Implementing Evidence-Based Literacy Curriculum for Students with ASD in Multiple High Schools

Christopher Brum & Laura J. Hall

San Diego State University

Yolanda Perkins

Frank Porter Graham, Child Development Institute,
UNC, Chapel-Hill

The CSESA Project

An overview of the Center on Secondary Education for Students with ASD and the CSESA study

About the CSESA RCT Study

3 — Number of years for the whole CSESA study
(July 2014-June 2017)

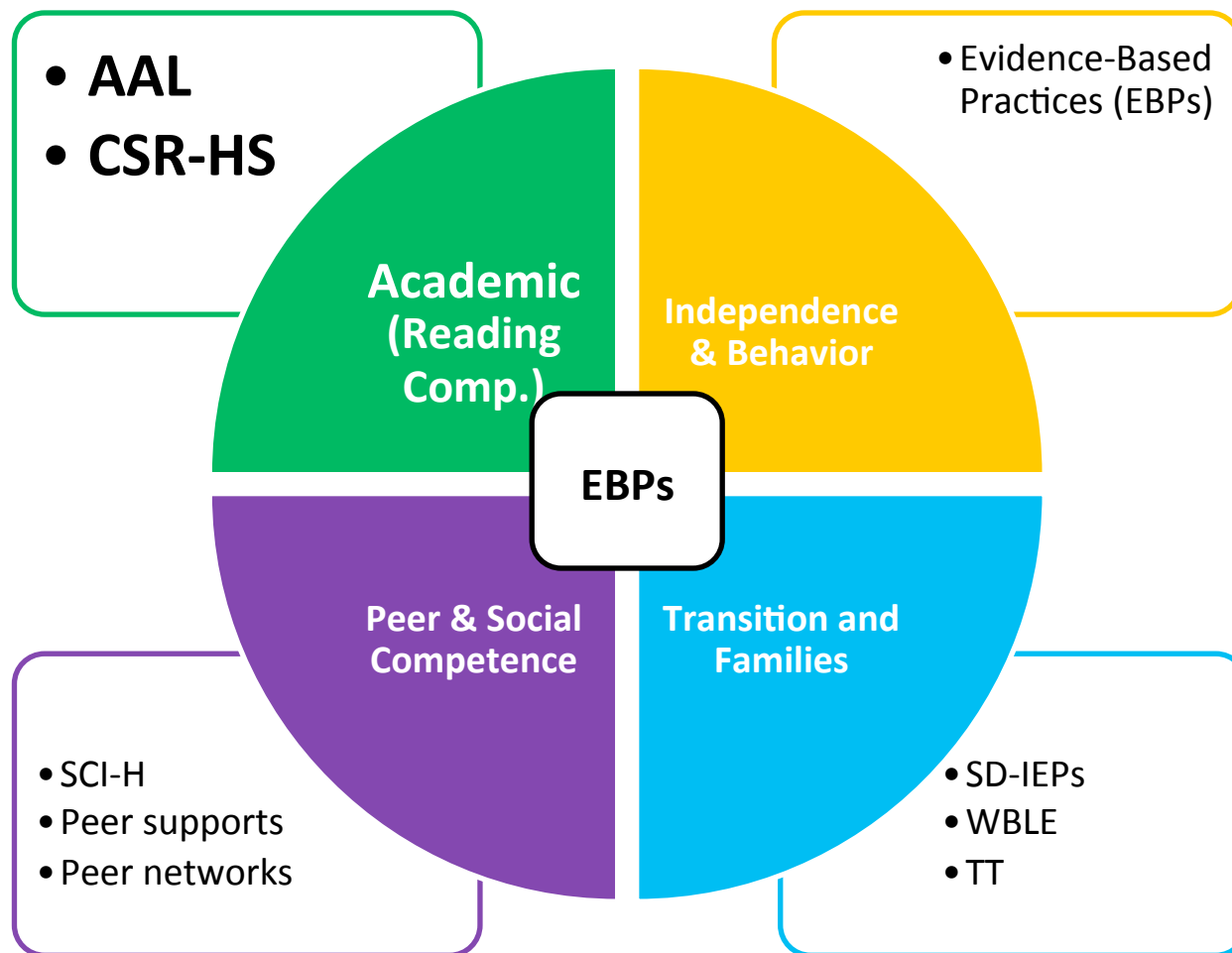**2** — Number of years each school is in the CSESA study

60 — Number of schools
(20 schools at each site – CA, NC, & WI)

547 — Number of students enrolled
(6-12 at each school)

CSESA
The Center on Secondary Education for
Students with Autism Spectrum Disorders

CSESA Interventions

- **AAL**
- **CSR-HS**

Academic (Reading Comp.)

