Title:

From student school assignment to after school programs and college completion: How three research-practice partnerships evaluate local conditions and provide support to practitioners

Session organizer:

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Panelists:

• Sean Reardon, Stanford University, sean.reardon@stanford.edu
• Orla O’Keeffe, San Francisco Unified School District, OkeeffeO@sfusd.edu
• Cheri Fancsali, Research Alliance for New York City Schools, cheri.fancsali@nyu.edu
• Elaine Allensworth, UChicago Consortium on School Research, elainea@uchicago.edu

Choice of Conference Section:

1. Effects of Education Policies
2. Research to Practice
Panel Justification

Research-practice partnerships (RPPs), long-term, mutually beneficial formal collaborations between those that primarily research education and those that primarily administer education, are promising approaches for increasing the use of research evidence in practice (Coburn, Penuel, and Geil, 2013). Because RPPs involve practitioners of education early and often in the research process, research questions and agendas are negotiated between both sides of the partnership to reflect local problems and conditions. This advantage over research that is produced using a “business as usual” approach (e.g., external researcher working mostly alone to publish pieces in a journal) results in rigorous research that is relevant and timely to practitioners, increasing the chances that evidence will actually be used in practice.

In this panel session, we bring together the work of three research-practice partnerships to illustrate how rigorous evaluation of local policies or programs can be effectively conducted through an RPP, resulting in direct impact on districts’ decision making. First we will hear from Sean Reardon, Professor of Education at Stanford University, and Orla O’Keefe, Director of Policy and Operations at San Francisco Unified School District. They will describe the collaborations between them that produced several pieces of research evaluating the district’s student assignment policies, resulting in the direct use of this evidence by the school board when re-examining district policies. Next, Cheri Fancsali from the Research Alliance for New York City Schools will share their work on a randomized control trial that evaluates an after school curriculum aimed at improving student outcomes in mathematics. The collaboration involves many stakeholders across the community, and in particular, directly involves practitioners along every step of the research process. Finally, we will hear from Elaine Allensworth, Director of the UChicago Consortium on School Research. She will present the Consortium’s “To&Through Project”, which brings together rigorous research, district data, and training and resources to help improve the number of students going “to” and “through” college.

Through a rich discussion between panelists and audience members, the examples highlighted in this panel session will shed light on the advantages and opportunities that are afforded to researchers and practitioners working in this domain who wish to impact local decisions. Rigorous evaluation of local programs is not only possible through partnership work, but it leads the way in increasing the use of research evidence in practice.

Planned outline for 90-minute session:

• We will start by asking audience members to think about two pieces of research they can point to that (1) had a major impact on local policy and (2) resulted in no impact. What aspects of the research led to its success or failure to impact?
• Next we will have the panelists discuss their projects: First, they will describe their partnership structure and give a brief overview of the types of research they engage in; they will then describe the research itself; and finally, they will share how they were able to engage practitioners post-research and especially how they were able to impact local decision making.
• A facilitated conversation between panelists and audience members would then take place, encouraging questions and comments from the audience.
• We will ask audience members to consider these projects in light of their local conditions and the challenges/successes they pondered earlier: What possible challenges do they foresee should they try to adapt these projects?

Abstract 1:

• Studying student assignment through a research-practice partnership: The case of San Francisco
• Presenters: Sean Reardon and Orla O’Keeffe
• Organization: Stanford University and San Francisco Unified School District

Background/Context/Purpose: San Francisco Unified School District’s (SFUSD) Executive Director of Policy and Operations, Orla O’Keeffe, wanted to provide School Board commissioners and the public with reliable information of whether SFUSD’s student assignment policy was achieving their intended goals. The Board’s priorities for student assignment include:

• Reversing the trend of racial isolation and the concentration of underserved students in the same school;
• Providing equitable access to the range of opportunities offered to students; and
• Providing transparency at every stage of the assignment process.

