Pre-K Content Blueprint Series

Literacy

Developing Assessments for All Pre-K Children

September 2025

MEASURES FOR EARLY SUCCESS

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Introduction

The Pre-K Content Blueprints are intended to help assessment developers learn about and design assessment tools that provide more accurate information about young children's early learning and development. Assessment developers can use these blueprints as they embark on content research, concept definition, and product development to ensure that their decision-making is grounded in the needs that are outlined in the *User-Informed Principles*.[1]

The Pre-K Content Blueprints were originally developed in 2022 to guide the work of the project teams that were selected to design novel assessments through the Measures for Early Success Initiative.[2]

How were the Pre-K Content Blueprints developed?

Each Pre-K Content Blueprint was developed through a systematic review of Head Start and select states' early learning standards (using what was publicly available as of early 2022), as well as theoretical and empirical literature on children's development. To benefit all children served by public pre-K programs, the Pre-K Content Blueprints consider a variety of perspectives, experiences, and needs to highlight domain-specific opportunities for assessment design to ensure that all children are given a fair chance to show what they know and can do.[3]

About the Measures for Early Success Initiative

Central to the Measures for Early Success Initiative is the belief that 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 provide users with information to:

- 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, and
- inform pre-K system-level policies and supports for pre-K programs.

A key objective of the Measures for Early Success Initiative is to create innovative assessments that provide accurate insights into what all children know and can do.

How can this resource be used?

The Measures for Early Success Initiative generated a set of Pre-K Content Blueprints to guide assessment development in the following domains:*

- Language
- Literacy
- Mathematics
- Executive Function

Each Pre-K Content Blueprint has three primary goals:

Describe skills in each domain and how they develop in children from ages 3 to 5.

Place assessment users' perspectives and needs at the center of the design of innovative assessments in each domain.

Provide an overview of existing assessments in each domain and highlight some ways that they advance toward the goals outlined in the *User-Informed Principles*.

*These domains were emphasized in the first phase of the Measures for Early Success Initiative (through 2024) because current direct assessment tools for these domains are most developed.

Pre-K Content Blueprints can be used in conjunction with the following resources that were developed for the Measures for Early Success Initiative:

- The *User-Informed Principles* resource highlights key goals for innovative child assessment solutions with corresponding criteria and target thresholds. It can help assessment developers address challenges in the current assessment landscape by helping them to 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 design to ensure that assessments are relevant for all pre-K children.

- *Centering User Perspectives in Assessment Design* describes how assessment tools can be designed in more accurate, usable, and useful ways by integrating users' perspectives, strengths, and needs early in the assessment design process.[4] This resource can be used to make progress toward the goals outlined in the *User-Informed Principles*.

- *Pre-K Content Blueprint Series - Technical Manual* describes the process for using federal and state early learning standards to summarize children's skills and developmental trajectories that are presented in the *Pre-K Content Blueprint Series*.[5]

Federal and State Early Learning Standards

Federal and state early learning standards describe the concepts and skills children develop and learn along the developmental continuum from birth until kindergarten entry. The purpose of these early learning standards is to inform the work of those aiming to foster the healthy development and well-being of young children. Early learning standards often represent minimum thresholds for children's development at various ages. Curricular supports, resources, and activities are selected to align with early learning standards. Pre-K programs also use early learning standards to select assessment tools that track children's developmental progression across early learning domains.

For the purposes of capturing children's skills and developmental progression from ages 3 to 5, this Content Blueprint presents definitions and summarizes developmental progressions—generated from the Head Start Early Learning Outcomes Framework (ELOF) and a subset of the early learning standards from the Measures Initiative's advisory states—using publicly available information as of early 2022.

Federal early learning standards reflected in the Pre-K Content Blueprints

The Pre-K Content Blueprints feature early learning standards from the Head Start Early Learning Outcomes Framework (ELOF),[7] which guides federally funded Head Start programs across the country.

States' early learning standards reflected in the Pre-K Content Blueprints

The Measures for Early Success Initiative engaged with pre-K leaders from over 20 states to gather their thoughts and feedback on child assessments.

To create the Pre-K Content Blueprints, the early learning standards from a subset of those states were selected to reflect the variation in the population and geography of the United States as well as different types of publicly funded pre-K systems. The state early learning standards in the Pre-K Content Blueprints came from Alabama, New Mexico, Ohio, Oregon, and Tennessee.* Notably, these states' early learning standards do not represent the early learning standards of all states.

*Oregon's early learning standards largely align with the Head Start ELOF standards. Alabama and Ohio have revised their early learning standards since the Pre-K Content Blueprints were initially researched and developed.

How do skills in the domain develop between the ages of 3 and 5?

