



# Alphabet Knowledge and Phonological Awareness

Students with Most Significant Cognitive Disabilities



*Kansas leads the world in the success of each student.*

# Learning Objectives

- Understand what explicit and embedded instruction are
- Understanding what the research says
- Learn about the Explicit Alphabet Knowledge Instructional Routine
- Learn about Embedded Alphabet Instruction
- Understand the levels and key aspects of phonological awareness
- Learn about explicit phonological awareness instruction
- Understanding the importance of accommodating and modifying instruction



# Alphabet and Phonological Awareness

*We are teaching our students  
how to use the voice within  
their mind.*



# Definitions

Alphabet Knowledge	The ability to name, distinguish and produce the shapes, and identify the sounds of alphabet letters
Phonological Awareness	Skills that include recognizing and cognitively manipulating units of oral language such as words, syllables, onsets and rimes. This does NOT involve print awareness
Phonemic Awareness	Awareness of and ability to cognitively manipulate the individual sounds in spoken words; a phoneme is the smallest possible unit of speech sound



# Explicit Instruction

## What it is:

- Is direct instruction that is **focused and brief** which helps learners “develop the thinking and problem-solving skills that are required for literacy learning and use” (Erickson & Koppenhaver, 2020). Explicit instruction focuses on **repetition with variety**

## What it is not:

- The focus is not on mastery of skills before moving on, but mastery of skills as a result of moving on. It is not errorless. **Mistakes are welcomed learning opportunities!**



# Embedded Instruction

## What it is:

- Instruction that focuses on how to apply skills within explicit instructional strategies during daily reading and writing experiences. Embedded instruction provides **context, meaning, and purpose**.

## What it isn't:

- Embedded instruction doesn't occur in **isolated, decontextualized activities** or within single environments.



# Research

What we know!



# Research Says!

- Everyone, regardless of disability, learns to **READ** in the same way!
- Students with moderate to severe disabilities can make progress in all areas of reading when given intense, systematic and explicit instruction using research-based techniques (Dessementet, 2021)
- The first step in helping our population become literate is to **PRESUME COMPETENCE** in his or her abilities to gain such knowledge and skills (Bilklen & Burke, 2006)
- Our population needs **INTENSIVE, DIRECT, and SYSTEMATIC INSTRUCTION** (Allor et al., 2010; Lemons, et al., 2012)
- Improved outcomes are achieved when using an **EXPLICIT-EMBEDDED** instructional approach
- Alphabet Knowledge and phonological awareness are fundamental to literacy learning (Comprehensive Literacy for All)
  - Strong predictor of later reading success
  - Letter names help children link print to speech





# What is Alphabet Knowledge

- Includes:
  - Letter identification - distinguishing letter shapes
  - Recognizing letters in text (naming letters)
  - Write letters – producing the letter form
  - Letter sound identification
- Strongly related to word and nonword reading success for students with significant disabilities (Dessemontet & de Chambrier, 2015)
- Impact of alphabet knowledge grows stronger over the first 2 years of reading development in SwSCD
- These students may need more time to learn to apply knowledge of letter sounds to decoding words and reading texts than their peers



# Development of Alphabet Knowledge

- Similar for students with out significant disabilities
- SwSCD most likely learn the letters of their names before other letters of alphabet
- Successfully developing alphabet knowledge and applying that knowledge in later reading is related to instructional opportunity rather than severity of disability
- SwSCD can develop alphabet knowledge and apply it meaningfully to reading and spelling when it is taught and immediately applied in the context of comprehensive instruction that extends over a period of months and years (e.g., Koppenhaver & Erickson, 2019)
- SwSCD need to be taught alphabet knowledge – with regular and sustained opportunities to apply what they are taught during comprehensive emergent literacy instruction



