Using Data to Inform and Improve Instruction: Child Assessment

December 5, 2012
Ways to Engage in this Webinar

- Answer polling questions
- Pose questions through question box
- Follow on Twitter at #PreK3rd
Webinar Series

• *Today’s Focus:* — Child Assessment as Key Ingredient in PreK-3rd Grade

• *Moderator:* Tom Schultz, Council of Chief State School Officers

• Full Series:

http://prek-3rdgradenationalworkgroup.org
PreK – Grade 3 Assessment Landscape
(In 4 Slides or Less…)

• Child assessments address THE core question

• Multiple efforts to expand child assessments

• Major differences between PreK & K-3rd assessment practices

• Major challenges/important opportunities
Child Assessments Address

THE Key Question about PreK-3rd

“HOW ARE THE CHILDREN DOING?”
PreK-3rd Grade Assessments: Expanded Efforts

• Head Start school readiness initiative
• OSEP ece child & family outcome indicators
• Race To the Top & Early Learning Challenge
• State Kg. entry assessments
• State assessments to determine if children are reading on grade level at 3rd grade
# PreK & K-3rd Assessments: Worlds Apart

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Assessment Challenges/Opportunities

• What about retention of children based on a single end-of-year reading test?
• What about new teacher evaluation systems using assessment data to evaluate PreK-3rd teachers?
• Can we build systems to report/use data on PreK-3rd children, programs & teachers?
• Can we build teams of PreK-3rd teachers to use assessments to improve teaching & learning?
Speakers

- **Marty Zaslow** – The Society for Research in Child Development
- **Cindy Bagwell** – NC State Board of Education/Department of Public Instruction
- **Carla Bryant** – San Francisco Unified School District
- **Ellen Frede** – Acelero Learning
Purposeful Early Childhood Assessment

Martha Zaslow
SRCD and Child Trends
Goals of this Presentation

To provide a brief overview of key themes in the report of the National Academies of Science Committee on Developmental Outcomes and Assessments for Young Children
Background

Concerns motivating study:

- Whether young children should be assessed at all
- If so, how to assess them
- What domains to assess
- Appropriate implementation of assessments
- Appropriate uses of assessment results
Background

Statement of Task:

- Identify key outcomes associated with early stages of child development (ages 0-5).
- Review and evaluate quality and purpose of current techniques and instruments for developmental assessments of young children.
- Prepare report with recommendations for assessment policy and practice as well as future research priorities.
Background

Committee on Developmental Outcomes and Assessments for Young Children

Catherine Snow (chair)  Harvard Graduate School of Education
Margaret Burchinal  University of California, Irvine
Harriet A. Egertson  Independent Consultant
Eugene K. Emory  Emory University
David J. Francis  University of Houston
Eugene E. García  Arizona State University
Kathleen Hebbeler  SRI International
Eboni Howard  Erikson Institute
Jacqueline Jones  New Jersey Department of Education
Luis M. Laosa  Educational Testing Service
Kathleen McCartney  Harvard Graduate School of Education
Marie C. McCormick  Harvard School of Public Health
Deborah Stipek  Stanford University
Mark R. Wilson  University of California, Berkeley
Martha Zaslow  Child Trends

BOCYF Liaison
Betsy Lozoff  University of Michigan

NRC Staff
Susan Van Hemel, Matt McDonough
Rosemary Chalk, Stuart Elliott
Consensus of Committee

- Assessments of young children, well designed, implemented, and used, have important benefits for children and the programs that serve them.
- Flawed assessments and flawed use of assessment findings can result in harm to children and programs.
- Our task is to maximize the benefits and minimize the harm of early childhood assessment.
Key Themes

*Purposes:* There are fundamentally different purposes for conducting early childhood assessments. The purpose is critical to how the measure is designed, which measure is selected, how it is implemented and how results are reported and used.
Key Themes

*Systems*: Conducting the assessments is only one part of a system with multiple components that together can inform progress towards high quality ECE and school readiness.
Key Themes

These are *linked*. The purpose will shape how the early childhood assessment is integrated with other components of the system.
Selected Issues: Purposes
Differing Purposes of Assessment

There are four fundamentally different purposes for conducting child assessments:

1. Screening and diagnostic testing
2. Guiding instruction
3. Evaluating the performance of a program or policy
4. Advancing knowledge of child development

Focus here will be on purpose of guiding instruction
Purpose: Guiding Instruction

What are the specific goals of assessment with this purpose?

