



Highlights of Our Work During 2015

- Launched *Evaluating What Works*, a technical assistance program for school districts and other education stakeholders wishing to rigorously evaluate new education initiatives.
- Began development of an online certificate in Causal Policy Research that will launch in September, 2016.
- Collaborated with Greeley-Evans School District 6 to develop a plan for evaluating the causal effect of blended learning in elementary math and science classrooms. Currently seeking funding to conduct the evaluation.
- Collaborated with the School District of Philadelphia to develop a plan for evaluating the causal effect of the program “Music for the 80%” on student engagement among disadvantaged youth. Currently seeking funding to conduct the evaluation.
- Began a new federally-funded Investing in Innovation (i3) Scale-up project evaluating the causal effect of a five-year project to expand early college high schools in three states.
- Supported a federally-funded partnership between the Colorado Department of Education and UNC to better understand the educational stability of students in foster care.
- Continued work on a federally-funded Investing in Innovation (i3) Validation grant evaluating the causal effect of a five-year project to create early college high schools in several Denver public schools and the Rio Grande Valley in Texas.
- Expanded a community of faculty committed to supporting one another’s work in causal education policy research.
- Continued a partnership with the Colorado Department of Education supporting a well-defined, rigorous, and transparent process for determining when and how Colorado education data may be shared for research and evaluation.
- Provided a secure computing space for UNC affiliates conducting research using education data covered by federal and state privacy laws.

EDUCATION INNOVATION INSTITUTE

ANNUAL REPORT TO THE GENERAL ASSEMBLY

JANUARY 2016

A Brief Overview

In its fourth year of operation, the Education Innovation Institute (EII) at the University of Northern Colorado (UNC) continued bringing to life the vision portrayed in its founding statute (SB 09-032). By partnering with school districts and other stakeholders to rigorously examine the efficacy of new approaches to teaching and learning, EII is helping build the capacity for informed education-related decision-making in Colorado and beyond.

EII's work in 2015 focused on building capacity for the creation and use of rigorous causal research to inform education policy from the school building to the national level. Causal research is designed to determine whether programs and policies actually *cause* improved student outcomes instead of just being correlated with them. This distinction is important because policies enacted based on correlational evidence can have costly unintended consequences. The most common of these is that ineffective programs live on, diverting scarce resources from productive uses.

In 2015, EII developed a sustainable model to provide training, technical assistance, and evaluation support for education stakeholders in Colorado and beyond wishing to rigorously evaluate their programs as part of the continuous improvement processes. The gold standard of causal evaluation is the randomized control trial, or RCT. Although RCTs have been used for decades to advance human understanding in the medical profession, it is quite new—though equally important—in the field of education. Just as when RCTs began in medicine, there are very real ethical and political barriers to using RCTs in schools. However, these concerns can and must be thoughtfully managed to move society's understanding forward about what works in education. EII provides hands-on support for schools as they bump against these barriers in their efforts to improve student outcomes while maximizing the return on investment for taxpayers.

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*Building capacity through the **Certificate in Causal Policy Research***

EII is in the process of developing a graduate-level online certificate program in Causal Policy Research slated to begin in fall 2016. This 9-credit program will provide administrators and others with the information and skills necessary to manage high quality evaluations of their programs and policies. Through a series of 1- and 2-credit online courses, participants will learn how to design a low-cost, rigorous causal evaluation using existing administrative data, how to negotiate the political barriers to implementing an RCT, how to make sense of findings and communicate them in accessible ways, and when and how to partner effectively with higher education experts. Assignments will connect the course material with students' particular needs and settings as much as possible.

*Building capacity through the **Evaluating What Works** technical assistance program*

In 2015, EII launched a program called Evaluating What Works that conducts outreach to education leaders about the meaning and value of rigorous program evaluation. The program also provides technical assistance for leaders negotiating the integration of rigorous program evaluation into their continuous improvement processes. For example, district leaders might brainstorm with EII staff about specific potential evaluation topics, rigorous methodological designs that ensure findings reflect cause rather than correlation, and how to bring reluctant stakeholders on board. To inform districts about rigorous evaluation and make connections with the field, EII presents at the summer conference of the Colorado Association of School Executives and networks with teacher leaders at events like the Colorado Conference of Online and Blended Learning.