This section presents skill definitions and developmental progressions that come from existing research literature and early learning standards in this domain.

How to use: This section can be used as an example of landscaping federal and state early learning standards to inform item development for assessments that measure children's abilities in this domain.

Early Literacy Subdomains

Each domain is comprised of subdomains, which are groups of related skills. While federal and state early learning standards may label subdomains in different ways (see the right-hand column for examples), the skills in the standards generally align with the following four areas of early literacy:

■ Print and Alphabet Knowledge

Also includes: Print Awareness and Book Handling, Concepts of Print, Print Meaning, Letter Naming, Letter-Sound Correspondence, Letter and Word Recognition

◆ Phonological Awareness

Also includes: Rhyme

● Comprehension and Early Reading

Also includes: Text Structure, Reading Comprehension, Early Reading, Fluency

▲ Writing

Also includes: Emergent Writing, Writing Process, Writing Application and Composition

*Tennessee standards do not group literacy standards by subdomain. Rather, they highlight a breadth of broader skills that align preschool and kindergarten standards. Tennessee standards have been relabeled using the most aligned subdomains presented in this Content Blueprint.

Federal and select state subdomains

Head Start Early Learning Outcomes Framework (ELOF)[6] & Oregon[7]

- ■ Print and Alphabet Knowledge
- ◆ Phonological Awareness
- ● Comprehension and Text Structure
- ▲ Writing

Alabama[8]

- ■ Alphabet Knowledge
- ■ Print Awareness and Book Handling
- ◆ Phonological Awareness
- ● Comprehension
- ▲ Emergent Writing

New Mexico[9]

- ■ Concepts of Print
- ■ Print Meaning
- ■ Letter Naming
- ■ Letter-Sound Correspondence
- ◆ Phonological Awareness
- ◆ Rhyme
- ● Reading Comprehension
- ▲ Writing

Ohio[10]

- ■ Print Concepts
- ■ Letter and Word Recognition
- ◆ Phonological Awareness
- ● Early Reading
- ● Reading Comprehension
- ● Fluency
- ▲ Writing Process
- ▲ Writing Application and Composition

Tennessee*[11]

- ■ Print and Alphabet Knowledge
- ◆ Phonological Awareness
- ● Comprehension
- ▲ Writing

Print and Alphabet Knowledge

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Understands the significance of print	Distinguishes print from pictures and shows an understanding that print is something meaningful.[a,b,c,e]	Understands that print is organized differently for different purposes, such as a note, list, or storybook.[a,e] Demonstrates an understanding of the basic conventions of print in English and other languages.[d] Recognizes that spoken words can be written and read.[f]
Shows growth in alphabet understanding	Shows an awareness of alphabet letters, such as singing the ABC song (example from English), recognizing letters from one's name,[b] or naming some letters that are encountered often.[a,e] The home languages of some children use non-alphabetic writing. The home languages of other children may not have a written form. These children would not be expected to identify letters of the alphabet in their home language.[e]	Names 18 upper- and 15 lower-case letters, among English speakers.[a,b,c,e] Knows the sounds associated with several letters.[a,b,c,d,e] Recognizes that letters are grouped to form words[a,c,e,f] and makes the connection that the words the child hears are words the child sees in print.[c] Sorts letters and finds words that contain specific letters, such as identifying words that start with the same letter as the child's name.[b]
Demonstrates book knowledge	Recognizes a book by its cover. Holds a book and attempts to turn pages one at a time.[b,c]	Identifies book parts and features, such as the front, back, title, and author.[a,b,c,e] Holds book correctly[b,c,d,f] and reads from beginning to end.[b] Tracks words from left to right, top to bottom, page to page.[b,d,f] Begins to point to single-syllable words while reading simple, memorized texts.[a,e]

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a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Print and Alphabet Knowledge *(cont'd)*

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Identifies environmental print	Shows interest in and recognition of environmental print (pictures, symbols, logos, and signs found in the child's environment)[b,c] without understanding that letters represent speech sounds.[c]	Attempts to sound out the first letters in environmental print and familiar words, and during the early stages of writing.[c] With modeling and support, recognizes and "reads" familiar words or environmental print.[b,d]
Shows interest in reading and literature	Shows interest in an adult reading a story or text, in looking at books, or both. Asks an adult to read the same story again and again.[c] Selects familiar books to begin to self-read.[b] Children learning two or more languages may also request stories in their home language.[e]	Selects different kinds of literature to read.[b] Actively listens to stories or texts as they are being read aloud without being distracted. Begins to show interest in retelling or acting out the text, using the pictures and illustrations as a guide.[c]