Independence & Behavior

- Evidence-Based Practices (EBPs)

EBPs

Peer & Social Competence

- SCI-H
- Peer supports
- Peer networks

Transition and Families

- SD-IEPs
- WBLE
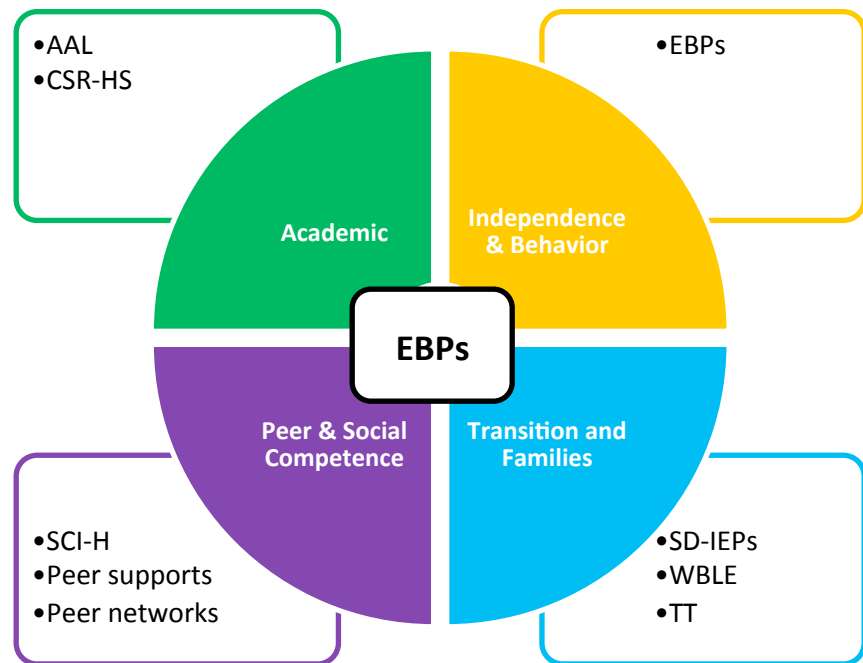- TT

Implementation
CSESA staff & School Personnel

- **Purpose:** Implement CSESA core components to meet the needs of individual students

- **Participants:** CSESA coach, A-team working together

- **Procedures:** School staff implement CSESA components based on student planning forms, CSESA coach (e.g., Brum & Perkins) provides support to staff implementers

- AAL
- CSR-HS

- EBPs

Academic

Independence & Behavior

EBPs

Peer & Social Competence

Transition and Families

- SCI-H
- Peer supports
- Peer networks

- SD-IEPs
- WBLE
- TT

Two Reading Comprehension Approaches

AAL - Alternative Achievement Literacy

❖ for students *learning to read*

Evidence of the Effectiveness:

(**Browder**, Ahgrim-Delzell, Flowers, & Baker, 2012)

CRS-HS – Collaborative Strategic Reading

❖ for students *reading to learn*

Evidence of the Effectiveness:

(**Reutebuch**, El Zein, Kim, Weinberg, & **Vaughn**, 2015)

Comprehension

The ability to construct meaning and learn from text by using a variety of applied strategies

The ultimate purpose of reading

Research indicates that to teach students to construct meaning from text, teachers need a firm grasp of the following:

– Strategies that successful readers use when creating meaning from text

– Effective instructional methods to teach such successful strategies (National Reading Panel, 2000)

ALTERNATIVE ACHIEVEMENT LITERACY (AAL)

Purpose of AAL

The ability to access and comprehend text that is chronologically age appropriate by using adaptations, modifications, and technology.

