Title: Partnerships Between Researchers and State/District Personnel for Program and Policy Evaluations

Preferred Sections: Alliance for Progress

The Three Projects Represented on the Panel:

Project 1: Middle School Intervention Project

Deanne Crone
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Drew Braun
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Mary Strand Cary
University of Oregon

Nancy Nelson-Walker
University of Oregon

Scott Baker
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University of Oregon

Project 2: Research-practitioner Partnerships in a Multisite Evaluation of the Implementation and Impact of Supplemental Educational Services

Dr. Carolyn Heinrich
University of Texas at Austin
Dr. Patricia Burch  
University of Southern California

Robert H. Meyer  
University of Wisconsin-Madison

Deb Lindsey  
Director of Research and Assessment  
Milwaukee Public Schools

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Project 3: Evaluating the Effectiveness of Tennessee's Voluntary Pre-K Program

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Bobbi Lussier  
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Connie Casha  
Director of Early Childhood Programs  
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Panel Outline:

Large-scale evaluations of state and district education programs and policies bring together researchers and State/district personnel with complementary skills and a common interest in determining the impacts of the programs and policies being studied. These collaborations can be established and structured in ways to meet the needs of all parties, e.g., early State/local input into the research questions and study design to help ensure a useful and implementable study, holding strictly to evaluation designs with opportunities for specific exceptions to accommodate practitioner needs, providing access to administrative data and technical assistance on its collection and use, and timely provision of useful results. Strong partnerships can also help projects obtain the full cooperation of field staff and meet State/district legal obligations, overcome the challenges posed by changes in leadership and budget cuts, as well as lead to opportunities for further joint work.

This panel includes three pairs of presenters with each pair composed of a researcher and a State/district personnel who are collaborating on an evaluation study. Each pair’s presentation will focus on the nature and importance of the partnership, the mutual interests and different perspectives that informed it, and the advice and recommendations that follow for researchers and policymakers planning to work together to conduct a large-scale field experiment with practical and political implications.

Deanne Crone (University of Oregon) and Drew Braun (Director of Instruction, Bethel School District) will discuss their Middle School Intervention Project. Students identified at the end of 5th grade as having reading difficulties were provided in 6th grade with a multicomponent intervention to improve their reading and their engagement with school plus monitoring by a school data team. Testing at the end of 6th grade led to the identification of students to be provided the intervention in 7th grade. This process will be repeated in the 2012-13 school year when the students enter 8th grade. The intervention will end after 8th grade and the cohort of students will be followed through 10th grade. The project is using a regression discontinuity design to evaluate the impact of the intervention on student engagement and achievement. Students are assigned to the treatment group if they score at or below a cut point on their combined performance of the Oregon Assessment of Knowledge and Skills (OAKS) reading assessment and a measure of passage reading fluency. For the 6th grade, 22 elementary and 18 middle schools in five Oregon districts with a sample size of 4,945 6th grade students took part. For the 7th grade, a sixth district was added to the project, and there were 25 middle schools with a sample size of 6,212 7th grade students. Initial finding from the 6th grade sample using the OAKS show a positive, non-significant, and very close to zero (one tenth of an OAKS point to one twentieth) mean effect across all schools and evidence for significant variation in the effect across schools. Prior to the SREE conference, the project will complete the analyses for four other outcome measures, including: a) passage reading fluency; b) grade point average; c) attendance, and; d) ratings on the Student Engagement Instrument.

The Middle School Intervention project sought to build effective, collaborative partnerships with participating school districts from the inception of the project using five broad strategies: a) coordinated identification of the intervention sample and focus area; b) frequent communication regarding critical features of implementation; c) financial support; d) teaming between district-based liaisons and project evaluation specialists for data collection and problem solving, and; e)
frequent and targeted dissemination of results to district leaders and school staff. During its first two years the project experienced some significant challenges, including: a) high turnover in district and school leadership in several districts; b) school districts facing budget shortfalls and corresponding cuts to staffing and programs, and; c) null results on a major outcome measure for the first year of the project. Despite these challenges the participating school districts remain committed to implementing the multi-component intervention with the struggling readers in their schools, and to collaborating with the project team to adhere to the parameters of the research design and data collection requirements. The presentation will describe the specific strategies used to develop and strengthen research-practice partnerships, the manner in which each strategy was implemented, challenges that were encountered, and adjustments that were made in response to district and school feedback.

Carolyn Heinrich (University of Texas-Austin) and Deborah Lindsey (Director of Research and Evaluation, Milwaukee Public Schools) will discuss their project, A Multisite Evaluation of the Implementation and Impact of Supplemental Educational Services. The project is examining the use and impacts of supplemental education services for approximately 275,000 students (annually) who are eligible in about 350 schools required to offer such services in five urban districts (Austin, Chicago, Dallas, Milwaukee, and Minneapolis). The number of eligible students varies per district ranging from over 6,000 students (Austin) to more than 230,000 (Chicago). The quantitative sample of service providers includes more than 180 providers, while the qualitative sample currently consists of 28 providers across the five districts and from each of the four primary program models (online, in-school, community-sited, and in-home). The project began with an in-depth qualitative study that defined key elements of service program models (and policy and practice variables that mediate their implementation) and informed the construction of treatment variables for both qualitative and quantitative analysis. Next, the project applied an interrupted time series design with nonequivalent (internal, no-treatment) comparison groups and student and provider data from the 2007–2008 through the 2012–2013 school years in the analyses to examine student selection into services (i.e., who registers and participates), net program impacts, provider-specific impacts, cumulative program effects, and related relationships. Comparisons are made within the population of students in the districts eligible for services, defining the treatment group as those who register for and attend and comparison group members as those who do not receive the services. Impacts are also estimated for different thresholds of attendance and for attendance with different types of providers. Four different econometric modeling approaches are employed: value-added, student fixed effects, school and student fixed effects, and propensity score matching models that control for school and student time invariant characteristics under differing assumptions. The key student outcome measures are gain scores calculated from standardized tests administered to students in the districts (before and after participation in SES). A follow-up qualitative study will examine whether program features identified in at the beginning of the study continue over time and to further inform the interpretation of quantitative findings of program impact from the quantitative analysis.