a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Phonological Awareness

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Explores rhyme and alliteration	Shows rote imitation and enjoyment of rhyme and alliteration[a,e] in stories, songs, or fingerplays.[c] Engages in word play with adults, such as using nonsense words or beginning rhymes.[b] With support, distinguishes when two words rhyme.[a,e]	Provides one or more words that rhyme[b] with a single given target[a,e] and identifies words that rhyme when orally presented with matched pairs of words.[c] Begins to blend and segment onsets and rhymes of single-syllable spoken words.[d,f]
Segments syllables	Hears and shows awareness of syllables (word parts) in simple words.[c]	Identifies, blends, and segments syllables in familiar words and words in a sentence, with modeling and support.[b,c,d,f]
Identifies words with shared sounds	With support, distinguishes when two words begin with the same sound.[a,e]	Provides a word that fits with a group of words sharing an initial sound, with adult support.[a,e] Identifies whether two words begin or end with the same sound.[b,d,f]

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Note: Phonology and other forms of phonological development vary across languages. The indicators in this Content Blueprint were drawn from early learning standards focusing on the development of English literacy skills and are not representative of literacy development in other languages.

a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Phonological Awareness *(cont'd)*

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Distinguishes between and recognizes words	Distinguishes between words that sound alike.[b] Begins to recognize the number of words in sentences.[c]	Identifies words as separate units in a sentence.[b] Recognizes high-frequency words by sight[f] and in spoken sentences,[d] including child's own name and other familiar words in the environment.[f]
Isolates and blends sounds		Produces, matches, and isolates the beginning, middle, and end sounds in a spoken word.[a,b,c,e,f] With modeling and support, orally blends and segments familiar compound words.[b,d]
Distinguishes between and recognizes words	Distinguishes between words that sound alike.[b] Begins to recognize the number of words in sentences.[c]	Identifies words as separate units in a sentence.[b] Recognizes high-frequency words by sight[f] and in spoken sentences,[d] including child's own name and other familiar words in the environment.[f]

Note: Phonology and other forms of phonological development vary across languages. The indicators in this Content Blueprint were drawn from early learning standards focusing on the development of English literacy skills and are not representative of literacy development in other languages.

a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Comprehension and Early Reading

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Engages in narrative story telling/ retelling	With support, may be able to tell one or two key events from a story,[a,b,e] or may act out a story with pictures or props.[a,e] Uses words to describe or name pictures when reading. Recites simple phrases or words from a story.[b] Children learning two or more languages may point and use nonverbal gestures to try to communicate. They may also retell stories in their home language.[e]	Re-tells or acts out a story that was read, putting events in the appropriate sequence,[b,d,f] and demonstrating a more sophisticated understanding of how events relate, such as cause and effect relationships.[a,e] Tells fictional or personal stories using a sequence of at least two or three connected events.[a,e] Identifies characters and main events in books and stories.[a,b,d,e,f] Uses phrasing, intonation and expression in shared reading of familiar books, poems, chants, songs, nursery rhymes, or other repetitious or predictable texts.[d]
Asks and answers questions about books that are read aloud	Answers basic questions about likes or dislikes in a book or story.[a,e] Asks and answers questions about main characters or events in a familiar story.[a,b,e] Participates in shared reading experiences by asking questions and making comments.[b] Children learning two or more languages may answer questions with one- or two-word answers.[e]	Answers questions about characters, events, and meaning of words and phrases in a story, with increasingly specific information.[a,b,c,d,e,f] While providing a summary of a story, highlights several key ideas in the story and how they relate.[a,e] Describes which part of the story the illustration depicts. Identifies the topic of an informational text that has been read aloud.[d] Stays on topic.[c]
Asks and answers inferential questions	With modeling and support, makes predictions about events that might happen next.[a,e]	Answers and asks increasingly complex inferential questions that require making predictions based on multiple pieces of information from the story;[c] inferring characters' feelings or intentions; or providing evaluations of judgments that are grounded in the text.[a,e] Uses title, pictures and prior knowledge to predict story content. Generalizes idea to another situation.[b]

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a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Comprehension and Early Reading *(cont'd)*

