

## The Science of Reading and Structured Literacy

As a society, we want all children to be able to read. Yet, several challenges prevent us from achieving this goal. Fortunately, research provides answers to many of these challenges. We call this research the *science of reading*, and Structured Literacy is an approach to teaching based on this science.

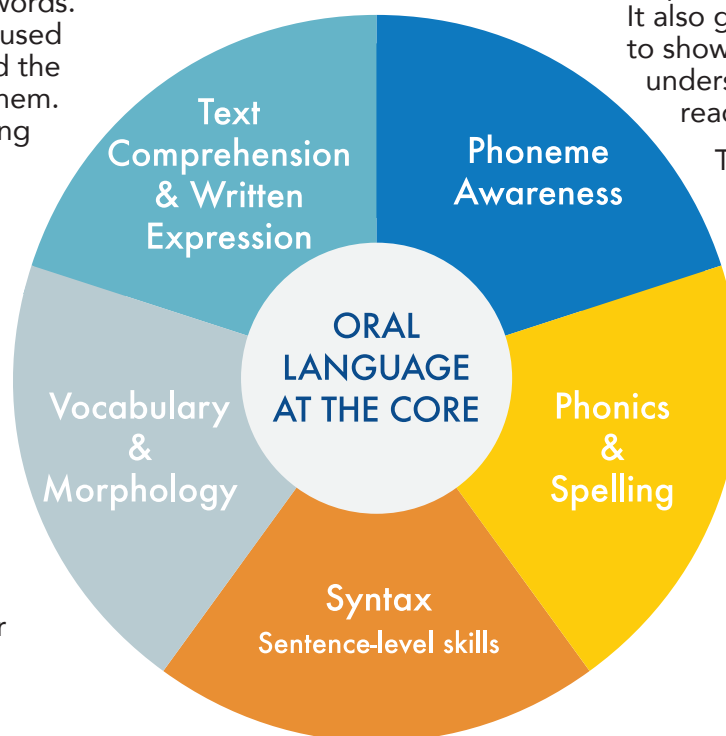
Educators who adopt Structured Literacy provide direct instruction in all areas of language. This includes the sounds found within words. It includes the letters used to make up words and the sounds that go with them. It also includes teaching about the parts of words that express meaning. Students use what they learn about these areas of language to read and spell words.

Yet, Structured Literacy teaches more than how to read and spell words. Educators using Structured Literacy teach how to put words together

to tell a story. They teach students how to share facts and knowledge. Educators provide students with opportunities to read and understand paragraphs. They provide opportunities to read and understand larger text passages. Doing so provides the practice students need to cement their learning. It also allows students chances to develop background knowledge in support of comprehension.

Structured Literacy works with students who do not struggle when learning to read. It also works with students with dyslexia who struggle to read and spell. Students with dyslexia need more deliberate, thoughtful, and sustained instruction. We provide them with many opportunities to practice what they are learning. We give them lots of chances to read text based on what they are learning. This practice helps them to develop fluency. It also gives students the chance to show you how much they understand about what they read.

This is why the center supports the delivery of Structured Literacy. The bottom line is simple. When provided with Structured Literacy, all children can learn to read. They get the skills needed to comprehend, and they are able to read and obtain knowledge for themselves. ■



The Literacy How Reading Wheel  
literacyhow.org

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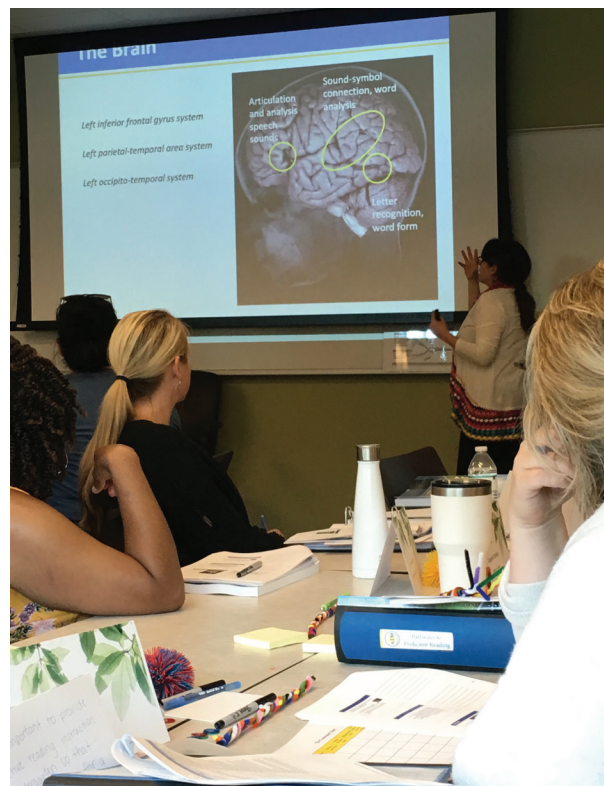
## Research Matters