# Strategies

- Talk about letters and the sounds they represent during shared reading
- Provide feedback that focuses students' attention on the meaningful use of letters and their relationships to letter sounds in words
- Use of explicit and embedded instruction systematically integrates explicit skill-based instruction in natural learning opportunities throughout the school day
  - Helps students develop the thinking and problem-solving skills required for literacy learning and use
- Targeted instructional time each day for learning letter names, shapes, and the sounds they represent
- Paired with efforts to help students develop alphabet knowledge during reading and writing interactions across the day



# The Alphabetic Principle

- Recognize 26 upper- and lower-case letters
- Know the name of each letter
- Make the sounds each letter represents
- Make or select each of the letters for use in writing
- Know that words are composed of letters



# Enhancing Alphabet Knowledge Instruction

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## One Letter a Week Alphabet Knowledge

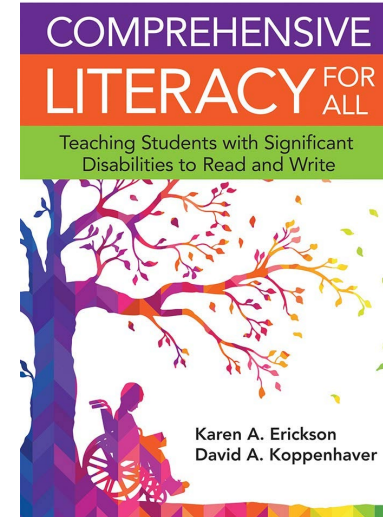
- Takes 26 weeks to go through entire alphabet
- If a student knows the letter, the week is lost.
- Only 1 complete cycle per school year.
- All letters are treated equally.

## Enhanced Alphabet Knowledge

- Takes only a few minutes per single letter (brief, explicit teaching)
- Protects instructional time and is responsive to what students already know.
- Emphasizes that purpose of learning the alphabet is for reading and writing.
- Allows for multiple opportunities for letters to be introduced, practiced and revisited.

# Explicit Alphabet Knowledge Instructional Routine

Source: Jones et al., 2013  
Comprehensive Literacy for All



# Enhanced Alphabet Instruction

- 10 minutes each day devoted to teaching an individual letter
- A new letter each day – all the letters have been introduced by day 26
- Rapid cycling - Each letter can be targeted again over the next 26 days – allows for distributed rather than massed practice
- Remove letters from the cycle as they are learned
- Vary the order of letters in each cycle based on features that make them relatively easier



# Enhanced Alphabet Lessons

- Step 1 – Identify the name and sound of the uppercase and lowercase form of the letter
- Step 2 – Recognize the letter contextually in books and other written texts
- Step 3 – Learn how to produce the letter forms for use in writing





# Explicit Alphabet Instruction

## Letter Name Identification (1-2 minutes)

- Show and/or write the letter of the day in uppercase and lowercase form.
- Practice naming the letter ("What is this letter?")\*

## Letter Sound Identification (1-2 minutes)

- Explain that "this letter represents the sound /\_\_/" Provide explanations or key words to help students remember the sound.
- State "let's practice saying the sound this letter represents. This letter represents the sound /\_\_/. Say the /\_\_/ sound with me.\*"

## Recognizing the Letter in Text (3 minutes)

- Students attempt to find uppercase and lowercase examples of the letter within text and state the letter name and sound aloud\* as they locate examples.

## Producing the Letter Form (4-5 minutes)

- Demonstrate how to write the letter in uppercase and lowercase form. Have students practice writing the letter in uppercase and lowercase form. If students use alternative pencils, model writing the letter using the alternative pencil.

Jones, et. al (2013)

Erikson & Koppenhaver (2020)



