

Researcher-Practitioner Partnerships and Kindergarten Entry Assessments

Panel Justification:

The Every Student Succeeds Act (ESSA) calls for the use of scientific evidence in decision-making. This call requires a change in behavior for many practitioners and policymakers who are more accustomed to making decisions based on personal experiences, input from stakeholders, and expert testimony rather than scientific evidence (Honig & Coburn, 2008). Underutilization of rigorous research may result from the fact that the research studies are not are difficult for practitioners to access, understand, interpret, and apply (Tseng, 2012). While ESSA provides incentive for states to build their policies and practices based off cutting-edge knowledge of “what works,” it may be hard for states to alter their practice without significant capacity-boosting.

One method for making research more accessible and relevant—and, therefore, easier to employ in decision-making-- is to use a researcher-practitioner-partnership (RPP). There are many different models of the RPP (Coburn, Penuel, & Geil, 2013), but most involve bringing researchers and practitioners together as equal partners in all phases of the research process from the design to the interpretation of findings. The act of partnering helps practitioners gain new capacity to understand and use data and research.

This panel will include presentations on three different RPPs that worked with state and local education agencies to build their capacity around using data from kindergarten entry assessments. The first presentation will be about an RPP that worked with stakeholders in the state of Alaska to contextualize their decision-making by providing information about what is happening nationally. The second presentation will be about an RPP in Illinois that is working with stakeholders to plan for appropriate uses of data in its first year of mandating statewide assessment. This presentation will highlight strategies for ensuring continuous involvement of practitioners in the planning of research and its intended uses. Finally, the third presentation will be from an RPP that took place in Pennsylvania between university-based researchers and the state of Pennsylvania and will highlight strategies used for communicating complex information on psychometric properties of data to stakeholders.

To encourage audience participation at this panel, we will structure our time so that the speakers give brief overviews of their work (5-10 minutes), with the rest of the time spent in discussion with the audience. The moderator will pose questions to the audience to encourage conversation. These questions will include: (1) How do these presentations connect to your own work? (2) Is there anything that you learned that you can take back home with you to apply? (3) What are the obstacles to evidence-based decision making that you have observed in your context? Do you think that RPPs can be used as a strategy for overcoming these obstacles?

Panel Presentation 1: A researcher-practitioner partnership in Alaska

Names/affiliations:

Karyn Lewis, Senior Researcher, Education Northwest

Ashley Pierson, Senior Researcher, Education Northwest

Background/Context:

Through an ongoing research-practice partnership (RPP), the authors worked with Alaska early childhood stakeholders to increase their understanding of different ways that states define and assess kindergarten readiness topics. This partnership also focused on improving reporting and use of Alaska's kindergarten entry assessment data (KEA) by education stakeholders. Alaska has a locally developed KEA, the Alaska Developmental Profile (ADP), which has been administered to all entering kindergarten students in public schools since 2009. The ADP assesses five domains of development: physical well-being, health, and motor development; social-emotional development; approaches to learning; cognition and general knowledge; and communication, language, and literacy. ADP data has been reported by the state education agency (SEA) as part of annual reporting, but this information was rarely used by state or local stakeholders.

Research Questions:

The research questions this project sought to answer included:

- How do other states define and assess kindergarten readiness?
- How can Alaska's KEA data be reported in a more user-friendly way?

Participants:

This RPP involves researchers, SEA staff, early childhood nonprofit staff, superintendents, and others.

Research Design:

To better understand how other states define and assess kindergarten readiness across the country, we conducted online searches of SEA websites in 2016 to document existing state-adopted definitions of kindergarten readiness and KEAs. We contacted agency staff to confirm information if it was not readily available online. The scan captured information about each state's adopted kindergarten readiness definition (or lack thereof), when it was adopted, which agency or agencies adopted the definition, whether the definition is in state statute, whether the state has a KEA, what KEA is used, when the KEA is administered, whether the KEA is administered to all students or to a sample, and sources. We also classified definition themes.

To explore how Alaska's KEA data could be reported in a more user-friendly way, we worked closely with SEA staff and designed different types of reports for stakeholder feedback in 2016 and 2017.

Findings:

Our scan shows that 26 states have a state definition of kindergarten readiness that is either formally adopted or promoted throughout the state as of June 2016. Among the states with a formally-adopted definition, six states have legislation associated with its adoption. In the remaining states with definitions, the definitions are predominantly adopted by state education agencies, but also occasionally by different groups such as special early childhood advisory councils. Twenty states had information on when definitions were adopted. Among these states, half were adopted after 2010. There is considerable variability in the definitions, with some taking the form of brief goal or vision statements, while others include detailed lists of school readiness indicators across multiple domains.