### Gaining Knowledge about Teacher's Knowledge

Teachers who provide direct instruction in reading are crucial in fostering reading skills. The last newsletter shared our recently published findings from one of these studies. The highest levels of literacy knowledge resided in educators with specialized training. Their training included an extensive practicum. Now we are analyzing data collected through a state Department of Education. K–2 educators completed a course intended to increase literacy knowledge. We are examining where they exhibited the most robust knowledge gains. Further, the educator's knowledge links to their student's reading scores. We predicted educator knowledge gains will be related to student's growth in reading. Yet, we need future studies to capture nuanced factors — for example, differences in classroom support and resources. These factors may impact how effectively a teacher can share their own knowledge. A teacher's ability to share knowledge may impact their student's reading skills.

We also tackled teacher training from another direction this summer. We worked with two school districts and the AIM Institute for Learning and Research. We studied how instructional modality impacts gains in teacher knowledge. This study was a randomized controlled trial using three groups. All teachers completed two assessments of their knowledge of literacy. Two groups completed a training course in between the two assessments. One group of teachers attended a five-day workshop on the MTSU campus. A second group of teachers received the same course through an online platform. A third group of teachers were in a waitlist condition. These

teachers completed both assessments one month apart from each other; then they started the online course. Our preliminary analyses suggest the participating teacher's knowledge improved. Teachers who completed training performed better after training. Differences occurred in the amount of growth observed within aspects of literacy. Differences also occurred across the groups of teachers. Stay tuned to learn more about these forthcoming findings. ■



Educators participating in the five-day workshop held on MTSU's campus in June received instruction led by Deborah Lynam, director of partnerships and engagement, AIM Institute at Learning and Research in Conshohocken, Pennsylvania.

## Recent Findings

### Struggles Finding Struggling Readers

Most U.S. states have legislation for identifying children with characteristics of dyslexia. Concerns of parents and educators motivated the creation of these laws. These widespread efforts illustrate how important we as a nation view reading education. Yet we hear from schools that they feel overwhelmed by these new laws. Educators struggle to understand how to implement them. They need more support. New data suggests that their concerns are justified. Schools are struggling to identify children with dyslexia. We described one of our peer-reviewed articles on this topic before. Our new research suggests possible explanations for the low identification rates. A new research article is under peer review. Here we present a brief overview.

We examined reading scores from a universal screener for thousands of second-grade students. The data came from the Department of Education for a single state with dyslexia laws. It indicated whether each child had been identified with characteristics of dyslexia or not. We asked if identification status corresponded to the child's reading scores. The core behavioral characteristics of dyslexia are problems with reading fluency and spelling. When

a student's scores are below expectations, it indicates they may have dyslexia. But do schools identify students with those low scores as having dyslexia?

First, the good news. In this sample, about 10% of the students were identified as having dyslexia. That value corresponds to expected prevalence rates. It suggests the screening processes appear to be having their intended effect. It shows that schools find many children who are likely struggling readers.

Educators and parents know they are still facing challenges. The data reflect these challenges too. Another 27% of students had documented deficits in their spelling and reading fluency. These children were not identified with dyslexia. This result shows that a substantial number of children appear to be slipping through the cracks. These students should be receiving some form of reading intervention. We used the data to ask about these children who appear to be missed. Their performance on the universal screener indicates likely reading struggles. Yet they have not been identified with characteristics of dyslexia. What factors contribute to this mismatch? The data revealed some troubling trends.

