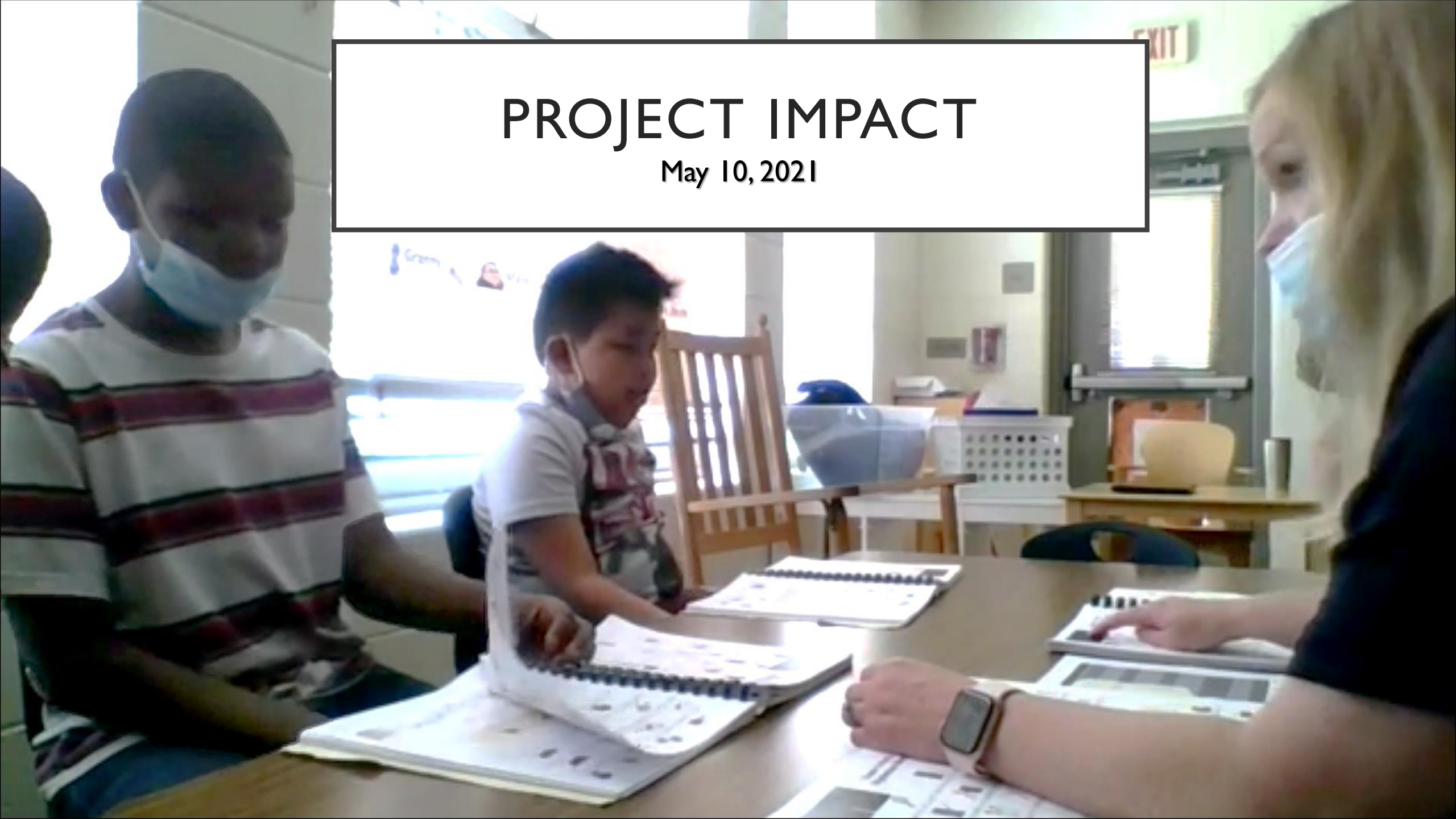# PROJECT IMPACT
May 10, 2021

PROJECT IMPACT TEAM

Shawnee Wakeman, PhD

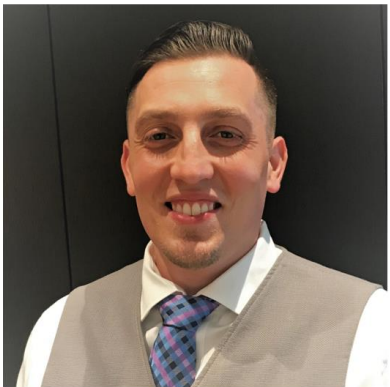Associate Professor and Principle Investigator

Robert Pennington, PhD BCBA-D

Associate Professor, the Lake and Edward J Snyder, Jr. Distinguished Scholar in Special Education, and Co-Investigator

Alicia Saunders, PhD
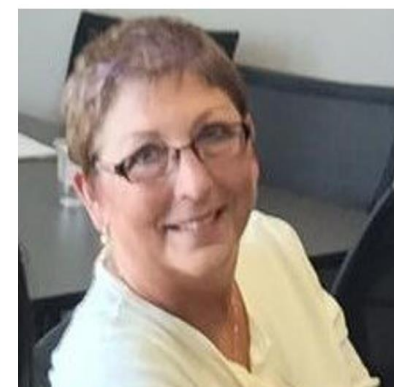
Adjunct Professor, Research Associate, and Co-Investigator

Brett Cerrato, M. Ed

Adjunct Professor and Research Associate

Tuba Gezer

PhD Candidate, Research Assistant and Data Analyst

Lynn Ahlgrim-Delzell, PhD

Data Analyst

PROJECT IMPACT OVERVIEW

- Inclusion Made Practical for All Children and Teachers (IMPACT)
- Began January 1, 2019
- Three year project
- UNC Charlotte and Charlotte-Mecklenburg Schools

FOUR GOALS

- Improve outcomes in the comprehension skills of students with ID

- Support teachers to align instruction to grade level content standards and promote access to the general curriculum

- Develop strategies and tools to support implementation of the comprehension model in inclusive classrooms

- Provide intensive coaching to support implementation of model in both special education and general education settings to promote sustainability

PROJECT IMPACT MODEL COMPONENTS

THE WHAT

- Comprehension strategies with varied depth of knowledge
- Adapting grade-aligned texts
- Explicit instruction of key vocabulary
- Assessment of student outcomes