Of the states that do not yet have a definition, another six are currently developing one. Three states do not have an official definition but have some other way of thinking about what kindergarten readiness means (e.g., a “philosophy of readiness” or a detailed framework). The remaining 16 states do not currently have a definition of kindergarten readiness, and we found no publicly available evidence that they plan to develop one.

We coded the state definitions of kindergarten readiness for thematic trends. The 26 definitions fall into one of three categories:

1. Focused solely on the child (9 definitions)
2. Focused solely on the context—schools, families, and communities—in which children are embedded (2 definitions)
3. Focused on both the child and the context (15 definitions)

States use a wide variety of KEA measurement tools. Seventeen states are using commercial tools. Most states note that they use their KEA to serve one or more of the following purposes:

- Inform classroom instruction, curriculum planning, and professional development needs
- Identify students in need of specialized supports or interventions
- Provide a statewide snapshot of what children know when they enter kindergarten, monitor changes over subsequent kindergarten cohorts, and inform public policy

We provided this information on kindergarten readiness definitions and KEAs to Alaska stakeholders to help inform their understanding of the national landscape in these areas. Alaska is not planning to draft a kindergarten readiness definition or revise the ADP at this time, but stakeholders wanted to understand the variety of definitions and KEAs in use to help inform their work.

After providing the kindergarten readiness definition and KEA information, the RPP began to focus on ADP reporting. Previously, ADP scores had been aggregated as an average on a scale of 0-2 for each of five domains and were published at the school, district, and state levels. However, these average scores were difficult for stakeholders to interpret, and as a consequence, were rarely used to inform decisionmaking.

The SEA provided us with district- and state-level data on the percentage of students who scored a 2 in each of 13 goal areas, the percentage of students who scored 2 in 11 of 13 goal areas, and the percentage of students who scored 2 in all 13 goal areas. Scoring a 2 indicates that the child consistently demonstrates skills in that goal area. We then created statewide and district-level reports showing these percentages. These reports were distributed to superintendents by the SEA and positive feedback was received.

In the 2016-17 school year, the state agency decided to revise ADP reporting. Rather than report average scores, they now report the percentage of students who consistently demonstrated skills in all 13 goal areas and in at least 11 of 13 goals. These ADP results have been used more frequently, with one example being that the state education commissioner reported ADP data to the state board for the first time.

Based on this experience in Alaska, we found that RPPs can work successfully to help inform education stakeholders about kindergarten readiness definitions, assessments, and reporting. The partnership continues and recently co-developed a template that kindergarten teachers can use to enter their ADP data; the template links to a dashboard to provide child and classroom data to help inform instruction. This template tool is being piloted in September 2017.

Panel Presentation 2: A researcher-practitioner partnership in Illinois

Name/Affiliation: Jill Bowdon, Researcher at American Institutes for Research

Background: To better understand differences in children's knowledge and skills at kindergarten entry, the Illinois State Board of Education (ISBE) is preparing to implement a new kindergarten entry assessment, Kindergarten Individual Development Survey (KIDS), statewide. When conducting the assessment, kindergarten teachers will observe each student in their classroom and report on development in domains that include mathematics, language and literacy, social-emotional development, and approaches to learning after 40 days of instruction. These statewide data will provide a first snapshot of children's skills at kindergarten entry.

Stakeholders are motivated to use the evidence that results from KIDS to make decisions. However, many are eager to use the data for accountability purposes, which is not appropriate given its psychometric properties. Researchers at Regional Educational Laboratory (REL) Midwest are partnering with stakeholders from state, local, and advocacy agencies to contextualize the data, discuss its psychometric properties and its appropriate uses, and plan research that fulfills the stakeholders' needs while respecting the limitations of the data. This researcher-practitioner-partnership (RPP) is called the Midwest Early Childhood Education Research Alliance (MECERA).

Objectives: Through this presentation, audience members will hear about several strategies that REL Midwest researchers are using to boost practitioners' capacity to understand their data and to lay the foundation for evidence-based decision making. These strategies could be employed by other researchers, practitioners, or policy-makers as state and local education agencies change their existing practices around evidence-use. The objectives of the presentation are:

- 1) To inform audience members about strategies for producing meaningful and impactful results.
- 2) To inform audience members about strategies for planning for evidence use.

Context/Setting/Population: REL Midwest formed MECERA in the winter of 2017. MECERA brings together early childhood practitioners, policy-makers, advocates, and researchers from the Midwest to increase the region's capacity to access, conduct, interpret, and make sense of early childhood education research and to support the use of that research in decision making at the state and local levels. The primary members in MECERA are based in Illinois. While some of our members come from Springfield, Rockford, Elgin, or Oswego, the majority are based in Chicago. Alliance members include members hailing from the Department of Health, Department of Human Services, Department of Child and Family Services, advocacy organizations, in addition to state and local education agencies.