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Makes connections between stories and real life	Relates story content to the child's own experiences. Child connects own experiences and the illustrations to grasp the meaning of the story. The child's comments may or may not follow the storyline.[c]	With prompting and support, orally identifies the connection between information in a text and personal experience or another text.[b,f] Demonstrates an understanding of the differences between fantasy and reality.[d] Orally compares and contrasts the experiences of characters in a story with personal experiences or with the experiences of characters in another familiar story.[f]
Compares and contrasts		With modeling and support, describes, categorizes, and compares and contrasts information in informational text.[d] Discusses some similarities and differences between two texts on the same topic (for example, illustrations and descriptions).[d,f] With prompting and support, orally describes the relationship between illustrations and the text in which they appear.[f]

a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Writing

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Creates written representations to convey meaning	Scribbles with intent to represent something observed or to convey a message.[a,b,c,e]	Creates drawings and writes to represent meaningful ideas on paper with some level of clarity.[a,c,e] Print may transition from mock letters to random letter strings. (May rely on dictation with an adult to clarify content.)[c] Written products may or may not phonetically relate to intended messages.[a,e] Begins to use inventive spelling using a letter to represent a word.[a,b,e] "Reads" what the child has written.[d]
Begins to hold writing utensils correctly	Begins to grasp writing tools with thumb and fingers.[b]	Uses a 3-finger grasp of the dominant hand to hold a writing tool.[b,d]
Writes letters and forms words	Makes early approximations with horizontal or vertical sets of lines or scribbles intending to represent letters[a,b,e] (sharing what is written with an adult).[a,c,e]	Demonstrates letter formation in "writing" and print letters of own name[a,b,c,d,e] and other meaningful words with mock letters and some actual letters. Shows awareness that one letter or cluster of letters represents one word. Notices and sporadically uses punctuation in writing.[d]

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a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

Writing *(cont'd)*

SKILLS	EMERGING INDICATORS *(36 to 48 months)*	COMPLEX INDICATORS *(by 60 months)*
Communicates for a variety of purposes	Shows interest in writing for a purpose.[b]	Writes (draws, illustrates) for a variety of purposes, such as: to tell a story, to express ideas, to share information about an experience or topic of interest, to express a preference or opinion, and to narrate a single event.[a,b,d,e,f]
Engages in shared writing processes		Discusses and responds to questions and suggestions from others about writing or drawing. Participates in shared research, reading, and writing projects using a variety of resources to gather information or to answer a question.[d,f]

a = ELOF (2015); b = Alabama (2020); c = New Mexico (2020); d = Ohio (2012); e = Oregon (2015); f = Tennessee (2018)

What are domain-specific opportunities for innovation?

This section provides examples that are specific to the development of assessment tools in this domain.

How to use: This section should be used to reflect on the current state of assessment in this domain and to identify potential opportunities for innovation in this domain. However, these examples are not exhaustive.

Centering User Perspectives in Assessment Design

Given the broad range of families and children served by publicly funded pre-K programs, the *Centering User Perspectives in Assessment Design* resource was created to ensure that the decision-making used to develop and design early learning assessments focuses on the perspectives, challenges, and context of those who will ultimately use the tools in pre-K programs and systems.[4]

Assessment developers are encouraged to use that resource and this Content Blueprint to:

Expand the types of skills that are measured to capture the strengths and capabilities of all children.

Explore how children might demonstrate these skills in different ways.

Innovate approaches to address key user considerations in new assessments in this domain.

Consider the progress of existing tools in this domain—as well as any new tools—in advancing toward the goals outlined in the *User-Informed Principles*.

Review the goals in the *User-Informed Principles*

GOAL 1
Content

GOAL 2
Psychometrics

GOAL 3
Experience

GOAL 4
Usefulness

GOAL 5
Scalability

Examples of Opportunities

The examples on this page can be used to reflect on the current state of literacy assessments and to identify potential opportunities for innovation in the literacy domain.

Literacy assessments often use varied stimuli—including images, stories, and audio clips. Some content may be more appropriate or relevant for certain children than others, based on their backgrounds. For example, a story or prompt with snow may not make as much sense to children living in the Southwest as it would to those living in the Northeast. When test items and stimuli are too specific to a particular community's experiences, the test may measure children's familiarity with that community or context, rather than their actual early literacy skills or competencies.

How can assessments include stimuli that are meaningful to different groups of children, and, in doing so, more accurately capture the early reading and comprehension skills of all children?

Language is acquired, while literacy is learned, meaning children must be explicitly taught literacy skills.[12] Thus, it is critical to consider the educational background of emergent bilingual children when interpreting the results of assessments in both English and their home language.[13] For example, some emergent bilingual children may receive limited formal literacy instruction in their home language, affecting their performance on measures of literacy in their home language. In contrast, children who have foundational literacy skills in their home language but not in English may not have a chance to express these skills on English literacy tests. With tailored instruction, these foundational preliteracy skills in children's home languages may be transferred to English.[14]

How can the interpretation of literacy assessment results consider the educational background of emergent bilingual children and capture the development of preliteracy skills in their home languages?

Early literacy assessments often measure children's skills through a series of disconnected prompts (for example, a rhyming task followed by a letter identification task), which may fail to reflect how children demonstrate literacy skills in real world conditions and give preference to children who have more experience with direct assessments.