# 6 Instructional Cycles

1. First 26 days – 1 letter per day beginning with the letters that appear most frequently in the names of students in the class
2. Next 26 days – letters are taught in alphabetic order
3. Letters are taught beginning with those that represent sounds that are in the letter name and moving to letters that represent sounds that are not in the name or represent more than one sound  
(*b,f,m,p,j,d,k,t,v,z,l,n,r,s,h,q,w,y,c,g,x,l,a,e,o,u*)
4. Taught base on the frequency of use of the letters in written English – begin with letters that appear least frequently  
(*y,q,j,z,x,w,k,h,g,v,b,m,p,d,c,l,s,n,t,r,u,o,e,a,i*)
5. Taught in order in which typically developing children learn to say sounds in spoken English (*n,m,p,h,t,k,y,f,b,d,g,w,s,l,r,v,z,j,c,i,a,e,o,u,x,q*)
6. Taught in order based on the visual features that make letters relatively easier or more difficult to distinguish from one another  
(*c,g,o,b,p,d,q,a,m,n,w,r,h,t,l,f,l,j,g,y,v,u,e,z,s,k*)



# Instructional Cycles for Letters & Sounds

Instructional Cycles for Letters & Sounds

Cycle 1	Most to least frequently occurring	E	A	R	I	O	T	N	S	L	C	U	D	P	M	H	G	B	F	Y	W	K	V	X	Z	J	Q
Cycle 2	Alphabetical order	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Cycle 3	Sounds in letter name first	B	F	M	P	J	D	K	T	V	Z	L	N	R	S	H	Q	W	Y	C	G	X	I	A	E	O	U
Cycle 4	Least to most frequently occurring	Y	Q	J	Z	X	W	K	H	G	V	F	B	M	P	D	C	L	S	N	T	R	U	O	E	A	I
Cycle 5	Sound acquisition order	N	M	P	H	T	K	Y	F	B	D	G	W	S	L	R	V	Z	J	C	I	A	E	O	U	X	Q
Cycle 6	Visual similarity clusters	C	G	O	B	P	D	Q	A	M	N	W	R	H	T	L	F	I	J	Q	Y	V	U	E	Z	S	K

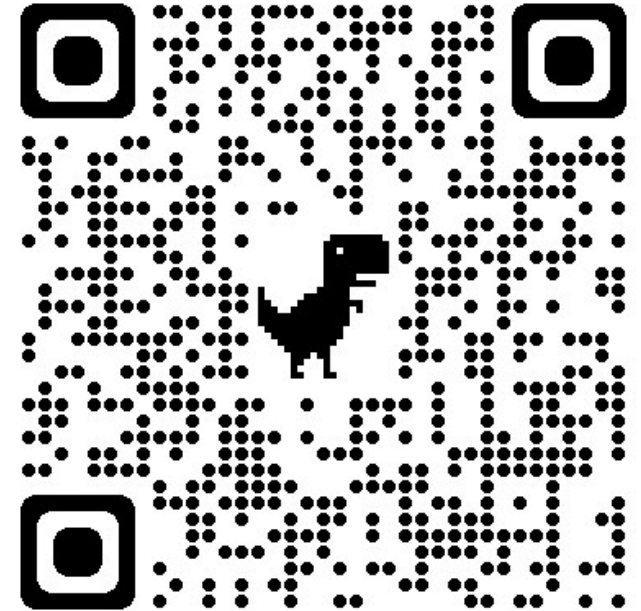
Instructional Routine for Alphabet Knowledge

Step 1 & 2	Letter Identification	1. Introduce the upper and lower case letter 2. Practice naming the letter
Step 3 & 4	Letter Sound Identification	3. Introduce the letter sound 4. Practice saying the letter sound
Step 5	Recognizing Letters in Text	5. Look for the letter in environmental print (e.g., books, signs, etc.)
Step 6 & 7	Letter Formation	6. Introduce how to write the upper and lower case forms 7. Practice writing both upper and lower case forms

For more information, refer to *Comprehensive Literacy for All: Teaching Students with Significant Disabilities to Read and Write* by Karen A. Erickson and David A. Koppenhaver (2020)

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Source: Jones and colleagues (2013) cited in Erickson and Koppenhaver (2020)



# Steps 1 and 2: Letter Identification

## Steps 1 and 2: Letter Identification

1. This is the letter (letter name). This is the uppercase letter (letter name). This is the lowercase letter (letter name). *(Show and/or write the uppercase and then the lowercase letter.)*
2. Let's practice naming this letter. What is this letter? *(Point to upper- and lowercase letters in different orders at least three times, asking students to say the letter name.)*

If students do not use speech to communicate, then say, "Let's practice naming this letter. You say it to yourself while I will say it aloud."



