

Practitioner Perspectives on Emerging Research Needs and Improving Relevance in Education Research

March 3, 2014

Technical Working Group Summary

The National Center for Education Research (NCER) and the National Center for Special Education Research (NCSER), in the Institute of Education Sciences (IES) at the U.S. Department of Education, convened a Technical Working Group of practitioners on March 3, 2014 to provide input on research needs in education and how research could be more relevant and useful to the field. This effort was, in part, a response to a 2013 Government Accountability Office (GAO) report that found that IES has, through its grant making and training activities, substantially improved the quality and rigor of education research since its inception in 2002, but recommended that IES do more to ensure that its supported research is timely and relevant.

The Technical Working Group (TWG) consisted of a group of expert-practitioners in the field of education focused on a range of topics and working in state education and legislative offices, districts, and schools as well as research and development organizations, non-profit organizations, and postsecondary institutions. Collectively, the participants' expertise represents a range of backgrounds across a range of content areas, student populations from early childhood through postsecondary education, and practice.¹

The Technical Working Group (TWG) discussion was organized into five broad sessions: (1) making research available through effective dissemination; (2) research needs for elementary, middle, and high school; (3) research needs for early intervention; (4) research needs for post-secondary/career readiness; and (5) researcher-practitioner collaborations.²

The following includes a summary of each of the TWG sessions in order.

Making Research Available Through Effective Dissemination

During the first session, the TWG members discussed the need for researchers to help practitioners and policymakers understand the practical implications of research findings. TWG members believe researchers' expertise is in judging the quality of evidence behind findings. Researchers have a responsibility to highlight where evidence is strong, where it is weak, and to put the results in context. In addition, researchers should not be afraid to draw conclusions.

Researchers also need to understand that practitioners and policymakers are not going to read a long report. Teachers are pressed for time and need brief, easily understandable and usable findings. Summaries and policy briefs are key ways to disseminate research results to promote use. One TWG member mentioned that literature reviews are also extremely helpful, as are the IES practice guides. However, other TWG members either had not heard of IES before the meeting or did not use materials from the Department of Education at all. In general, researchers need to make a more concerted effort to communicate and to disseminate information to practitioners.

To learn about major new studies, the TWG members reported that they currently rely on three major sources: (1) association reports (e.g., National Center for Teacher Quality, Brookings, Education Trust,

¹ Refer to the list of participants included in Appendix B.

² Refer to the agenda included in Appendix A.

Data Quality Campaign); (2) media coverage (e.g., EdWeek); and (3) blogs. Few of the TWG members were aware of the What Works Clearinghouse. State leaders, district superintendents, school principals, and teachers tend to learn primarily from their peers in other states, districts, schools, and classrooms. However, one TWG member noted that her state does use research information when possible and described using research-recommended methods for incorporating information into their state educator evaluations.

In terms of the conduct of research in schools, the TWG members discussed the importance of involving districts and schools early on in the research process so that they can help with the design, advise on data collection, and help researchers avoid pitfalls. This involvement of practitioners also serves to promote buy-in when it comes to actual data collection. Another TWG member noted that IES provides “an excellent opportunity for districts to participate...designing and implementing collaborative research” through partnership grants that allow for a broad range of research topics. This TWG member hopes that many more districts will apply and obtain support for collaborative research projects.

It is also important for IES to help practitioners and researchers connect with each other. Districts often need hands-on, timely technical assistance and policymakers often need information quickly to make decisions. Policymakers and practitioners also need to connect with each other. Often, policies are “handed down” without any practitioner input or research cited. If the methods of implementing policies are not “pre-ordained” in the legislation, states and districts have more leeway to use research as a guide.

One suggestion to improve the relevance of research to policy was for IES to provide small, quick-turnaround grants for research on high priority areas because “policy moves fast.” For example, the National Institutes of Health (NIH) has a program like this with a month turnaround time for small projects, such as pilot studies and baseline research.