How can literacy assessments mimic children's authentic literacy activities (such as shared storybook reading or environmental print interactions in everyday surroundings)?

Examples of Opportunities (cont'd)

The examples on this page can be used to reflect on the current state of literacy assessments and to identify potential opportunities for innovation in the literacy domain.

What additional opportunities for innovation do you see in the assessment of literacy?

Assessments designed for emergent bilingual children should distinguish between errors caused by the influence of one language on another (also known as "language transfer") and unexpected errors. For example, a Spanish-speaking child may say /ee/ when shown the letter i, reflecting the letter name for i in Spanish. Arabic-speaking children may flip through the pages of a book from right to left or run their fingers over the text from right to left when pretending to read, reflecting the orientation of text in Arabic. These are expected errors for a child learning two languages, as they reflect literacy skills in the home language. An unexpected error, such as a Spanish-English emergent bilingual child spelling "spoon" as "spun," may indicate a greater need for literacy support, as this error does not reflect a correct response in either language.

How can the scoring of literacy assessments be designed to distinguish between expected errors while learning two languages versus unexpected or developmentally concerning errors?

Although some languages may have similar alphabets, the way that sounds are organized and function in the languages spoken by a child impacts the kind of assessment tasks that are appropriate to ask in specific languages. For example, many assessments of early English literacy ask children to split apart or blend compound words, such as identifying butterfly as "butter" and "fly." This task may not be appropriate when assessing Spanish literacy skills, as compound words occur much less frequently in Spanish.[15] It is important to determine the appropriateness and relevance of tasks for each language that an assessment intends to measure, ensuring that test items are not simply directly translated from English.

How can literacy assessments reflect the unique characteristics of the languages being assessed?

How are skills in the domain currently measured?

This section presents a sample of direct assessments that measure skills in this domain. An overview of each assessment is provided and some ways that each tool is aligned with the *User-Informed Principles* are highlighted.

How to use: This section can be used to understand the current state of assessments in this domain and to identify potential opportunities for innovation and improvements. These tools are elevated as examples—not exemplars—of direct assessments of young children's skills in this domain.

Assessment developers should not try to replicate these tools or copy example prompts or items as most of these tools are primarily used in research environments. Assessment developers should consider the needs of educators, children, and families, and other assessment users when designing their tools.

Current Measure of Early Literacy Skills

Comprehensive Test of Phonological Processing (CTOPP-2)[16]

Subdomain(s) Measured

Phonological Awareness; Print and Alphabet Knowledge

Age Range

Ages 4 years through 24 years 11 months (There are separate test forms for ages 4 to 6 and ages 7 to 24.)

Language Version(s)

English; Spanish: Test of Phonological Processing in Spanish (TOPPS).[17] The updated second edition of the Spanish version had not yet been released at the time of this publication.

Administration

- The CTOPP is administered one-on-one with each student and takes 40 minutes to complete. Bolded subtests in composite areas 1, 2, and 5 (see below) are untimed; other subtests have time limits on responses.
- Children identify images and respond to audio recordings to assess their reading-related phonological processing skills.
- There are 12 subtests situated under five reading composite areas. Nine of the subtests and four of the reading composite areas are appropriate for children ages 4 to 6.

1. Phonological Awareness: **Elision**, **Blending Words**, and **Sound Matching**

2. Phonological Memory: **Memory for Digits** and **Nonword Repetition**

3. Rapid Symbolic Naming: Rapid Digit Naming and Rapid Letter Naming

4. Rapid Non-Symbolic Naming: Rapid Color Naming and Rapid Object Naming

5. Alternate Phonological Awareness: **Blending Nonwords** and **Segmenting Nonwords**. This composite is only appropriate for ages 7 to 24.

Sample Items[18]

Phonological Awareness)

Elision: The examiner says a word, the child repeats the word, and then the child is asked to say the word without a specific sound.

- "Say cat without the /c/."

Blending Words: The examiner plays a series of pre-recorded separate sounds and then asks the child to blend the sounds into a complete word.

- "What do these sounds make: b-oi?"

Sound Matching: Children are asked to identify, from a set of three words, the word that has the same initial or final sound as a target word said by the examiner. In this section, the examiner uses drawings of all four words to make sure children fully understand which words are being said.

- "Which word starts with the same sound as pig? Pan, cat, or dog?" The correct response is "pan."].

Rapid Symbolic Naming

Rapid Digit Naming: The child is shown a set of numbers and is asked to name the numbers from left to right, as quickly as possible.

Rapid Non-Symbolic Naming

Rapid Object Naming: The child is shown drawings of objects (such as a star or a key) and is asked to name the objects in each row from left to right, as quickly as possible.

