



## Dyslexia Community of Practice Session 2: Misunderstandings of the Science of Reading

Sharon Vaughn & Elizabeth Stevens

October 7, 2025

mimtsstac.org



### Presenters:

The content for this training day was developed based on the work of:



Sharon Vaughn, PhD  
Professor, The University of Texas at Austin  
Executive Director, Meadows Center for Preventing  
Educational Risk



Elizabeth Stevens, PhD  
Associate Professor, University of Kansas



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### A Note about Recording

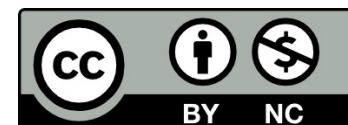


- We are recording this session so the content may be available to:
  - Others in our Dyslexia Community of Practice who were unable to attend today
  - You! If you want to refer to this session later, it's available to you.
- Rest assured the recordings will not be made publicly available, so we hope you'll share your ideas freely within this safe space.

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## Training Effectiveness

- At the end of the session, you will be asked to provide feedback on today's training
- Results will be used to make improvements to professional learning and for reporting to TA Center stakeholders
- One of the feedback questions you will see is related to promoting and positively portraying diversity among educators and learners (e.g., focus on asset-based language, positive representation of multiple identities)

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## Group Agreements

### We are **Responsible**

- Return on time from breaks
- Take care of our needs

### We are Engaged

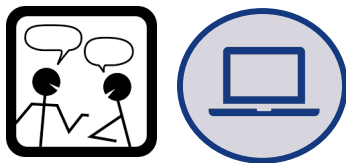
- Share what you know and ask questions
- Plan to participate in multiple ways
  - Chat, breakout rooms, polls, reactions, unmute
  - Ask questions

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## We want to hear from you!

We are committed to making this time engaging and meaningful to support your learning as a teacher and coach. When you see these icons, please join in the conversation via the chat or in your breakout sessions.



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## MiMTSS Dyslexia CoP Session Schedule

| Date              | Time               | Topic   |
|-------------------|--------------------|---|
| September 9, 2025 | 2:00-3:30pm ET     | The Neurobiological Underpinnings of Dyslexia                 |
| → October 7, 2025 | 10:00-11:30am ET   | Misunderstandings of the Science of Reading                   |
| November 4, 2025  | 3:00-4:30pm ET     | Structured Literacy   |
| December 3, 2025  | 11:00am-12:30pm ET | Multisyllabic Word Instruction                                |
| January 23, 2026  | 2:00-3:30pm ET     | Supporting Reading Comprehension for Students with Dyslexia   |
| February 24, 2026 | 10:00-11:30am ET   | Differentiating Tier 1 Instruction for Students with Dyslexia |
| March 26, 2026    | 3:00-4:30pm ET     | Using Data to Inform Instruction                              |
| April 20, 2026    | 11:00am-12:30pm ET | Deliberate Practice and Feedback: The Secret Sauce            |

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## Agenda

- 10:00-10:10 Welcome and check-in on Session 1 
- 10:10-10:50 Content presentation
- 10:50-11:05 Application activity
- 11:05-11:15 Debrief application activity as a whole group
- 11:15-11:30 Wrap up (i.e., answer follow-up questions, review resources, set goals for applying lessons learned, preview next session)


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## Objectives

- 1**  
**Define** the Science of Reading (i.e., what it *is*, what it is *not*).
- 2**  
**Identify** myths or misconceptions about the Science of Reading.
- 3**  
**Explain** why these are misconceptions using your knowledge of the research.
- 4**  
**Identify** implications for practice.
- 5**  
**Explain** how you will apply today's learning in your teaching and/or coaching role.

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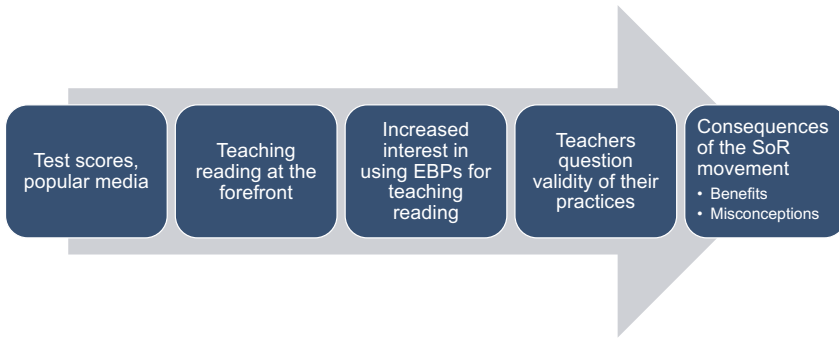
12

In the chat: Share one "big takeaway" you learned from session 1.