The TWG members also mentioned the need for researchers to get local data back into hands of teachers. Teachers are interested in data that helps them understand their students and their classrooms. In contrast, education leaders are interested in data that allow comparisons (e.g., state-to-state, district-to-district); one TWG member observed that providing such comparison data makes it hard for practitioners to ignore findings. Both teachers and education leaders would like to know about implementation success stories, challenges, and practical considerations in order to decide if something is right for their state, district, school, or classroom.

Finally, practitioners need help from researchers in adapting research findings in their local context. It is a challenge for teachers to figure out how to take an idea or concept (e.g., customized instruction or Response-to-Intervention) and translate it into simple, clear, repeatable actions that lead to better student outcomes. To make research more useful and relevant, the message must be clear and simple. One TWG member stated it this way: “[Teachers need] information related to micro-level instructional approaches – techniques used within classrooms and by frontline educators that have a demonstrable impact on student learning.” A suggestion was made for IES to make greater use of social media to disseminate research directly to teachers in a blog format that is easily shared: “A talented blogger who has a strong understanding of reading and drawing inference from research would be a great asset.”

Research Needs for Elementary, Middle, and High School

In the next focused discussion, the TWG members mentioned a number of specific areas in which more research is needed at the K-12 level. One TWG member mentioned several emerging trends where practice may be ahead of research and the need for research regarding these practices is urgent:

- The effects of extended learning time on student achievement.
- The implementation and outcomes of universal pre-K.
- Areas where families could benefit from community school models (partnership with local community-based organizations along a variety of dimensions).
- Effective ways to enrich or fortify middle school instruction
- Strategies to improve early language acquisition.
- Effective services and instructions for students with disabilities and English language learners (ELLs), particularly in heterogeneous classrooms.
- Better tools for teachers to differentiate between language and content challenges in assessing learning among ELLs.

This TWG member also pointed out that districts don't have the time to do long-term planning for research and evaluation around new policies and practices. An exception was the random assignment study of small schools in New York City, in which researchers partnered with the Department of Education to strategically study the implementation of a new policy.³ More collaboration and planning like this could increase the amount and usefulness of research in school districts. Another TWG member mentioned the need for quality instruction and quality teachers. Researchers could examine what the characteristics of good teachers are for more effective selection of talented people into the profession. Additionally, what are the lessons learned from other countries' systems for mitigating the effects of poverty?

The TWG members noted that districts are looking for ways to fortify the learning experience for middle school students. Extended learning time, as previously mentioned, was one potential way suggested to prevent the trend of "sliding back" in terms of the number of students reaching proficiency on the state exam.

Another TWG member added that, relevant to their work right now, are strategies to support early literacy acquisition and effective remediation strategies for older students.

One TWG member added that there is a need to understand children's progress and development over time. For example, a portrait or profile of where a child is, and should be, can help teachers and other practitioners to identify patterns and to see where there is room for accelerating a student's growth.

There is also a need to align data systems from pre-K through 12 to better support their use.

One TWG member mentioned that practice was the most disconnected with research at the high school level because of the "silos" that exist. The content takes over and there is not enough attention to the learner and the learning process or the social, emotional, and behavioral needs of the students that can impact learning.

³ Refer to the following website for more information regarding this study: <http://www.mdrc.org/publication/headed-college>

The following are additional research questions that the TWG members suggested as research needs in the area of elementary, middle, and high school education.

- What are effective remediation strategies, what promotes transition and what promotes post-school success?
- What can be done better to support students with disabilities or those without a diagnosis that may be in remedial classes? Generally, what else do we need to know to support students with special needs?
- What are effective online learning models, and is virtual learning an effective model?
- Do bullying prevention programs have impacts on students? If so, what are those impacts?
- How does teacher planning time related to teacher and student performance?
- How do teacher preparation and training (especially in special education) prepare teachers to meet high expectations, and how does the preparation impact practice and student outcomes?

In addition to the above, the TWG members mentioned that principals and teachers are under a lot of pressure with new evaluation requirements and measures of their teaching. There is a need for researchers to help ensure that evaluations of teachers and principals provide data and feedback that are useful to inform instruction. Practitioners and policymakers would also like to have usable data systems that can show trends and easily produce reports.

