Evidence Base of Commonly Used Early Childhood Assessments

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Session Overview

- What are Assessment Standards
- What do we mean by evidence base
- How we evaluated evidence
- Results of our research

Session Goals

- To learn how to be savvy consumers of assessments
- To understand the current state of evidence available for some commonly-used assessments

Assessment Standards/Guidelines

- NAEYC
- DEC
- Head Start
- State Standards
- AERA
- LINK

DEC,NAEYC, &Head Start Guidelines

- Assessment should be:
 - Comprehensive
 - Authentic
 - Conducted for ethical and meaningful purposes
 - Systematic well planned and evidence based
 - Involve families
 - Conducted in a developmentally appropriate manner
 - Reflect the child's language and culture

AERA Standards

24 Standards related to validity

• Standard 1.1

A rationale should be presented for each recommended interpretation and use of test scores together with a comprehensive summary of the evidence and theory bearing on the intended use or interpretation.

• Standard 1.3

If validity for some common or likely interpretation has not been investigated or if the interpretation is inconsistent with available evidence, that fact should be made clear and potential users should be cautioned about making unsupported interpretations.

AERA Standards

• Standard 1.4

If a test is used in a way that has not been validated, it is incumbent on the user to justify the new use collecting new evidence if necessary.

• Standard 1.13

When validity evidence includes statistical analyses of test results either alone or together with data on other variables the conditions under which the data were collected should be described in enough detail that users can justify the relevance of the statistical findings to local conditions. ...

• Standard 1.22

When it is clearly stated or implied that a recommended test use will result in a specific outcome the basis for expecting that outcome should be presented together with relative evidence.

LINK Standards

- Acceptability
- Authenticity
- Collaboration
- Evidence
- Multi-factors
- Sensitivity
- Universality
- Utility

(Neisworth, Bagnato, & Pretti-Frontczak, 2010)