Students should have opportunities to learn to read to increase independence as a reader, and have the opportunity for lifelong access to narrative and informational literature
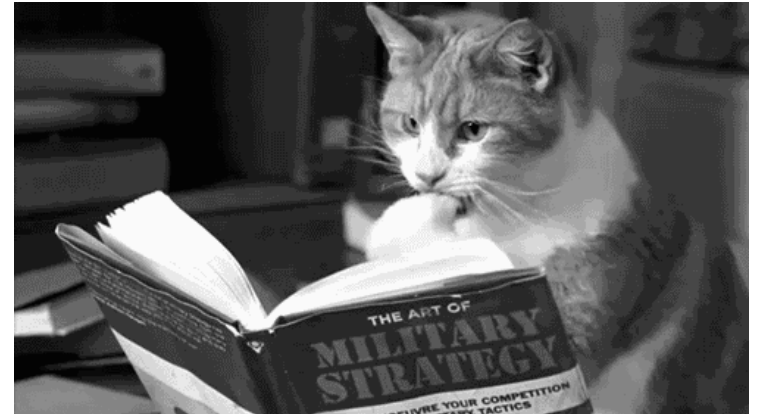
Literature can be accessed through reading (decoding with comprehension), through shared stories (read alouds), and/or the use of technology

Options for "Reading" the Text

Use student's own reading skills

Read-aloud by teacher, para, or peer

Text-to-speech technology

Use Systematic Instruction to Teach Comprehension

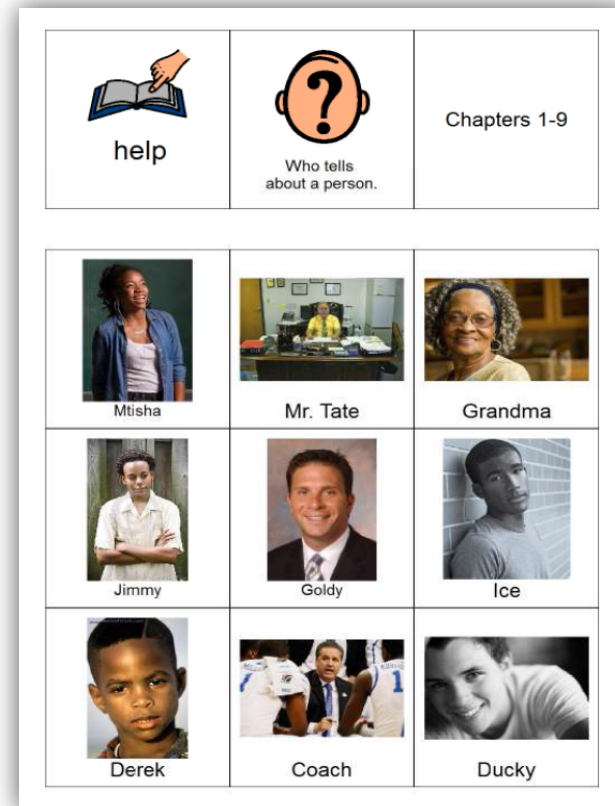| Type of question	Rule	Visual Example
Who?	Who is a person	
What?	What is a thing.	
When?	When is a time or date.	
Where?	Where is a place.	
Why?	Why is a reason.	Because