Scoring[18]

- For untimed subtests, all examinees begin with Item 1, regardless of age. The CTOPP is manually scored, and items are given 1 point if the examinee provides the correct response. Incorrect items are given 0 points. The ceiling is established when three consecutive incorrect responses are given.
- For timed subtests, scores are based on how many seconds it takes the child to respond. Children are prompted to move onto the next item after hesitating for more than two seconds. These subtests have a practice session before administration to ensure that examinees are familiar with the items; if the examinee cannot correctly name all items (letters, numbers, colors, and objects) during the practice session, they will not complete the subtests and no score is recorded. The test is supposed to measure speed of processing, rather than knowledge of the items themselves. Testing ends and no score is recorded if, during the actual administration, the child makes four or more errors.
- The CTOPP generates six normative scores for each subtest:
  - age equivalent
  - grade equivalent
  - percentile rank
  - scaled subtest scores (mean of 10, standard deviation of 3)
  - composite indexes (mean of 100, standard deviation of 15)
  - Rasch-based developmental score (for untimed subtests)

Alignment with the User-Informed Principles

GOAL 1: Content Strengths

Domain coverage: The CTOPP offers a comprehensive lens into children's phonological processing, measuring nine different aspects of the subdomain.

GOAL 4: Usefulness Strengths

Actionable insights: Skills measured by the CTOPP can indicate whether a child might be at risk of having dyslexia. It can inform potential intervention efforts, as well as be used to illustrate the impacts of early intervention.

Current Measure of Early Literacy Skills

Phonological Awareness Literacy Screener (PALS-PreK)[19]

Subdomain(s) Measured

Phonological Awareness; Print and Alphabet Knowledge; Writing

Age Range

Ages 3 to 4 (administered once in the fall and once in the spring of preschool)

Language Version(s)

English; Spanish: K-3 version, none for pre-K specifically.[20] A pilot study for the Spanish pre-K version had been scheduled for the 2019–2020 academic year when the pandemic began.

Administration

- PALS-PreK is administered one-on-one with each child. Most children can complete the test in 20 to 25 minutes.
- Throughout the assessment, the examiner asks the child to complete a series of exercises in the literacy domain. These activities may have children write, engage with photos, and verbally respond to answer questions.
- There are six subtests, and across these subtests, children engage with 114 to 120 items.
  1. Name Writing
  2. Alphabet Knowledge
  3. Beginning Sound Awareness
  4. Print and Word Awareness
  5. Rhyme Awareness
  6. Nursery Rhyme Awareness

Sample Items[21]

1. Name Writing: The child draws a self-portrait and writes the child's own name.

Name writing is manually scored on a continuum from scribbles to full correct name. Scores range from 0 to 7; the target range for the spring assessment is 5 to 7 points.

2. Alphabet Knowledge: The child is asked to name 26 uppercase and lowercase letters in a random order. The child is asked to produce the sounds of 23 letters and three consonant digraphs (ch, sh, th).

Upper case scoring ranges between 0 and 26 points; the target for the spring of pre-K is 12 to 21 points. Lower case scoring ranges between 0 and 26 points; the target for the spring of pre-K is 9 to 17 points. Letter sound scoring ranges between 0 and 26 points; the target for the spring of pre-K is 4 to 8 points.

3. Beginning Sound Awareness: The child is shown 10 pictures. The teacher identifies a target word from the sheet (such as "milk") and asks the child to repeat the word out loud. Then the child is asked to produce the first sound of the target word.

Scores range from 0 to 10; the target for the spring of pre-K is 5 to 8 points.

4. Print and Word Awareness: The child points to various text components (such as the title) in a familiar rhyme book.

Scores range from 0 to 10, and there are 10 tasks in all. The target for spring of pre-K is 7 to 9 points.

5. Rhyme Awareness: The child is given three images and is asked to identify which picture rhymes with a fourth picture. ["Which image rhymes with bee? Flag, tree, or mug?"]

Scores range from 0 to 10, and there are 10 tasks in all. The target for spring of pre-K is 5 to 7.

6. Nursery Rhyme Awareness: The teacher repeats lines from a nursery rhyme and stops before the end, and the child is asked to complete the line with the final rhyming word. ["Jack be nimble, Jack be quick, Jack jump over the ____."]

Scores ranges from 0 to 10 and there are 10 items in all. The target for spring of pre-K is 6 to 10.