The primary membership of MECERA meets nine times per year, with the majority of meetings taking place in-person and via video conference call. In addition to the primary membership in the state of Illinois, there are two other parts of the alliance, as shown in Figure 1. The first, a subset of the primary membership, are the stakeholder advisory groups, which meet regularly to provide continuous feedback on the planned projects. Each research project and technical assistance project has its own stakeholder advisory group. The second is a community of practice that joins the primary membership quarterly and consists of one member from each of the other Midwestern state education agencies. This community of practice allows cross-state information sharing about kindergarten entry assessment development and use.

Practice: From the start of the alliance, researchers have worked with practitioners to understand appropriate uses of the research and to plan ways of using and disseminating the research findings to those who can use them in decision-making. In order to make sure that the evidence resulting from MECERA's research can inform decisions, REL Midwest researchers is using the following strategies.

Creating and prioritizing research topics in partnership with practitioners: MECERA engaged in a formalized research agenda setting process early in the year. At an in-person alliance meeting, researchers facilitated a discussion to find out more about the issues of importance to the stakeholders. After the meeting, stakeholders participated in an iterative process via Survey Monkey to rank-order research topics according to whether they were likely to inform decision-making. Researchers at REL Midwest worked with stakeholders to translate these research needs into research questions and designed research approaches. Then, researchers worked with alliance members to refine the questions to ensure they met the stakeholder needs.

Continuously checking on whether the research remains useful and contextually relevant: A stakeholder advisory group consisting of a subset of the larger alliance (see Figure 1) meets every other month to provide a check on whether the proposed design and approach remained useful, feasible, and contextually relevant.

Building practitioners' capacity to understand data: Researchers presented on common assessment data's uses and misuses based on its psychometric properties. In alliance meetings,

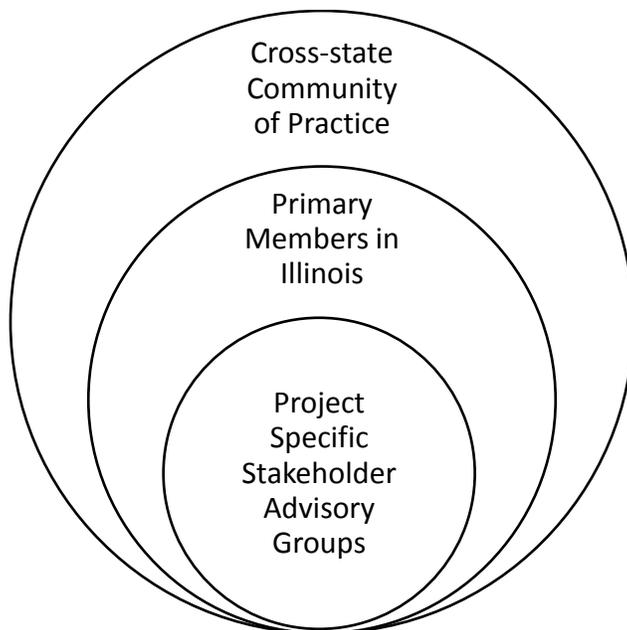
the group had in-depth conversations about what they wanted to do with the data and whether their intended uses of the data were appropriate based on the assessment's design.

Reaching out across state lines: To contextualize the state's process and decision-making, the alliance has also formed a community of practice that incorporates representatives from other states who are deeply embedded with their state's development and use of kindergarten entry assessments. These community of practice members join the primary alliance members quarterly. Hearing from their counterparts from different states about their experiences implementing kindergarten entry assessments has informed the alliance's thinking about applications for their data.

Continuous dissemination planning: From the start, the alliance has planned on how to bridge the gap between research and practice by embedding a dedicated REL Midwest member with communication expertise into the team. This staff member will understand the contextual nuances of the research and can produce communication that meets stakeholders' needs. The research will produce a full-length report, but in addition, research will be available in alternative forms, such as infographics, videos, or podcasts. The alliance has also planned data use workshops for teachers, since teachers will use the data to inform their instructional practices.

Conclusion: Practitioners have many obstacles to using evidence to inform their practice. This RPP provides an example of how states can partner with researchers to make sense of the data they have and plan for its use. These strategies relate to both the structure of the alliance (e.g. the inclusion of researchers, practitioners, and an embedded communication specialist; the inclusion of both stakeholder advisory groups and a community of practice) and to the content of the alliance (e.g. explicit discussion and education about psychometric properties of data).