- To get a picture of what children know and can do, and to track children’s progress over time.
- To use this information to guide decisions about instruction at the level of the individual or group.
- This differs, for example, from the goal of evaluating the effectiveness of a program or contributions of a policy, where focus is at a broader level: functioning of a program, policy, or indicators for children in a geographical area.
Purpose: Guiding Instruction

Who is assessed?

- *All* children in a class, center or program need to be assessed.
- For some other purposes, a sample may be completely appropriate. For example, this is the case when the purpose is to evaluate a program or policy, or to advance knowledge.
Purpose: Guiding Instruction

How is assessment information collected?

- Usually by observing children, collecting samples of their work, and talking to children. Progress is related to learning or behavioral criteria (criterion referenced) or to progress on curricular goals (curriculum referenced).

- In assessment for other purposes, it may be a high priority to collect assessments using standardized assessments and procedures.
Purpose: Guiding Instruction

Who are the key targets of the assessment information?

- The targets are primarily those within an early childhood setting: directors; educators and caregivers; specialists focusing on curricula and working with children with special needs; families.
- This differs, for example, from collecting assessment data to provide information about a program or policy, where the target is primarily policymakers, the public, and researchers.
The Committee affirmed previous descriptions of five important domains of development: physical health and wellbeing, social-emotional development; approaches to learning; language and literacy; cognitive skills (e.g., early math skills)

The purpose of assessment determines the domain or domains assessed.

However, the Committee cautioned that where possible:

“Domains included when assessing child outcomes and quality of educational programs should be expanded beyond those traditionally emphasized (language, literacy, and mathematics) to include others, such as affect, interpersonal interaction, and opportunities for self-expression” (p. 348)

The Committee noted the need for measures development in these areas.
Issues to Consider with Different Types of Assessments

Observation-based:

- Important to help teachers work towards and maintain same interpretation and scoring
- This is best accomplished with well-defined scoring guides and initial but also ongoing training
- Training and support are also needed in whatever system is used in entering scores and producing reports. There are particular issues if an on-line system is being used and is unfamiliar.
- Care is needed in considering whether scoring might be biased by perception of consequences to teachers

Standardized assessments:

- Training is needed not only on administration of particular assessments, but also in how to help children feel comfortable in assessment setting
- Cultural issues are important to take into account
- Language of administration for children learning English is related to purpose of assessment. For example, whether maintenance of home language is a program goal will help determine if assessments are given only in English, in two languages, or with scoring of concepts as articulated by child in either language.
Reliability and Validity Need to be Documented for Specific Purposes as Well as Populations

- Selecting an assessment tool includes confirming that it has acceptable reliability and validity for the intended purpose.
- Reliability and validity also need to be acceptable for the population to be assessed.
- “Program directors, policy makers, and others who select instruments for assessments should receive instruction in how to select and use assessment instruments.”
Selected Issues: Systems

- Standards
- Inclusion
- Professional Development
- Resources
- Assessment
- Opportunity to Learn
- Reporting
- Monitoring & Evaluation
Early Childhood Assessment as Part of a System

The Committee agreed that early childhood assessments:

- Should not be conducted in isolation
- But should be part of an assessment system
- With the goal of providing information to guide progress towards high quality early care and education and children’s school readiness.
What are Key Features of Systems?

Systems:
- Are organized around specific goals
- Have components each with their own goals
- Components must work well together for larger system to work
- Missing or poorly operating components can cause system to function poorly
What are the Key Components of Assessment Systems?