Grade-aligned Instruction

Evidence-based Practices

- Story-based/literature lessons
- Systematic Prompting with Feedback
  - TA Instruction w/ SLP
  - CTD
- Graphic Organizers
- Peer Supports

THE HOW

- Fidelity of implementation of EBP
- Ongoing coaching and support
  - Behavior Skills Training
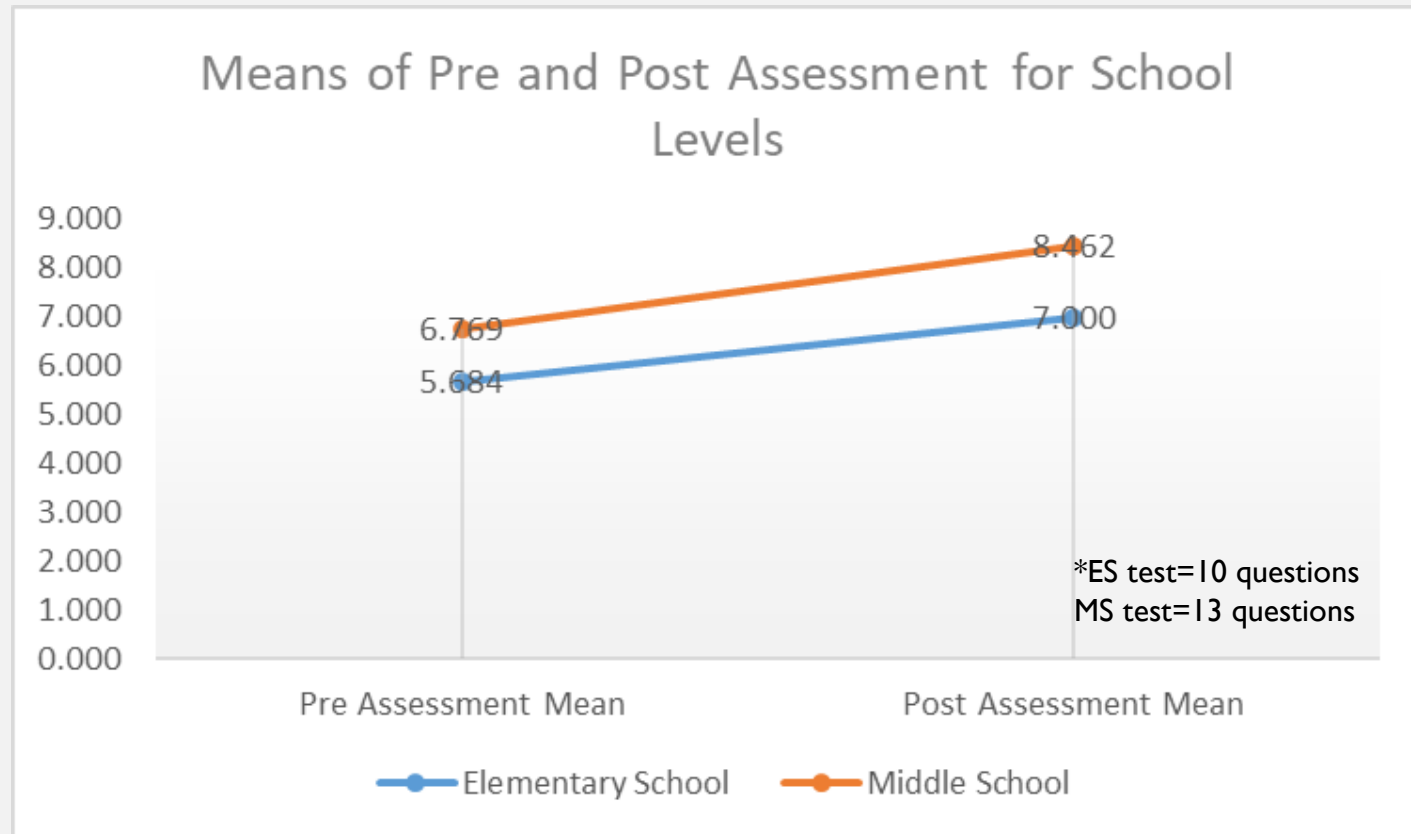- Sustainability of practices
- Online PD

Coaching: Targeting Fidelity and Sustainability

Generalization

- Train SPED teachers on EBP, tools, and measuring student outcomes
- Train Gen Ed teachers on use of RBP, UDL, and grade-aligned supports
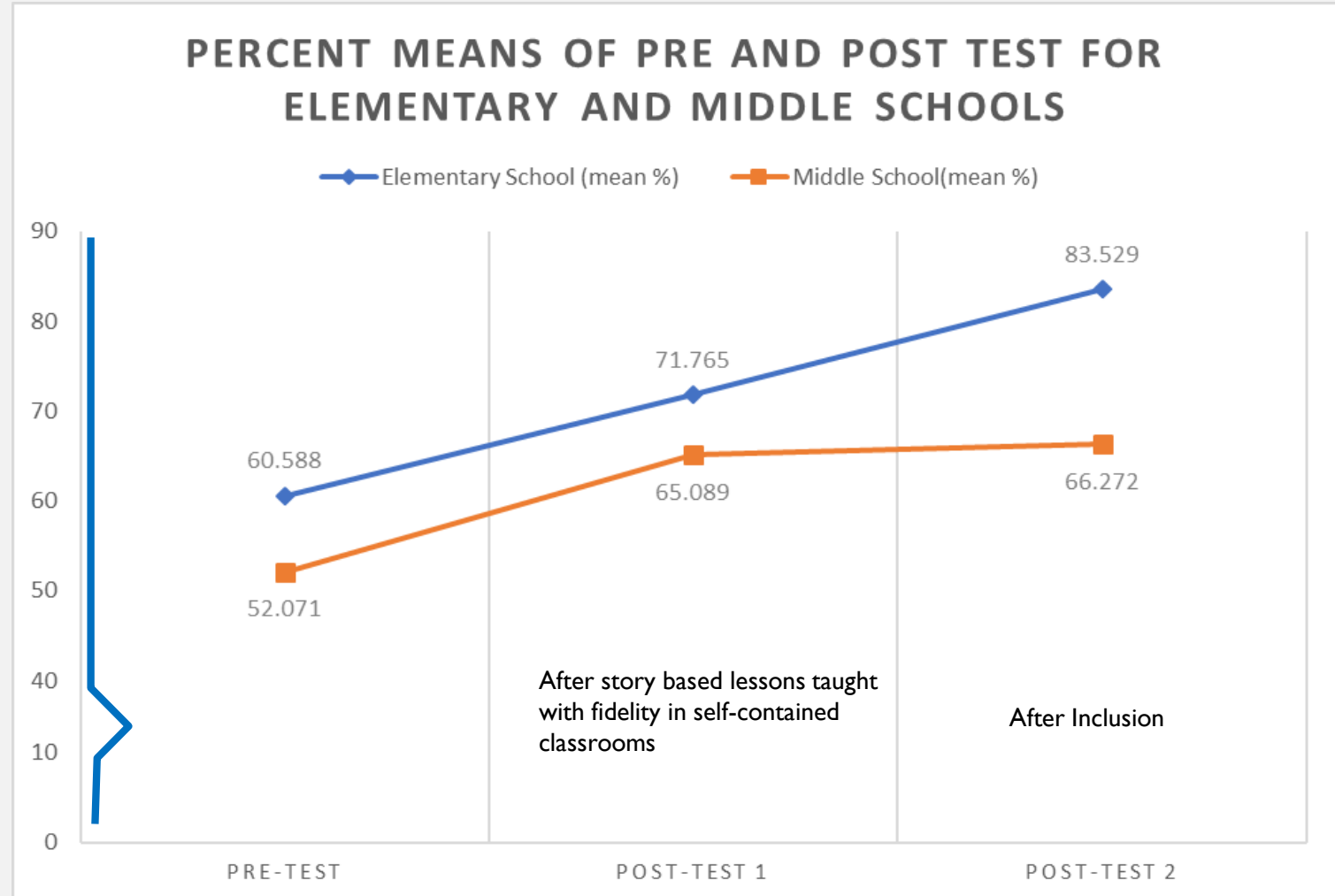- Inclusive opportunities using lag implementation

