Centering User Perspectives in Assessment Design

A Guide to Developing Assessments for All Pre-K Children

September 2025

MEASURES FOR EARLY SUCCESS

Introduction

This resource aims to support assessment developers as they embark on product ideation, research, and development to drive innovation in early learning assessment tools that are used in pre-K settings. The primary focus of this resource is to address this question:

> **How can user perspectives be integrated into the design of early learning assessments to make tools more accurate, usable, and useful?**

Why

Importance of Early Learning Assessments

Early learning assessments are a powerful tool for understanding young children's strengths and competencies and where they are at in their learning and development. Data from assessments can be used for several purposes:

- help tailor instruction in the classroom
- support children's learning in key areas that are unique to them
- provide or recommend additional support for specific children
- inform pre-K system-level policies and supports for pre-K programs[1]

Having data that accurately captures all children's abilities is foundational for ensuring data can be used as intended.

A key objective for assessment design is to create innovative assessments that provide accurate insights into what all children know and can do.

This resource was originally developed as part of the Measures for Early Success Initiative to guide the work of project teams that were selected to develop novel assessments.[2]

Challenges with the current state of the early assessment landscape

Challenges limit the range of information that is collected across the pre-K system, undermining critical opportunities to identify solutions that can support all children:

- Many early learning assessment tools have not been developed and validated using study samples that reflect the wide range of backgrounds and experiences of children in publicly funded pre-K programs.
- Existing tools are often costly and burdensome to use, and they do not always yield meaningful and timely insight to support educators and families and to help young children learn.
- Most tools focus on narrow sets of skills that have not been consistently linked with longer-term indicators of success.

What is meant by early learning assessments for *all* children?

In the context of early learning assessments, this phrase means that all children are given a fair chance to show what they know and can do, without being disadvantaged by their background or circumstances. Assessment designers can focus on designing tools for children who have the most significant barriers, as designing tools for them often benefits all children.

What

User-Informed Principles: Innovation in Assessment Development

To address the challenges of the early learning assessment landscape, a target product profile—the *User-Informed Principles*—was created to guide assessment developers in creating innovative child assessment solutions.[3] It is intended to help assessment developers identify areas where existing solutions do not address users' priorities, possible measurement items or solutions to address these gaps, and important areas or features to incorporate into their design to ensure that assessments are relevant for all pre-K children.

The *User-Informed Principles* features five key goals to drive innovation, along with criteria and aspirational target thresholds for each goal. This framework can be used to evaluate progress in creating more innovative assessment tools that address user needs.

Goals featured in the *User-Informed Principles*

GOAL 1
Content

Instrument(s) comprehensively measure the skills and development of 3- to 5-year-old children.

GOAL 2
Psychometrics

Instrument(s) collect objective information to produce psychometrically sound and valid data that reflects minimal statistical bias.

GOAL 3
Experience

Instrument(s) are enjoyable and engaging for children and easy for educators to collect.

GOAL 4
Usefulness

Instrument(s) generate timely, easily accessible, readily digestible, and understandable information for several purposes.

GOAL 5
Scalability

Instrument(s) can be administered at scale in publicly funded pre-K systems.

What

User-Informed Process: Centering User Perspectives

Challenges with assessment design

Assessment design is complex, requiring countless decisions ranging from which content domains to assess to which words to use in item prompts. Historically, assessment tools have not been developed in ways that prioritize the experiences, strengths, and needs of all children in pre-K programs.

Instead, design decisions are often guided by developers' personal experiences and expertise, which are then naturally reflected in the tool and the data that come from it. As a result, the tool may not produce reliable data for all children served by public pre-K.

Understanding users' experiences selecting, taking, or using early learning assessments early in the design process helps developers create assessments that more accurately capture the development of all children.

Integrating user perspectives

Creating accurate early learning assessments requires a design process that ensures that tools are sensitive to the experiences of *all* young children and their families. This resource emphasizes "centering the user," a design process that explicitly focuses on the users of the eventual tool.

Centering user perspectives is a critical ingredient for advancing toward the goals outlined in the *User-Informed Principles*.

The goal is to focus on users' perspectives, challenges, and context, and design tools accordingly. It is an *iterative process* in which assessment developers engage users and consider their experiences at *every step* of the design process to inform the content of the assessment tool, how the tool is implemented, and how the data it produces are used.

Who

Key Users of Early Learning Assessments

The best-designed products and services come from understanding the strengths and needs of users—the people who will use and be affected by them.

Publicly funded pre-K programs serve a broad range of families and children in a variety of settings, such as preschool centers, schools, and homes. Families and children, and the educators who serve them, have varying strengths and needs.