EII is also building an Evaluating What Works online resource library for practitioners to explain the fundamentals of rigorous program evaluation, when an RCT is appropriate (and when it is not), how to keep evaluation costs low, and how to manage the ethical and political barriers to RCTs. Over time, the resource library will include samples of essential tools necessary for high-quality program evaluation, including logic models and fidelity of implementation rubrics used by other districts conducting rigorous program evaluations as part of their own continuous improvement processes.

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Building capacity through Researcher-Practitioner Partnerships

EII also partners with school districts to implement rigorous, low-cost program evaluations that are complex enough to require more involved expert assistance. While the Evaluating What Works program helps districts get started on the path to rigorous causal evaluation, a researcher-practitioner partnership potentially provides active assistance from start to finish. The hope is that such partnerships build the capacity of districts to conduct future evaluations independently or with minimal expert assistance. Researcher-practitioner partnerships are currently funded by federal and private foundation dollars, but ideally the costs of rigorous program evaluations--with or without support from higher education partners--will ultimately be incorporated into district regular operating budgets.

EII forged a researcher-practitioner partnership in 2015 with Greeley-Evans School District 6 to conduct a low-cost, rigorous evaluation of a blended learning program in six elementary schools. Blended learning is expected to enhance student engagement and achievement by increasing personalization. Since the district cannot afford to implement the intervention district wide all at once, they selected six elementary schools that were ready and interested in implementing blended learning in the 2016-17 academic year. Since these schools were not randomly chosen from among all district elementary schools, a comparison of student outcomes from these six schools to all other district schools would be correlational rather than causal. Therefore, the district elected to randomize at the grade level with half of the six schools implementing blended learning (“treatment”) in grades K, 2, and 4 and the other half in grades 1, 3, and 5 starting in fall 2016. This way, student outcomes in the treatment grades K, 2, and 4 can be compared to student outcomes in the control grades K, 2, and 4 to estimate the causal effect of the intervention. They will then follow the same approach for grades 1, 3, and 5. Greeley-Evans leveraged the fact that they couldn’t afford to implement the intervention district wide all at once by randomly assigning who got it first rather than taking volunteers or selecting those schools they expected to be most likely to succeed. As a result of this simple decision, they will have hard data to inform whether it makes sense to further expand the program given the costs. Furthermore, similarly situated districts will have the opportunity to learn how and whether the blended learning model being utilized in Greeley-Evans is likely to be effective in their setting.

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EII embarked on another researcher-practitioner partnership in 2015 with the School District of Philadelphia (SDP) to evaluate a program called Modern Band in Philadelphia high schools. Targeting the 80% of students—typically disadvantaged—who do not participate in formal music programs, the Modern Band program seeks to increase student engagement and enhance student preparedness for college and career. The program is expected to accomplish these goals by focusing on popular music repertoire and instruments, small ensembles, encouraging creative risk-taking among teachers and students, and technology integration. As with Greeley-Evans, SDP cannot afford to implement the program all at once across the district. Therefore, the district identified a list of approximately 40 high schools that are interested and prepared to implement the Modern Band program. From this list, EII will randomly select 6 high schools in each of the next four years to implement the program (receive “treatment”). Comparing student outcomes from the randomly selected schools to those from control schools that were not randomly selected yields the causal impact of the program. The size of the impact will help the district calculate the return on investment for this program and help them determine whether to continue implementing and expanding the program. Furthermore, the results will inform similarly situated districts about whether the program is likely to work for their at-risk students.

History of the Education Innovation Institute

The General Assembly created 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. As a small organization, EII seeks to amplify its influence by collaborating with other universities, state agencies, nonprofits, and, of course, school districts.