

Battelle Early Academic Survey (BEAS) for Dyslexia

Margaret L. Camp, PhD

BEAS



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Housekeeping

Post any questions in the chat

This presentation will be recorded for future reference

Certificates of Participation will be emailed out at the conclusion of the webinar

Agenda

What is the BEAS?

Key components of assessing dyslexia

How can I use the BEAS in practice?

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What is the BEAS?

The newest member of the BDI-3 family

Assesses early literacy & mathematics skills

Ages 3.6-7.11 years



Who Can Administer the BEAS?

- Preschool Teachers
- Head Start Teachers
- Kindergarten Teachers
- Special Education Teachers
- General Education Teachers
- Educational Diagnosticians
- School Psychologists
- Speech/Language Pathologists (SLP)
- Trained Paraeducators





How Can the BEAS be Used in the Schools?

- Academic Screenings in General Education
 - **Early Literacy Skills (Dyslexia)**
 - Early Math Skills
- Transitioning Into Kindergarten
- Pre- and Post-Intervention Assessment (RTI)
 - Benchmarking Progress
- Special Education
 - Measure Impact of Developmental Delays
 - Development of IEP Goals
 - Documenting Progress on IEP goals



Importance of Early Literacy Skills



Although babies don't become readers for several years, they begin to develop the necessary skills for reading and writing at birth. The **first three years** of life are important ones in developing the language foundations that will lead to reading.



5 Pillars of Reading (National Reading Panel, 2000)

- **Phonemic Awareness**
- **Phonics**
- **Fluency**
- **Vocabulary**
- **Comprehension**

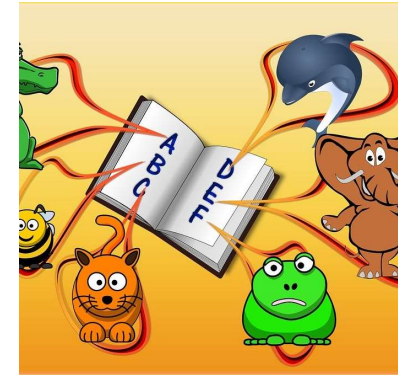
Phonemic Awareness & Phonological Awareness

- **Phonemic awareness**, the ability to identify the smallest units of sound in the English language, has been shown to be a very powerful predictor of later reading achievement (Juel, 1988). Phonemic awareness is closely associated with phonological awareness - manipulating and substituting phonemes.
- Phonemic awareness: cup = /c/ /u/ /p/
- **Phonological awareness**: "what is the last sound in cup?" /p/ "Change the last sound to /t/. Now what is the new word?" Cut
- Phonemic awareness applies only to verbal speech but provides the foundation for the next instructional step of associating individual sounds with written letters, commonly known as phonics.



Phonics

- **Phonics** is the ability for learners to decode the words they read and to spell the words they write.
- **Phonics** provides the explicit connection between individual sounds (phonemes) and letters (graphemes) and an understanding of the alphabetic principle, the predictable and systematic relationships that can be used to recognize, read, and spell words. Phonics is especially important for beginning readers and English language learners.



Fluency

- The ability to read text quickly and accurately.
- **Fluency** is based on
 - the reader's understanding of the alphabetic principle to accurately decode words, and
 - a collection of common sight words (words that cannot be "sounded out").
- When readers are able to decode with automaticity, they can focus attention on the content and meaning of what they are reading.



Vocabulary

- **Vocabulary** is the collection of words that are known and understood by the learner. In many cases, vocabulary is first developed orally as students hear and repeat words and associate meaning with objects in their environment.
- As children begin to decode, learners create associations between spoken words and the corresponding text.



Comprehension

- **Comprehension** is the goal of reading
- Learners who decode text and make meaning from what they read



Early Reading & Dyslexia



What is Dyslexia?

Consensus on the Definition

Neurobiological disorder that affects the development of basic reading skills, spelling, and automaticity with sound-symbol connections

Often accompanied by specific weaknesses in cognitive and linguistic factors that predict poor reading and spelling

Lifelong condition but effective interventions reduce the impact

Other abilities are often intact and can even be advanced



Identifying

Dyslexia



Four Types of Readers

Impaired decoding, but typical listening comprehension (specific reading disability/dyslexia)

Impaired listening comprehension, but typical decoding (language impairment)

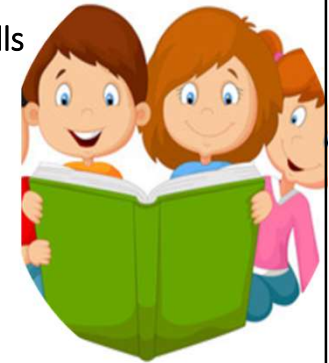
Impaired decoding and listening comprehension (specific reading disability/reading comprehension)

Typical decoding and listening comprehension (no disability)

Identifying Dyslexia: Typical Listening Comprehension Skills

Students with dyslexia typically have adequate higher level language skills, including being able to understand an age-appropriate story and spoken directions, to carry on a conversation, and to understand and use words that are age appropriate. If a student has average higher-level oral language skills but difficulty developing written language (reading and spelling) skills, the need for evaluation for dyslexia is recommended.