Finally, when policies are made, the theory behind them should be made clear so that practitioners understand the evidence base and purpose.

Research Needs for Early Intervention and Early Childhood

The TWG members noted that early childhood education is not yet a system like K-12; it lacks the same kind of infrastructure. For example, funding and administrative agencies are different in each state. There is a disconnect between Head Start and other early learning programs in some states. Parents do not know where to go to get information about programs. In examining data collected across sites, researchers need to take into account the many differences in delivery and in the demographics of programs in early education (e.g., dosage, quality of care, poverty, mobility). There is also a need for research focused on the different ways services are provided (e.g., modalities, dosage, transitions). IES has the opportunity to provide good data, but the consideration of context is important, otherwise results can be misused politically.

One TWG member asked whether federal agencies could do more to coordinate strategies. One way IES could help is to encourage data collection with common identifiers to track students from Pre-K into K-12 and beyond, as well as promote more alignment between Pre-K and K-12 education. Practitioners also need help with accessing and using common, reliable, valid assessment tools that could be used to assess impact, as well as validating existing measures. Finally, there is a need to help practitioners understand and use data to improve practices and services. For example, more should be known about what quality teaching looks like in early intervention and early childhood education.

Another point discussed is the unevenness in the level of professional preparation of practitioners in early childhood, so they struggle with translating research to practice. Researchers need to help practitioners understand and use data and to draw their attention to the need for continuous improvement.

The TWG members were enthusiastic about collaborative regional research consortia that provide research evidence that feeds back into early intervention and early childhood education; addressing questions of importance to practitioners rather than researchers. It was noted that people are wary of data sharing agreements, but in consortia they can see how the data are being used.

The following are additional research questions that the TWG members suggested as research needs in the area of early intervention and early childhood education.

- How can we measure child and family outcomes of large interventions? Are they making a difference?
- How can we assess family needs and incorporate them into services?
- What are standards for parent engagement? What are best practices?
- How can children be linked to other community services that they need?

Research Needs for Postsecondary/Career Readiness

Next, the TWG members discussed several areas in need of research in postsecondary education. The TWG members discussed the need to better understand what cognitive skills students require for college and for careers. There is also a need for research on how to do “K-12 differently” for students who are not on track for a 4-year college. These students should not be spending money going to college and taking noncredit courses, and then dropping out. Relatedly, it was pointed out that there are still many students in remedial college courses. How can we better prepare students so they can transition without remediation? What additional preparation do they need to meet higher standards in K-12?

The following are other questions that the TWG members suggested as research needs in the area of postsecondary/career readiness.

- How are college and career ready standards going to help career technical education (CTE) students in the longer term?
- Do college and career ready standards change the type of postsecondary education or career path students choose to go into?
- What are the systemic or cultural reasons or barriers in connecting rural students to postsecondary and career training options?
- What are creative ways that some rural communities are overcoming barriers in connecting students to postsecondary and career training? [One suggestion was made that place-based research could be conducted with colleges that are next to school districts.]
- There is flexibility in online learning, but what is the added value? For whom does it work best (or not work)?
- Are teachers using best practices to meet the diverse needs of students, what is the accountability for not using them?

Finally, there was a lot of discussion among TWG members about data: Researchers should determine what a quality data structure should look like for early childhood, for K-12, and for postsecondary education. What is needed to look at transitions across time? How can we understand the trajectories of student performance throughout their schooling?

Currently, we have complex administrative datasets at the district and state levels that need to be standardized for more efficient use. It was suggested that this could be done one state at a time. At the

same time, researchers need to be better trained to use state and district administrative datasets. Researchers come to districts with “hazy” research questions, uninformed about available data or how to use it. District and state staff spend a lot of time instructing researchers on how to use the data (data fields, etc.) and this could be avoided if there was a national standard for what a dataset should look like.