For a number of years, San Francisco received information on their student assignment policy from a court-ordered monitor, stemming from two lawsuits related to student assignment. Now, where could O’Keeffe get reliable information on the effect of San Francisco student assignment policy? O’Keeffe partnered with a set of professors from local universities and relied on them to help shape an annual analysis of the policy: Professors Prudence Carter and Sean Reardon from Stanford University’s Graduate School of Education and Associate Professor Michal Kurlaender from University of California at Davis. Since 2011, the professors volunteered their time once or twice a year to meet with O’Keeffe and her administrative team. All three of these professors published research about issues related to student assignment—race, culture, desegregation, integration (e.g., Kurlaender and Yun, 2005; Reardon, Yun, and Kurlaender, 2006; Carter, et. al., 2010; Reardon and Owens, 2014), including a study O’Keeffe had commissioned Professor Carter to conduct to inform the 2010 policy decision (Carter, 2010). Over time, the professors and O’Keeffe developed trusting relationships, which allowed for frank dialog about research findings articulated in the annual policy analysis.

Anticipating some potential changes to the student assignment policy in the near future, O’Keeffe was on the look out for the type of evidence necessary to unpack the impact of the policy’s goals for the annual report. With the help of an Institution of Education Science (IES) Fellowship Grant awarded to Stanford University and further discussions with O’Keeffe, Professor Sean Reardon and one of his doctoral students, Matt Kasman, used district data to simulate different changes to the criteria in the assignment system, and the potential impact of the policy on school diversity with the current criteria in place. This research is cited in the district’s annual report on SFUSD’s student enrollment (San Francisco Unified School District, 2014), and was later referenced by school board members when making decisions about policy changes to student assignment.
**Research question:** In this presentation, Sean Reardon and Orla O’Keefe will present their findings from one of these studies. In particular, the focus of this presentation will be to understand how the SFUSD student assignment system, in conjunction with parental choices, shapes the degree of racial isolation in SFUSD schools. Potential policy levers available to the district to alter the outcome of the choice/assignment/enrollment processes include influencing parental choice by offering more or different information about the schools, for example, or altering the school assignment policy or algorithm.

**Data:** Data were collected from school choice surveys and school choice forms for families choosing schools in spring 2012. In particular, the team examined which schools parents listed as their first choice; collected school characteristics about these schools, including distance to school, achievement, racial composition of the school and socioeconomic composition of the school; and checked to see if the schools differed by race.

**Findings, Part I:** After being assigned to a school, families either enroll in the assigned school, obtain reassignment and enroll in a different school, or choose to enroll outside SFUSD. Survey responses indicate that families consider school quality and distance to be important when choosing schools. Overall, there are no large racial differences in survey responses. However, there are racial differences in school choices. These could be due to differences in preferences, differences in information, or differences in feasible school options. Additionally, there are also racial differences in enrollment responses after assignment.

**Implications and Research Design:** After the initial round of findings, the team further refined their research questions. In particular, they wanted to know how the choice/assignment/enrollment processes affected racial isolation in district schools and how changes in the assignment algorithm would affect racial isolation. To answer those questions, the team compared the patterns of racial isolation that would result under different scenarios, simulating outcomes.

**Findings, Part II:** Results from simulation suggest that student assignment reduces the number of racially isolated schools and overall segregation. Enrollment patterns, however, increase them again. The student assignment process reduces the school achievement disparity between schools of Asian/White and Black/Hispanic students.

**Conclusions:** Several resources and supports are needed if SFUSD is to achieve their priorities as they relate to student assignment. For example, SFUSD needs a student assignment system that is aligned with and supports other initiatives within SFUSD that are designed to create and support diverse enrollments and quality schools in every neighborhood. Additionally, a human capital allocation system that ensures quality teaching and promotes diversity among the faculty at each school and strong, effective programs that attract a diverse student body are also required, just to name a few. With these types of systems in place, SFUSD can reverse the trend of racial isolation and the concentration of underserved students in the same school, provide equitable access to the range of opportunities offered to students, and provide transparency at every stage of the assignment process.
Abstract 2:

- **Studying the impact of an innovative after school curriculum on student outcomes in mathematics: Evidence from a randomized control trial conducted through RANCYS**
- Presenter: Cheri Fancsali
- Organization: Research Alliance for New York City Schools

The Research Alliance for NYC Schools, in collaboration with IMPAQ International, FHI 360 and the South Carolina Afterschool Alliance, is conducting a three-year study to investigate the implementation and impact of an innovative after-school curriculum on student engagement in, identity with, and achievement in mathematics using a randomized controlled trial design. The study is funded through a National Science Foundation Advancing Informal STEM Learning “Research-in-Service to Practice” grant. The research-in-service to practice grants require that “practitioners are integral collaborators in the research endeavor.” This presentation will describe how researchers involved practitioners as integral collaborators, the results of those efforts in the first and second year of the project, and lessons learned that may inform other research practice partnerships.