International Dyslexia Association



Identifying Dyslexia



Students with dyslexia show impact on development and acquisition of:

Sound-Letter (phoneme-grapheme) associations

Basic Reading Skills – phonics and sight word reading

Rate (automaticity) of reading and spelling

Spelling

Importance of Dyslexia Screeners

- Early identification of students with dyslexia and the implementation of early intervention programs for these students have a significant impact on their future academic success.
- According to Hall and Moats (1999):
 - Early identification is critical because the earlier the intervention, the easier it is to remediate.
 - Inexpensive screening measures identify at-risk students in mid-kindergarten with 85% accuracy.
 - If intervention is not provided before the age of 8, the probability of reading difficulties continue into high school is 75% (pp. 279-280).



Research Supporting Dyslexia Screeners

- The rapid growth of the brain and its responsiveness to instruction in the primary years make the time from birth to 8 a critical period for literacy development (Nevills & Wolfe, 2009).
- Characteristics associated with reading difficulties are connected to spoken language.
- Difficulties in young children can be assessed through screenings of phonemic awareness and other phonological skills (Sousa, 2005).
- Eden (2015) points out "when appropriate intervention is applied early, it is not only more effective in younger children, but also increases the chances of sparing a child from the negative secondary consequences associated with reading failure, such as decline in self-confidence and depression."



Criteria for Dyslexia Screening Instruments



Kindergarten	First Grade
<ul style="list-style-type: none"> • Phonological Awareness • Phonemic Awareness • Sound-Symbol Recognition • Letter Knowledge • Decoding Skills • Spelling • Listening Comprehension 	<ul style="list-style-type: none"> • Phonological Awareness • Phonemic Awareness • Sound-Symbol Recognition • Letter Knowledge • Decoding Skills • Spelling • Reading Rate • Reading Accuracy • Listening Comprehension

Sources & Examples of Screening Data

Quantitative Information	Qualitative Information
<p>Results of ---</p> <ul style="list-style-type: none"> • Current screening instruments • Previous screening instruments • Formal & Informal classroom reading assessments • Additional brief and targeted skill assessments 	<ul style="list-style-type: none"> • Observations of student during screening • Other observations of student progress • Teacher observations • Parent/guardian input (e.g., family history, early language skills) • Current student work samples • Work samples from earlier grade(s) • Intervention history

Using the BEAS to Screen Early Literacy Skills



Transitioning into Kindergarten

- The BEAS is a great measure for kindergarten teachers to administer at the beginning of the school year to obtain data on students' early literacy and mathematics skills.
- Data can be used to plan instruction
- Benchmarking throughout the school year

BEAS – Ages 3-6 to 7-11

Literacy Domain

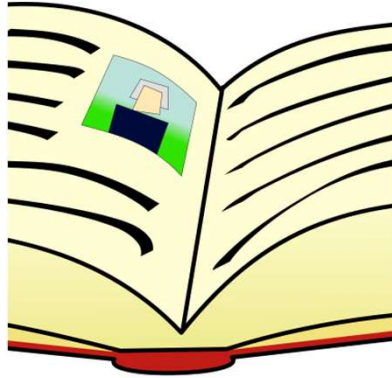
- Print Concepts
- Phonological Awareness
 - Rhyming
 - Syllables
 - Onset Rime
 - Phoneme Identification
 - Phoneme Blending & Segmenting
 - Phoneme Manipulation
- Phonics and Word Recognition
 - Letter Identification
 - Letter Sound Correspondence
 - Early Decoding
 - Sight Words
 - Nonsense Words
 - Long Vowel Patterns
 - Inflectional Endings
 - Listening Comprehension
 - Fluency

