Preventing The MisMeasure of Young Children:
The Authentic Assessment Alternative for Early Childhood Intervention

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“Misrepresenting children through mismeasuring them denies children their rights to beneficial expectations and opportunities.”

(Bagnato, 2004, p.198).
“Everything that can be measured counts, but not everything that counts can be measured.”

(Einstein, 1951)
Session Topics

1. Why Are Changes Needed in Early Childhood Measurement?
2. What is Wrong with Conventional Testing of Preschool Children?
3. What Are the Purposes for Assessment of Young Children?
4. What is the Authentic Assessment Alternative to Conventional Testing?
5. Are There Professional Standards for Authentic DAP Assessment?
6. What Are Some Exemplary Authentic Assessment Measures?
7. How to Use AA for Parent-Professional Teamwork?
Why Are Changes Needed in Early Childhood Measurement?
Rationale for Changes from Conventional Testing Practices

• Lag with philosophy, policies, reforms in early childhood intervention:
  o Developmentally-appropriate practice (DAP)
  o Inclusion
  o Natural environments

• Emphasize developmentally “inappropriate” practices:
  o Decontextualized environments
  o Unnatural child behaviors

• Fail to link or align with curricula and standards

• Lack treatment validity

• Fail to collaborate with parents as “core” partners with professionals
What is Wrong with Conventional Testing of Preschool Children?
“Much of developmental psychology [early childhood testing] as it now exists is the science of the strange behavior of children with strange adults in strange settings for the briefest possible periods of time.”

(Bronfenbrenner, 1979, p.19)
Evidence-based Developmental Principles Violated by Conventional Testing

- Early learning is play-based.
- Close attachments to familiar adults are crucial for early learning.
- Temperament influences child behavior.
- Each child has own “developmental ecology” supports (Bronfenbrenner, 1979)
What’s Wrong with Conventional Tests & Testing?

- Contrived, not real-life situations
- Unfamiliar “experts” as testers’
- “Expected test behavior” is unnatural
- Insensitive to developmental gains
- Non-functional tasks
- Fails to match curricular or state standards
- “Scripted” materials & procedures
- Typical child norms; few disabilities
- Inequitable for children with differences/disabilities
- Not family-centered
- Not strengths-based
- Lacks research evidence-base for early childhood
“... the committee regards the effort to assess students’ decontextualized potential or ability as inappropriate and scientifically-invalid”

(pp. 8-23)
Why Do We Assess Young Children?
Assessment

“Valutare insieme”
To evaluate together
Primary Measurement Purposes for Early Childhood Intervention

- Screen/Detect for probable delays
- Eligibility to confirm service access
- Functional assessment on strengths/needs
- Goal-planning for individualization
- Monitor progress toward goals/standards
- Response-to-instruction, therapy, intervention
- Evaluate program impact/outcomes
- Accountability for federal/state oversight
Fundamental Rationale & Benefit of Early Childhood Assessment

“The overarching purpose of assessment in early childhood intervention is the design of individual plans for care, instruction and therapy” 

(Bricke et.al., 2000; Sandall et.al., 2000; Bagnato et.al., 2010; NAEYC, 2014; DEC, 2014).
What is the Authentic Assessment Alternative to Conventional Testing?
“Authentic assessment refers to the systematic recording of developmental observations overtime about the naturally-occurring behaviors of young children in daily routines by familiar and knowledgeable caregivers in the child’s life.”

(Bagnato & Yeh Ho, 2006)
Authentic Assessment in Early Childhood Intervention

- **Natural observations** of ongoing child behavior in everyday settings and routines vs. contrived arrangements;
- Reliance on **informed caregivers** (teachers, parents, team) to collect convergent, multi-source data across settings;
- **Ongoing monitoring** of skill acquisition in natural activities (i.e., preschool, home, community) over sufficient time periods and occasions;
- **Curriculum-based measures** linked to program goals, content, standards, & expected outcomes;
- **Universal design;** equitable assessment content and methods;
- **Intra-individual child progress** supplemented by inter-individual normative comparisons;
- NAEYC/DEC/HS DAP Assessment **Standards & Practices**
Primary Assessment Actions for Authentic Assessment in Real-Life Contexts

- **Serial**: Across time, places, people
- **Observations**: Structured, but naturalistic
- **Probes**: In-vivo responses to interventions
- **Video segments**: Parents & professionals
- **Interviews**: Familiar caregivers
- **Ratings**: Usual capabilities
- **Functional classifications**: Informed opinions
Our Mantra:

No Tabletop Testing!
Are There Professional Standards to Choose & Use Authentic Assessment Measures for ECI?
Developmentally Appropriate Practice

in Early Childhood Programs
Serving Children from Birth through Age 8

Third Edition
Carol Copple and Sue Bredekamp, editors

DEC Recommended Practices

Program Assessment:
Improving Practices for Young Children
With Special Needs and Their Families

Mary Louise Hemmeter
Gail E. Joseph
Barbara J. Smith
Susan Sandall
Selected Professional Standards for Early Childhood Assessment

• Reliance on developmental observations—ongoing observational assessments overtime
• Performance on “authentic, not contrived, activities”
• Integration of assessment and curriculum
• Child progress on past performances as the reference, not group norms
• Choose materials that accommodate the child’s special functional needs
• Use only measures that have high treatment validity
• Rely on curriculum-based measures as the foundation or “mutual language” for team assessments
• Defer a diagnosis until evaluation of a child’s response to a tailored set of interventions
• Use scales with sufficient item density to detect even small increments of progress
AUTHENTIC ASSESSMENT FOR EARLY CHILDHOOD INTERVENTION

8 Developmentally-Appropriate Standards for Professional Practices
DAP ASSESSMENT STANDARDS

1. ACCEPTABILITY – Social worth & detection
2. AUTHENTICITY – Natural methods & contexts
3. COLLABORATION – Parent-professional teamwork
4. EVIDENCE – Disability design/evidence-base
5. MULTI-FACTORS – Synthesis of ecological data
6. SENSITIVITY – Fine content/measurement gradations
7. UNIVERSALITY – Equitable design/special accommodations
8. UTILITY – Usefulness for intervention
AUTHENTICITY

Extent to which assessment content & methods sample naturally occurring behaviors in everyday settings

- **Functional content:** Necessary competencies for real-life participation?
- **Observational methods:** In-vivo observations & reports of familiar people?
- **Natural situations:** Captures data in familiar classroom, home, play, & community settings
Nonauthentic Content in Commonly Used Early Childhood Tests:

- Removes/replaces pegs from pegboard
- Sorts dry macaroni shapes into sorting tray
- Stacks blocks horizontally/vertically
- Strings 3–4 beads
- Colors within lines of a circle
Nonauthentic Content in Commonly Used Early Childhood Tests:

- Completes three-hole puzzle
- Uncovers toy hidden under cup
- Points to the picture of “pouring”
- Points to picture of “what swims?”
- Eats items of a meal in an acceptable order
Authentic Assessment Content:


• Engages in adult role-playing
• Builds large structures from blocks or chairs and centers play around them
• Uses “I” instead of given name
• Fixes bowl of dry cereal with milk independently
• Identifies own feelings

- **Locates** objects, people, and events without contextual cues
- **Initiates** communication with a familiar adult
- **Moves** around barrier to change location
- **Conforms** to game rules
- **Shows** understanding of three different shapes
- **Initiates** cooperative play with peers
- **Uses** more than one strategy to solve problems
UNIVERSALITY

Design and/or accommodations which enable all children to show their underlying and often unrealized functional skills

- **Equitable design:** Develops items for child to show underlying competence via functional vs topographical content and universal design concepts?

- **Alternate materials:** Allows use of substitute, multi-sensory objects to elicit child’s functional capabilities?

- **Alternate responses:** Allows substitute ways for individual children to show competence despite limitations?
Universal Design in Assessment:
Topography vs. Function in Equitable Assessment Content

**Topography**
- **Walks** across the room
- **Talks** to express needs
- **Uncovers** hidden toys
- **Handling** makes toys work

**Function**
- **Walks** across the room
- **Talks** to express needs
- **Uncovers** hidden toys
- **Handling** makes toys work
Snapshot of Some Exemplary AA Measures
AUTHENTIC ASSESSMENT FOR EARLY CHILDHOOD INTERVENTION:

- **National Consumer Social Validity Study of DAP Quality (2009–2010)**
  - Best Measures for Best Practices
- **LINK International Forum & Focus Groups**
  - Social Validation of the Process & Methods of AA for ECI (2021–2022)
LINK Consumer Rating Icons

- Exemplary: 4
- Notable: 3
- Acceptable: 2
- Marginal: 1
- Unacceptable: 0
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<th>Conventional</th>
<th>Authentic</th>
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Functional Classification Systems: Developmentally-Appropriate
How to Use AA for Parent-Professional Teamwork?
ASSESSMENT FOR EARLY INTERVENTION
NOT TEST-BASED