One TWG member observed: “You've got common education data standards. How do we leverage that, coming up with that research-ready dataset. That was a smart investment at a federal level, and a lot of associations and states and locals working together. How do we leverage that now to move forward and say okay, now that we've got common vocabulary, how do we make a common research data set that's FERPA-compliant and meets the emerging needs at the right time in the right way?”

Researcher-Practitioner Collaborations

The TWG members were enthusiastic about researcher-practitioner collaborations and suggested some areas for promoting and improving them. One suggestion was to extend the funding for researcher practitioner partnership grants from 2 to 3 years to allow enough time to build trust, create consensus, monitor collaborations, and conduct meaningful research that builds the capacity of the districts. On the other hand, sometimes a district has questions and just needs some technical assistance from a university to get the ball rolling in the right direction but can carry out the research in-house; small, short-term grants would be helpful for this purpose.

District and school leaders are often involved in regional research alliances, but the work is often focused at a high level rather than originating from the teachers. Teacher buy-in to the research effort is very important. Research questions for problems of practice need a bottom-up approach; educators want to be able to state what they are struggling with and have researchers study different solutions to recommend the best one.

Collaboration between researchers and practitioners works best when district and/or school staff members are involved in tailoring some of the research questions. This can also increase buy-in and help researchers avoid pitfalls. Truly collaborative research increases the probability that the results will be used (in contrast to traditional researcher “hit and run” approaches in which they come in to collect data and then leave). There is also a need to study the process of building the partnership and to document the structure.

Increased sustainability of best-practices is one benefit of researcher-practitioner collaborations. In traditional researcher-initiated projects, the intervention fizzles out when the researchers leave. Focusing on ways to improve sustainability of an intervention is very important, especially if the partnership is to last through multiple superintendents. If a partnership is successful, districts can put that partnership into their strategic plan. To get buy-in, they may need to “sell” it by showing exemplars of success, but the partnership language can eventually be included in the state framework.

Summary

During the course of the day, the TWG members made a number of recommendations to make research more relevant to practice and policy, and they are summarized below.

- Provide education practitioners (e.g., teachers, principals, superintendents, school staff) with specific, relevant, and applicable information to improve their practice, along with guidance and support for the implementation of new programs and practices in their local contexts.

- Involve school districts earlier in the research process, specifically in the formulation of research questions, the best data collection methods, and how to interpret the research findings. Both practitioners and researchers can learn from the implementation effort.
- Whenever possible, present practitioners with research findings and implications based on data from their schools or districts.
- Support districts with timely, hands-on technical assistance tailored to specific issues they face.
- Help practitioners understand how to collect, analyze, and use data to improve their practice.
- Consider supporting study teams for practitioners to learn from each other.
- Help practitioners and researchers use the large amount of data that has already been collected and help districts and states create a more standardized data system for the future that is more user-friendly for researchers, analysts, and practitioners to track things like student progress and grade-level performance across time.
- Provide brief summaries of research findings of a particular study or of the body of evidence on a topic, quickly, to inform the decision-making of practitioners and policymakers.
- Help practitioners understand the theory and evidence behind new state and district policies.
- Offer small, quick-turnaround grants for research on high priority areas to help address more immediate needs.

In addition, the TWG members provided input on the most pressing research needs in education, spanning prekindergarten through post-secondary schooling. They specifically recommended IES fund more research on:

- the components of effective teaching, how to draw good teachers into the profession, and the best way to prepare new teachers;
- how to address the individual needs (in particular, special needs) of students, being sensitive to the fact that many students have multiple, overlapping needs;
- how to better prepare students for college and careers, including supporting the remediation needs of students before they get to college and helping them to understand different postsecondary and career options; and,
- the effects of new policies, such as college and career ready standards and teacher evaluations, on districts, schools, leaders, teachers, and students.

