EI/ECSE Standard 4
Component 4.2
Overview & Speaker Notes

Intended Audience:

Overview for Facilitators:
ECPC has developed an anchor presentation for each of the Initial Practice-Based Professional Preparation Standards for Early Interventionists/Early Childhood Special Educators (EI/ECSE). The components under each standard are presented separately. The materials are designed for an in-service professional development (PD) program but can be used in a pre-service teacher preparation course. This resource will increase professionals’ ability to address each of the EI/ECSE standard and components. Additional materials for each standard can be found on the ECPC Website: Curriculum Module | The Early Childhood Personnel Center (ecpcta.org)

Speaker Notes
The speaker notes provide a narrative and activities for each slide. You will see speaker notes for most of the slides within the slide deck. The notes provide additional details about the information on a particular slide, including the context for the information and key points. The notes are a guide, and speakers should feel free to modify these as needed. Please note the following:

- The narrative is a sample script for the presenter. Although you may read it verbatim, speaker notes are intended as a guide for the presenter, and you may modify them as needed.

Materials Required for face to face
1. Share the outline with timelines for the training (build in breaks)
2. Conduct an opening activity (introductions/ice breaker)
3. Computers or tablets with internet access for participants (if possible)
4. Handouts
5. Projector with audio capable for playing video with speakers
6. Presentation slides with speaker notes
7. Develop an evaluation tool for all attendees (e.g., continuous improvement activity)

Materials Required for virtual
1. Distribute the link to the online platform in advance
2. Share the outline with timelines for the training (build in breaks)
3. Conduct an opening activity (introductions/ice breaker)
4. Determine how participants will receive handouts and materials, on the cloud, using a storage platform (e.g., dropbox, google, etc.)
5. Platform to share presentation (e.g., zoom, teams, etc.) with polling questions prepared in advance and breakout room capability
6. Upload or send handouts in advance or through platform (insert through chat)
7. Download videos ahead of time to prepare for low bandwidth from slide deck
8. Share screen capability (be sure to enable sound for videos)
9. Develop an evaluation tool for all attendees (e.g., continuous improvement activity)

**Objectives for Standard 4, Component 4.2:**
After participating in this professional learning opportunity, participants will be able to:
- Describe the psychometric properties of assessment measures, including types of validity and reliability.
- Identify criteria for selecting and administering formal assessment tools
- Identify criteria for selecting and administering informal assessment methods
- Describe the key elements of an authentic assessment
- Describe the use of technology in the assessment process
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Speaker Notes with Slides

Slide 1

Assessment Processes
Initial Practice-Based Professional Preparation
Standards Early Interventionists/Early Childhood Special Educators
4.2

Slide 2

Standard 4
Candidates know and understand the purposes of assessment in relation to ethical and legal considerations. Candidates choose developmentally, linguistically, and culturally appropriate tools and methods that are responsive to the characteristics of the young child, family, and program. Using evidence-based practices, candidates develop or select as well as administer informal measures, and select and administer formal measures in partnership with families and other professionals. They analyze, interpret, document, and share assessment information using a strengths-based approach with families and other professionals for eligibility determination, outcome/goal development, planning instruction and intervention, monitoring progress, and reporting.

Slide 3

Component: 4.2

• Candidates develop and administer informal assessments and/or select and use valid, reliable formal assessments using evidence-based practices, including technology, in partnership with families and other professionals.

Slide 4

Objectives

• Describe the psychometric properties of assessment measures, including types of validity and reliability.
• Identify criteria for selecting and administering formal assessment tools
• Identify criteria for selecting and administering informal assessment methods
• Describe the key elements of an authentic assessment
• Describe the use of technology in the assessment process
| Slide 5 | Understanding and Evaluating Assessment Tools: Why Is This Important?  
- EI/ECSE professionals select and evaluate appropriate assessment measures  
- Should understand limitations of assessment  
- Cross-disciplinary professionals need a shared understanding of what assessment results mean, their limitations, and how to explain simply to families |
| --- | --- |
| Slide 6 | Formal Assessment Tools in EI/ECSE  
- Formal assessment tools used in EI/ECSE are not always designed to capture authentic and accurate data about young children’s functional competencies in meeting the challenges of real-life routines (Bagnato et al, 2014) |
| Slide 7 | It’s Up to You: Be a Knowledgeable Consumer  
(Bagnato et al, 2014)  
- Formal assessment tools: Review the evidence base and the user manual  
- Determine whether or not assessment content is developmentally appropriate for your purposes and specifically designed, developed, and field validated and/or normed for young children, especially those with disabilities |
| Slide 8 | Psychometrics  
- Psychometrics: the science of measuring mental capacities and processes |

EI/ECSE professionals need to select and evaluate appropriate assessment measures. Should understand limitations of assessment measures esp. when used with diverse populations of children. Cross-disciplinary professionals need shared understanding of what assessment results mean, their limitations, and how to explain simply to families.