DATA TO DATE- YEAR 1_PHASE I

- Pre and post were developed from a novel text (not read during intervention) and different chapters pre/post with comparable questions

- 22 Elementary students- Paired t-tests

- Elem participants' pretest assessment (M= 5.68, SD=3.02) and post-test assessment (M=7, SD=2) is **statistically significant** $t_{(18)}$ = -3.04, p= .007, d=.52 (medium effect size).

- 16 Middle school students- Paired t-tests

- Middle participants' pretest assessment (M= 6.77, SD=3.14 and post-test assessment (M=8.46, SD=2.33) is **statistically significant** $t_{(12)}$ = -3.16, p=. 008, d=.61 (medium effect size).

Means of Pre and Post Assessment for School Levels

	Pre Assessment Mean	Post Assessment Mean
Elementary School	5.684	7.000
Middle School	6.769	8.462

*ES test=10 questions
MS test=13 questions

YEAR I DATA

Students who participated in inclusion lessons during Phase 2 made significant gains on Posttest 2 over students who did not

PERCENT MEANS OF PRE AND POST TEST FOR ELEMENTARY AND MIDDLE SCHOOLS

Elementary School (mean %) — Middle School(mean %)

	PRE-TEST	POST-TEST 1	POST-TEST 2
Elementary School (mean %)	60.588	71.765	83.529
Middle School (mean %)	52.071	65.089	66.272

After story based lessons taught with fidelity in self-contained classrooms

After Inclusion

EDUCATOR FIDELITY DATA

Fidelity Data Summary

	Av. Opt.	SLP Av. %	Min	Max
E1	87.2	96.5	93.4	100
E2	34.3	97.6	85.1	100
E3	71.3	86.0	44.4	100
E4	90.3	93.8	81	100
E5	35.5	97.7	86.3	100
E6	101	97.4	85	100
T	69.9	94.8		
P1	67.6	93.3	83.6	100
P2	79.4	92.1	72	100
P3	25	82.8	50	100
P4	96.9	99.5	98	100
P6	55.3	93.1	78.6	100
P	64.8	92.2		
Total	**67.6**	**93.7**		
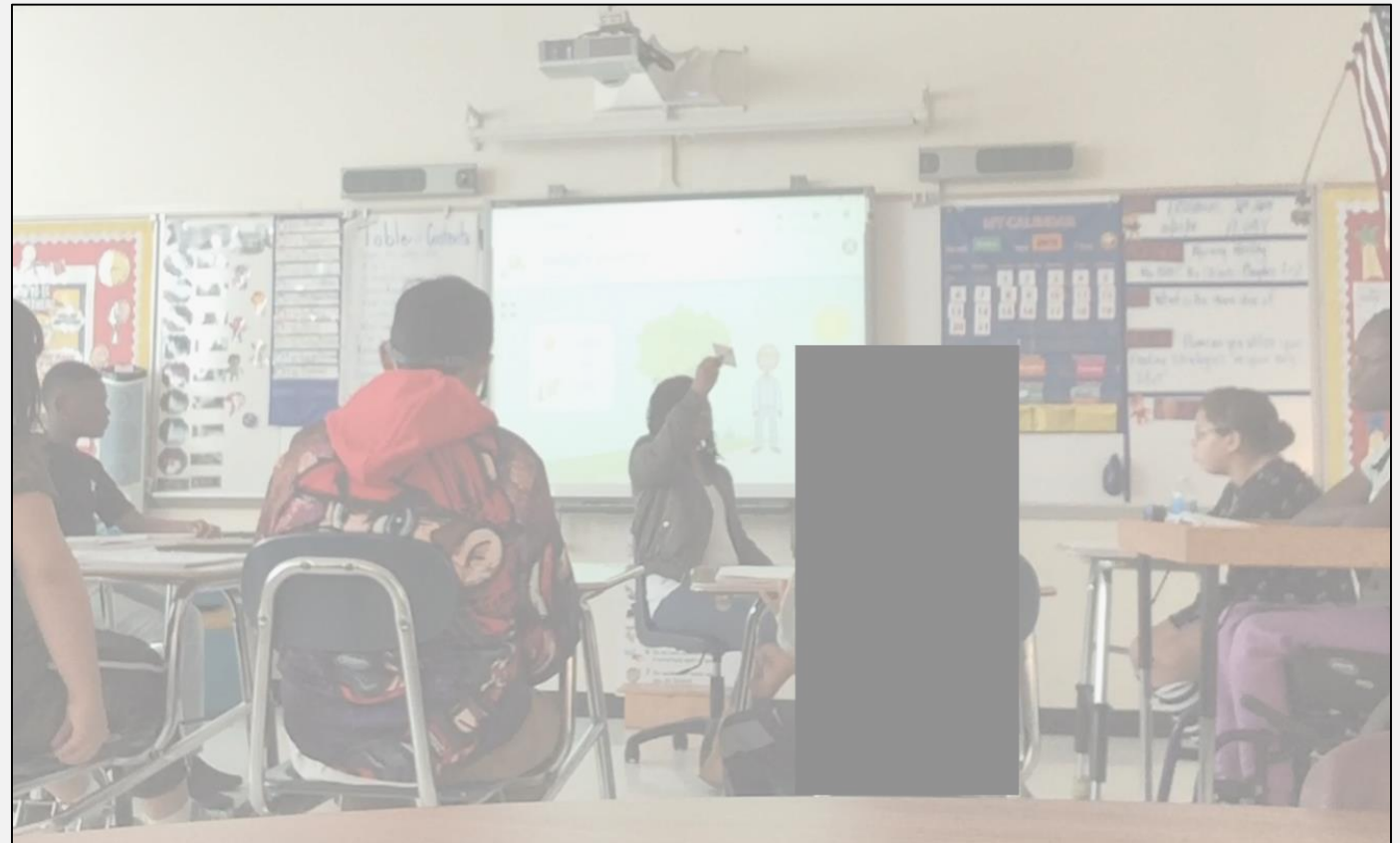
SINGLE CASE DESIGN