“Early childhood assessment is a flexible, collaborative decision-making process in which teams of parents and professionals repeatedly revise their judgments and reach consensus about the changing developmental, educational, medical, and behavioral healthcare needs of young children and their families”
EARLY INTERVENTION TEAMWORK MODELS

• Multidisciplinary
• Interdisciplinary
• Transdisciplinary
Multidisciplinary Assessment

Decision-Making

Intervention

Child
Interdisciplinary Assessment

Assessment:
- SW
- SPL
- PT
- OT
- PSY
- TR

Decision-Making:
- SW
- SPL
- PT
- OT
- PSY
- TR

Intervention:
- SW
- SPL
- PT
- OT
- PSY
- TR

Child
Authentic Assessment
Continuum of Measurement Contexts:

Natural
Analog

Clinical
Simulated
Continuum of Measurement Contexts
Contextualized >>>> Decontextualized

Where
Natural: Everyday routines
Analog: Everyday routines

What
Natural: Spontaneous behaviors
Analog: Prompted natural behaviors

How
Natural: Direct observation; report; interview
Analog: Direct observation; report; interview
Continuum of Measurement Contexts

**Contextualized >>> Decontextualized**

**Simulated**
- Where: Replica or setup situations
- What: On-demand behaviors
- How: Structured tests; observation schedules

**Clinical**
- Where: Laboratory situations
- What: Scripted responses to scripted stimuli
- How: Psychometric test instruments
What Is Authentic Assessment “In Action” for Parent-Professional Teamwork
## Authentic Assessment “in Action”:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Definition</th>
<th>Implication</th>
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<tr>
<td>Why?</td>
<td>Rationale &amp; purposes to implement assessment</td>
<td>Individualized intervention</td>
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<tr>
<td>What?</td>
<td>Content of the authentic assessment</td>
<td>Functional competencies</td>
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<tr>
<td>How?</td>
<td>Method or format for authentic assessment</td>
<td>Observation &amp; judgment</td>
</tr>
<tr>
<td>Who?</td>
<td>Parent-professional collaboration</td>
<td>Teamwork models</td>
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<tr>
<td>When?</td>
<td>Timing &amp; occasions of the assessments</td>
<td>Serial performance &amp; progress</td>
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<tr>
<td>Where?</td>
<td>Contexts for the assessment</td>
<td>Natural environments &amp; play</td>
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“AA in Action”: Brief Steps

1. Reframe assessment role as “orchestrator” of AA via others
2. Choose a teamwork model with parents that fits the child
3. Observe children’s natural competencies in play/classroom routines
4. Select a developmental profile to record competencies
5. Ensure use of professional judgments & parent informed opinions
6. Observe across multiple home/preschool activities
7. Partner with parents/caregivers
8. Partner with teachers/other professionals
9. Engage in child play to probe specific skills
10. Select familiar toys/peers to prompt child play
11. Interview caregivers about child competencies & needs
12. Record cell “videos” of child play to validate observations/progress
“Authentic Assessment in Action”:
RESULTS MATTERS (Colorado, USA)
“We pass through this world but once. Few tragedies can be more extensive than the stunting of life, few injustices deeper than the denial of an opportunity to strive or ever hope, by a limit imposed from without, but falsely identified as lying within”

The MisMeasure of Man (Stephen J. Gould, 1981) Pg. 28
Preventing The MisMeasure of Young Children: Parent-Professional Teamwork Via Authentic Assessment

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Authentic Assessment in Action:

- Choose an **authentic curricular scale** to unify interdisciplinary and interagency teamwork
- Use **professional judgment** as an essential component
- Match **team assessment model** to the needs and preferences of each child and family
- Share duties among parents, other caregivers, and interdisciplinary team members
- Rely on **parent observations** & informed opinions/judgments
- Reframe your assessment role as “**orchestrator**” of authentic assessment via others
- Spread team assessment activities **over time** (e.g., 15–30 days)
- Sample skills only in **natural or analog contexts** relying on several people
Action Guidepoints

- **Use probes** to sample expected skills in the proper context (e.g., math problems at a desk; social communication on the playground)
- Ensure samples over **several situations and occasions**
- Employ **“family-friendly” materials** that are jargon-free and a common language for all
- **Use technology** to collect ecological data for support and validation (e.g., I-Pads; cell phone video segments; cell/text messages)
Guidepoints for the “Right Measure” of Children

• Real situations give the best results.
  o “Get Real.”
• Assessment requires teamwork.
  o “Two Heads Are Better Than One.”
• Choose materials that link to intervention.
  o “The Right Tool for the Right Job.”
• Assessment is decision-making.
  o “Tests Don’t Make Decisions, People Do.”