Scoring

- The assessment is manually scored with correct items receiving a 1 and incorrect items receiving a 0 for subtests 2 to 6. Scores are generated for each of these subtests by summing correct items. Subtest 1 is scored on a continuum from 0 to 7.[21]
- PALS-PreK provides scores for each of the subtests. These scores are compared with a benchmark range, which reflects expectations for the spring of the pre-K year. While PALS-PreK tasks are appropriate to use with 3- and 4-year-old students, the scoring ranges apply only to the spring of the 4-year-old year.
- PALS-PreK scores are intended primarily to be compared with the target developmental range (in the spring). Classroom-level data from the fall can be used to guide language-based literacy instruction for the pre-K year.[22]

Alignment with the User-Informed Principles

GOAL 4: Usefulness Strengths

Actionable insights: The tool sets clear benchmark ranges for scores at the end of the 4-year-old pre-K year that reflect developmental goals and can help identify areas of strength and areas where extra support is needed.

GOAL 5: Scalability Strengths

Cost: The state of Virginia has used the PALS as a literacy screener,[23] indicating its scalability potential.

Note: As of summer 2022, Renaissance is the parent company of PALS. PALS will no longer be available in its current form for renewal or purchase after the 2022–2023 school year.

Current Measure of Early Literacy Skills

Star Early Literacy[24]

Subdomain(s) Measured

Phonological Awareness; Print and Alphabet Knowledge

Age Range

Preschool through 3rd grade

Language Version(s)

English; Spanish: K–12 has a Spanish version, no Spanish pre-K version currently.[25]

Administration

- Star Early Literacy is completed individually by children on computers or tablets, and can be administered in person or remotely. Children complete the assessment in about 15 minutes.
- The assessment includes demonstration videos, practice items, audio supports, and graphics to help get a true measure of students' early literacy skills.
- There are over 3,500 active test items, aligned with state and Common Core standards. Star Early Literacy is a computer-adaptive test and dynamically interacts with the child taking the test. This allows it to create a virtually unlimited number of test forms, catered to the skill level of individual students. Each test has 27 scored items.[26]
- Each test has three sections:
  - Section A: 14 early literacy items with short audio
  - Section B: 8 early literacy items with longer audio
  - Section C: 5 early numeracy items

Sample Items[27]

Alphabet

- Which of these is a letter B? Pick the letter B:
  - d
  - h
  - b

Concept of Word

- Which of these is a word, not just a letter? Pick the word:
  - Are
  - R
  - e

Visual Discrimination

- Which letter is different from the others? Pick the letter that is different from the others:
  - R
  - P
  - R

Phonemic Awareness

- The sound is /ace/. Look at the pictures: frame, face, plane. Pick the picture that has the /ace/ sound.

Scoring

- Star Early Literacy produces a scaled score, which is the student's overall score across each of the sections on the assessment. The scaled score is used to report performance for all students on a consistent scale, which allows for comparison among students and over time for individuals.[28] The Star Early Literacy scaled scores range from 300 to 900.[29] Kindergarten readiness in literacy is marked by a score of 530 and higher. The score ranges are:
  - Emergent Reader (300 to 674)
  - Transitional Reader (675 to 774)
  - Probable Reader (775 to 900)
- Literacy subdomain scores are also reported for Star Early Literacy.[29] This criterion-referenced score estimates the percentage of items a child would answer correctly in each subdomain. Scores range from 0 to 100 in 10 areas. These areas include 41 separate literacy skill sets:
  1. Alphabetic Principle (AP)
  2. Concept of Word (CW)
  3. Visual Discrimination (VS)
  4. Phonemic Awareness (PA)
  5. Phonics (PH)
  6. Structural Analysis (SA)
  7. Vocabulary (VO)
  8. Sentence-Level Comprehension (SC)
  9. Paragraph-Level Comprehension (PC)
  10. Early Numeracy (EN)

Alignment with the User-Informed Principles

GOAL 2: Psychometric Strengths

Reliability: Star can chart children's skills over time from pre-K through grade 3.

GOAL 3: Experience Strengths

Child experience: Star can be completed in approximately 15 minutes. It can also be completed online with limited adult support.

Current Measure of Early Literacy Skills

Test of Early Reading Ability 4 (TERA 4)[30]

Subdomain(s) Measured

Print and Alphabet Knowledge

Age Range

Ages 4 years through 8 years 11 months

Language Version(s)

English

Administration

- TERA is administered one-on-one with each child and takes about 30 minutes to complete.
- There are three subtests on TERA: Alphabet (knowledge and usage, 29 items), Conventions (print rules, 21 items), and Meaning (the construction of meaning from print, 30 items). Across all subtests and age groups, there are 80 total test items. Children only receive a subset of these items depending on their age. For example, there are four items for children ages 3 years 6 months to 5 years 11 months on the Conventions subtest.[31]
- Children are asked to respond to various prompts and questions based on pictures, logos, and text in a flipbook.
- TERA assesses mastery of early-developing reading skills, rather than readiness for reading. The assessment can be used to:
  - identify children who are performing below their peers
  - determine a child's individual strengths and weaknesses in early literacy
  - document progress over time
- The child's age is used to define the starting point for each subtest. The basal is established when the child produces three consecutive correct responses. The ceiling is established when the child produces three consecutive incorrect responses.[31]

Sample Items[31]

The following sample items are from the Alphabet subtest. These questions are designed for 8-year-old students, not preschoolers.