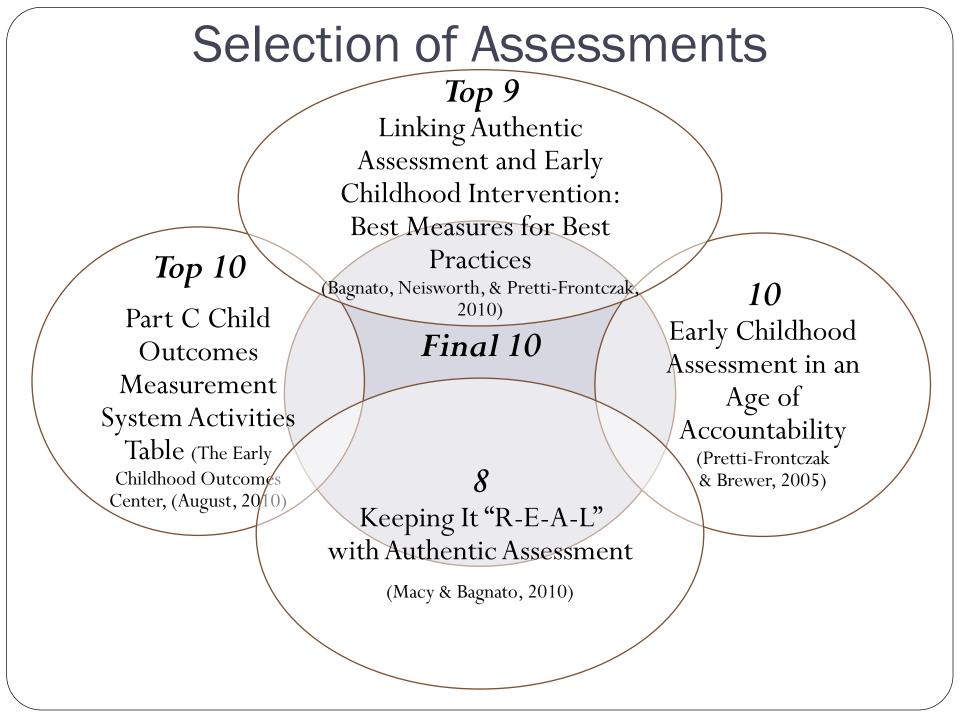
Evidence Base

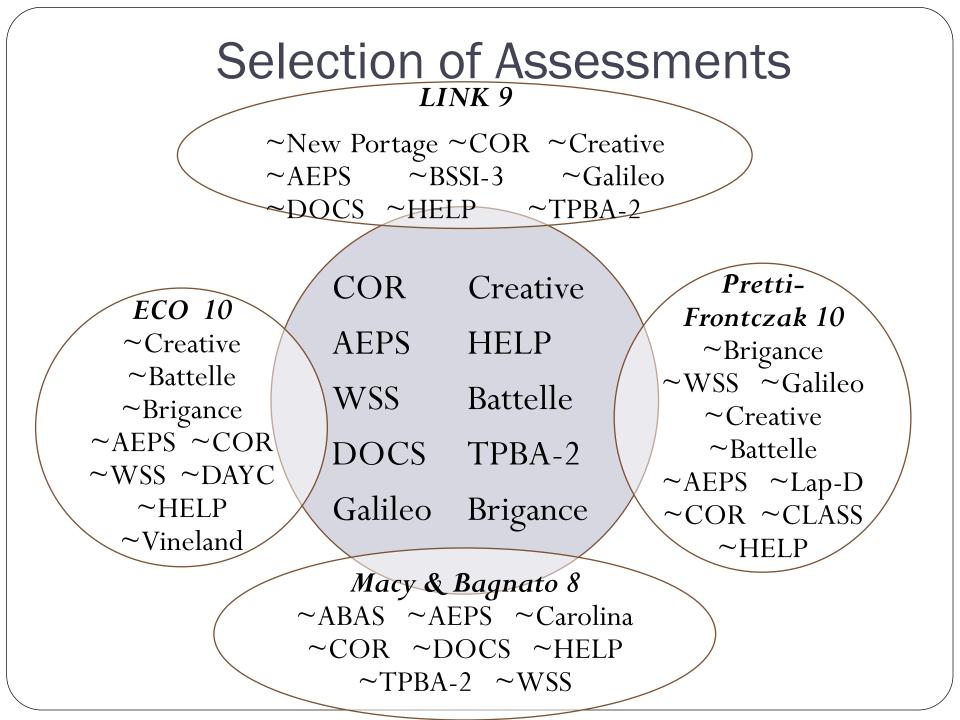
- Professional Standards
- Diversity Representation
- Disability Specific
- Early Intervention Validation

(Pretti-Frontczak & Shannon, 2010)

Selection of Assessments

Top 35 based on LINK consumer	•Infant/Toddle	Removed: Single Domain Assessments Infant/Toddler Only Assessments Disability Only Assessments		
	NK Portage •H/S CC •Creativ •AEPS	DR •DOCS		





What Counts as Evidence

- Study a manuscript that describes the methods and results (according to APA) of an empirical investigation of technical adequacy, utility, or fidelity, or related to an assessment.
 - Indexed online
 - Easily accessible to the general public.
 - Published in a journal, component of the published assessment (e.g. manual), on a product-related website, or otherwise available in full-text form online, including theses and dissertations
- Investigations of Technical Adequacy include all types of reliability, validity, and bias.

Common Exclusions

- Subjects (age, disability)
- Inadequate or non-existent methods description
- Curriculum

Validation for Intended Purposes

	Eligibility	Programming	Outcomes Evaluation	Accountability
AEPS	Х	Х	Х	Х
Battelle	Х	Х	Х	
Brigance		Х	Х	Х
Creative		Х	Х	Х
DOCS	Х	Х	Х	
Galileo		Х	Х	Х
HELP		Х	Х	Х
H/S		Х	Х	Х
COR				
TPBA-2	Х	Х	Х	
WSS		Х	Х	Х

Evidence Rating Scale

Rating	Criteria
High	Considerable evidence exists to validate the tool for the intended
	purpose.
Medium	Some evidence exists to validate the tool for the intended purpose.
Low	Little evidence exists to validate the tool for the intended purpose.
None	No evidence exists to validate the tool for the intended purpose.