The likelihood of missing a specific student increased when below-expectations reading scores occurred more often. What does that result mean? It suggests that when most students in a school struggle to read, it is much more difficult to find students whose struggles are due to dyslexia. These findings are sobering. They can lead to feelings of defeat. So, how do we use this data to push us to keep moving forward?

The results provide more evidence for strengthening reading instruction for everyone. Explicit and systematic instruction in the structure of the English language is important. Reading instruction incorporating structured literacy techniques benefits all students. Using those techniques will likely result in higher reading performance for all students. It should lead to fewer students scoring below expectations. There will still be some students who exhibit low scores. The reading struggles of these students may be more severe or slower to improve. That is the profile of a child who has characteristics of dyslexia. These children are not always found today. They should be easier to find when all students learn structured literacy techniques. Once we find students with dyslexia, the structure and intensity of their reading instruction can be increased. Reading interventions provide the environment for that support. ■

## *In Focus:*

### Year in Review: Fiscal Year 2018–19

As we celebrate Dyslexia Awareness Month, the center celebrates its fiscal year accomplishments. During the past fiscal year, the center had the unique experience of having a complete staff. This is the first time in over 10 years the center has all positions filled. Even though our staff may be new, our mission is not. Since the creation of the chair in 1988, the center’s mission remains focused. The three areas of focus are education, research, and assessment.

#### **EDUCATION**

The center provided 8,995 hours of professional development to 769 Tennessee educators from 50 counties this year. Professional development events included 14 on-campus events and 24 in-school workshops. Center staff also delivered nine conference presentations.

#### **Campus Events**

During the 2018–19 fiscal year, three top-notch literacy experts presented workshops for educators. Leslie Laud and Charlie Haynes delivered workshops on improving the writing of students. Anita Archer addressed the importance of using explicit instruction with students. For a glimpse of Archer’s message, watch the center’s expert minute video on our YouTube channel. The center also co-hosted a workshop with the Tennessee branch of the International Dyslexia Association. This workshop by Nancy Coffman focused on spelling instruction.

#### **Dyslexia Success Series**

The center’s Dyslexia Success Series began with a generous gift from an anonymous donor in 2010. The 2018–19 series, presented by center staff, featured seven sessions on the essential components of reading instruction.

#### **School-Based Professional Development**

The center delivered in-service workshops to 15 school districts across Tennessee. The center offers several workshops about

dyslexia and reading instruction for K–12 students. Center staff delivered sessions to pre-service teachers at two seminars held on campus. These sessions were part of the College of Education’s seminars for pre-service teachers.

The center continues to expand its services with conference presentations across the country. Center staff presented workshops at the 2019 General & Special Education Conference in California. Our staff also delivered two sessions at the 2018 International Dyslexia Association conference. Center staff presented at the 2018 Mid-South Conference for Psychology in the Schools. We also conducted a workshop for Region 16 in Amarillo, Texas.

#### **Online Resources**

The center further provides resources for educators and parents. The center developed lesson frames for use in the RTI setting. The lesson frames focus on important aspects of literacy. These include phonological awareness, decoding, and fluency. The lesson frames are available as free downloads on our website. Other resources include our Student Literacy Profile. This tool allows educators and school personnel to see patterns in student performance. The Student Literacy Profile helps educators identify students with characteristics of dyslexia. The center also provides resources for both parents. These resources include an overview of characteristics of dyslexia by grade level. In the last year, over 7,000 parents and educators visited our resource web page. Another online resource provided by the center is our YouTube channel. This channel hosts our Expert Minute series of videos. This video series features best literacy and



education practices presented by literacy experts. The experts include Archer, Marcia Henry, and Suzanne Carreker. The center shares the videos on our other social media platforms as well as YouTube.

## Tutoring

In addition to assessment, the center offers tutoring to students with dyslexia. Reading intervention for students with dyslexia consists of direct, systematic instruction.

The program used at the center addresses follows the principles of Structured Literacy. This year, center staff provided 481 hours of tutoring to students with dyslexia.

## ASSESSMENT

The center provides assessments to K–12 Tennessee students. Assessments include measures of phonological processing, basic reading skills, fluency, spelling, and comprehension. Students spend between five and six hours at the center on the day of assessment. We developed a new process for applications in 2018.