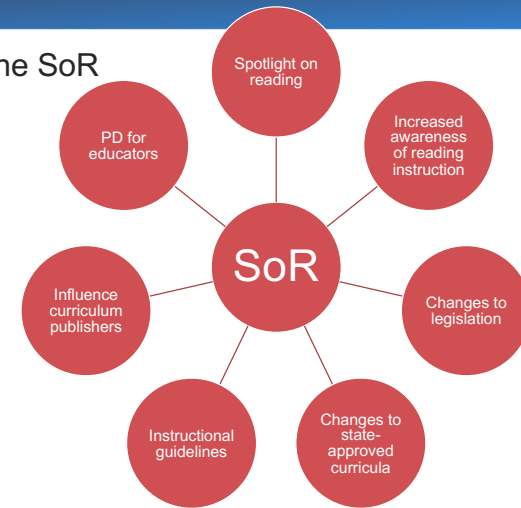
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## The Science of Reading Movement



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## Benefits of the SoR



## Clarification 1: Does the SoR refer to a program or specific pedagogy?

Misconception: The SoR is a package or specific pedagogy.

- We are “doing the SoR”
- We are a “SoR district” or a “SoR school”
- The only effective programs are named “Structured Literacy” or “Multisensory”

Effective reading instruction is *based* on the SoR.

- Not a program or pedagogy that can be purchased or adopted
- Program alignment with SoR exists on a continuum

The SoR is not just a curriculum, but includes:

- A connection between PD and the curriculum.
- Screening and progress monitoring tools.
- Teacher knowledge and understanding about how skilled reading develops.
- Practices and strategies supported by evidence.

## Clarification 2: Is learning to read a natural process?

Misconception: Learning to read is a natural process.

- If we expose students to a lot of books and read to them a lot, they will figure out how to read!

Learning language is a natural process, but learning to read is NOT a natural process.

- Learning to read does not occur by simply being exposed to it (i.e., Watching and/or listening to someone read)

Research shows most students learn best when:

- Provided explicit, systematic, cumulative instruction in the alphabetic code and taught how to apply to code to read words.
- Taught vocabulary and oral language skills are supported.
- Given many opportunities to read and understand complex text.
- Provided opportunities to practice with support and feedback from the teacher.

### Clarification 3: Has the SoR established there is only *ONE* effective way to teach reading?

Misconception: There is *ONE* way to effectively teach reading.

- If we don't teach in that prescribed manner, students won't learn to read.
- A specific "scope and sequence" must be used.

There are many effective ways to teach students to read.

- Most students do best with an **organized approach** to reading that includes
  - Alphabetic principle, reading words, learning word meanings, accessing complex texts
- **Differentiating instruction** for a range of learners is important
  - Using a set of practices and a strong curriculum will not automatically ensure all students learn to read



### Clarification 4: Does the SoR say most of reading instruction should focus on phonics?

Misconception: Most reading instruction should be focused on phonics.

Reasons why phonics has been central to the SoR movement:

- There has been a longstanding debate over phonics (The Reading Wars).
- Many teachers - to no fault of their own - are unprepared to teach phonics.
- Phonics is often neglected in the "balanced" approach to literacy.

Decades of research shows phonics instructions is necessary for most children to learn to read. However,

- Phonics isn't the **ONLY** component of reading instruction (e.g., vocabulary, background knowledge).
- Phonics should not even be the majority of reading instruction.
- Curriculum developers may have overly weighted materials toward phonics.



### Clarification 5: The Role of Pictures in Reading

Misconception: Pictures should never be used in reading instruction.

Referring to pictures to decode words is problematic.

- Effective reading instruction targets application of the alphabetic code to read words.

Pictures can be used to promote engagement with the story.

Pictures can also be used to promote comprehension.

- Helps students visualize what's happening in the story
- Verify understanding
- Used to ask and answer questions, make inferences, prompt discussion, connect to knowledge and feelings

(Vellutino & Scanlon, 2002; Scanlon & Vellutino, 1996, 1997; Vellutino et al., 2000)



### Clarification 6: What is the role of comprehension in the SoR?

Why is comprehension so rarely the focus of debate around the SoR?