- Virtual Instruction
  - Students made gains in comprehension
  - Students needed less prompting over time
    - *32=complete independence
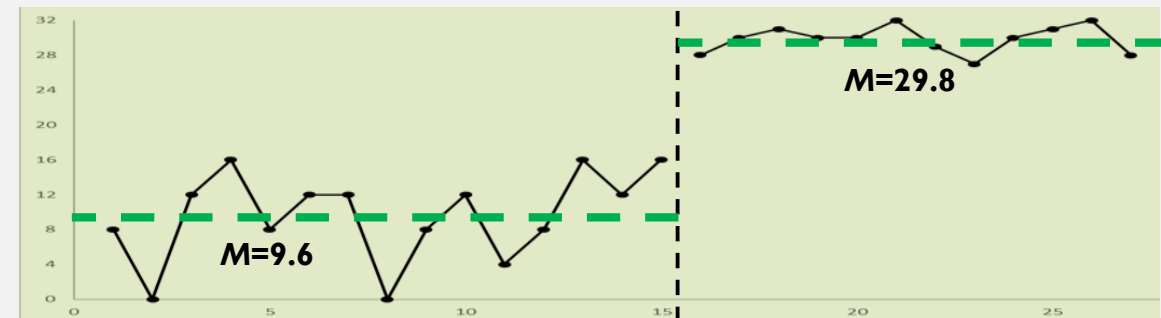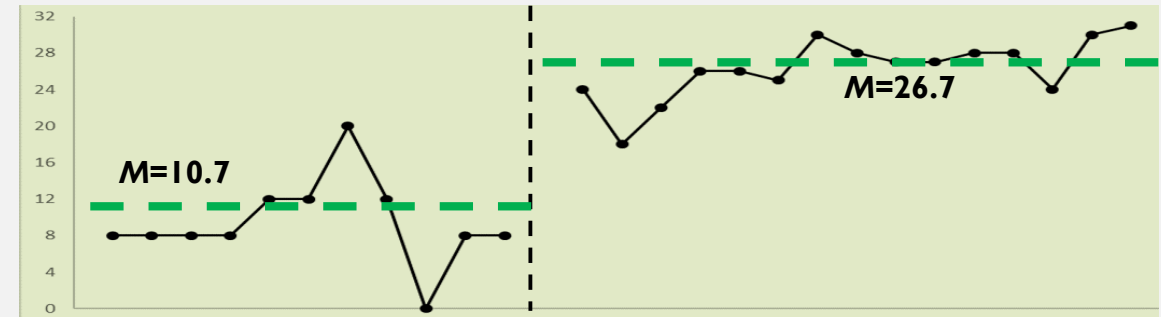