## Assessment Process

The center releases assessment slots at the beginning of each month of the school year. We release slots on a first-come, first-served basis. The center does not maintain a wait list. Identification processes exist in the K–12 public school system. We encourage parents to pursue identification in their school. When parents receive a slot, they complete a screening survey. This survey helps the center determine if the child

meets evaluation criteria. It also helps the center determine if previous identification exists. If the child meets criteria, parents receive an appointment for assessment or consultation.

This year, 75 parents completed the survey. Seventy parents qualified to have their

child assessed. Forty-four parents opted to have their child tested at the center. Thirty-six children had characteristics of dyslexia according to the assessment data.

## RESEARCH

The center continues its active research program. During the fiscal year, the center supported eight active research studies. Center staff published four research articles in peer-reviewed publications. We have several manuscripts under review. We also delivered 15 research presentations at state, national, and international conferences.

The center collaborates with several organizations on research projects. Collaborators include Texas Scottish Rite Hospital for Children. The center also collaborates with the International Dyslexia Association and AIM Institute. The center collaborates with several school districts across the nation and in Tennessee. These collaborations aim to improve student outcomes through teacher training.

The center remains committed to supporting MTSU students' involvement in research. The center supports three graduate students from the MTSU School Psychology program. We also have five Ph.D. students supporting our research projects. There are four undergraduate students assisting in our research projects as well. Our current areas of dyslexia research include teacher training, instructional methods, and identification.

## ONLINE PRESENCE

The center continues to build its online presence. This year, the center's web page had visitors from every region of the country, and 3,500 were new visitors. Visitors to the education page represent the largest percentage of visitors. The center's resource page garnered most of these visits with 7,400 of the 8,600 page views. The center also added the social media platforms Facebook and Instagram this year. The center grew its Facebook followers from zero to 881 followers from our first post in April to June 30. Currently, the center's Facebook page has close to 1,500 followers from 21 countries. We hope you will join us as we celebrate Dyslexia Awareness Month. Like us @MTSUDyslexia Center, follow us at mtsudyslexia, and tweet us @DyslexiaMTSU. ■



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Center for Dyslexia  
MTSU

Like.  
Follow.  
Tweet.  
Repeat.