Although we often think of the standardized assessments we use to evaluate young children in EI/ECSE as fully evidence-based and appropriate for the children we serve, the research supporting early childhood assessment tools as a whole is “weak, and often nonexistent” (Bagnato et al., 2014).

Psychometrics is an umbrella term for all of the ways we evaluate the usefulness and effectiveness of assessment instruments.
Let’s start with the concept of reliability. Read slide
To put it simply: if the same person took the same test under the same conditions of testing
How similar will the results (scores) be?

A good way to think about it is if you have a pedometer, and it measures the same distance for a walk around the block, no matter how often you take that walk – it is always the same. If someone else uses it to take that same walk, the results are the same – the instrument is reliable.

These are 4 commonly considered forms of reliability:

**Procedural reliability** refers to the extent to which the assessor follows the administrative procedures required by a given assessment, best accomplished by having an observer monitor how the assessment is conducted,

**Scoring Reliability** is the extent to which scoring judgements and scoring calculations/summaries are accurate. Accomplished by a second person providing feedback/agreement on what judgements were made to score any given item, and a double-checking of calculations and final summaries.

**Test-retest reliability:** the extent to which scores of a given group of children – tested on two different occasions – are scored similarly over time (e.g., a week or so later).

**Internal consistency** - Applies whenever multiple items are on the test
Assumption underlying such tests: all the items measure the same thing
For example – all items in a social-emotional assessment tool capture elements of social-emotional functioning

**Inter-rater reliability** - Important to the extent that judgment is required for scoring
Answers the question - how closely do independent observers agree when using this tool?

Controls for subjectivity
Can be performed at different levels of complexity.

Validity

Validity: the extent to which an assessment tool performs the function for which it was intended
• Does the assessment measure what it is supposed to measure?

Another component of an assessment’s psychometric profile is validity:

Validity: A Simple Example, Expanded

• Although our pedometer shows reliability, it needs to correctly measure the actual distance
  If it consistently measures your half-mile track as a quarter-mile distance, it is not a valid instrument – although it is reliable!

Types of Validity

• Content validity
• Criterion validity
• Construct validity: convergent/discriminative
• Instructional validity
• Social validity/acceptability

These are types of validity we often consider for the assessments we use:

Content validity – how well does the assessment fit with what is known about what is being measured? Relies on expert judgement

Criterion validity: Determining how well a given assessment corresponds to another validated assessment that measures the same thing across populations

Construct validity: Based on an accumulation of research results about a given concept that is being measured. Shows high convergent validity when an assessment shows a high correlation with other tests measuring the same construct across populations, and good discriminative validity when it demonstrates a low correlation with test that measure different constructs when measured across populations.
**Instructional validity** – The extent to which an assessment tool provides useful information for planning intervention/instruction programming for young children with disabilities. This might be done by asking groups of EI/ECSE providers and teachers to rate how useful the assessment results were for the purpose of intervention planning.

**Social validity/acceptability**: arguably one of the most important forms of validity – *Social validity* refers to the acceptability of and satisfaction with an intervention or assessment procedure, gained through soliciting the judgments of individual consumers, participants, and implementers of the procedures (e.g., parents, children, and professionals). Does the assessment items/tasks and procedures make sense to the child/family in the context of that family’s experiences culture? Is the assessment in the primary language of the child taking the test? Does the assessment use objects and words that the child is familiar with across his or her own everyday routines?


Were the right questions asked? Was it inclusive? Does it correlate with other validated tools?
Support discussion around the fact that stacking 3 small wooden blocks is not an interesting activity for most toddlers, for whom this item is typically geared to, especially when a stranger is asking the child to do it. Many children will do it but many will not see it as an interesting activity. So **social validity/acceptability** is in question even though the item has been proven to measure the broad concept of a specific motor skill.

**Instructional validity:** Does the item “stacks three blocks” lead families and educators to meaningful instructional planning in an explicit way? Are there other ways to identify how a child is using fine motor skills to inform program planning? What other behaviors might you want to observe if a child isn’t interested in stacking small wooden blocks?

Beyond evaluating the psychometrics of the assessment tools, you are considering, it is important to understand how the use of informal and formal assessments can converge to complement each other and provide a full picture of a child’s developmental capacities.

In most instances, you will be using both formal and informal forms of assessment across functions of assessment – eligibility, program planning, progress monitoring and evaluation.

