



History of the Education Innovation Institute

The General Assembly created The Education Innovation Institute (EII) in 2009 (SB 09-032) to leverage new and existing applied research to solve practical problems in education reform. It is located at the University of Northern Colorado, which has the state's largest educator preparation program. UNC secured non-state funding for the institute, which began operating in spring 2011. The primary work of the institute during its second year has been to establish itself as a non-partisan source of research-based recommendations on implementation of Colorado's many recent education reforms as well as on issues under consideration for future legislation.

EII has continued to sharpen its mission and now focuses on three broad areas: improving Colorado's teacher pipeline through the stages of preparation, licensure, induction, practice, and evaluation; training young scholars to use rigorous techniques for education research; and helping UNC to raise its profile through innovative programs and ambitious research. As a young, small organization EII often seeks to amplify its influence by collaborating with others, including established nonprofits, school districts, and faculty researchers. The institute also has participated in applications for major research grants and continues to seek other potential sources of public and private funding.

Why EII is needed

Colorado is recognized as a national leader in education reform and other states are watching us closely. That makes careful, forward-looking implementation crucial. It is increasingly evident that implementation policies are most likely to succeed and gain acceptance when they are informed by both the findings of rigorous research and a practical understanding of the often messy realities of school operations. One mission of EII is to break down barriers between the three groups key to successful implementation: policy makers, practitioners, and researchers. We do this by learning about implementation of reforms elsewhere, talking to educators about their experiences, staying abreast of the latest research findings, and thinking about ways to translate those findings into policies that work for reformers as well as educators.

Although Colorado's reform activity is extensive, it is not complete. New issues arise each year and EII works to inform the development of new policies, again by familiarizing ourselves with policies elsewhere, keeping up with research, and investigating Colorado's specific needs.

Our mission to break down barriers between researchers, policy makers, and practitioners bears more explanation. It is illustrated by the diagram at right. While many nonprofit organizations base their work in one of the three silos and may reach out to the others, we see our work residing in the arrows that connect the three areas. Our policy briefs and interest in longitudinal data are good examples. The briefs explain important, but complex, issues for broad audiences by screening research on the topic for quality and explaining the findings in plain English. The advocacy for widespread appreciation of longitudinal data arises from a belief that this powerful tool is becoming the vernacular language of educational improvement – essential for assessing the effectiveness of schools and policies and for planning fruitful improvements.



Focus on Key Policy Areas for Colorado

Our policy work arises from an underlying belief that enduring reforms are most likely if education is respected and treated as a profession. Parents and the public are more likely to support schools if they respect the teachers. And talented young people are more likely to seek careers in teaching if they view the profession with respect. The broad goal of improving respect can be addressed from many perspectives, from improving the quality of teacher preparation to improving the credibility of licensure to improving the conditions under which teachers work. All ultimately seek to increase the likelihood that schools will attract good teachers and keep them happy and challenged for many years – an essential circumstance if Colorado is to provide high-quality education for all students.

Another guiding belief is that Colorado's reform policies should include higher education in appropriate ways, including by setting accountability standards that are relevant to the state's needs. A first step is to study, with the use of rigorous means, the nature and level of benefit students de-

rive from Colorado's various higher education institutions. Colorado has already begun work in this area and we expect that effort to grow as budgets remain tight and interest in higher education accountability expands nationally.

We also consider it a natural part of our mission to act as advisors as Colorado builds a high-quality database of education records that links students to teachers and K-12 to higher education and the workforce. A well-designed longitudinal data set will help improve the quality of education in several ways. Educators can use it to assess their success on the job and to meet the needs of all students. Administrators can use it to assess the success of their schools and to understand how their performance compares to others'. And researchers can use it to study trends and evaluate the impact of policy, programs, and practices.

Outreach and dissemination are integral parts of our mission. Whether shared through policy briefs, op-ed pieces in influential publications, or discussion forums on selected issues, we don't want our ideas to sit on a shelf. If our ideas don't stimulate discussion and push against the status quo to foster a proactive climate, we will have failed. What follows is a list of major projects undertaken or completed over the past year.

Projects Launched During the Second Year

- Completed a CDHE grant to explore data capacity in relation to SB 10-036 and SB 11-245 in collaboration with the University of Colorado at Boulder and UC-Denver.
- Researched policy issues related to teacher licensure, educator evaluation and discussed them with education and policy leaders.
- Produced research briefs on issues related to evaluation of teacher prep programs using available data.
- Coordinated the collaboration between UNC mathematics education faculty and Weld County School District 6 to apply for a large, multi-year National Science Foundation research grant to improve teacher training and induction for secondary math teachers.
- Worked with a group of teachers convened by Stand for Children to develop a proposal for improving student teaching and induction in Colorado that will be shared with legislators and other stake-holders .
- Served on a committee led by Jobs for the Future to explore the need and possibilities for early college high school expansion in Colorado.