- **Alignment** with early learning standards and program quality ratings or criteria
- **Professional development** on implementing assessments and understanding and using assessment reports
- **Database** with checks on data quality (including data entry) and protections for data privacy; providing basis for reports to varied audiences according to purpose
- **Resources** sufficient for conducting timely assessments with reliability appropriate for purpose, and for preparing summaries of data presented in a useful way
- **Monitoring** of alignment; adequacy of professional development; burden on administrators, educators/caregivers and children; reliability with which assessments are conducted, and use of reports
Lack of Alignment of Components of System Can Cause Difficulties

Examples of lack of alignment:

- Poor coordination in focus of early learning standards and child assessments.
- Professional development on a curriculum but not on how to use child assessment information to guide when and how specific components should be implemented.
- Lack of joint consideration of program quality and child assessments in providing input into program improvement.
Need for Resources Targeting Usefulness and Use of Assessment Information

Resources for initial training on selection and implementation will fall short without resources for:

- Ongoing training to assure that child assessment and program quality data are collected with reliability
- Training so that those receiving assessment reports can interpret and make use of them
- Timely preparation of reports so that information is provided at points it can be used to guide instruction and (together with information on program quality) decisions on program improvement.
For More Information

Using Data to Inform and Improve Instruction: Child Assessment

North Carolina’s K-3 Assessment
Cindy Bagwell, RTT-ELC Project Administrator

December 5, 2012
K-3 Assessment in North Carolina

• GS 115C-174.11
  – Requires appropriate individualized assessment versus standardized testing in Kindergarten, 1st and 2nd grades
K-3 Assessment in North Carolina

• GCS-C-016
  – Requires ongoing assessment throughout school year & summative evaluation at end of year in Kindergarten, 1st, and 2nd grades

• NCDPI
  – Develops K-2 Literacy Assessment & K-2 Math Assessment
K-3 Assessment in North Carolina

• Blue Ribbon Commission to revise NC’s Accountability System
  – Expand use of formative assessment
    • NC FALCON established
    • Formative Assessment PD modules

https://center.ncsu.edu/nc/course/category.php?id=10
K-3 Assessment in North Carolina

• Governor’s Literacy Initiative

• Senate Bill 795
  – Requires the use of formative and diagnostic reading assessments in Kindergarten, 1\textsuperscript{st}, 2\textsuperscript{nd}, and 3\textsuperscript{rd} grades
K-3 Assessment in North Carolina

• GCS-J-002
  – Requires schools to use state-approved formative and diagnostic assessment system for reading in Kindergarten, 1st, 2nd, and 3rd grades

• NCDPI
  – Reading 3D pilot expands to statewide implementation
RTT-ELC Section E: Measuring Outcomes and Progress

• (E)(1): Understanding the status of children’s learning and development at kindergarten entry

  – Plan to develop valid, reliable KEA that informs instruction in early grades, is aligned with state standards, and included in State Longitudinal Data System.
NC Vision for K-3 Assessment

• K-3 Assessment
  – Support the use of formative assessment
  – Build on K-2 Literacy & Math Assessments
  – Broaden areas assessed
  – Align to state standards
  – Expand to 3rd grade
  – Use KEA as initial data point
K-3 Assessment Development

• Think Tank
  – Renowned NC researchers & practitioners
  – Big ideas & possibilities

• Task Force
  – Practitioners, content experts, & technology specialists
  – Guide development of assessment

• State Implementation Work Group
  – Guide statewide implementation
Invitational Priority 4: Sustaining Program Effects in Early Elementary Grades

• Goal - develop practices and systems for using data to support Pre-K – Grade 3 instruction effectively

• Implement project focused on broadening and improving use of classroom and child assessment data among administrators and teachers
NCDPI Goal

• Improve instruction in early grades through strengthened alignment of PreK – Grade 3 standards, curriculum, instruction, and assessment
PreK-3rd Grade Assessment PROCESS

Carla Bryant, Chief of Early Education
San Francisco Unified School District
SFUSD Assessment Story

- Context
- Assessment Tools
- Assessment Implementation
  - Fidelity to Assessment Process – Professional Development
    - Training
    - Professional Learning Communities/Collaboration
    - Coaching, Classroom Implementation
San Francisco Context

City and County of SF
- First 5 SF (Community Assessments)
- Department of Children Youth and Families (Data)

SFUSD (County Department of Education)
- Elementary Schools TK-2 (Uneven Assessments)
- Leadership & Instructional Models that Best Serve Students (Labor Partnerships)
- Seattle Early Education Collaborative (PLC)
- Stanford University (Research)
Assessment Tools

**PreK**
- DRDP - Desired Results Developmental Profile
- PALS - Phonological Awareness Literacy Screening (English and Spanish assessments in Dual Language Classrooms)
- CELDT – California English Language Development Test