- What word goes with this picture? [Child points to the word "dog" from the list presented.]
- Point to the word up. [Child points to the word "up" from the list presented.]
- Point to the word that goes with this picture? [Child points to the word "house" from the list presented.]
- What does this say? [Child reads the word "daddy" from the list presented.]
- Read these words aloud. [Child reads the words "was, boy, girl, and man" from the stimuli book.]

Scoring

- The assessment is manually scored throughout. Items are scored as 0 if the child answers incorrectly and 1 if the child answers correctly.[31]
- Each of the three subtests (Alphabet, Conventions, and Meaning) generate a standard score. These scores are combined to form a composite score—the General Reading Index. Grade and age equivalents are also reported for subtests.[30]
- TERA-4 recently added an online scoring and reporting system, compatible with tablets, Mac, PCs, and Chromebooks.[30] This digital platform allows assessors to:
  - Enter test data
  - Convert raw data/subtest data into scaled scores
  - Generate index scores, percentile ranks, and upper/lower-level confidence intervals
  - Compare TERA-4 scores across individuals
  - Obtain score summaries and reports

Alignment with the User-Informed Principles

GOAL 1: Content Strengths

Domain coverage: This test focuses on capturing early reading abilities rather than just focusing on potential indicators of readiness to read.

GOAL 2: Psychometric Strengths

Reliability: The internal consistency of the TERA has been tested in multiple studies and scores demonstrate strong internal consistency.

Current Measure of Early Literacy Skills

Test of Preschool Early Literacy (TOPEL)[32]

Subdomain(s) Measured

Phonological Awareness; Print and Alphabet Knowledge; Vocabulary (considered a language subdomain by the Measures Initiative)

Age Range

Ages 3 years through 5 years 11 months

Language Version(s)

English; Spanish version developed though may not be published for full circulation, entitled the Spanish Preschool Early Literacy Assessment (SPELA)[33]

Administration

- The TOPEL is administered one-on-one with each child, and most children can complete the 98 test items in 25 to 30 minutes.
- There are three subtests: Print Knowledge (36 items), Definitional Vocabulary (35 items), and Phonological Awareness (27 items).
- The ceiling for all subtests is three incorrect responses in a row.[34]

Sample Items[34]

Subtest 1: Print Knowledge

The child points to, names, and identifies sounds associated with specific letters and words.

- [The child is shown a series of images, only one of which has letters in it.] "Find the picture that has letters in it."
- [The child is shown a series of images and needs to identify the photo which has written text as the title of the book.] "These are pictures of a book. Which picture shows the name of the book?"

Subtest 2: Definitional Vocabulary

The child is shown an image of an object and is asked to identify the object and its uses or features.

- The assessor points to the picture [picture of a bed]. "What is this?" [The child says bed.] "What is it for?" [The child responds with a range of phrases: to sleep on, lie on, etc].

Subtest 3: Phonological Awareness

For the first 12 items, the child looks at an image, says the word the image represents, and is asked to verbally identify which sound is left after dropping a specific sound (elision).

For the remaining 15 items, the child is asked to combine sounds into a word (blending).

- "Look at these pictures." [The assessor points to the pictures while naming them]. "Ball, mop, man, bat. My word is batman. Say batman." [The child says batman.] "Now, point to batman without bat." [The child points to the image of man.]

Scoring

- The TOPEL is manually scored throughout. Correct items receive 1 point, and incorrect items receive 0 points. Raw scores are produced for each of the subtests. For all three subtests, the raw score is the total number of correct test items up to the ceiling.[34]
- A composite score is created by combining the raw scores for the three subtests. Percentiles and standard scores are provided.
- Children who score above average (> 110 composite score) likely won't have problems learning to read and write. Children who score in the average range (90–110 composite score) are performing like most children their age. Children who score below average (< 90 composite score) may struggle learning how to read and write.[35]

Alignment with the User-Informed Principles

GOAL 2: Psychometric Strengths

Reliability: The TOPEL demonstrates strong test-retest reliability over a 1- or 2-week period.[36]

Comparisons: TOPEL scores demonstrate moderate to strong correlations with scores yielded from other literacy measures.

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