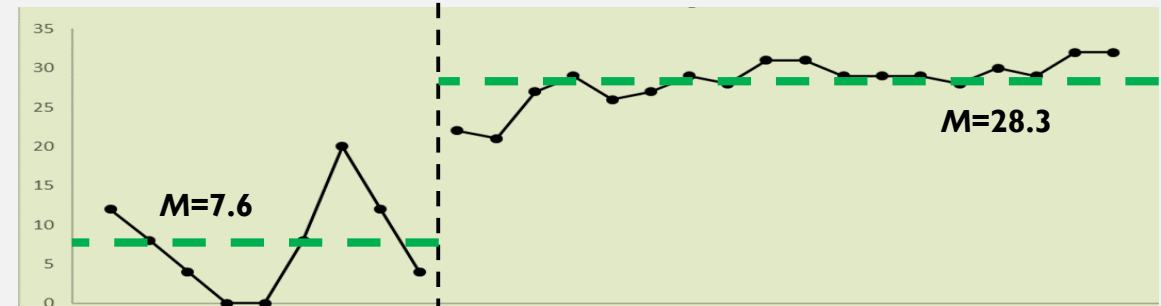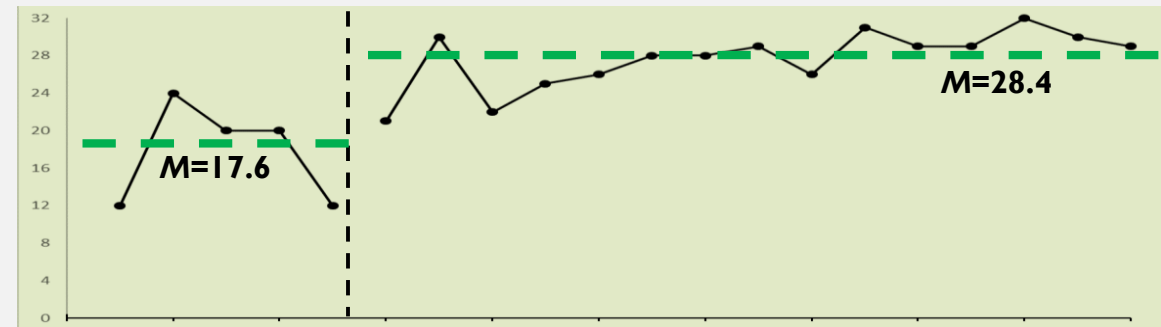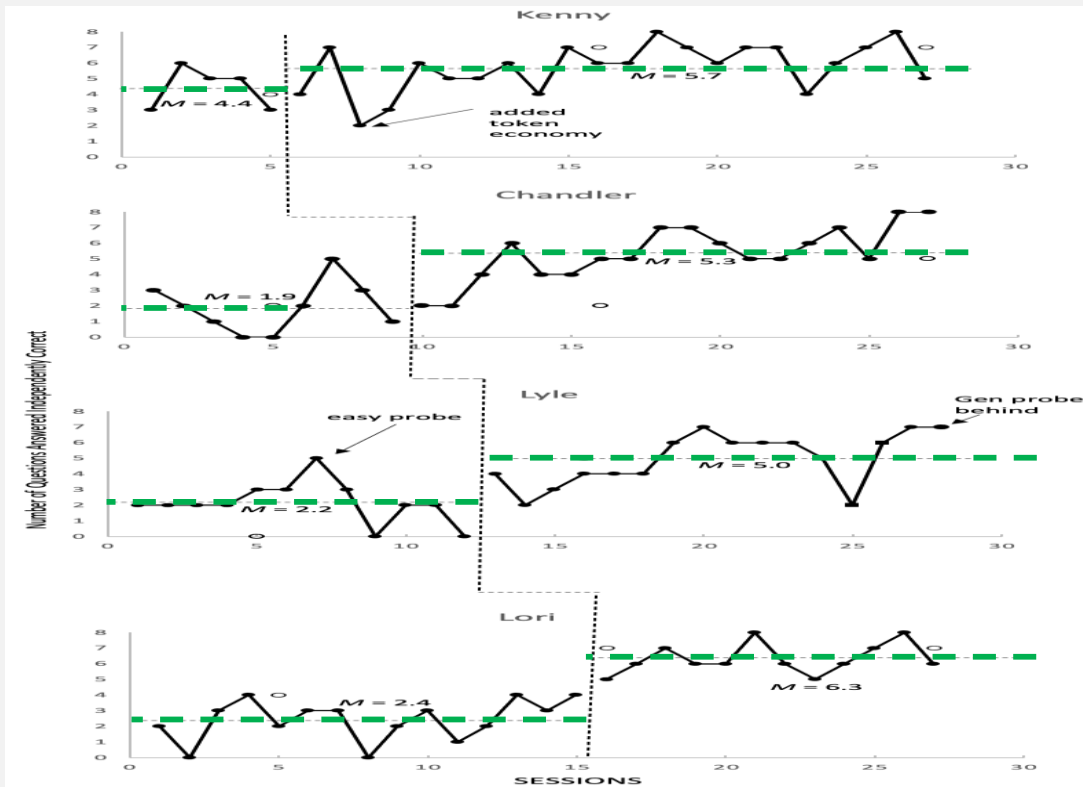
PROJECT IMPACT OVERVIEW
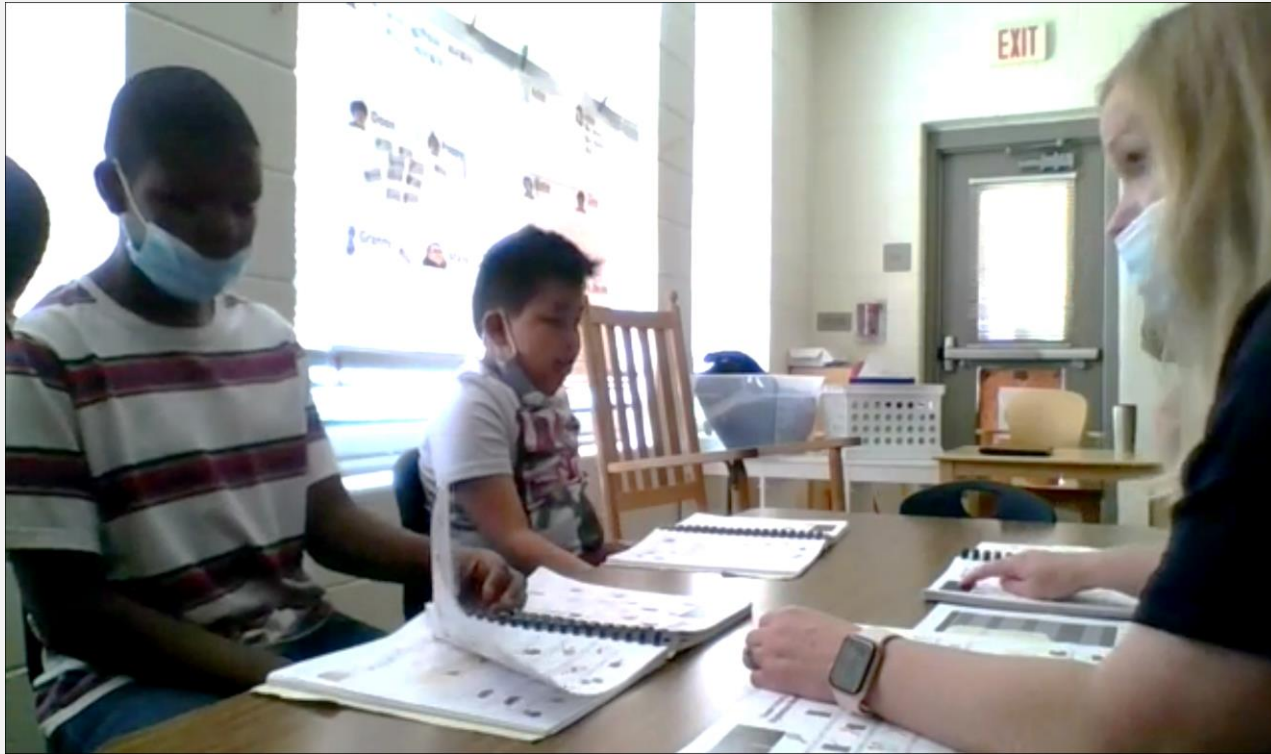
Principal Quote 1: 🔊