**The Intervention:** The intervention includes four days of professional development and monthly follow-up support to afterschool educators to implement After School Math Plus (ASM+), a standards-based math activity program with built-in literacy and career connections. Over the course of two years, students are exposed to 4 modules of the curriculum, organized by the following themes that are designed to engage students in hands-on, fun activities based on students’ interests:

1. Jump Rope Math teaches students essential math skills while jumping rope.
2. Built Environment engages students’ interest in creating a better society.
3. ArtMath helps students understand the connections between art and math.
4. MusicMath explores the connections between rhythm and fractions through listening to music.

The activities are implemented during two, 90-minute periods per week. Each theme takes approximately 12 weeks to implement. Located in afterschool programs in South Carolina and New York City, the study targets low-income fourth- and fifth-grade students who are historically underrepresented in STEM.

**Study Data Collection**

To assess program implementation and to understand the experiences of the afterschool educators and children in the treatment and control sites, researchers are conducting surveys and interviews of educators, and program observations to collect data on the extent to which the unique aspects of ASM+ are implemented and students’ reactions to those aspects. The goal of the implementation study will be to illuminate (1) the mechanisms underlying the development of STEM interest, engagement, and identity and (2) how specific activities can foster these outcomes. For the impact study, researchers are collecting data to assess the effect of ASM+ on students’ math identity, interest, and engagement, and on their academic performance. Outcome data will be collected from school records, including standardized math test scores, grades and attendance, as well as from pre- and post-surveys of students’ attitudes and beliefs about math. Combining the implementation and impact studies will allow us to investigate the effects of ASM+ on
student outcomes and how these effects are achieved, contributing to the knowledge base about effective programs that broaden interest and participation in STEM.

**Research/Practice Partnership Strategies.** Currently in the second year of the study, we have employed several strategies to accomplish the grant’s mandate to include practitioners as integral collaborators in the research endeavor. This includes engaging an advisory committee comprised of practitioners and researchers to inform the research questions explored, the theory of action being tested, the design and implementation of the study, and interpretation and dissemination of the findings. On the practitioner side, the advisory committee includes a diverse group of out-of-school-time (OST) STEM educators including state level after school network leads, representatives from national OST organizations with a STEM focus such as the YMCA, museum educators such as Association of Science and Technology Centers (ASTC), and local practitioners involved in STEM-related policy groups. On the researcher side, the advisory committee includes a multi-disciplinary group representing scholars in mathematics and math educators, teacher professional development, youth development, and STEM learning.

The research/practitioner advisory group provides feedback and input on the data collection instruments, analysis and interpretation of findings to ensure the work reflects the realities of practice and addresses the research questions most critical to answer from a practitioner perspective. For example, we sought advice from this advisory group on the types of information practitioners need to know to be able to implement practices that foster math identity, what information would be most useful in implementing such practices in real-world settings, and the context variables that are important to capture in our understanding and analysis of data.

We also engaged the advisors in reviewing our research questions, data collection instruments, and study processes in year one before recruitment and data collection began. In year two, we plan to engage the advisors in reviewing and interpreting data collected, and providing recommendations on how to revise the curriculum and research design, if needed. In year three, we will convene the advisory board to assist with dissemination efforts, counseling us on the most effective venues, formats, and audiences for widespread dissemination of our findings.

