colorado Department of Education should provide and/or broker data collection, analysis and training to increase local school districts' awareness of the differences in the age/experience profiles of their teacher workforce and how that will affect both the district's ability to retain teachers and the expenses of hiring new teachers.
- The state Legislature and Colorado Department of Education should provide resources and assistance to strengthen induction and mentoring programs in schools and districts particularly those with a high number of novice teachers and/or facing teacher retention challenges.
- The Colorado Education Association and the Colorado American Federation of Teachers should take the lead, working in partnership with school districts and higher education, to craft a set of research-based practices and principles for placing and inducting new teachers in a way that focuses on supporting student learning.
- The Colorado Department of Education and Boards of Cooperative Education Services (BOCES) should highlight and widely distribute tools and resources to assess the cost of attrition, teaching and learning conditions and other supports to improve retention of quality teachers.

Local

- Local school districts should routinely evaluate their induction program to ensure its effectiveness.
- Local school districts should provide additional resources and support to schools facing greater teacher attrition (e.g., enhanced induction programs, fair teaching assignments, high quality professional development, strong principal leadership, and/or financial incentives).
- Local school districts should direct resources to ensure high quality induction and mentoring programs particularly in schools facing the largest teacher retention challenges.
- Local school districts and BOCES should routinely analyze data around teacher attrition and retention. This should include:
 - Why teachers leave their positions and why they stay,
 - Working conditions that lead to attrition/retention,²⁶
 - Costs of attrition,²⁷
 - Regional comparison of district salary schedules,
 - Current and future challenges in available supply of teachers.
- Policymakers in local school districts that are experiencing high attrition rates should:
 - Examine novice teacher placements to ensure that novice teachers are not concentrated in low achieving schools,
 - Examine the effectiveness of novice teacher mentoring and induction,
 - Collaborate with the teacher preparation institutions supplying the district's teachers to ensure that teachers are prepared and supported to meet the education needs of the district's students,
 - Determine which factors are contributing to low retention, and how induction, mentoring and other resources can be strengthened in low retention schools.

²⁶One tool to assess teaching and learning conditions is a survey administered by the New Teacher Center. Information about the survey: <http://www.newteachercenter.org/>

²⁷One tool to assess the cost of attrition was developed by the National Commission on Teaching and America's Future (http://www.nctaf.org/resources/demonstration_projects/turnover/TeacherTurnoverCostStudy.htm).

TEACHER DIVERSITY

Research suggests that minority students benefit from being taught by teachers of their same race. The teacher workforce, however, is likely to continue to be largely white, middle-class and monolingual. (Gitomer, 2007)²⁸. Research also suggests that increasing all teachers' ability to engage in culturally responsive teaching practices will support the learning of Colorado's increasingly diverse student population.

Findings in Colorado

- Colorado's minority (non-white) student population is now 38% increasing by 6 percentage points between 2000 and 2005 (Figure 7, page 51).
- Overall, Colorado districts and schools have slightly increased the percentage of minority teachers (1 percentage point increase between 2000 and 2005), but with significant variation by district. (Figure 8, page 32.)
- University-based teacher preparation programs in Colorado enroll a higher proportion of minority students (13%) than the proportion of new minority teachers being hired by districts (11%). Yet statewide higher education enrollments overall are 17% minority. Alternative preparation programs are not required to report the percent of minority participants.
- Students of color in Colorado have a one in ten greater likelihood to have teachers who are inexperienced (fewer than 3 years teaching experience).²⁹
- Colorado schools with a student population that is primarily students of color have teacher attrition rates more than a third greater than schools where student populations are white.³⁰

RECOMMENDATION # 2: Increase the ethnic diversity and cultural/linguistic competence of the teacher workforce in Colorado.

- The state Legislature should provide funds to offer scholarships to first-generation students who enroll in university-based teacher preparation programs and who agree to teach in high-need schools for three years following graduation.
- The state Legislature should provide funding to create incentives for teacher candidates and licensed teachers to develop linguistic competence in Spanish (or other languages spoken by a high percentage of students in their school/district) and/or completion of Linguistically Diverse Education certificates or endorsements.
- The Colorado Department of Higher Education should increase awareness of and participation in the Colorado LIFT (Loan Incentive For Teachers)³¹ scholarship program with an emphasis on meeting the needs of a changing student population.
- The Colorado Department of Education and Colorado Department of Higher Education should work together to develop and implement uniform requirements for all teacher preparation programs (including alternative preparation programs) to report the number of minority teachers prepared.

²⁸Gitomer, D. (December 2007). *Teacher Quality in a Changing Policy Landscape: Improvements in the Teacher Pool*. Princeton, NJ: Educational Testing Service. Retrieved from the following website http://www.ets.org/Media/Education_Topics/pdf/TQ_full_report.pdf

²⁹Shining the Light: the State of Teaching in Colorado, Alliance for Quality Teaching, 2006, pp. 33-34.

³⁰Ibid. p. 36.

³¹<http://www.collegeinvest.org/default.aspx?pageID=28>

- The State Board of Education should strongly encourage the inclusion of cultural and linguistic competence in teacher preparation curricula by revising the state's teacher standards to include greater emphasis on culturally responsive teaching practices.
- The Colorado Department of Education should strongly encourage cultural and linguistic competence in school districts by providing and/or brokering training for teachers.
- Teacher preparation programs and local school districts should collaborate to build and support pipeline programs aimed toward increasing the number and diversity of high school students going into teacher preparation.
- Policymakers in local school districts should ensure that teachers are provided training and support in developing cultural and linguistic competence.