Print Concepts (PC)	Demonstrate an understanding of basic print concepts while looking at a book
PHONOLOGICAL AWARENESS (PA)	
• Rhyming (RH)	Identify rhyming and nonrhyming words
• Syllables (SY)	Break words into syllables; blend syllables to create words
• Onset Rime (OR)	Identify initial sounds in words; blend initial sounds with word parts to create whole words
• Phoneme Identification (PhID)	Identify phonemes in initial, medial, and ending positions within words
• Phoneme Blending and Segmenting (PBS)	Blend individual phonemes to create words; break words into individual phonemes
• Phoneme Manipulation (PhM)	Add and remove phonemes in the initial and ending positions in words; substitute phonemes in the initial, medial, and ending position to create new words

Phonics and Word Recognition (PWR)	
• Letter Identification (LI)	Identify uppercase and lowercase letters presented visually
• Letter-Sound Correspondence (LSC)	Produce sounds corresponding to letters presented visually
• Early Decoding (ED)	Match pictures with consonant-vowel-consonant words
• Sight Words (SW)	Read sight words aloud
• Nonsense Words (NW)	Apply phonetic decoding skills to read nonsense words
• Long Vowel Patterns (LVP)	Apply knowledge of long and short vowel patterns to match pictures with words
• Inflectional Endings (IE)	Identify the correct word in a series based on an understanding of inflectional endings
LISTENING COMPREHENSION (LC)	Answer questions pertaining to short passages and stories presented orally
FLUENCY (FLU)	Correctly name pictures of familiar objects under a timed condition

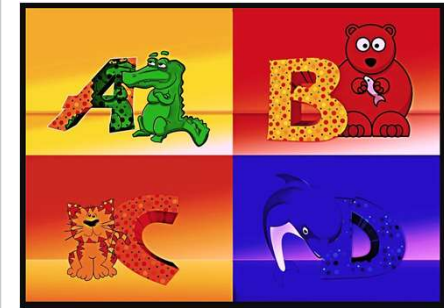
Print Concepts

- First step in literacy development; an understanding of basic concepts of print is essential for the child to move forward as a reader.
- Understanding the features of standard English print through the analysis of a picture book
- The child is given a picture book and asked to identify elements such as the title, the first page, specific text on the page, and the direction in which the text should be read.
- The child is asked to follow along in the text as the examiner reads it and to identify individual sentences and punctuation marks.



Phonological Awareness

- Rhyming
- Syllables
- Onset Rime
- Phoneme Identification
- Phoneme Blending and Segmenting
- Phoneme Manipulation



Phonics and Word Recognition

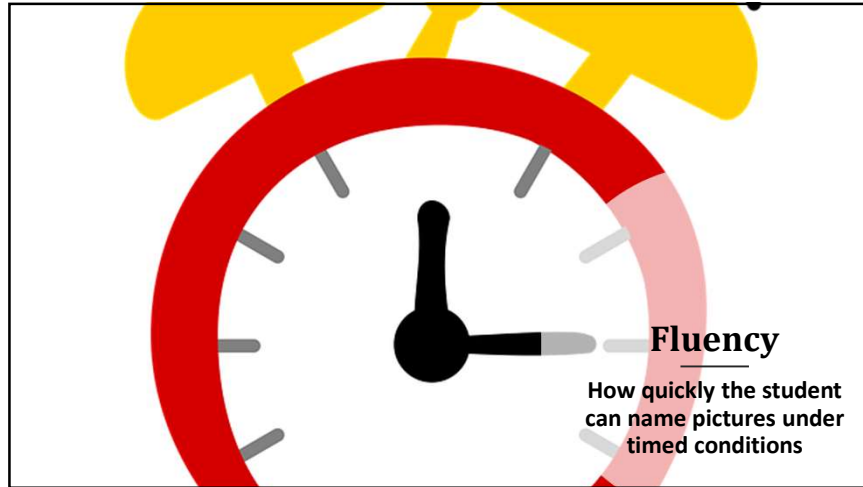
- Letter Identification
- Letter-Sound Correspondence
- Early Decoding
- Sight Words
- Nonsense Words
- Long Vowel Patterns
- Inflectional Endings



Listening Comprehension

- The ability to listen and demonstrate understanding of what has been heard





BEAS Results: What Now?