How Will Student Answer?
Response board option

Provides a visual aid

Simplifies responding by offering options

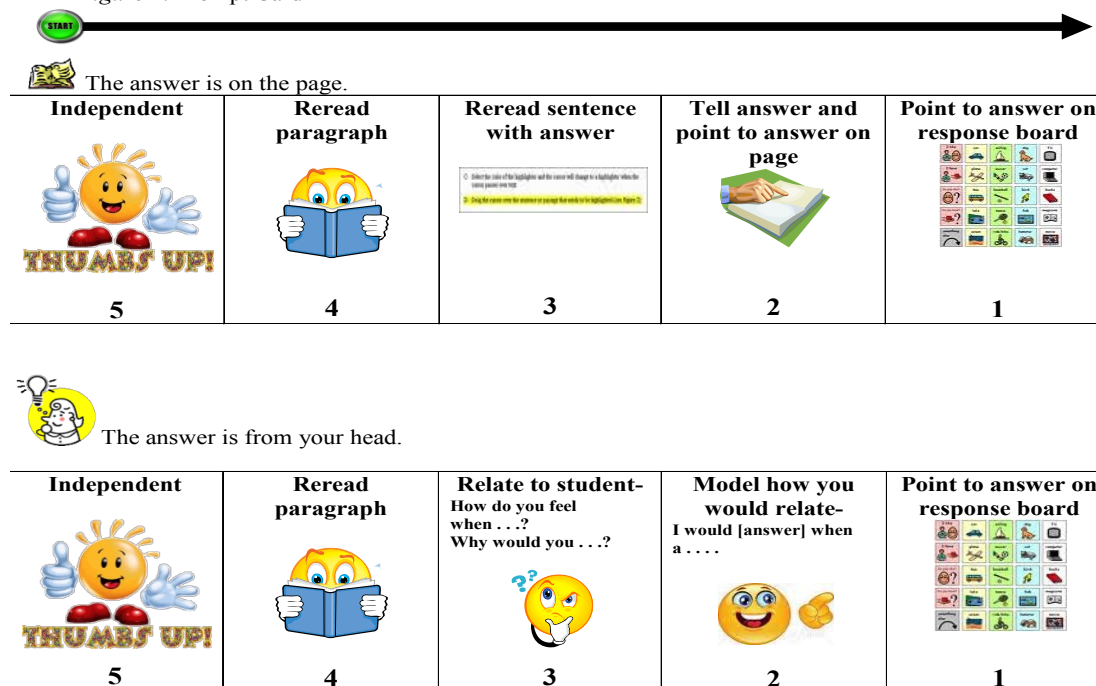Only use for students who cannot compose answer using speech

Use Text Rereads to Locate Answer:

Modified Least Intrusive Prompts

Modified from Mims, Hudson, Browder, 2012

Figure 1. Prompt Card

Independent	Reread paragraph	Reread sentence with answer	Tell answer and point to answer on page	Point to answer on response board
5	4	3	2	1

The answer is on the page.

The answer is from your head.

Independent	Reread paragraph	Relate to student- How do you feel when . . .? Why would you . . .?	Model how you would relate- I would [answer] when a	Point to answer on response board
5	4	3	2	1

CSESA
The Center on Secondary Education for
Students with Autism Spectrum Disorders

CSESA Implementation of AAL

Differences in implementation across schools:

- Class size and groupings

- Technology:
  - AAC devices
  - Smart Boards
  - Ipads

CSESA
The Center on Secondary Education for
Students with Autism Spectrum Disorders

CSESA Implementation of AAL

Differences in implementation across schools:

- Content:
  - SLAM! By Walter Dean Myers
  - Unique (The Outsiders)
  - News2You
  - Discovery Ed. Science

COLLABORATIVE STRATEGIC READING (CSR)

Why Focus on Comprehension and Strategy Instruction?

Reading comprehension interventions can have a significant impact on adolescent struggling readers (Scammacca et al., 2007).

Teaching students strategies to use before, during, and after reading can improve their comprehension.

Asking questions after students read can help to determine whether they comprehended a text, but the practice does not teach students how to improve their comprehension skills.

Combining strategies leads to increased comprehension.

CSR Intervention

- Targets improved reading comprehension across all phases of reading (before, during, and after reading)

- Combines strategy instruction and cooperative learning

- Is based on traditional CSR, an evidence-based intervention

- Is adapted for use in high school classes (supplemental or content area) for students with autism spectrum disorder (ASD) and their peers

Collaborative Strategic Reading–High School
CSR–HS

Teacher Introduction
(2–3 minutes)

1. Steps
2. Expectations

BEFORE reading
(2–3 minutes)

1. LOOK AT:
   – Title
   – Key words
   – Pictures

2. VISUALIZE:
   – Pictures
   – Demonstrations
   – Short video clips

DURING reading
(10–12 minutes)

1. LOOK FOR:
   Words or sentences that don't make sense

2. READ:
   Answer questions about the topic

AFTER reading
(10–12 minutes)

1. WRITE AND ANSWER QUESTIONS:
   – Why or how
   – What, where, or who

2. SUMMARIZE:
   – Use graphic organizer
   – Tell what text was mostly about (person, place, thing, or idea)

3. WRAP UP LESSON

Reading Strategy Components

Title of Text: _____

The key words are:

_____

_____

_____

_____

I have looked at the: ❑ Title   ❑ Key words   ❑ Pictures

I have visualized the: ❑ Pictures   ❑ Demonstrations   ❑ Video clips

Fix Up Meanings

This does not make sense to me.	Now I get it!
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

True or False?