There has been considerable disagreement about the inclusion of phonemic awareness and phonics in reading instruction.

- Practices that help students build foundational skills for word reading, phonemic awareness and phonics are what has been missing from effective reading instruction.

There is no argument about reading comprehension; comprehension is the outcome of reading.



## Clarification 7: Does the SoR say decodable texts are a necessary part of instruction?

Misconception: Decodable texts are a necessary part of reading instruction.

What are "decodable" texts?

- A high proportion of words are phonetically regular and/or patterns students have learned.
- The assumption is that students should be able to read the words by sounding them out (i.e., because they've learned the patterns).
- Provide a scaffold to make text accessible and give students an opportunity to practice patterns learned.

## Clarification 7 continued: Does the SoR say decodable texts are a necessary part of instruction?

What is the evidence on using decodable texts vs. authentic texts?

- There is little evidence using decodable text is superior to authentic text (Blevins, 2019).
- Other studies showed no benefit compared to authentic text (Jenkins et al., 2004; Price-Mohr & Price, 2019).

When should decodables be used?

- With beginning readers but their use should be faded
- Students should have practice with many text types
- Authentic texts expose students to increased vocabulary, syntax, and background knowledge

## Clarification 8: Does the SoR say "leveled" texts should never be used?

Misconception: Don't ever use "leveled" texts.

The problem was not the text themselves but how "levels" and leveled texts were used.

- Schools may throw out their leveled text sets to align their practices with SoR
- Waste of potentially valuable content for reading practice

Students should have practice reading a variety of text types across a range of levels

- Extensive practice opportunities
- Access to "stretch" texts

## Clarification 9: Does the SoR generalize to students who are English learners (ELs)?

Misconception: Reading instruction aligned with the SoR does not benefit ELs.

The SoR extends to ELs and accelerates learning to read (Vargas et al., 2021).

- What is the same about reading for ELs and non-ELs?
  - Models of reading (e.g., The Simple View of Reading; Gough & Tunmer, 1986)
  - Skills that predict reading proficiency or risk
  - Intervention effectiveness

Keep in mind, though, ELs need additional support in oral language.

### Clarification 10: Is the 3-cueing system helpful for ELs?

Is the three-cueing system helpful for ELs?

No; all students need to be able to read words.

- Three cueing is not an evidence-based way to teach ELs and non-ELs to read words.

### Clarification 11: Is the SoR based solely on implementing whole-class instruction?

Is the SoR based solely on whole-class (core) instruction?

No; multiple group formats are associated with improved outcomes for readers.

- Whole group
- Pairs
- Fluency practice
- Small group
- Reteaching, preteaching, providing targeted, supported practice with specific feedback

### Clarification 12: Does the SoR say phonemic awareness should be taught without print?

Misconception: Phonemic awareness should be taught without print.

Misconception: Phonemic awareness should be taught in the upper elementary grades.

Misconception: Advanced phonemic awareness skills are necessary for learning to read.

- Adding, deleting, substituting phonemes

What does the research show about teaching PA?

- Reading outcomes are better when PA is taught with letters (NRP, 2000; Stelega et al., 2023).
- PA without letters is appropriate for students who haven't learned letter sounds (e.g., PreK or early K).

### Clarification 12 continued: Does the SoR say phonemic awareness should be taught without print?

Why is PA important for beginning readers?

- Segmenting -> encoding
- Blending -> decoding

Good phonics instruction naturally integrates PA.

- K, 1st, and 2nd graders who received stand-alone, oral PA did not do better than students who did not receive it (Coynne et al., 2021; Little et al., 2024).

There is no evidence to suggest training in advanced, oral-only PA skills is necessary to improve reading performance (MacCandiss et al., 2004)

- PA can be practiced while students read and spell words.

### Clarification 13: According to the SoR, is a “speech-to-print” approach to beginning reading superior to a “print-to-speech” approach?

Misconception: Students should be taught using a “speech-to-print approach.”

What is a “print-to-speech” approach?

- Teach grapheme -> sound

What is a “speech-to-print” approach?

- Teach sound -> graphemes
- “Sound walls”
- Extensive practice in spelling

What does the research say about these two approaches?

- No studies have been done comparing these two approaches



### Clarification 14: Does the SoR deem it necessary for students to learn spelling and syllable division rules?

Misconception: The SoR shows that students must learn syllable division rules.

What does the research show about teaching syllable division rules?