# Steps 3 and 4: Letter Sound Identification

3. This letter (letter name) represents the sound (/letter sound/). *(Provide stories, mnemonics, and key words to help students remember the sound.)*
4. Let's practice saying the sound this letter represents. The letter (letter name) represents the sound (/letter sound/). Say (/letter sound/) with me. *(Point to upper- and lowercase letters in different orders at least three times, asking students to say the letter sound.)*

If students do not use speech to communicate, then say, "Let's practice saying this letter. The letter (letter name) represents the sound (/letter sound/). You say the sound (/letter sound/) to yourself while I say it aloud."

*Hint:* For vowels, teach the short vowel sound. As you begin conventional instruction, you can explain that the letter can represent its name or its sound in reading and writing.



# Step 5: Recognizing the Letter in Text

5. Now, let's look for the letter (letter name). (Help students look for the upper- and lowercase letter in naturally occurring print, such as books, charts, signs, and other places in the environment that include print. Each time they locate the letter, students should state the letter name and the sound it represents.)

If students have physical disabilities that prevent them from pointing to the letters in print, then use partner-assisted scanning or other ways to vary the presentation so that the student is not restricted to identifying the letter from an array of individual letters.



# Steps 6 and 7: Producing the Letter Form

6. Let me show you how to write the letter (letter name). This is (letter name), and this is (letter name). *(Describe how to write the upper- and lowercase forms of the letter as you write them.)*

If students write with alternate pencils, then demonstrate how to write or select the letter using the student's alternate pencil.

7. Let's practice writing the letter (letter name) together. *(Practice both the upper- and lowercase forms.)*

If students write with alternate pencils, then ask the students to write the letter using their alternate pencils.



# Reading & Writing 4 All



## Letter a Day Instructional Routine

To set up your own classroom or home routine, [click on this link](#) for the directions to each step in teaching alphabet awareness for your emerging reader(s). Below is a short video on how you can use the Letter a Day Instructional Routine.

### Template Directions: Letter a Day

Explicit Instruction for Emerging Readers


Looking for more free books?  
Go to <http://bit.ly/Reading4All>

## Template Book

If you'd like to make your own book from scratch, you can use this template book. When you [click on this link](#), it will prompt you to "make a copy" that you can download or save to your own Google Drive. Below, there are 3 short tutorial videos on how you can use this template.

**Template Book** → **The Letter**  
\*\*

Looking for more free books?  
Go to <http://bit.ly/Reading4All>

 10 minutes every day

Emergent Reader Book -  
Alphabet Instructional Routine

Alphabet Books in ABC order used the steps in Erickson & Koppenhaver's "Explicit Alphabet Knowledge Instruction Routine"



# Embedded Alphabet Instruction

- Students must understand that letters represent sounds that are useful in reading and spelling
- Alphabet books – during shared and independent reading; focus on letter names and sounds; help students understand the relationship between the 2 forms of the letter and the sound(s) they represent
  - Create a book that features a letter or letters that are confusing to the student
- Alphabet puzzles and games – teach children about letters and sounds while playing; key is interacting with the child and introducing variety to ensure that students are attending to letter shapes, names, and sounds
  - Add letter to Jenga blocks – student names letter before removing the block
  - Playing cards that feature letters rather than standard suits
    - Go Fish or Slap Jack



# Embedded Alphabet Instruction (2)

- Student names – SwSCD are 10x more likely to recognize the first letter of their name than other letters; no other is more personally relevant to individual students
- Environmental Print – this naturally occurring print provides ongoing, embedded opportunities to teach the letters of the alphabet; scavenger hunts to find specific letters throughout the classroom or school – students could write the letter, take a picture of it, or type it into their communication device each time they find the letter
- Computers and Apps – talking word processor software to explore keyboards; word prediction software to explore the relationship among letters and words that begin with those letters; avoid apps that only focus on matching and sorting letters – instead seek variety



