

# Evidence Base of Commonly Used Early Childhood Assessments

Teresa Brown, M.Ed., Sophia Hubbell, M.A.T., & Brooke Winchell, M.Ed.

Center for Excellence in Early Childhood Research and Teaching, Kent State University



## Purpose

To help early childhood professionals make informed decisions when choosing assessments through increased understanding of the validity evidence available by:

1. Examining the evidence base for ten commonly used assessments in early childhood special education
2. Identifying the publishers' intended assessment purposes
3. Determining existing evidence to validate each assessment based on publisher-defined intended purposes

## Assessment Standards

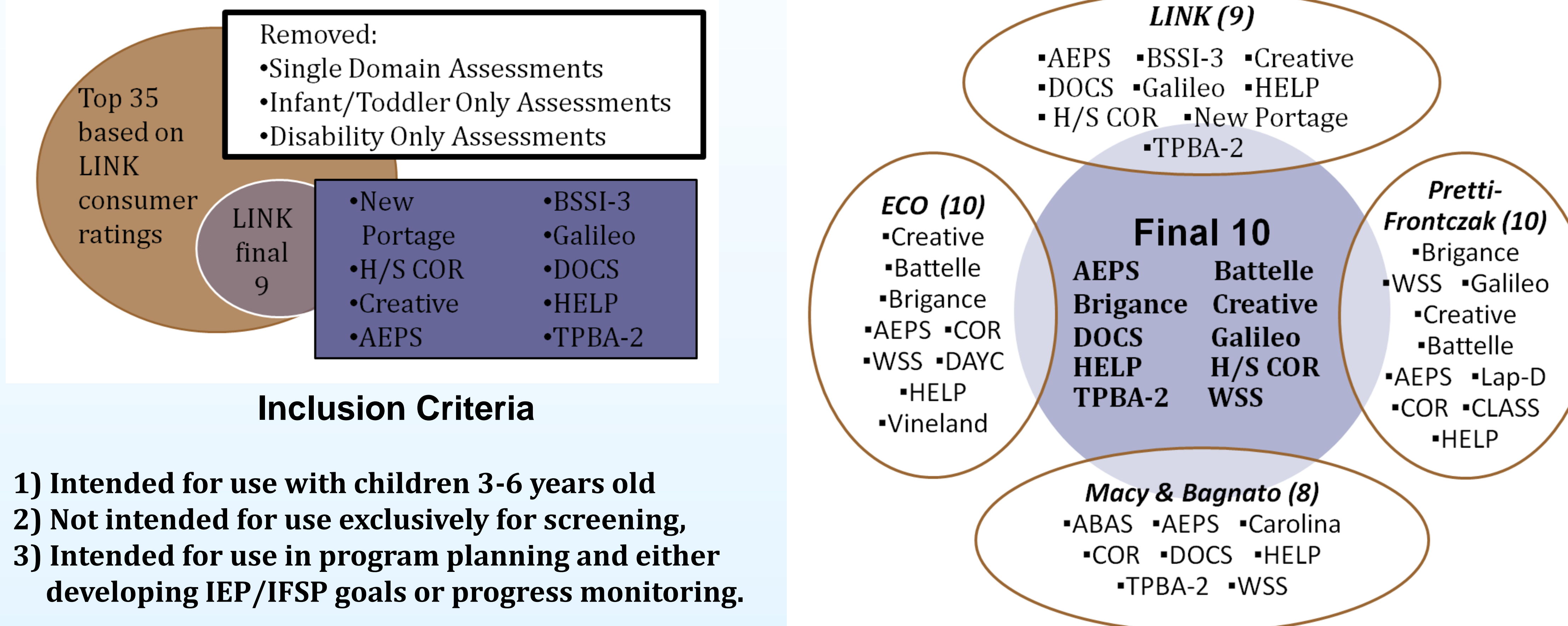
•A recurring theme across recommended assessment standards from professional organizations, government agencies and researchers is the need for evidence to support an assessment's use (e.g., Bagnato, et al., 2010; NAEYC, 2003; National Research Council, 2008).

•A collection of evidence that supports an assessment's use for a specific purpose is the assessment's *validity argument* (AERA, APA, & NCME, 1999).

•A validity argument provides information about the degree to which an assessment's results are valid for a specific use.

•The person who administers and interprets an assessment is responsible for reviewing the assessment's evidence base and making a determination about the adequacy of its validity argument for each administration.

## Assessment Selection



### Inclusion Criteria

- 1) Intended for use with children 3-6 years old
- 2) Not intended for use exclusively for screening,
- 3) Intended for use in program planning and either developing IEP/IFSP goals or progress monitoring.

Through a review of the literature, four key sources were identified for frequently-used early childhood assessments:

1. *Part C Child Outcomes Measurement System Activities Table* (ECO, The Early Childhood Outcomes Center, August, 2010)
2. *Linking Authentic Assessment and Early Childhood Intervention: Best Measures for Best Practices* (LINK, Bagnato, Neisworth, & Pretti-Frontczak, 2010)
3. *Early Childhood Assessment in an Age of Accountability* (Pretti-Frontczak & Brewer, 2005)
4. *Keeping It "R-E-A-L" with Authentic Assessment* (Macy & Bagnato, 2010)

A list was compiled of the top 35 assessments as rated by consumers from the most recent addition of LINK (Bagnato, et al., 2010). The researchers reduced the list by removing disability only assessments, infant/toddler only assessments, and single domain assessments. The resulting list of nine assessments was compared to the ten most frequently reported ECO assessments, and all of the assessments included in the two remaining studies. The final ten assessments were included in at least two of these four sources (see figures to the left).

## Definition of Evidence

•*Study* – A manuscript that describes the methods and results (according to APA) of an empirical investigation of technical adequacy, utility, or fidelity of an assessment. The study must be:

- 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
- Includes investigations of technical adequacy (i.e., all types of reliability, validity, and bias).

Rating	Criteria
High	Considerable evidence exists to validate the tool for the intended purpose.
Medium	At least 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.

## Limitations

•The psychometric properties of the given studies were not examined.

•Sample size, population characteristics (age, disability, etc...) should be taken into consideration when evaluating evidence.

•Future research should examine quality and outcomes of the studies that make up each assessment's evidence base.

## Results

### Publisher-defined Intended Assessment Purposes

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

### Evidence Rating for Each Intended Assessment Purpose

	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/S COR	N/A	High	High	Low
TPBA-2	Medium	Medium	Low	N/A
WSS	N/A	None	None	None

### Common Reasons for Evidence Exclusion

•Study subjects did not match our target population (e.g., age, disability).

•Study had inadequate or non-existent methods description.

•Study evaluated curriculum component of a system, not the assessment.

References available online at [ehhs.kent.edu/ceecrt](http://ehhs.kent.edu/ceecrt)

## Implications

•Most assessments included in this analysis were missing validity studies for one or more intended uses.

•In the current age of accountability, it is imperative that early childhood professionals use assessments that have been proven to be effective.

•When choosing an assessment, early childhood teams need to be critical in their evaluations. Information about an assessment's evidence base needs to be considered.