"It's one of those things where when you first you know presented and talked about it was like man that because that's where every I think extensions program or self-contained program wants to go or every school should want to go and I'll be honest I was like can that really happen…it's just how realistic is that goal?"

Principal Quote 2: 🔊

"You know definitely it's exceeded some of the expectations because you know again it was one of the things yes that sounds great but really how doable is that?"

PRINCIPAL PERSPECTIVE

Full quote about expectations of Project IMPACT after the 'pitch' to the outcome after observing from the Elementary School Principal of a participating school during years 1-2 of project:

"By going in and seeing what some of the EP (self-contained, special education) teachers are doing, we can all learn and pick up some important strategies that I think as far as the structure of classes, the transitions between activities, differentiation, we have been personalizing in the EC (special education) world since the beginning. And so I think there are some components that the EC teachers understand better than the general ed(ucation) teachers do."

- Elementary School Principal of participating school (years 1-2 of project)

PHASE 1(SEPARATE SETTING SBL) VICTORIES

1. Students are looking at the text unprompted for an answer

2. Parents requesting vocab and additional activities to extend the learning to home after their students have talked about the book

3. Teachers and Paras are including 'look in the text' as a part of their routine

4. Students making connections between separate stories

5. Students who are non-verbal or do not speak 'clearly' are able to show their knowledge by referring to the text

6. "It is applicable. I can definitely apply in my classroom. I can see using these techniques not just in ELA but in other subjects as well. Transferable."

7. "Students love the chapter and reading. Students are motivated to participate group reading. We have had students that normally refuse to work want to participate in the lessons."

8. "Since students are engage so that I want to do more activities about reading. It challenges me to challenge my students."

9. "Amazed by student's skills, they look back at the book to find the answers, didn't know they could do that."

PHASE 2 (INCLUSION SETTING SBL) VICTORIES

1. Students are following along with in the same text as their peers

2. Students are answering comprehension questions with their peers

3. Students are completing adapted and non-adapted graphic organizers that equivalent to their peers

4. Students are having appropriate academic and social interactions during lessons with their peers

5. Students are engaging in social opportunities outside of class

6. Students are engaging in imaginary play that is intertwined with their novel

7. Students making connections between themselves and characters in the text

8. Students are able to find specific words within the text

9. Students who lack impulse control have delayed their answers which has led to more correct answers from these students

PROJECT WEBSITE: PROJECTIMPACT.UNCC.EDU

TOOLS

Adapted Novels adapted by Brett Cerrato, Alicia Saunders, Holly Johnson, and Shawnee Wakeman:

- Peter Pan (Classic Starts Series) by J. M. Barrie, (Abridged by Tania Zamorsky)
- City of Ember by Jeanne DuPrau
- Boy Who Harnessed the Wind by by William Kamkwamba, Bryan Mealer

Friend	Me	Action
		Listen to question
		Answer question
		Ask question
		Listen to answer
Repeat or		
		Agree / disagree

Intro Vocab word and definition	Introduce Vocab word and definition -Show 1 word at a time -Read word and definition	0-Second word -Display 3 word cards -Say "Touch..." Student touches -Point to word then say "Touch..." -Provide feedback -Read definition -Shuffle cards and continue to next word	3-5 Second word -Display 3 word cards Say "Touch..." Student (w/ verbal student) say "Touch..." -Provide feedback -Read definition -Shuffle cards and continue to next word
Wait **0** seconds			
Wait **3-5** seconds			

Literal Recall

	Look back	Reread Excerpt
Level 1	Look back	"Look back in the text". Re-read Wait time. Repeat the question.
Level 2	Look here	Reread Sentence "Let's see if the answer is in this section." Point and reread. Repeat the question.
Level 3		Model Silently point to the answer. Repeat the question.
Level 4		Physical Assist student in touching **answer**.
Response Board		Visual SUPPORT Wait time. Reveal answers for students who can not generate answer. Repeat the question.

Inferential

	Look back	Reread Excerpt
Level 1	Look back	"Look back in the text". Reread Wait time. Repeat the question.
Level 2	A clue	Reread Sentence Engage in Think Aloud "I see a clue". Point and reread. Repeat the question
Level 3		Model Silently point to the clue(s). Repeat the question.
Level 4		Physical Assist student in touching **answer**.
Response Board		Visual SUPPORT Wait time. Reveal answers for students who can not generate answer. Repeat the question.

The research reported here was supported by the Office of Special Education Programs, U.S. Department of Education, through Grant H326M180005 (Project IMPACT) to the University of North Carolina at Charlotte. The opinions expressed are those of the authors and do not represent views of the OSEP or the U.S. Department of Education.

IDEAs that Work
Office of Special Education Programs
U.S. Department of Education

COACHING/PLANNING TOOLS

EMBER NOVEL AND CURRICULUM PACK
BY ANNE ARMS EC TEACHER

Lina

Doon   Poppy

Character cards:

Lina	Doon	Lizzie
Mayor Cole	Granny	Poppy

Vocabulary cards:

Blackouts	Faded
tidy	worried
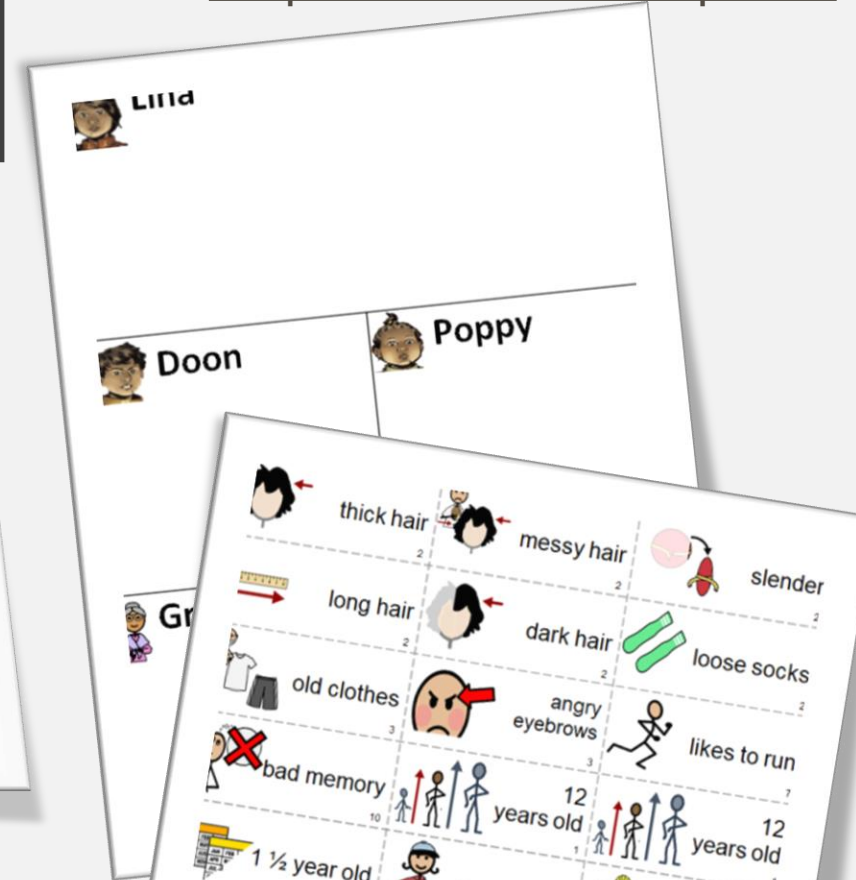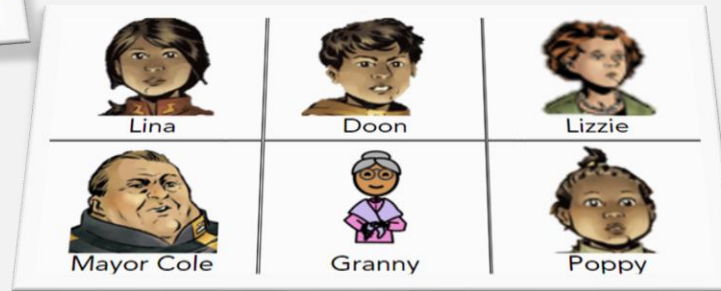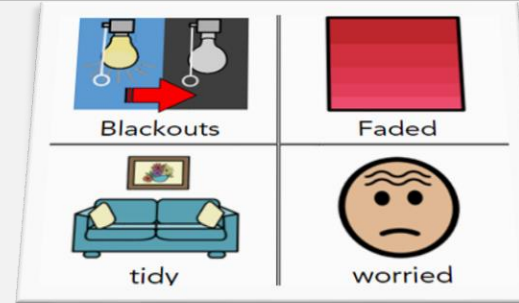
Chapter 2

#	Question	Answer	Remem	Unders	Apply	Analyze	Eval
1	What happens if Ember runs out of lightbulbs?	It will be dark all the time.	B	Y			
2	Why did Doon and Lina stop being friends?	She laughed at him	B	Y			
3	Who does Lina live with?	Granny and Poppy	B				
4	What do they do with the things they do not throw away?	They reuse everything.	B	Y			
5	Rule 1 is when a customer gives you a message, repeat it back. If Rule 1 is broken people don't get the correct message. Rule 4 is deliver a message only to the person it's meant for. What happens if this rule is broken?	No privacy/secret	B	Y			
6	Lina is a Messenger. Who is her boss?	Captain Fleery	B				
7	Who sent the message to the Mayor?	Looper	B				
8	Where does Lina go while she is waiting?	The rooftop	B				
9	Lina had a message for the Mayor. Why didn't she give the message to the assistant guard?	She followed the rules.	B	B	B	B	

Chapter questions:

1. What did Lina show Doon?
2. Why was Doon surprised that Lina wanted his help?
3. Who was at Lina's house when they got there?
4. Why is Mrs. Murdo at Lina's house?
5. Where do Lina's pictures come from?
6. What does she draw pictures of?
7. Doon thinks the instructions are _____.
8. Where does Lina think the door leads to?
9. What are Lina and Doon planning to do?

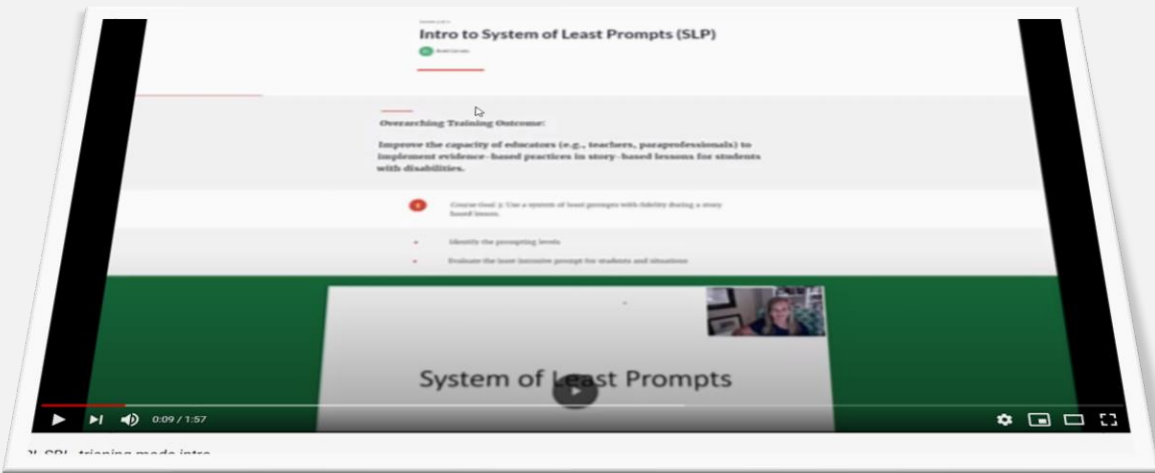**Descriptive vocabulary cards:** thick hair, messy hair, slender, long hair, dark hair, loose socks, old clothes, angry eyebrows, likes to run, bad memory, 12 years old, 12 years old, 1 ½ year old, messenger, pipeworker, likes to draw, likes to draw, happy, young man, dragging leg, long neck, big teeth, bushy hair, curious, likes to explore, messy hair, worried