Other users—such as program administrators and policy and practice leaders—need data from assessments to inform program and policy decisions, such as curricula and the distribution of resources.

Thus, the perspectives of users at all levels of the early childhood education system should be elevated in the early design, creation, and validation of assessment tools, to ensure that the final product will be accurate and appropriate for use by all.

ASSESSMENT	children, families, and educators PRIMARY USERS	program administrators SECONDARY USERS	policy and practice leaders TERTIARY USERS
	Engage: What are **the strengths and needs** of your primary users? Has your team invited and incorporated their input?	**Engage**: What are the needs of administrators? What support do they need to make their use of the assessment successful?	**Engage:** What are the needs of leaders? How will your team remain focused on the primary users' desired outcomes?

Take a strengths-based approach toward designing assessments for people who might have the most challenges with existing assessments. Elevate their knowledge, skills, connections, and potential rather than their weaknesses or deficits.

How

User Research Activities and Engagement

To prioritize the experiences of users in the assessment design process, assessment developers are encouraged to design a series of research activities that are frequent and iterative, to dynamically create tools that are informed by and useful to all assessment users. Below is an inexhaustive menu of participatory research activities that assessment developers can use at different stages of product development to advance toward the goals in the ***User-Informed Principles***.

STAGES IN EARLY PRODUCT DEVELOPMENT

Concept Development	**Prototyping**	**Minimum Viable Product**	**Product Version 1 (V1)**
The initial ideation stage	First rough physical representation of the idea	Working product with essential, basic features	First complete launch of working product

ACTIVITY	WHO	WHEN TO USE	USER-INFORMED PRINCIPLE
Focus groups, feedback sessions Individual or group-based interviews with users. Good for understanding user context to inform content, classroom implementation, or data reporting.	• Parents and caregivers • Educators • Program administrators • Policy and practice leaders	• Concept development • Prototyping • Minimum viable product • Product V1	• Content • Experience • Usefulness • Scalability
Cognitive interviews Semistructured, one-on-one conversations between the assessment developer and users. Good for learning how users navigate tools, interpret item prompts, and interpret scores.	• Children • Educators	• Prototyping • Minimum viable product	• Content • Experience • Usefulness
User testing User testing in pre-K classrooms. Good for understanding how the tools function at different phases of development under real-world conditions, and for gathering data for initial psychometric analysis.	• Children • Educators	• Minimum viable product • Product V1	• Psychometrics • Experience • Usefulness • Scalability
Community advisory board Recurring engagement with a panel of users who have direct experience. Good for codesigning and gaining ongoing input and feedback from users.	• Parents and caregivers • Educators • Program administrators	• Prototyping • Minimum viable product • Product V1	• Content • Experience • Usefulness • Scalability

Apply

Guiding Prompts for the Design Process

This section of the guide is designed to help assessment developers reflect on key considerations to ensure that tools are accessible and usable for all pre-K children. The guiding prompts on the following pages are not exhaustive and do not have a single "right" answer—instead, they are meant to support ongoing reflection throughout the stages of imagining, prototyping, and testing an assessment tool.

The guiding prompts are organized around three key areas of focus:

1. **Content development:** How the tool's content and format are developed
2. **Implementation:** How the tool will be implemented
3. **Data use:** How the data the tool produces will be used

In addition to the guiding prompts on the following pages, it's important to reflect on how your team's mindset and process might shape your engagement with users. To support this reflection, review the considerations below.

Mindset considerations

- How will your team consider the limits of their understanding of young children's thinking and experiences when taking assessments?
- How will your team consider the similarities and differences they have with users when designing new tools?

Process considerations

- How is your team creating structures and mechanisms in all research and validation activities that allow for an iterative design process that continually incorporates user feedback?
- How will you track your advancement toward the goals featured in the *User-Informed Principles* as you engage in an iterative design process that elevates users' perspectives?

Apply

Content Development Prompts

The prompts on this page are related to the choice of priority content domains and subdomains and the creation of items in the selected content areas.

Refer to the Measures for Early Success Initiative's Pre-K Content Blueprint Series for further content support. This series focuses on the domains of early language, literacy, mathematics, and executive function.

Each Content Blueprint explains the domains, developmental progressions based on early learning standards, and the assessment landscape, and highlights opportunities for innovation in the domains that make them more relevant for all pre-K children.