# FY 2018-19 AT A GLANCE

## EDUCATION

14

EVENTS ON CAMPUS



24

WORKSHOPS IN SCHOOLS

9

CONFERENCE PRESENTATIONS



50

COUNTIES



769

EDUCATORS SERVED

8,995

HOURS OF PROFESSIONAL DEVELOPMENT AWARDED



82%

OF APPLICANTS WERE IDENTIFIED WITH CHARACTERISTICS OF DYSLEXIA THROUGH CENTER TESTING

24%

OF APPLICANTS HAD A LETTER FROM THE SCHOOL STATING THE STUDENT HAD CHARACTERISTICS OF DYSLEXIA



9%

OF APPLICANTS EVALUATED HAD A PRE-EXISTING IEP IN BASIC READING SKILLS

## ASSESSMENT

75

EVALUATION SLOTS RELEASED



642

REQUESTS FOR EVALUATIONS

59%

OF APPLICANTS COMPLETED AN EVALUATION



93%

OF APPLICANTS ACCEPTED FOR EVALUATION OR CONSULTATION

481

HOURS OF DYSLEXIA SPECIFIC TUTORING PROVIDED

## RESEARCH

8

ACTIVE RESEARCH STUDIES



10

RESEARCH COLLABORATIONS

15

RESEARCH PRESENTATIONS



4

PEER-REVIEWED PUBLICATIONS

## ONLINE RESOURCES



4

RTI TIER 2 LESSON FRAMES



1

STUDENT LITERACY PROFILE ID TOOL

9

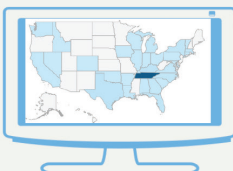
INFORMATIONAL RESOURCES



11

EXPERT MINUTE VIDEOS

## ONLINE PRESENCE



## SOCIAL MEDIA

mtsudyslexia



FOLLOW US ON  
INSTAGRAM

@MTSUDyslexiaCenter

13.3K

ENGAGEMENTS ON FACEBOOK

Center for Dyslexia MTSU



3.8K

VIEWS ON YOUTUBE



@DyslexiaMTSU



62.8K

IMPRESSIONS ON TWITTER



Tennessee Center for the  
Study and Treatment of Dyslexia

MIDDLE TENNESSEE STATE UNIVERSITY

# Instruction Matters

## All Children Benefit from Structured Literacy Instruction

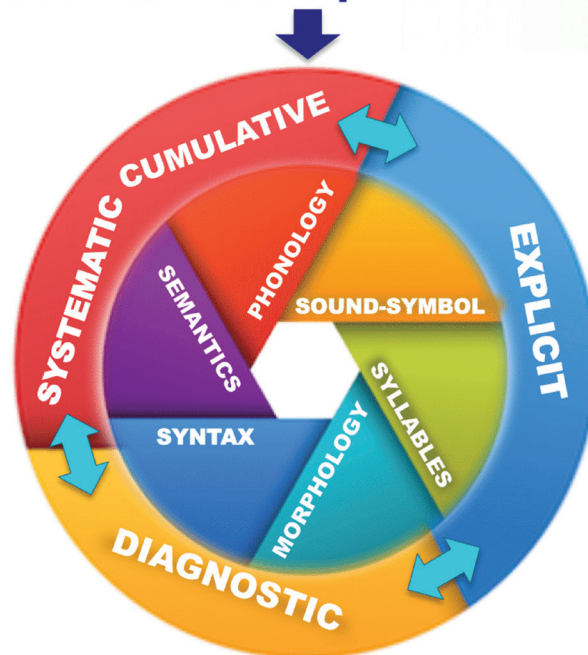
The goal of reading is to make sense of text. Because our brains are not hard-wired for reading, comprehension builds over many years of practice integrating layers of language skills. Our written language has consistent sound, spelling, and meaning features. A Structured Literacy approach weaves these layers of language together explicitly and systematically. This direct instruction in the sound, word, sentence, and meaning levels of our language system benefits all students. It is an essential approach for students with dyslexia.

If students don't receive Structured Literacy as their core reading instruction, it is difficult to appropriately identify those with dyslexia. A primary characteristic of dyslexia is a slow response to instruction. That is best determined when appropriate, evidence-based reading instruction has been offered in the core setting. What if a large number of students in a school or district are exhibiting characteristics of dyslexia? The core instruction should be examined to ensure it aligns with the elements and principles of Structured Literacy.

Students with characteristics of dyslexia need the same Structured Literacy instruction as their classmates. However, they need it delivered with increased intensity. Primary characteristics of dyslexia are inaccurate and/or dysfluent word reading, inaccurate spelling, and a slow response to instruction. Students identified with these characteristics need a carefully planned and paced sequence of literacy skills. They need many opportunities for repetition and practice. They also need a small group size that allows for a lot of teacher interaction and immediate, corrective feedback.

### STRUCTURED LITERACY PRIMER

**Effective reading instruction for most children incorporates *all* this.**



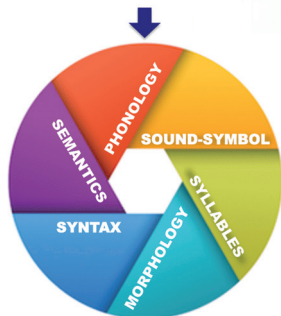
**Inner Circle: Elements**  
**Outer Circle: Teaching Principles**

There's more to Structured Literacy than its instructional content. Who's teaching it and how it's delivered are also important. Educators need to have deep knowledge and flexible use of the layers of language. Teachers develop this expertise by seeking out science-based professional development and getting lots of practice providing Structured Literacy instruction. When delivered as intended, Structured Literacy offers a high level of engagement between teachers and students. Students learn the consistent patterns of the language and reliable strategies to read words and make meaning from text. That leads to comprehension. ■



# What is Structured Literacy?

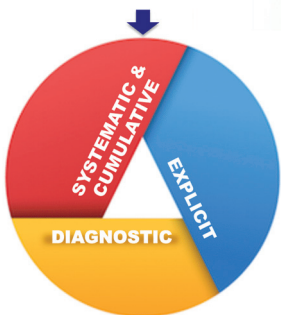
## A Primer on Effective Reading Instruction