- Not established these rules are necessary for learning to read well
- Approaches developed before a lot of the reading research occurred

Concerns with syllable division rules:

- English orthography is opaque
- Rules are inconsistent (Johnston, 2002; Kearns, 2020)



### Clarification 15: Does the SoR say that reading nonsense words is a key part of phonics instructions?

Misconception: Students should practice reading nonsense words.

What does the research show about having students practice reading pseudowords?

- Important for **assessing** word reading
- No studies documenting extensive practice in pseudoword reading is beneficial
- Some interventions that greatly improved students’ pseudoword reading did not translate to improved reading of real words and connected text (Flynn et al., 2012; Scammacca et al., 2007; Stevens et al., 2021; Torgesen, 2006; Wanzek & Vaughn, 2007)

Reading real words is the goal; have students practice with real words.



### Clarification 16: Is the SoR about teaching “The Big Five”?

Misconception: The NRP (2000) identified the Big Five (PA, phonics, fluency, vocabulary, & reading comprehension).

The NRP did not identify “The Big Five.”

- The “Big Five” message occurred as part of interpretation of the panel’s findings.

What’s problematic about “The Big Five?”

- States, districts, and schools interpret this as a framework for reading instruction
- Promotes teaching as isolated components
- Neglects spelling, writing, and BK
- Contributed to the notion PA should be taught separately from phonics
- “Sound walls”
- Extensive practice in spelling



## Implications for practice

Teach on EBPs (not programs or buzz phrases)

The SoR is more than a curriculum

- Screening
- Progress monitoring
- Teacher knowledge about reading development
- PD

Provide explicit, systematic, cumulative instruction in word reading and spelling

- Teach PA with print!
- Use real words for practice

## Implications for practice

Teach vocabulary and support students' oral language development

Provide multiple opportunities for students to read a variety of texts

- Decodable
- Authentic
- Stretch

Differentiate instruction

- A "one-size-fits-all" approach will not work for all students
- Customization is key!

## Implications for practice

Don't be afraid to use pictures to support reading comprehension

Practices that work for non-ELs also work for ELs

Use flexible groupings based on the instructional objective and students' needs

- One-on-one
- Small group
- Whole group

Think fluidly about "The Big Five"

- Integrate instruction across these components
- Don't forget about BK, writing, and spelling

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11:15-11:30 Wrap up

## Reminder: Our Breakout Room Norms

- Identify the **facilitator** who will lead discussion and keep the group moving forward
- Identify a **notetaker** who will document key ideas and share those with the larger group (in the chart or aloud)
- Identify a **timekeeper** who will keep track of time and support with making sure the group answers all questions



In your breakout rooms...



Share 2 things you learned today that are relevant to your teaching and/or coaching role.

Can you identify other misconceptions that weren't presented today?

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11:15-11:30 Wrap up

## Let's debrief!

What questions do you have for us related to...

- Lessons learned from today
- Action steps

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## More Resources to Explore

### Dyslexia Knowledge Measure

Understandings and Misunderstandings About Dyslexia: Introduction to the Special Issue (Clemens & Vaughn, 2023)

*Reading Research Quarterly* <https://doi.org/10.1002/rrq.499>

Misunderstandings of the Science of Reading (Vaughn & Clemens (2024)

*The Reading League Journal*

## Measure Overview

**Dyslexia Knowledge Measure**

Please read the following statements about dyslexia carefully. Mark one of the four choices (A) that best represents your opinion.

| Item   | Definitely True       | Possibly True         | Possibly False        | Definitely False      |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Dyslexia is usually hereditary.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Poor spelling is one symptom of dyslexia.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. Poor handwriting is one cause of dyslexia.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Most individuals with dyslexia are naturally left-handed.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. Students with dyslexia read comprehension primarily by relying on comprehension strategies.           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Dyslexia can contribute to low self-esteem.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Phonological awareness is another term for phonics.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. If parents read to their children, their children will likely not develop dyslexia.                   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. Medication, when taken appropriately, can cure dyslexia.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. Most transition state media have dyslexia.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. Dyslexia is hereditary.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. Having below average intelligence is a common characteristic of individuals with dyslexia.           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. Less than 2% of the population has dyslexia.   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. An individual can be diagnosed with both ADHD and dyslexia.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. Dyslexia exists only in English speaking countries.  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. Most public-domain perform diagnostic evaluations to determine if a child has dyslexia.              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17. Students with dyslexia learn to read most quickly through the use of audiobooks or portable text.    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18. Students with dyslexia will learn to read more quickly through the use of audiobooks.                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19. An individual can be diagnosed as dyslexic if s/he has dyslexia until the third grade.               | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20. Current science on evidence that supports reading to people with dyslexia.                           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 21. Students with dyslexia should be taught how to read using a synthetic and explicit phonics approach. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Adapted from White et al. (2020). *The Knowledge and Height of Dyslexia Survey*.