(Facilitator reads text in each of the two boxes aloud).
Formal measures are used for the purpose of determining eligibility, or to qualify a child for new services if they currently have an IFSP or IEP. These measures can often be used for program planning.

As a rule, early education programs, including inclusive and specialized education programs, require formal assessment at regular intervals to document effectiveness, an element of accountability. These are often in the form of a summative achievement tests that measure attainment of specific standards, e.g. Common Core. Alternatives exist for these tests in every state for children for whom these tests are not adequately sensitive or appropriate. These tests are not useful for program planning or progress monitoring.

Formal assessments are also built into many curriculum frameworks, such as The Head Start Early Learning Outcomes Framework: Ages Birth to Five (ELOF), High Scope - or the Creative Curriculum framework - which specifically supports special education objectives. Disability-specific programs such as the LEAP model curriculum framework, or the Early Start Denver model also include the use of validated assessments that provide ongoing formative information.

The use of informal assessment is a critical piece of progress monitoring on a daily and weekly basis.

Data collected daily/weekly across routines inform whether or not intervention or instructional strategies are impacting behavioral or educational targets. For Part C providers, families can share ideas about how best to collect ongoing data in the home. For example, using a counting clicker.
or app, or keeping a simple frequency form attached to the refrigerator.

This informal data should always be shared in an ongoing manner with all members of the child’s team, especially families.

Individualized informal and ongoing data collection ensures that intervention/instruction is having the desired impact on a child’s development and functional goals, and ensures that need modifications are implemented in a timely way.

Effective data collection that focuses on within reach and measurable short-term goals ensures/ helps families and educators see and appreciate the smaller steps towards success! This empowers both the child, the family, and the early education providers to continue fidelity implementation.

This image describes the relationship of formal and informal relationship by showing 2 overlapping circles. The point of overlap is where the benefit of using both forms of assessment lies. When both forms of assessment are RELIABLE, VALID, UNBIASED, RELEVANT, AND INTENTIONAL as described in the blue rectangle, we know that best-practice assessment is being used.

Assessment tools, whether they are formal assessments like the Battelle Developmental Inventory or an informal assessment like a parent interview or an individualized rating scale - provide feedback.

Using BOTH types of assessments creates a broad picture of the child’s abilities - which
can be used to inform IFSP/IEP goals. This combination of several forms of assessment is called “convergent” assessment.

(Facilitator can read the quote aloud).

When we have determined that individual assessment tools are appropriate for the child we are evaluating, we must then make sure that we are creating a fully representational picture of that child and his or her environment.

We do that through the use of authentic assessment.


(Facilitator will read the characteristics of authentic assessment aloud)

- **Authentic Assessment: 5 Characteristics**
  - Ongoing
  - Holistic
  - Naturalistic
  - Collaborative
  - Useful

(Facilitator can read the quote aloud).

• Assessment process continues throughout program planning to document progress, modify intervention plans, and monitor improvement over time
Slide 25

**Holistic**

- Inclusive of all developmental domains
- Inclusive of relevant formal academic assessments
- Inclusive of culture and linguistic preferences
- Inclusive of child’s strengths and deficits
- Inclusive of medical information

Slide 26

**Naturalistic**

Occurs:
- during normal routines and activities
- during play
- in a familiar environment
- with familiar people
- across settings

Slide 27

**Collaborative**

- Recognize family as a reliable and valid source of information
- Recognize role as a team member
- Recognize the need for accommodations and modifications

Slide 28

**Always Include:**

- Family’s priorities, hopes and dreams for their child
- Relevant information about child’s strengths and needs
- Objective information on what is working and not working
- Multiple assessment tools
- Consideration of the need for assistive technology
Let’s take a look at this video about authentic assessment. As you watch, notice how this Part C PT provider talks about using observation as a key part of her authentic assessment practice. What might the use of authentic assessment look like in the context of Part B/619 assessment in preschool settings?

https://youtu.be/CjE3tSxhDDg

Facilitators: Support the notion that video can document the way an assessment was conducted as was intended to, can be used to corroborate clinical judgement with other providers, can provide a full and layered picture of the ways children engage with and learn from their physical and social environment. Video can document the 5 functions of authentic assessment.

The use of video can provide valuable and objective data for an authentic assessment process especially when using a play-based approach.

https://journals.sagepub.com/doi/10.1177/0271121414523652

https://www.cde.state.co.us/resultsmatter/rmvideoseries
### Resources and References

**Slide 33**

- [Standard 4: Assessment Processes | The Early Childhood Personnel Center (ecpcta.org)](https://www.veipd.org/earlyintervention/2018/10/30/an_invisible_bridge/)
- [Assessing Infants and Preschoolers with Special Needs](https://ecpcta.org/curriculum-module/standard-4-assessment-processes/)


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