Other strategies to foster the research/practice partnership include:

- Engaging a network of local practitioners (the South Carolina Afterschool Alliance and the New York City Department of Youth and Community Development) as a partner in the project to provide feedback and advice on the research design as well as implementation of the intervention (e.g., advice on timing, location, format of training, support needed for educators to implement the curriculum, and feedback on the feasibility of implementing the activities).
- Engaging practitioners to provide feedback and recommendations for improving the professional development and curriculum in cycles of revision.
- Working with a Networked Improvement Community (funded by NSF through a different grant) focused on girls’ math identity to engage in Plan-Do-Study-Act inquiry cycles.
- Conducting workshops and presentations at practitioner-focused conferences such as the National Afterschool Association and the 21st Century Community Learning Centers annual meetings.
Abstract 3:

- Improving students’ transition from high school to college through a research-practice partnership: The “To&Through Project” from the UChicago Consortium on School Research

- Presenter: Elaine Allensworth
- Organization: University of Chicago Consortium on School Research

In 2003, the leadership of the Chicago Public Schools (CPS) decided to take on postsecondary outcomes as a major focus of district work. At the time, the district collected information from graduating 12th graders about their postsecondary plans, but there was little other information about college outcomes for their students. There was also little knowledge about what high schools could do to help students succeed in college, beyond the efforts that were already underway to increase curricular rigor and preparation for the ACT. Members of CPS’ newly-formed Department of Postsecondary Education and Student Development teamed up with researchers at the UChicago Consortium to tackle the many questions that emerged as they started to do that work. Twelve years later, a large body of work that has emerged from research, practice, and partnerships with nonprofits has led to substantial changes in practitioners’ knowledge about how their students are doing in college, and school practitioners’ work to prepare their students for college. The newest phase of this work, the To&Through Project, brings together expertise across three key domains: research, data, and training/supports to further increase the number of Chicago students who make it to and through college.

The goal of To&Through is to provide educators, families, and other stakeholders with three types of resources in their work to support students’ college goals: 1) research-based information about what matters most as students to move from ninth grade through all of the key milestones towards college graduation; 2) data that systematically tracks how students in each high school in the city are doing across key milestones that can be used to inform strategic decision making by schools and nonprofits/community groups working with schools; and 3) resources that help translate research and data on key milestones into informed practice in schools. Consortium researchers provide the research, both connections to studies that have been done in the past, and new research on questions that exist and arise from practice. Data are provided through a collaboration of CPS, the Consortium, and UChicago Impact, each of which provides different types of information to schools and the public, from real-time dashboard data, to school-by-school reports on key indicators and trends, to an interactive web tool that allows for detailed drill-downs and comparisons of trends across schools and student subgroups. Training and resources are provided by UChicago’s Network for College Success which conducts workshops for leadership and postsecondary teams for all high schools in the district to support use of the research and data in school practice and decision-making.

All of this work is possible only because of the reciprocal learning that has occurred between researchers and practitioners as they have worked to address the barriers that keep students from achieving their postsecondary goals over the last decade. As researchers developed methods for tracking students through high school and college, and conducted research showing the factors associated with students’ success, schools responded by developing new school structures and systems. In turn, this led to new school practices for researchers to study, and a demand for research on new questions that
emerged. It also led to a demand for school-by-school data on the factors that emerged from research, and the production of those breakdowns of data led to further insights into what was happening in schools.

College graduation rates for students in Chicago have more than doubled since the start of this research-practice collaboration. In 2008, approximately ten percent of students who started ninth grade in Chicago high schools received a four-year college degree within ten years (allowing for four years of high school and six years of college, calculated through the Degree Attainment Index which combines the most recent data available on high school graduation, college enrollment, college graduation, and students who attain a college degree through non-traditional routes). This compares to 22 percent in 2016. At the same time, about three-fourths of students aspire to earn at least a four-year degree. Now that disparate pieces of research, data and training/resources have been brought together and enhanced with To&Through, there are efforts to engage a much broader range of stakeholders to use data and research in their work with students, including community groups and postsecondary institutions.

This presentation will discuss the evolution of the partnership work around improving students’ postsecondary outcomes, what was learned along the way, how research has changed practices in Chicago schools, and how practitioners’ responses to the research has informed subsequent research at the UChicago Consortium.
References

Carter, P.L. (February 2010). Tales of Two Contexts: Achieving Equity Between and Within San Francisco Schools. Produced on behalf of the NAACP Legal Defense and Educational Fund and the Council of Great City Schools.