# Resources for Alphabet Activities

Word Wizard



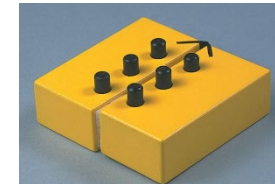
ABC - Magnetic Alphabet HD for Kids



APH Braille Legos (remember to check with TVI or KIRC, this may be free for your student)



Swing Cell Compact (remember to check with TVI or KIRC, this may be free for your student)



Salient Features Dictionary (based on Christine Roman-Lantzy)

Readtopia Readtopia gives you a set of all-inclusive resources to guide your instructional time throughout the day.

- ELA / Reading — Includes all components of a comprehensive reading curriculum and resources including Informational Text, Phonics/Word Study, Videos, Graphic Novels, and Literature



# Phonological Awareness



# Phonological Awareness Levels

- Word level (least difficult)
- Syllable level
- Individual Sounds level (most difficult)



# Word Awareness

Can the student distinguish between words in a sentence?

Example: I like dogs. (3 words)

## Ways to teach:

- Clap, tap, nod, move for each word in a sentence.
- Identify which words rhyme
- Identify alliteration; which words start with the same sound



# Syllable Awareness

Can the student distinguish between syllables in a word?

Ways to teach:

- Onset and rime (ex. Cat: /c/at/)
- Clap, tap, nod, move for each syllable in a word
- Counting syllables



# Individual Sound Awareness

Can the student distinguish between individual sounds in a word?

This is **phonemic awareness** (phoneme: smallest unit of sound). It is the ability to isolate or manipulate the individual sounds in words.

## Ways to teach:

- First sound segmentation
- Clap, tap, nod, move for each sound in a word
- Show object and ask what is the first sound
- Advanced phonemic awareness (ex. Word chains)





# Key Aspects of Phonological Awareness

- Related to alphabet knowledge
- Hear difference between words
- Syllables and parts of words
- Words that rhyme or end the same
- Words that begin with the same sounds
- Ability to identify and manipulate sounds in language



# Explicit Phonological Awareness Instruction

## Segment words into syllables

- Segment sentences with monosyllabic words
- Segment two-syllable compound words (snowball, railroad)
- Segment two-syllable words (blanket, dinner)
- Segment multisyllabic words (octopus, banana)

## Rhymes

- Identify if words rhyme (Do cat and bat rhyme?)
- Odd-one out rhymes (Which one doesn't rhyme? Cat, Door, Bat)
- Match rhymes (Find the one that rhymes with Cat: Eat, Bat, Go)
- Generate rhymes (What is a word that rhymes with cat?)

## Alliteration

- Judge initial sounds (Do cat and see start with the same sound?)
- Odd-one out (Which one doesn't start with the same sound? cat, see, cart)
- Match initial sounds (Which one begins with the same sound as say?)
- Initial sound sorts (Which ones start like say and which ones start like cat?)

Schuele & Bordreau (2008)



# Resources

[Word Wizard](#)



[Dot Piano](#)



[Wheel of Names](#)



[Phonological Awareness Intervention: Beyond the Basics Schuele & Boudreau](#)

[Jack Hartman YouTube Videos for Rhyming](#)

[Penn State Literacy Instruction for Individuals with Autism, Cerebral Palsy, Down Syndrome and other disabilities](#)



# Accommodating and Modifying



# Accommodate and modify instruction to meet individual student needs

- Students with **PHYSICAL NEEDS** may need **ADAPTED** books to access instruction
- Students who are **NONVERBAL** or **AAC USERS** can learn and demonstrate reading ability through **MODIFICATIONS OF RESPONSES**.



# Contact Information



Cary Rogers  
Education Program Consultant  
Special Education & Title Services  
(785) 296-0916  
[crogers@ksde.org](mailto:crogers@ksde.org)

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