**Transitional Kindergarten, TK**
- DRDP - Desired Results Developmental Profile
- PALS - Phonological Awareness Literacy Screening
- KOF - Kindergarten Observation Form (TK-K Only)
- F&P - Fountas and Pinnell

**K-3rd Grade**
- KOF - Kindergarten Observation Form (TK-K Only)
- F&P - Fountas and Pinnell
- CLA – Common Learning Assessments (3rd Grade Only)
- CST – California State Test (End of 2nd - 3rd Grades)

Note: Red highlighted text indicates new tools adopted by SFUSD
Bolded red highlighted text indicates varying stages of implementation
Assessment Implementation

1) Training: content acquisition & demonstration of understanding

2) PLC: multi-grade collaboration groups

3) Coaching: contextual application
Professional Learning Communities
“Multi-Grade Groups: Data Meetings”

PK Grade

PK-TK-1st Grades

PK-3rd Grades

Weekly or Monthly

Monthly or Every 2-4 months

Annually or Semi-Annually

...Superintendent-to-Para
...ROCI – Results Oriented Cycle of Inquiry
Coaching

Classroom Implementation

- Classroom Environment
- Classroom Schedule
- Lesson Planning (Beginning of Year - data implications/English PALS and DRDP, CELDT from previous years)
How Is Data Used?

- **Program:** CELDT Data Set
  - "Soy Bilingue"

- **Classroom:** PALS Data
  - Language Development
  - EL Language Development
Contact Information:

Carla Bryant
BryantC@SFUSD.edu
Quality in ECCE: Implementing Data-Based Systems to Drive Improvement in the Real World

Ellen Frede, PhD
Senior Vice President
Early Learning, Research and Training
Topics

➢ The continuous improvement cycle
➢ An Illustration: Acelero Head Start’s data-based system at the child level
  • Setting school readiness goals; aligning them to curriculum activities and child assessment
  • Collecting data, analyzing and using the results
Continuous Improvement Cycle

Develop Early Learning Outcomes/School Readiness Goals

Measure and Assess Progress

Analyze and Plan

Implement/Pilot Improvements
Acelero Head Start’s early learning services:

An integrated system for data-based decision making at every level:

- child,
- classroom,
- coach,
- center,
- program,
- grantee.

At every level we combine data from ongoing performance-based assessment with that of structured, on-demand instruments.
Assessing Progress to Inform Instruction and Decision-making: **Authentic On-going Assessment**

- Performance-based, comprehensive assessment collected by teachers for each child
  - Results are aggregated and analyzed quarterly.
  - We review what percentage of pre-K children are on track to achieve school readiness in each classroom, center, delegate, and program-wide.
  - Teachers receive a report quarterly on each child’s current level of readiness and recent gains.
Assessing Progress to Inform Instruction and Decision-making: **Standardized Pre-Post Assessments**

- Outside evaluators administer standardized language and math assessments on a random sample of 8 children in each classroom
  - To confirm concurrent validity of the on-going assessments
  - To investigate and compare impact of program components (curriculum models, length of day, pilots)
  - Carefully analyzed trend data over 3 years will be used in conjunction with other information in teacher performance appraisals
Using the Assessment Data: What We Found

- Scores varied widely across domains.
- Across all classrooms math and science scores were lower than other scores.
- Why might this be happening?
  - Teacher error
  - Different curricula
  - Different children and families
How Did We Use These Results?

- Added more structure for teachers in assessment system and curriculum models
- Increased math and science in the curriculum
- PD focused on math and science
- Monthly Assessment Workgroups for:
  - Increasing the usefulness of documentation
  - Improving the accuracy of scoring
  - Focusing on using information to improve teaching
- Facilitated Webinar on interpreting the child outcome data for differentiated instruction
- Systems to establish inter-rater reliability
Oh, the Places We Go!

Miss Desenoff + Miss Runge’s Class 2003-2004
Special thanks to the Bill & Melinda Gates Foundation for underwriting the technology costs behind this Webinar.
Next Webinar:

Scale and Sustainability: Implications for State and District Policy

Wednesday, January 16, 2013
3pm to 4:30pm EST

Registration link will open in approx. 2 weeks
For additional information:

www.prek-3rdgradenationalworkgroup.org