Structured Literacy's Evidence-Based Elements

Structured Literacy's **ELEMENTS** work together

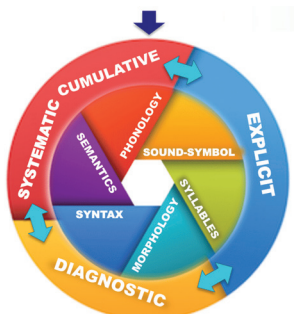
- Phonology
- Sound-Symbol Association
- Syllables
- Morphology
- Syntax
- Semantics



Structured Literacy's Evidence-Based Teaching Principles

These **PRINCIPLES** guide how Structured Literacy's elements are taught

- Systematic and Cumulative
- Explicit
- Diagnostic



Inner Circle: Elements  
Outer Circle: Teaching Principles

To ensure that all children have access to effective reading instruction, we must ensure that their teachers have **BOTH** the

- deep content knowledge and
  - specific teaching expertise
- needed to teach these **elements** according to these **principles**.

[dyslexiaida.org/what-is-structured-literacy/](http://dyslexiaida.org/what-is-structured-literacy/)  
International Dyslexia Association  
DyslexiaIDA.org  
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## Center News

### Murfreesboro Rotary Club Supports Teacher Training

The Murfreesboro Rotary Club awarded a \$10,000 grant to the center to fund teacher training. This generous gift from the Murfreesboro Rotary Club was used to provide training for 40 educators from two mid-state counties. The weeklong training took place on the MTSU



Rotary president Rev. Dr. John Hinkle(l), center director Jennifer Flipse, and former Rotary president Melissa Cassidy(r) are pictured during a recent Murfreesboro Rotary Club meeting.

campus during June. The in-depth training focused on the elements of Structured Literacy instruction. Structured Literacy is an evidence-based approach to reading instruction that benefits all children. This direct, explicit instructional approach is essential for students with dyslexia. Instructors from the AIM Institute for Learning and Research, Conshohocken, Pennsylvania, delivered the Structured Literacy training. The attendees received training about dyslexia, learning disabilities, and assessment. Areas of instruction included phonology, decoding, spelling, and fluency. The training also covered morphology, comprehension, and language domains.

We would like to extend our sincere gratitude to the Murfreesboro Rotary Club for their generous support. ■