Appendix A: AGENDA

Practitioner Perspectives on Emerging Research Needs and Improving Relevance in Education Research

Technical Working Group Meeting March 3, 2014 Washington, DC

9:30 A.M. – 10:00 A.M. Welcome and Introductions

John Q. Easton, Director, Institute of Education Sciences

Thomas Brock, Commissioner, National Center for Education Research

Joan McLaughlin, Commissioner, National Center for Special Education Research

10:00 A.M. – 10:50 A.M. Making Research Available Through Effective Dissemination

Key Questions

- Where do you go to identify effective practices or programs that are relevant for the work you do?
 - What dissemination sources do you trust and why?
 - What dissemination strategies can researchers use to communicate with you more effectively?
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10:50 A.M. – 11:00 A.M. Break

11:00 A.M. – 12:15 P.M. Research Needs for Elementary, Middle, and High School

Key Questions

- What are the critical research needs for the K-12 system and students?
 - What are the emerging issues or trends to which researchers should be paying attention?
 - What challenges do you face when using research to improve policy or practice?
 - What recommendations do you have to help researchers make their work more useful?
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12:15 P.M. – 1:00 P.M. Lunch

1:00 P.M. – 1:50 P.M. Research Needs for Early Intervention & Early Childhood

Key Questions

- What are the critical research needs that you see for this age group?
 - What are the critical issues that you see for transitions between early intervention, early childhood, and K-12?
 - What are the emerging issues or trends to which researchers should be paying attention?
 - What recommendations do you have to help researchers make their work more useful?
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1:50 P.M. – 2:40 P.M. **Research Needs for Postsecondary Education & Career Readiness**

Key Questions

- What are the critical research needs that you see for this age group?
 - What are the critical issues that you see for transitions between K-12 and postsecondary education/career readiness?
 - What are the emerging issues or trends that researchers should be paying attention to?
 - What recommendations do you have to help researchers make their work more useful?
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2:40 P.M. – 2:50 P.M. **Break**

2:50 P.M. – 3:45 P.M. **Encouraging Researcher-Practitioner Collaboration**

Key Questions

- What experiences have you had working with external researchers (e.g., university-based researchers or private firms)?
 - What do you see as the strengths and limitations of collaborations involving external researchers?
 - What can the federal government do to help state and local education agencies plan and carry out high quality research that leads to improvement?
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3:45 P.M. – 4:00 P.M. **Wrap-Up**

Appendix B: MEETING PARTICIPANTS

Technical Working Group Members

Carrie Conaway

Associate Commissioner
Office of Planning, Research, and
Delivery Systems
Massachusetts Department of
Elementary and Secondary Education

Virginia L. Dolan

Coordinator
Behavioral Supports and Interventions
Anne Arundel County (Maryland)
Public Schools

Patti Everitt

Education Policy Analyst/Consultant
Texas House of Representatives

Jason Glass

Superintendent
Eagle County (Colorado) Schools

Jeffrey Gold

Senior Director of Academic Technology
California State University System

David Heistad

Executive Director
Research, Evaluation, and Assessment
Bloomington Public Schools

Thomas Howell

Director
Center for Education Performance
and Information
State of Michigan

Susan Keyock

Chair and Technology Coordinator
Special Education Department
The Metropolitan High School
New York City Department of Education

Tammy Mann

President and Chief Executive Officer
The Campagna Center

Darlene Morris

Chairperson, Department
of Mathematics
HD Woodson STEM High School
District of Columbia Public Schools

Donna M. Noyes

Co-Director
Bureau of Early Intervention
New York State Department of Health

Maribelle Nuñez Pardo

ESL Teacher Trainer
Center for Child and Family Policy
Social Science Research Institute
Duke University

Jesse Solomon

Executive Director
Boston Plan for Excellence

Saskia Levy Thompson

Deputy Chancellor of Portfolio Planning
New York City Department of Education

John Wilson

Coordinator, Assessment and
Evaluation
Tempe Elementary School District

IES Staff

John Q. Easton

Director

Thomas Brock

Commissioner

National Center for Education Research

Joan McLaughlin

Commissioner

National Center for Special Education Research

Allen Ruby

Associate Commissioner for Policy and

Systems Research

National Center for Education Research

Erin Higgins

Associate Research Scientist

National Center for Education Research

Kristen Rhoads

Education Research Analyst

National Center for Special Education Research