Battelle Early Academic Survey Sample Reports- Table of Scores- Literacy

Adams, Makay

DOB: 05/08/2015

Score Report

Table of Scores

● On Track

● Monitor

● Support

● Not Applicable

Domain Subdomain	Examiner	Test Date	RS	Scaled Score	Standard Score	Percentile Rank	Performance Level
Literacy							
Print Concepts	Demo Examiner	08/31/2020	4	7		15	SUPPORT
Phonological Awareness						50	ON TRACK
Rhyming	Demo Examiner	08/31/2020	6				ON TRACK
Syllables	Demo Examiner	08/31/2020	4				MONITOR
Onset Rime	Demo Examiner	08/31/2020	6				ON TRACK
Phoneme Identification	Demo Examiner	08/31/2020	2				MONITOR
Phoneme Blending and Segmenting	Demo Examiner	08/31/2020	4				ON TRACK
Phonics and Word Recognition						50	ON TRACK
Letter Identification	Demo Examiner	08/31/2020	12				MONITOR
Letter-Sound Correspondence	Demo Examiner	08/31/2020	4				MONITOR
Early Decoding	Demo Examiner	08/31/2020	4				MONITOR
Right Words	Demo Examiner	08/31/2020	4				ON TRACK
Listening Comprehension	Demo Examiner	08/31/2020	3	7		15	SUPPORT
Fluency	Demo Examiner	08/31/2020	11	5		5	SUPPORT

Early Literacy Performance - Susie

Domain Subdomain	Examiner	Test Date	RS	Scaled Score	Standard Score	Percentile Rank	Performance Level
Literacy					77	6	SUPPORT
Print Concepts	Jacqueline Kilburn	10/05/2020	1	5		5	SUPPORT
Phonological Awareness					10	50	ON TRACK
Rhyming	Jacqueline Kilburn	10/05/2020	2				MONITOR
Syllables	Jacqueline Kilburn	10/05/2020	1				MONITOR
Onset Rime	Jacqueline Kilburn	10/05/2020	3				ON TRACK
Phoneme Identification	Jacqueline Kilburn	10/05/2020	2				ON TRACK
Phoneme Blending and Segmenting	Jacqueline Kilburn	10/05/2020	0				ON TRACK
Phonics and Word Recognition				8		25	MONITOR
Letter Identification	Jacqueline Kilburn	10/02/2020	4				MONITOR
Letter-Sound Correspondence	Jacqueline Kilburn	10/02/2020	1				MONITOR
Early Decoding	Jacqueline Kilburn	10/02/2020	2				MONITOR
Listening Comprehension	Jacqueline Kilburn	10/02/2020	2	8		25	MONITOR
Fluency	Jacqueline Kilburn	10/02/2020	5	5		5	SUPPORT

Early Literacy Performance - Spencer

Domain/ Subdomain	Examiner	Test Date	RS	Scaled Score	Standard Score	Percentile Rank	Performance Level
Literacy					76	7	SUPPORT
Print Concepts	maggie camp	03/11/2021	5	7		16	SUPPORT
Phonological Awareness				5		5	SUPPORT
Rhyming	maggie camp	03/11/2021	2				SUPPORT
Syllables	maggie camp	03/11/2021	0				SUPPORT
Onset Rime	maggie camp	03/11/2021	3				MONITOR
Phoneme Identification	maggie camp	03/11/2021	2				MONITOR
Phoneme Blending and Segmenting	maggie camp	03/11/2021	0				SUPPORT
Phonics and Word Recognition				7		16	SUPPORT
Letter Identification	maggie camp	03/11/2021	20				SUPPORT
Letter-Sound Correspondence	maggie camp	03/11/2021	3				SUPPORT
Early Decoding	maggie camp	03/11/2021	2				SUPPORT
Sight Words	maggie camp	03/11/2021	0				MONITOR
Listening Comprehension	maggie camp	03/11/2021	9	11		63	ON TRACK
Fluency	maggie camp	03/11/2021	9	4		2	SUPPORT

*Support indicates scores that fall below the 25th percentile. Monitor indicates scores falling within the 25th-49th percentile. On track indicates scores falling at the 50th percentile or above.

BEAS can be administered at the **beginning and the end** of the **academic school year**, or the second test administration take place no less than **4 months** after the first.

How frequently can I administer the BEAS?



USING YOUR BEAS FOR IEPs

1

Use the BEAS up to 3 times a year you can get beginning of the year, middle of the year, and end of the year data for current levels and progress monitoring

2

Use the BEAS for short term goals as benchmarks to document mastery

3

Use the BEAS to determine percent/rate of mastery for annual goals

4

Use the BEAS to write next years goals based on the progression of skills assessed and the age/grade-based standards set by your district/state

Summary

- Early literacy skills are critical for ensuring children become strong readers
- The BEAS Literacy Domain is an excellent measure to assess those pertinent foundational skills necessary to become a successful reader
- The BEAS Literacy Domain can be used to screen for dyslexia to identify children ages 3-6 to 7-11 who may be at risk for reading difficulties
- When used with the BDI-3, a comprehensive assessment of young children's developmental and early academic skills can be assessed.