#### Recent

#### State, Regional, National, and International Conference Presentations

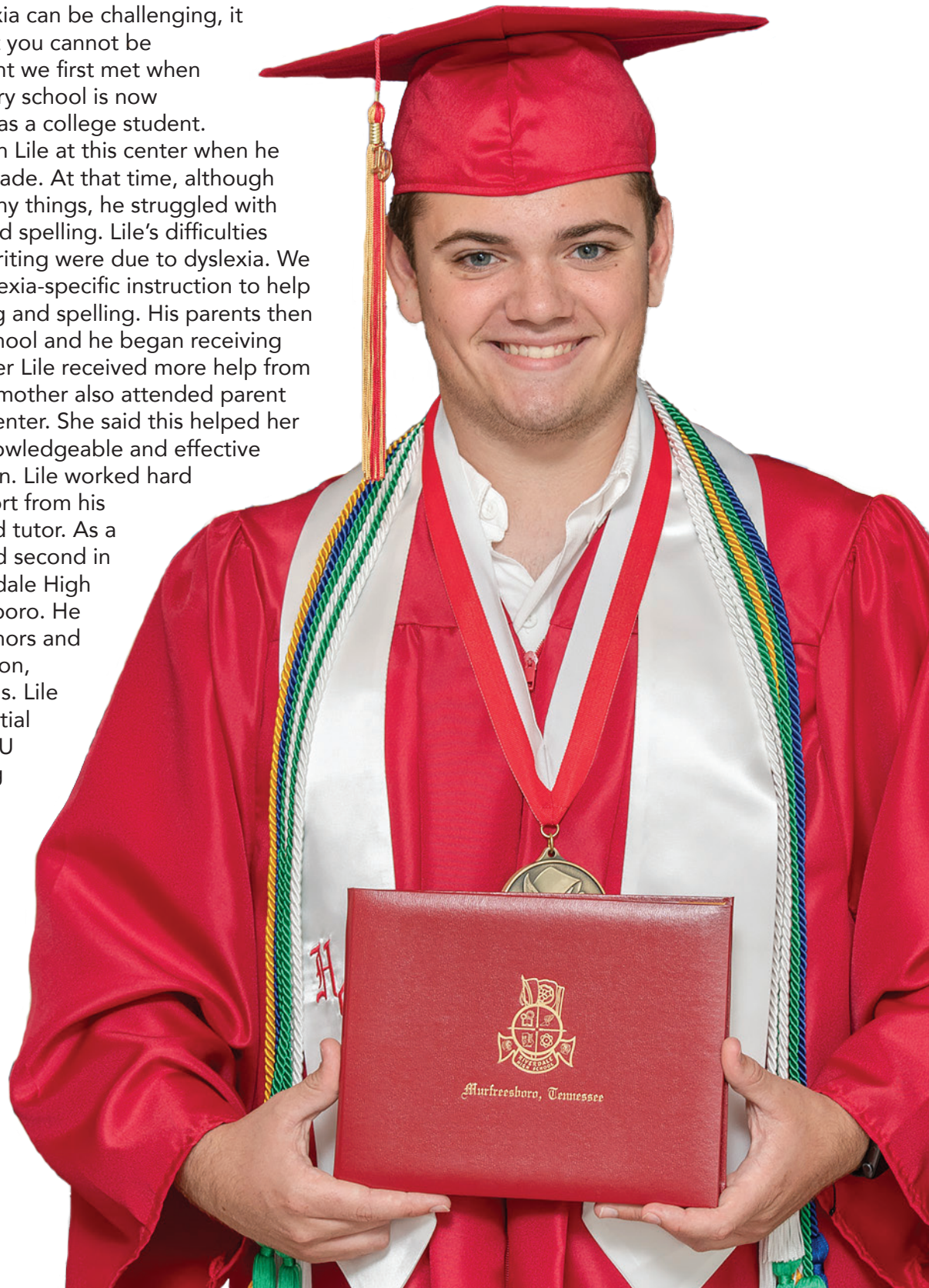
“Dyslexia: What Do We Really Know and What Do We Need to Know to Intervene,” presented by Timothy N. Odegard at the Alliance for Accreditation and Certification of Dyslexia Specialists Annual Conference, Charlotte, North Carolina, Sept. 28, 2019

“Brain 101: A Crash Course in the Neuroscience of Reading Development and Instruction,” presented by Timothy N. Odegard at the Alliance for Accreditation and Certification of Dyslexia Specialists Annual Conference, Charlotte, North Carolina, Sept. 28, 2019

“Utilizing Online Learning and Professional Communities of Practice to Build Teacher Knowledge,” presented by Deborah Lynam and Timothy N. Odegard, The Reading League Annual Conference, Syracuse, New York, Oct. 18, 2019

## Dyslexia Success Story

While having dyslexia can be challenging, it does not mean that you cannot be successful. A student we first met when he was in elementary school is now returning to MTSU as a college student. We evaluated Aaron Lile at this center when he was in the fourth grade. At that time, although he was good at many things, he struggled with reading, writing, and spelling. Lile's difficulties with reading and writing were due to dyslexia. We recommended dyslexia-specific instruction to help him with his reading and spelling. His parents then worked with the school and he began receiving this instruction. Later Lile received more help from a private tutor. His mother also attended parent workshops at the center. She said this helped her become a more knowledgeable and effective advocate for her son. Lile worked hard and received support from his parents, school, and tutor. As a result, he graduated second in his class from Riverdale High School in Murfreesboro. He graduated with Honors and Workplace Distinction, among other awards. Lile received a Presidential Scholarship to MTSU and is now studying Mechatronics Engineering. You can read more about his story at [mtsunews.com/liles-dyslexia-center-success-2019/](https://www.mtsunews.com/liles-dyslexia-center-success-2019/). Congratulations on your achievements, Aaron! We look forward to hearing what you will do next! ■



DYSLEXIA **MT**

Workshops and Conferences



SAVE THE DATE!  
FOX READING CONFERENCE  
MARCH 21, 2020



Tennessee Center for the  
Study and Treatment of Dyslexia

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