Results

	Eligibility	Programming	Outcomes Evaluation	Accountability
AEPS	High	High	Low	Low
Battelle	High	Medium	High	N/A
Brigance	N/A	Low	Low	None
Creative	N/A	None	None	None
DOCS	Low	Low	Low	N/A
Galileo	N/A	Low	Low	Low
HELP	N/A	None	Low	Low
H/SCOR	N/A	High	High	Low
TPBA-2	Medium	Medium	Low	N/A
WSS	N/A	None	None	None

Quantity \neq Quality

- We did not examine the psychometric properties of the given studies.
- Sample size, population characteristics (age, disability, etc...) should be taken into consideration.
- Future research should look at quality and outcomes of the studies.

References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). Standards for educational and psychological testing. Washington, DC: American Educational Research Association.
- Bagnato, S.J., Neisworth J.T., Pretti-Frontczak, K. (2010). LINKing authentic assessment and early childhood intervention: Best measures for best practices. (4th Edition). Baltimore, MD: Brookes Publishing.
- The Early Childhood Outcomes Center (ECO). (August, 2010). Part C Child Outcomes Measurement System Activities Table. Retrieved on September 12, 2010 from http://www.fpg.unc.edu/~eco/assets/pdfs/C_Child_Chart_web.pdf
- Macy, M., & Bagnato, S.J., (2010). Keeping it R-E-A-L with authentic assessment. *NHSA Dialog*, *13*, 1-20.
- Pretti-Frontczak, K., & Brewer, D. (2005). Early childhood assessment in an age of accountability. Kent, OH: Kent State University.
- Pretti-Frontczak, K., & Shannon, N. (2010). Recommended Practices for Determining Technical Adequacy. In J. Grisham-Brown and K. Pretti-Frontczak (Eds.), AssessingYoung Children in Inclusive Settings: The Blended Practices Approach. Baltimore, MD: Paul H. Brookes Publishing.

References

- Bergan, J.R., Burnham, C.G., Feld, J.K., & Bergan, J.R. (2009). The Galileo Pre-K Online System for the Electronic Management of Learning. Retrieved on October 14, 2009, from the Assessment Technology, Inc., web site: http://www.ati-online.com/pdfs/researchPreschool/GalileoTechManual.pdf
- Bricker, D. (Ed.). (2002) Assessment, Evaluation, and Programming System (AEPS) for Infants and Children (2nd ed.). Baltimore, MD: Brookes Publishing.
- Brigance, A. H., & Glascoe, F. P. (2004). Brigance Diagnostic Inventory of Early Development-Second Edition (IED-II). North Billerica, MA: Curriculum Associates.
- Dodge, D. T., Colker, L. J., & Heroman, C. (2002). *The Creative Curriculum for preschool* (4th ed.). Washington, DC: Teaching Strategies.
- High/Scope Educational Research Foundation (2002). *HighScope Child Observation Record*. Ypsilanti, MI: High Scope Press.
- Holt, T, Gilles, J. Holt, A. & Davids, V. (2004). HELP for Preschoolers. Palo Alto, CA: Vort Corporation.
- Hresko, W., Miguel, S., Sherbenou, R., & Burton, S. (1994). Developmental Observation Checklist System. Austin, TX: Pro-Ed.

Linder, T. (2008). Transdisciplinary Play-Based Assessment (2nd ed.). Baltimore, MD: Brookes Publishing.

Meisels, S. J., Jablon, J. R., Dichtelmiller, M. K. Marsden, D. B., & Dorfman, A. B. (2001). *TheWork Sampling System* (4th ed). San Antonio, TX: Pearson.

Newborg, J. (2005a). Battelle Developmental Inventory, 2nd Edition. Itasca, IL: Riverside Publishing.

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• Handouts will be available online through the DEC conference website.