What is driving your decision to design an assessment that is focused on a particular domain or domains? Is this decision informed by users whose perspectives are often not elevated in the assessment development process?
Will your tool measure any domains or subdomains that reflect the strengths and skills of children and communities who have historically not been included in assessment development? Why or why not?
How does your tool expand beyond constrained skills to capture the less frequently measured unconstrained skills?[4]
How will you determine whether the content and items you design will provide all children with the opportunity to share what they know and can do?
How will you create items or item prompts that are relevant to all children who are served by public pre-K programs?
How will the tool capture equivalent constructs from children who only speak English, children who only speak Spanish, and children who speak both English and Spanish?
How will you ensure that items in the tool are developmentally appropriate for the individual children who are being assessed, so that items reliably capture children's current abilities?
How will you develop an item bank that reflects and balances the various demographic backgrounds and cultural contexts of users?
How will you ensure that items are free of stereotyping based on race or ethnicity, gender, culture, economic class, disability, or religion, and that they do not represent any of those categories unfavorably?
How will you ensure that tools that are developed for emergent bilingual children do not favor knowledge in English over other languages?[5]

Apply

Implementation Prompts

The prompts on this page are related to educator and program burden, child experiences during the assessment, response and scoring procedures, and scalability.

What role will educators have in the administration of your tool? How will your tool minimize educator burden during assessment administration?
How will your tool reduce the burden of assessment use on pre-K educators and program administrators?
Will the administration of your tool be designed in such a way that assessment is integrated into typical preschool activities? Why or why not?
What design features will you use to make the tool intuitive, engaging, and joyful for all children?
How will you ensure that all children—regardless of whether they are monolingual (speaking English or Spanish) or emergent bilingual (speaking English and Spanish)—have comparable experiences when completing the assessment?
How will you ensure that young children understand how to complete the assessment tasks regardless of their language or cultural background?
How will you design assessment tasks so that they capture children's abilities regardless of individual differences in their behavior (for example, self-regulation skills), mood, or fatigue levels?
How will children be expected to respond to assessment items? If using a technological resource (like Wi-Fi or a tablet), how will you ensure that the resource enables young children to respond and does not disadvantage children who are unfamiliar with it?
How will your tool minimize assessor, educator, or observer bias, so that children's scores are representative of their abilities rather than others' perceptions of their abilities?
How will you design your tool to make it implementable and appropriate for use in pre-K settings that are underresourced, including settings that may not be able to afford technological resources or educational materials (like books or manipulatives) or that have limited physical space?

Apply

Data Use Prompts

The prompts on this page are related to data reports and data interpretation.

Will the data generated from the tool be available for educators, administrators, and families to review in a frequent and timely manner?
How will your tool present data in ways that are understandable to educators? How will you evaluate whether educators comprehend the data that is produced by your tool?
How will your tool present data in ways that are helpful to educators and inform their instruction and activities in the classroom?
How will data reports from your tool be presented to program administrators to help inform program- and system-level decisions?
How will your tool present data in ways that are understandable to families, including people who speak languages other than English at home? How will you evaluate whether families comprehend the data that is produced by your tool?
How will your tool facilitate conversations between educators and families about children's developmental progress?
How will you design data reports so they communicate the strengths of all children and do not reinforce harmful stereotypes?
Will data reports include instructional activities for educators and families to use with children that are tied to their assessment data? Why or why not?
How will any extension or instructional activities that are tied to data outputs support high-quality early learning experiences for all children?

Notes and References

1. National Research Council. 2008. *Early Childhood Assessment: Why, What, and How*. The National Academies Press. https://nap.nationalacademies.org/catalog/12446/early-childhood-assessment-why-what-and-how; McCormick, Megan. 2022. "Can Pre-K Assessments Improve Early Learning Programs? Listening to Teacher Perspectives." MDRC. https://www.mdrc.org/work/publications/can-pre-k-assessments-improve-early-learning-programs-listening-teacher
2. MDRC. n.d. "Measures for Early Success." https://www.mdrc.org/work/projects/measures-early-success.
3. MDRC and Substantial. 2022. "User-Informed Principles: Developing Assessments for All Early Learners." MDRC. https://www.mdrc.org/work/publications/user-informed-principles.
4. Constrained skills, such as basic letter recognition and rote counting, are directly teachable, acquired quickly with instruction, and finite (meaning they can be fully mastered within a period of time). Unconstrained skills are those that are acquired gradually and continue to develop throughout a person's life, such as vocabulary, reading comprehension, and storytelling and oral discourse, among others. They can also be more challenging to measure. See McCormick, Meghan and Shira Mattera. 2022. "Learning More by Measuring More: Building Better Evidence on Pre-K Programs by Assessing the Full Range of Children's Skills." MDRC. https://www.mdrc.org/work/publications/learning-more-measuring-more.
5. "Emergent bilingual children" is a strengths-based term to refer to children who are continuing to develop their home language while also learning a new language. This term emphasizes that children are learning two languages and that both are of value.

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