PREPARING QUALITY TEACHERS

Learning to teach is a developmental process. Initial teacher preparation in Colorado occurs either through a university-based teacher preparation program or in an alternative-preparation program (e.g., Teacher-in-Residence programs or Teach for America). Teachers continue to develop their knowledge and teaching skills throughout their career through induction programs and continuing professional development experiences. Currently, universities and districts each have responsibility for the preparation and development of quality teachers; however, there are few opportunities or incentives for the universities and districts to collaborate in their efforts. As a result, the system for teacher preparation, induction, and professional development lacks coherence and is often redundant.

Although the state has undertaken significant policy efforts since 2000 to make university-based initial teacher preparation more accountable for quality teacher preparation, more remains to be done. Colorado stands to benefit from a coherent and systemic approach to teacher preparation and development. A formal system for higher education and school districts to collaborate and evaluate their efforts would enhance the quality of the teacher workforce. For example, a system of teacher identification would allow teacher preparation programs to obtain feedback on the effectiveness of their graduates (e.g., retention, student achievement, etc.); a state-level study of teacher working conditions and rigorous evaluation of induction programs would provide valuable information to all parties involved in teacher preparation and development; coordinated data and communication would support efforts to reduce shortages of quality teachers in hard to staff schools and subject areas.³²

Findings in Colorado

- All teacher candidates in university-based teacher education programs in Colorado must complete an approved content major (e.g., English, chemistry, mathematics).

³²It should be noted that legislation (Concerning Alignment of Preschool to Postsecondary Education) was introduced in March 2008 in support of Governor Ritter's Colorado Achievement Plan for Kids (CAP4K). This would ultimately have an impact on teacher preparation and is a movement toward coordinated P-20 standards and assessments. In its initial draft, the legislation requires that the State Board of Education (SBE) adopt a description of school readiness and standards for preschool through postsecondary education. It also directs SBE and the Colorado Commission on Higher Education to jointly adopt the description of postsecondary and workforce readiness. All are to be aligned. As we go to press, it is too early in the process to know the details of final legislation and its impact if passed.

- The Colorado Department of Higher Education and Colorado Department of Education evaluate and approve teacher education programs to ensure that content courses align with Colorado Model Content Standards.
- Colorado law requires that all initial teachers complete an induction program. However the quality of induction programs varies from district to district.
- Colorado lacks a formal system for higher education and school districts to collaborate and evaluate their efforts to support and enhance the quality of the teacher workforce.

RECOMMENDATION #3: Create structured feedback loops between K-12 local school districts and higher education (teacher preparation programs):

- Colorado Department of Education and Colorado Department of Higher Education should collaborate with higher education institutions and local school districts to create mechanisms to regularly and systematically communicate with each other about:
 - The outcomes of effective teacher preparation,
 - The roles of each (higher education institutions and local school districts) in effective teacher preparation,
 - Evaluation systems that are more alike than different for teacher candidates and new teachers,
 - Evaluation systems that assess the teacher's impact on student learning,
 - The roles of each in induction programs that support and develop effective teachers,
 - Strategies to improve culturally responsive teaching practices,
 - Strategies to increase the number of minority teachers and administrators,
 - Specific teacher preparation needs of districts and/or schools,
 - Specific student teacher placement needs of preparation institutions.
- Colorado Department of Education and Department of Higher Education should structure both data and communication feedback loops to clarify the demand for teachers in specific areas compared to the supply of available teacher candidates.

ASSESSING IMPACTS ON STUDENTS

In order to assess the impact of teacher attrition, diversity and preparation on classrooms and individual students, data about individual teachers is important. The movement of teachers (by experience, preparation and subject taught) between and within schools and districts builds knowledge about the factors affecting student learning. Data that links teachers to their students enables assessment of the value added to student learning, and the impact of preparation, supports and endorsements. This is not possible without a way to uniquely identify teachers.

Findings in Colorado

- Colorado does not currently have a system of teacher identification that would allow policymakers to answer many questions about teacher preparation, induction, attrition, and the impact of the teacher workforce on student learning including the value added of National Board Certification, advanced endorsements and master license.

RECOMMENDATION # 4: Establish a unique identifying number for each teacher (unique teacher identifier) in Colorado that includes protections against misuse as well as policies and guidance for appropriate uses.

- The Quality Teachers Commission established by Senate Bill 07-140 should recognize the necessity of a unique teacher identifier and utilize its time to create the structure for a pilot program in 2008-09 and full implementation by 2010.

SUPPORTING TEACHER QUALITY

Recent studies of teacher working conditions have identified a number of features that enable teachers, especially new teachers, to teach more effectively. The study also identified a link between teacher working conditions and teacher retention.

Findings in Colorado

- Teacher attrition in Colorado's unsatisfactory schools is double the attrition rate in average performing schools.
- Colorado does not have the data to provide answers about why teachers choose to leave or stay and how those factors might be addressed.

RECOMMENDATION #5: Conduct a statewide survey of teachers to assess the working conditions that support teacher quality and the retention of highly effective teachers, particularly teachers of color and teachers in high need schools.



- The state Legislature should provide funds to conduct a statewide teacher survey, tied to research on student achievement³³, in 2008. Only statewide data should be made available for public use, and school-level data should be provided to local school districts to use in improving their ability to attract and retain quality teachers.
- The study should provide data to differentiate the working conditions in high- vs. low-performing schools so that local school districts can address the inequities and their impact on the retention of quality teachers.

³³The New Teacher Center (www.newteachercenter.org) conducts this study which includes comparative data from other states.