- Created an annual internship program to expose graduate students to econometric methods for conducting education research.
- Worked with the UNC administration to explore creation of a new interdisciplinary master's program in education policy stressing entrepreneurship, leadership, and data analysis.
- Created EII Faculty Affiliate positions to create a community of scholars to collaborate on research and policy analysis.
- Played a key role in UNC's outreach to Greeley schools to improve student teacher experiences and partner with the district on selected research projects.
- Wrote a chapter for a special volume on Dual Enrollment to be published in the spring by Jossey-Bass, a respected house that specializes in education publications.

Colorado's trailblazing work in education improvement gives our work urgency and immediacy. As the state builds a reputation as a reform leader we strive to help key players stay abreast of relevant research and avoid mistakes made elsewhere. The following sections describe our work in more detail as it relates to our broad areas of focus.

Improving Colorado's Teacher Pipeline

Strengthening the professionalism of K-12 is a natural emphasis for EII given our location at Colorado's premier educator prep institution at a time when the state's reform agenda is focused on improving teaching and empirical evidence is growing nationally that teaching quality is one of the strongest drivers of student achievement. We frame our work in terms of stages in the teacher pipeline: preparation, licensure, induction, evaluation, and retention.

Much of EII's work on teacher preparation involves collaboration with UNC faculty. We are currently advising a group of mathematics education faculty on a federal grant application for a project that would improve the pedagogical skills of new secondary math teachers and tighten coordination between prep programs and school districts to create seamless transitions from preparation to practice. Fully realized, this multi-year, multimillion-dollar project would begin introducing students to field work in their freshman and sophomore years, taking care to align course content with experiences from K-12 classrooms. The university would take a more active role in choosing

mentor teachers and assigning students to them, and UNC faculty would work closely with the mentors to ensure a high-quality student teaching experience. The project directors also hope to collaborate with the Greeley schools to improve the induction process for secondary math teachers and to orchestrate research with the district to identify effective methods for evaluating teacher candidates' progress through the prep program.

We also have worked with UNC's education leadership faculty to add modules on data use to the curriculum so that future principals will be equipped to help teachers use data to improve instruction. Principals also will need data skills to conduct Colorado's new teacher evaluations and to prepare state-mandated school improvement plans.

Licensure and induction are rapidly gaining prominence as policy areas in need of revision in Colorado. As legislation is likely in both areas over the next few years, EII has begun working with other nonprofits and the Colorado Department of Education (CDE) to discuss proposals for improving these two important steps in a teacher's career.

EII also has watched the development of SB10-191, and written occasional commentary. We have noted the increased demands the system will put on principals and have recommended that the state provide ample support for principals and find ways to reduce the burden, perhaps by allowing veteran teachers to be evaluated on only some standards each year instead of requiring all teachers to be evaluated every year on all 27 standards required by state rules. We will continue to follow progress on this key project and weigh in as we see opportunities to make a difference.

Training Future Researchers

One ongoing goal of EII is to train graduate students in advanced statistical methods so they can contribute to the growing body of rigorous education research. In the fall of 2012, we selected the second cohort of our EII Internships in Education Research Methods. Over the next year they will learn to understand econometric statistical and produce plans for using them in their own graduate work. We also hope to place at least some of them in practicum experiences with nonprofit policy organizations in the state.

Working With State Accountability Reforms

EII, along with the University of Colorado-Boulder and UC-Denver, worked with the Colorado Department of Higher Education (CDHE) to meet the requirements of SB10-036 to prepare annual reports on the effectiveness of teacher prep programs based on data on their graduates during their first three years of teaching. Under a CDHE grant, the project researchers investigated the characteristics of recent K-12 teachers who were trained at Colorado institutes of higher education, and the data infrastructure that is available to link these teachers and preparatory programs to student achievement outcomes. The work involved comparing data sent to the state with records kept by the prep programs to determine rates and areas of discrepancy. Establishing valid links is a vital piece of the state's ongoing effort to build an extensive, multi-year database linking students and teachers through K-12 and higher education and, ultimately into the workforce.

Another piece of our work around prep program accountability is a policy brief that describes the difficulty of measuring effectiveness for enterprises as complex as teaching and learning. Choosing a comprehensive and valid group of measures is difficult because they would have to accommodate the many factors that affect instructional quality in K-12 classrooms as well as the wide variation among the more than 2,000 teacher prep programs in the U.S.

Looking Ahead

Much of our energy in the coming months will be focused on building out the projects described above and continuing to meet with policy makers, nonprofits, and other thought leaders to identify emerging issues within our priority areas. We also will continue writing policy briefs to provide policy makers with recommendations for research-based policies. Finally, we will continue to seek public and private funding for such core activities as communications about our work and educating the public on policy issues.