INSTRUCTION MODS

EBP/SBL-Preview Video

IMPACT-Preview
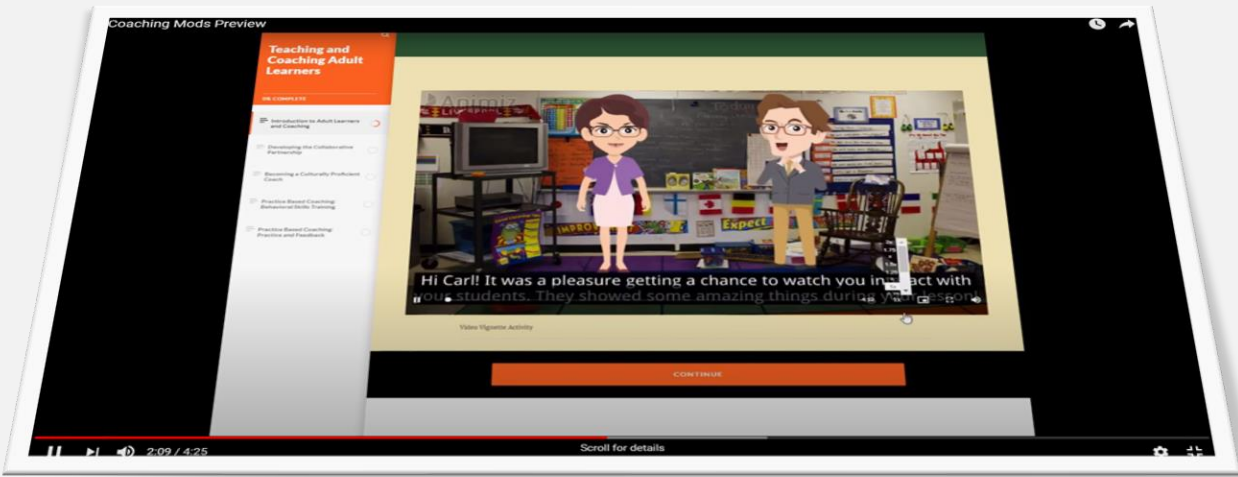
EBP/SBL-Quick Preview

IMPACT-Review

COACHING MODS

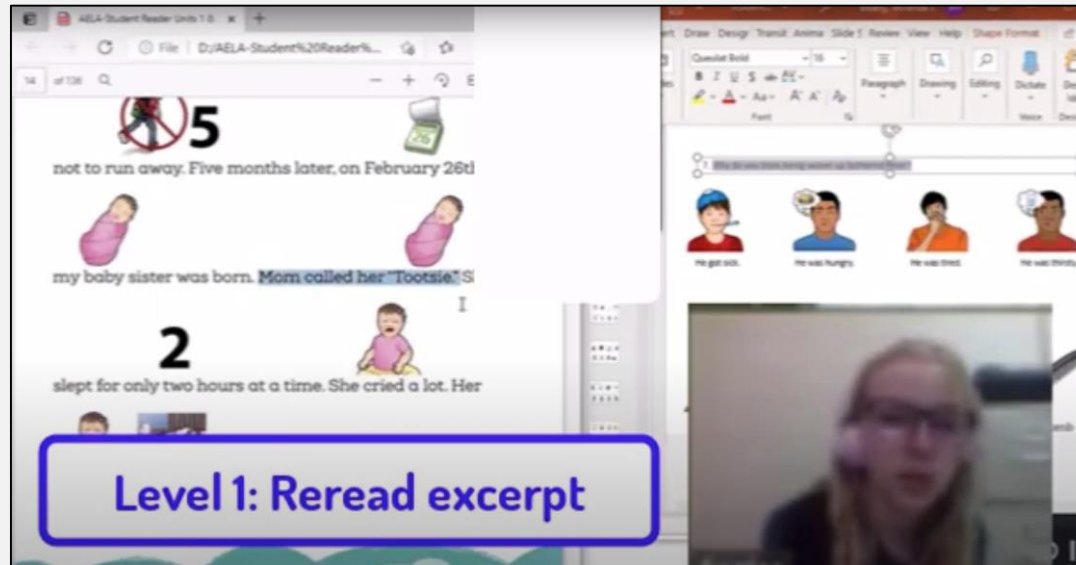[Coaching Training Modules-Tutorial Video](#)

[Coaching Training Modules-Preview](#)
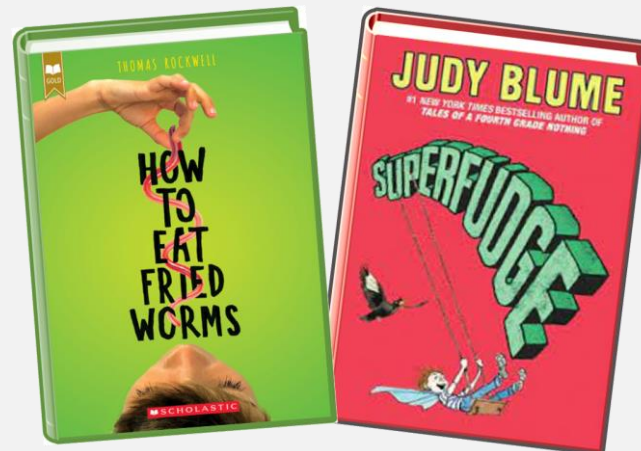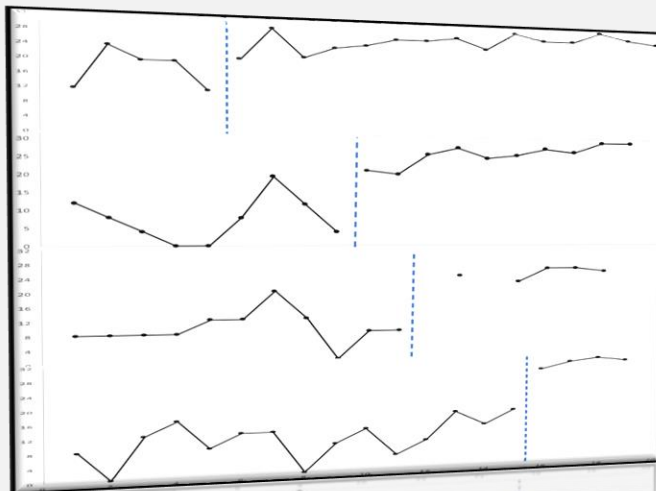
SINGLE CASE DESIGN-VIDEO CLIPS

Constant Time Delay and Vocab

Challenges of Virtual Instruction

Prior to intervention

Post intervention

Students begin to look back in text without a prompt

QUESTIONS?

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