The Role of Data System Integration in Policy, Practice, and Research

Description
This breakout session involved discussion about some of the ways that integrated data systems can be used to answer research questions, analyze policies, and inform practice. Alternative approaches were compared and contrasted along with exploration of challenges and lessons learned.

Facilitator
Tamara Halle, Child Trends

Presenters
Jana Martella, National Association of Early Childhood Specialists in State Departments of Education
Isabel Bradburn, Virginia Tech
Aaron Schroeder, Virginia Tech
Rod Southwick, Consultant

Scribe
Patti Banghart, National Center for Children in Poverty

1. Documents in Session Folder
- “Key Resources”
- “Data Sharing among Massachusetts Agencies Serving Children and Youth Aged 0 to 20,” Rod Southwick

2. Summary of Presentations
- Summary of Presentation #1: Jana Martella
  - We can learn about child care data systems from the education field. Big initiatives include the quality data initiative and the data consortium. Both promote the use of single student identifiers to help track children (some States have done this in grades K–12).
  - The field is currently grappling with what questions we should be able to address across programs using integrated early childhood data systems and deciding on what the unit of analysis should be.
  - A new publication from the New America Foundation was just released titled “Many Missing Pieces.”

- Summary of Presentation #2: Isabel Bradburn and Aaron Schroeder
  - A case study is underway in Virginia: Child Care Subsidy and Early Education: Helping Analyze Needed Data Securely (HANDS). The aim of this study is to build an integrated web-based system for social services, health, and education to guide
evaluation and policy. Goals are to improve data quality, research capacity, and increase the use of data to guide decisions.

- Much of the data is currently fragmented and measured only at the local level. Linking local and State-wide data is important as is making the web-based system user-friendly. They are also seeking to maintain data security, engage stakeholders to build and test data system, and capture child care quality.

- The system includes federated data (not consolidated) and multi-agency, query-based, and child-level data linking. The federated data system integrates data from social services and education, with health data a potential future partner. Virginia privacy laws have been interpreted to preclude the use of a single unique identifier to link data. Instead, internal identifiers are linked through a directory table protected by a recursive hashing algorithm such that no individual can identify persons across agencies. Efforts are underway to build query access for administrators who make policy decisions and data access for researchers working with state administrators.

- The plan is that this system will feed into longitudinal data for grades K–12, and include quality rating systems, which could provide infrastructure to link other programs such as juvenile justice, etc. The integrated data system has helped provide a platform for policy discussions, new questions, and increased interdisciplinary collaboration.

**Summary of Presentation #3: Rod Southwick**

- Massachusetts’s School Readiness Cabinet established an integrative data system to follow children from birth to age 5 and then through grades K–12. The goal is to share information for all children, not only those at risk, and to measure program outcomes in addition to child outcomes.

- In 2008, an Office of Education was charged with overseeing all education services for children from birth to age 20.

- The system currently collects data on children in elementary and secondary school. FERPA laws restrict data collection making it difficult for early childhood data to be useful in measuring school readiness of children. A new Early Childhood Information System (EICS) is being created to collect early childhood data, guided by a data workgroup partnering with other data integration initiatives.

- The EICS data system will be based on a unique child-identifier, educator/staff identification, and program identification. It will also include collaboration with other systems such as health, education, etc.

- The intent is to track children over ages and time, and encompass data on home and communities to look at outcomes. Data from QRIS, licensing, etc. will be included.

- Early childhood education data is now shared with a number of human service agencies and the State would like to make that data more accessible particularly for research partners.

- The State is currently grappling with data indicators that should be addressed and questions answered.

3. **Summary of Discussion with Presenters and Participants**

- *Is the goal to have a national integrative data system to help track children who move across State lines?* The Federal Government is working to remove restrictions, but
comparisons across States and systems are difficult, and there are confidentiality issues. States are working to build data standards and use longitudinal data to determine if children are slipping through the cracks. Subsidy grants are State-driven, and there are a lot of unique program variables.

- **For Virginia, how valid is the data without a child unique-identifier?** The linking directory is the key, which uses probabilistic matching for the unique identifiers that each agency holds.
- **Is Virginia feeding aggregate data back to communities?** Yes, localities have been involved in focus groups to figure out what would be most useful. The education data is the most complicated. Regional comparisons can be seen. We are collaborating with others to offer technical assistance in addressing community questions. The Data Quality Campaign highlights how providers are collecting a lot of data that offer opportunities.
- **Data compliance vs. improvement?**
  - The Data Quality Campaign is trying to move from getting providers to be compliant with data requirements to using data for program quality improvement.
  - To allow for quality measurement, the Office of Child Care is moving toward including child records in the ACF 801 report.
  - Head Start includes a lot of data including child assessment data.
  - In Massachusetts, only UPK programs are doing child assessments, which are mostly to measure improvement in children over time. Teachers could use that data for program improvement.
  - Longitudinal data systems could be supplemented with other studies and qualitative information.
  - Virginia is struggling with how to build-in all Head Start data. The burden will be in using data that translates to the classroom and child level.
- **Are Early Childhood Advisory Councils involved in building data systems?** In Virginia, the answer is yes. The head of council is very involved in developing questions that system will address. In Massachusetts, not yet. Still deciding on whether stakeholders should be at the table to inform data collection. The New York Early Childhood Advisory Council and NCCP have created a survey to find out what data is collected.
- **What prenatal data and health data are you collecting?** Virginia collects prenatal data and hopes to include home visitation data.
- **How are you tracking child outcomes and growth in programs?** Massachusetts is using assessment tools and has built this into licensing requirements. Virginia has a thin assessment process for early childhood education. The hope is that the data system will highlight this gap and motivate increased use of assessments.
- **Are infants and toddlers included in the data system, and is there a pushback to include assessment data?** Longitudinal data systems can answer policy questions related to school readiness by tracking where children have been. At a young age, there is also greater focus on screening for developmental delays versus academic readiness. Health data on delays would be helpful to look at.
- **What information on parents is being collected?** In Massachusetts, there has been interagency sharing around homeless children and families.