The project found few statistically significant effects of supplemental education services on elementary and middle school student reading and math gains, and almost no effects for high school students. Statistically significant positive effects are found primarily in Chicago Public Schools (measured by changes in standardized test scores, effect sizes of 0.05 to 0.12 s.d.) for
students attending at least 40 hours. Few students reach the 40-hour threshold in other study districts due to the cost per hour for services. In Chicago Public Schools, the district provider charges a very low hourly rate compared to other providers, and other providers charge lower rates in Chicago than they do in other districts. In addition, the district provider uses teachers in the Chicago school system, and there is an explicit emphasis on facilitating continuity from the regular school day into after-school tutoring to meet the needs of enrolled students. On-line providers charge more on average for their services. In part because of their higher hourly rates, students typically receive significantly fewer hours from on-line providers and on-line providers are less effective than other types of providers in generating student achievement gains in math and reading. The qualitative research finds that SES instruction is rarely individualized or differentiated. There are relatively few highly qualified tutors, inadequate professional development, lack of materials and/or training for tutors on differentiation for students with special needs, and lack of administrative or instructional staff fluent in families’ native languages.

The Multisite Evaluation of Supplemental Educational developed a collaborative with the five school districts working together over time to put study findings into practice and improve on service components identified as contributing to student achievement. The project briefs stakeholders on a regular basis at times when the findings can be used in planning. In person briefings are used with district personnel to ensure discussion of results before public release. The presentation will describe the briefing process, how districts have used the results, and its use of an “embedded researcher” program under which a university employee splits time each week between the university and Milwaukee Public Schools, working under the technical direction of the university staff but the functional direction of the MPS Director of Research and Evaluation.

Mark Lipsey (Vanderbilt University) and a representative from the TN Department of Education will discuss their project, Evaluating the Effectiveness of Tennessee's Voluntary Pre-K Program. The project is evaluating the effectiveness of the Tennessee Voluntary Pre-k Program (VPK) in attaining its primary objectives of enhancing the school readiness of economically disadvantaged children and improving their academic performance. Tennessee currently invests nearly $85 million each year in its VPK program, which includes over 900 classrooms that serve more than 18,000 economically disadvantaged children from across 94 of the 95 counties in the state (http://www.tn.gov/education/prek/factsheet.shtml). The project includes three studies: 1) a randomized experiment based on oversubscribed programs that uses state collected data on grade retention, special education placement, and 3rd grade achievement as the outcomes, 2) an intensive sub-study of part of the randomized sample that collects addition student measures (literacy, math, and social-emotional) in each grade from pre-k to 3rd grade to be used as outcomes, and 3) a regression-discontinuity design (RDD) that uses the legally mandated age cutoff for pre-k eligibility (slightly younger students who must wait a year to enter pre-k will serve as the control group) will be implemented in 128 representatively sampled classrooms from regions in the state and will include the same literacy, math, and social-emotional outcome measures used in the randomized sub-study.

Results from the portions of the study completed to date show significant overall benefits for the children who participate in VPK. The effects on the early literacy, language, and math skills of children who attended TN-VPK were all statistically significant with gains ranging from
37% to 176% greater than those of children not in TN-VPK. The Pre-K children made the strongest gains in literacy and strong, but more moderate gains in language and math skills. In addition, subgroup analysis have shown that VPK is equally effective for boys and girls and generally effective regardless of the age at which children began VPK, but was more effective for lower performing children at baseline and English Language Learners. These results were consistent across the RCT and RDD studies, lending credibility to their common conclusion. The RCT study also included ratings by kindergarten teachers and found positive and significant effects for TN-VPK on their assessment of the children's preparedness for kindergarten and work-related abilities in the classroom. Though this study overall is still in an early stage, these initial results provide strong indications that TN-VPK is boosting the school readiness skills of the economically disadvantaged children it serves.

Conducting a statewide study of this scope on a state-sponsored program presents many practical, legal, and political challenges. Among these are (a) identifying research questions that are meaningful and relevant for the local policymakers; (b) selecting research designs that are feasible, acceptable to the state and local stakeholders, and still methodologically sound enough to provide credible answers; (c) identifying appropriate sites for the various portions of the complex research design and acquiring key descriptive information about them; (d) developing informed consent procedures for parents that are consistent with the State Department’s legal obligations and established practices; (e) obtaining the cooperation of many school superintendents, prekindergarten coordinators, and teachers across the state and maintaining their cooperation over the multiple years of the study; (f) ensuring the integrity of the design and data collection; (g) accessing the state data bases over an extended time for a large number of students in order to track their locations and obtain performance data; and (h) providing timely feedback to the participants and relevant stakeholders about the findings of the research without releasing premature and potentially misleading information.

Many of these challenges would have been insurmountable without the close working relationship established well before the proposal for the project was written between the Vanderbilt researchers and the administrators in the Tennessee Department of Education with responsibility for the VPK program. In particular, the directors of the early childhood programs in the Department of Education were instrumental in guiding the design of the project in feasible directions, essential to obtaining access and cooperation from the teachers, schools, and district superintendents involved, creative in helping resolve problems that arose along the way, and able to provide data and contextual information that would not have been available otherwise.