Write the statement.	Answer	If false, rewrite to make the statement true.
_____ _____	T / F	_____ _____
_____ _____	T / F	_____ _____
_____ _____	T / F	_____ _____

After Reading

Generate Questions

"Why" Question	Response
_____ _____ _____	_____ _____ _____

"How" Question	Response
_____ _____ _____	_____ _____ _____

"What," "Where," or "Who" Question	Response
_____ _____ _____	_____ _____ _____

Graphic Organizer

Who or **what** is the story is mainly about?

What are the three most important things about the **who** or **what**?

1

2

3

Summary   Use the graphic organizer to construct a summary about the reading topic.

CSESA Implementation of CSR

Differences in implementation across schools:

- Class size and groupings

- Technology:
  - Laptops
  - Google Classroom
  - Smart Boards
  - ActivelyLearn.com

![CSESA — The Center on Secondary Education for Students with Autism Spectrum Disorders logo]

CSESA Implementation of CSR

Differences in implementation across schools:

- Content:
  - CSR Curriculum
  - TweenTribune.com
  - The Great Gatsby
  - Science Class

Sputnik and the Space Race

Key Words

exacerbated	*Exacerbated* means made a bad or problematic situation even worse.
heightened	*Heightened* means increased or raised.
paranoia	*Paranoia* is unreasonable fear, suspicion, and mistrust of others .
tension	*Tension* is strain in a relationship or underlying conflict or hostility.

Story

When Sputnik, the Earth's first artificial satellite, orbited the planet on October 4, 1957, the Soviet Union was ecstatic and the United States was devastated. Sputnik, which in Russian means "Earth's traveling companion," was the first man-made object in outer space. It was a 184-pound satellite the size of a basketball, and it orbited Earth in an elliptical path at 96-minute intervals. Sputnik made this orbit for several months until it disintegrated upon re-entry into Earth's atmosphere.

On the surface, Sputnik was a scientific accomplishment that advanced space exploration to an exciting new level. A closer look at Sputnik, however, reveals that the satellite was more significant as a symbol of political **tension** between the United States and the Soviet Union.

The Soviets launched Sputnik during the Cold War. The Cold War was a 45-year conflict between the capitalist United States and the communist Soviet Union. These two superpowers did not coexist peacefully, because they each wanted to be the world's most influential nation. Each nation constantly tried to outdo the other militarily, politically, and technologically. Meanwhile, an organization called the International Council of Scientific Unions declared that July 1957 through December 1958 would be an optimal time to launch an artificial satellite. Both the United States and the Soviet Union strived to be the nation to accomplish this feat.

The United States concentrated its efforts on a satellite called Vanguard, and the Soviet Union constructed Sputnik. With Vanguard far from ready, the successful launch of Sputnik in October 1957 sent a wave of shock and fear over the United States. In November, the Soviet Union **exacerbated** America's anxiety when it launched Sputnik II, a much bigger satellite that transported a dog named Laika into space. In December, the United States attempted to launch Vanguard. However, the satellite exploded within seconds of takeoff. The space race was under way, and the Soviet Union was winning.

The triumphs of the Soviet Union severely **heightened** Cold War **paranoia** in America. Americans figured that if the Soviets could launch satellites into space, they could launch military weapons at the United States. Many people saw Sputnik as evidence that the Soviet Union was technologically superior. For a number of Americans, this fear did not subside until the United States became the first nation to put a person on the moon in 1969.

The space race continued for many years. The Cold War did not end until 1991, when the Soviet Union dissolved and was divided into many countries, the biggest being Russia. In 1998, Russia and the United States, in conjunction with several other nations, became partners in the International Space Station project. The International Space Station was proof that Russia and the United States could successfully collaborate in space exploration.

- Video