Figure 1. Structure of MECERA



Panel Presentation 3: A researcher-practitioner partnership in Pennsylvania

Names/affiliations:

Katie Dahlke, Principal Researcher, American Institutes for Research

Katie Barghaus, Senior Researcher, University of Pennsylvania

Background/Context:

In partnership with Pennsylvania's Office of Child Development and Early Learning (OCDEL), researchers at American Institutes for Research (AIR) and the University of Pennsylvania (Penn) conducted a rigorous validity study of Pennsylvania Kindergarten Entry Inventory (PA KEI) as part of its ongoing continuous improvement strategy. The PA KEI is a teacher-reported measure of children's competencies at the start of kindergarten to generate information on how individual children are functioning on standards based competencies as they enter kindergarten. The PA KEI was developed over a 5-year period, beginning in 2010, by OCDEL in collaboration with educational leaders and kindergarten teachers throughout the Commonwealth. OCDEL's aim was to use the KEI to measure 5 domains of functioning: (1) Social and Emotional Development; (2) English Language Arts; (3) Mathematics; (4) Approaches to Learning; and (5) Health, Wellness, and Physical Development.

Research Questions:

This project examined the following research questions:

1. What are the characteristics of the PA KEI indicators?
2. Does the PA KEI measure five distinct dimensions of children's competency at kindergarten entry? If not, what are the evidence-supported dimensions?
3. Within each of the identified dimension structures, do the PA KEI indicators function as expected?
4. Do the dimensions of the PA KEI operate consistently across relevant subgroups of children (i.e., gender, race, children with special needs, and dual language learners)?
5. Do the evidence-based PA KEI dimensions validated by the construct validity study correlate with other validated kindergarten assessments of similar constructs?
6. To what extent do the scores reflect information about individual children?

Participants:

This study was conducted in partnership by researchers at AIR and UPenn, OCDEL leadership, public school administrators and kindergarten teachers across the Commonwealth.

Research Design:

The PA KEI Validation Study was designed to provide validity and reliability evidence in accordance with the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014). In line with the *Standards*, the study examined evidence of the response process validity, internal structure of the PA KEI, its relationship to other measures, and reliability. Collectively, the findings from this project provide scientific evidence to support conclusions related to three key areas of inquiry: (1) the scientifically supported dimensions of the PA KEI; (2) the evidence-supported uses of the PA KEI; and (3) recommendations for next steps in the continuous quality improvement of the PA KEI.

Findings:

This presentation will share learnings from the partnership process engaged in to validate the PA KEI. Specifically, the authors will share lessons learned with respect to: (1) establishing and building trust, (2) understanding the uses of assessments, (3) setting and updating expectations, and (4) translating research questions and findings.

Establishing and building trust

A preliminary and ongoing priority for the research team was to gain the trust of our partners from OCDEL. Trust helps ensure that research is relevant as it can allow for greater transparency over communicated research objectives and needs. Trust across partners also can help ensure that study findings are put to use. We found the following steps important to establishing trust: (1) meeting face to face with our partners at the beginning of the project and at key stages, as well as meeting more regularly by telephone; (2) articulating a clear, comprehensive research plan; (3) explaining proposed analytic decisions in language that was accessible for a non-research audience; and (4) responding to questions and priorities of our partners.

Understanding the uses of assessments

The Standards note that the process of developing and validating an assessment begins with and is guided by its planned uses. There are many potential uses for an assessment ranging from lower-stakes ones such as formatively guiding instruction to higher-stakes endeavors such as making placement decisions. Indeed many assessments are created with multiple uses in mind and in practice assessments with a well-defined use are often employed for different purposes. This foundational issue was surfaced early in this project's partnership process and used as a guiding pillar. The team began by working with OCDEL to surface all of the intended uses of the KEI as well as uses for which it was not originally designed but a demand for was anticipated. The validation activities were then planned to examine the extent to which there was evidence to support the most salient uses. The findings were then used to articulate evidence-based uses of the PA KEI at this time. Furthermore, evidence and conditions necessary for using the PA KEI for other purposes were articulated.

Setting and updating expectations

Assessment development and validation is an iterative on-going process; they are not static activities to be completed once. For this project, the researcher team worked to create a common understanding of this continuous quality improvement (CQI) approach to educational assessment with our partners. Potential risks, such as not finding support for the anticipated dimension structure, were also outlined from the beginning. This approach to educational assessment also informed the communication strategy with stakeholders and the public. This allowed the team to position the project within the history of the development of the PA KEI, its current context of use, and point to the next phases in its development.

Translating research questions and findings

A key aim of this project was to ensure that all of the partners engaged in the work understood what the research questions and findings meant and why they mattered for the teachers and children who would use the PA KEI. To meet this aim, the research team worked to create non-jargon explanations of the research questions and findings for our partners and the public.

References:

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