### Four Knowledge Strands of Dyslexia

- Origins
- Characteristics
- Prevalence
- Instruction and Treatment

### 4-point Likert-scale

- Definitely True
- Possibly True
- Possible False
- Definitely False

## INTERNATIONAL LITERACY ASSOCIATION READING RESEARCH QUARTERLY

FROM THE EDITORS

### Understandings and Misunderstandings About Dyslexia: Introduction to the Special Issue

Nathan H. Clemens  
Sharon Vaughn

Department of Special Education and  
The Meadows Center for Preventing  
Educational Risk, The University of Texas  
at Austin, Austin, Texas, USA

#### ABSTRACT

The purpose of this special issue was to provide a forum for contemporary research and thoughtful discourse about dyslexia. Scholars from several disciplines contributed articles that advance our understanding of dyslexia with regard to early identification, genetic and neural bases, assessment, instruction and intervention and educators' perspectives. In this article, we introduce the special issue, discuss current evidence and highlight persistent misunderstandings associated with dyslexia.

Over the past decade, and certainly within the last 5 years, there has been considerable momentum around passing legislation aimed at identifying and improving outcomes for individuals with dyslexia world-wide (Mather et al., 2020). In the United States, more than 42 states now have dyslexia-specific laws or policies in place and most of the remaining states have dyslexia-related laws in development. These laws vary in their scope but often include the following: (a) requirements related to early screening for youngsters with or at risk for dyslexia, (b) prescribing requirements within teacher preparation programs for future teachers related to knowledge and skills for teaching individuals with dyslexia, (c) describing schools' obligations to provide evidence-based interventions for students with dyslexia, or (d) guidelines for professional development for current teachers related to dyslexia.

The surge of attention toward dyslexia is not the result of recent

### Misunderstandings of the Science of Reading

by Sharon Vaughn and Nathan Clemens

The science of reading movement has invigorated educators' interest in evidence-based practices for teaching reading ([www.theReadingLeague.org/what-is-the-science-of-reading](http://www.theReadingLeague.org/what-is-the-science-of-reading)). Spurred by dissatisfaction with stagnant test scores and provocative articles in the popular media, the science of reading movement has led many teachers to question the validity of their practices and seek evidence-based programs. As important as it is to identify and implement effective instructional practices, it is just as important to recognize and clarify misunderstandings about the science of reading. The science of reading has become a significant movement that has influenced changes to state legislation, state and school standards for curriculum approval and adoption, school instructional guidelines, and educators' professional development. In turn, these changes directly influence curriculum publishers who, to keep pace with market demands and be included in state-approved curricula lists, revise their programs to align with what the market wants.

Misperceptions about which practices are and are not evidence-based can result in programs and practices without research support being mandated and codified into curricula and instructional practice. Similarly, these misperceptions can lead to the unnecessary abandonment of practices or materials that are incorrectly perceived as being inconsistent with the science of reading. Ultimately, these misunderstandings can negatively impact students, educators, and families. As reading researchers, we are concerned that these misunderstandings will undermine the influence of scientific findings in the future. Why should educators continue to trust scientific findings if previous ones were interpreted carelessly? Why should educators trust future pushes to implement "scientific findings from education research" when there

the following list of common misunderstandings we have observed and questions that have been asked as part of the science of reading movement.

**1. Does the science of reading refer to a program or specific pedagogy?**  
The science of reading movement has motivated many teachers and schools to change how they teach reading—so much so that many have declared they are a "science of reading district," a "science of reading school," or that they are now "doing the science of reading." Effective reading instruction is based on the science of reading. However, the science of reading is not a program or pedagogy that can be purchased or adopted. Some programs are better aligned with the science of reading, but there are not "science

## What's coming up?

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## Sharon & Liz's Office Hours!

Questions for us? Want to chat further? Send us an email!



Sharon Vaughn  
[srvaughn@austin.utexas.edu](mailto:srvaughn@austin.utexas.edu)



Liz Stevens  
[lizstevens@ku.edu](mailto:lizstevens@ku.edu)

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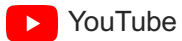
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