

BC MEASUREMENT MANUAL

The research team has developed a comprehensive measurement plan to provide a framework for the 2019-2020 evaluation study of *ABC Support*. The plan involves the use of multiple types of measurement procedures to be implemented prior to, during, and following the 18-week experimental evaluation period. Specifically, we will use five types of measurement:

- **Screening:** To identify students for participation in the intervention and to evaluate post-intervention progress toward grade-level oral reading benchmarks and behavior risk status.
- **Outcome Assessment:** To evaluate the effects of the intervention on student oral reading and behavior outcomes.
- **Intervention Fidelity Assessment:** To determine the extent to which teachers implement the ABC Support intervention procedures as intended.
- **Social Validity Assessment:** To assess the level of acceptability and satisfaction with the ABC Support intervention procedures.
- Analysis of Context Variables: To collect descriptive information about school-, classroom-, and teacher-level variables that may affect measurement outcomes.

OVERVIEW

In the following sections, the rationale for and use of each type of measurement procedure within *ABC Support* are explained, followed by a detailed description of and illustration of each measure. Research citations are included at the end of each section. The table provided on the following page presents the overall measurement plan.

ABC Support Measurement Plan

Study Phase	Pre-Baseline (including student identification)	Baseline "wait period" (1- 4 weeks)	Teacher Training (60 minutes; 2 consecutive weeks)	Orientation (2 sessions; 2 consecutive days within 1 week)	Intervention (8 weeks)	Post- Intervention (immediately after intervention)	Follow-up (3-6 weeks)	Post Follow-Up
Type:	Screening: DIBELS Next	Outcome Assessment:	Outcome Assessment:	Outcome Assessment:	Outcome Assessment:	Social Validity Assessment:	Outcome Assessment:	Social Validity Assessment:
Procedure	ORF Screening Behavior Screening Analysis of Context Variables: Teacher and Classroom Information MTSS Teacher Rating Classroom Snapshot	Standard ORF Probes (2x weekly) Training ORF Passages (2x weekly) DBR Observation (2x weekly) GAS ratings by teacher (1x weekly)	Standard ORF Probes (2x weekly) Training ORF Passages (2x weekly) DBR Observation (2x weekly) GAS ratings by teacher (1x weekly)	Standard ORF Probes (2x weekly) Training ORF Passages (2x weekly) DBR Observation (2x weekly) GAS ratings by teacher (1x weekly)	Standard ORF Probes (2x weekly) Training ORF Passages (2x weekly) DBR Observation (2x weekly) GAS ratings by Teacher (1x weekly) Intervention Fidelity Assessment: Fidelity Observations (30% of sessions)	Teacher Evaluation Student Evaluation Screening: DIBELS Next ORF Screening Behavior Screening Analysis of Context Variables: Classroom Snapshot	Standard ORF Probes (2x weekly) Training ORF Passages (2x weekly) DBR Observation (2x weekly) GAS ratings by Teacher (1x weekly)	Teacher Evaluation Student Evaluation

SCREENING

Screening is a type of assessment used to identify students who may be at risk for poor learning outcomes and, therefore, require supplemental interventions to be successful in school (Elliott, Huai, & Roach, 2007). Within an integrated approach like ABC Support, the screening process allows for identification of students who exhibit risk on academic as well as behavioral indicators. Screening measures (academic or behavior) are brief and efficient; they are administered, scored, and interpreted quickly (Ikeda, Neessen & Witt, 2008). Screening is typically completed 2-3 times a year (fall, winter, spring) to determine whether students are meeting grade-level expectations, or benchmarks, for a specific domain. The use of data from screening tools is well established as a valid and reliable method for identifying students with elevated levels of risk (Christ & Nelson, 2014).

Screening in *ABC Support* includes two types of measures – one screening tool that assesses oral reading fluency, and a second tool that assesses learning-related behaviors (social, academic, and emotional behaviors).

When does SCREENING occur in ABC Support?

Screening ("benchmark assessment") in *ABC Support* occurs at two measurement times:

- 1. *Pre-Baseline Phase*: Prior to the initiation of baseline to determine eligibility for participation in *ABC Support*.
- 2. *Post-Intervention Phase*: Following the final *ABC Support* intervention session to determine progress toward benchmark goals (oral reading fluency) and level of behavior risk (learning-related behaviors).

References:

Christ, T., & Nelson, P. (2014). Screening assessment: Practical and psychometric considerations. In R. J. Kettler, T. A. Glover, C. A. Albers, & K. A. Feeney-Kettler (Eds.), *Universal screening in educational settings: Evidence-based decision making for schools* (pp. 79-110). Washington, DC: American Psychological Association.

Elliott, S. N., Huai, N., & Roach, A. T. (2007). Universal and early screening for educational difficulties: Current and future approaches. *Journal of School Psychology*, 45, 137-161.

Ikeda, M., J., Neessen, E., & Witt, J. C. (2008). Best practices in universal screening. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 103-114). Bethesda, MD: National Association of School Psychologists.

BEHAVIOR SCREENING TOOL

Description: The Social, Academic, and Emotional Behavior Risk Screener (SAEBRS; Kilgus, Chafouleas, Riley-Tillman & von der Embse, 2014) is a brief tool for use in universal screening of students for behavioral and emotional risk. The SAEBRS items correspond to categories of behavior found to predict social and academic success in school-age children. The SAEBRS provides a broad screening of students' overall behavior (based on ratings across 19 scale items). It also screens students' behavior within three inter-related domains, specifically social behavior (6 items), academic behavior (6 items), and emotional behavior (7 items). Multiple studies have provided consistent evidence regarding the reliability (α = .93), concurrent validity (r = .61-.93), and diagnostic accuracy (.81-.97) of the SAEBRS. On the SAEBRS, a teacher rates one student (1-3 minutes) by indicating how frequently he/she has displayed each of 19 behaviors during the previous month. Item ratings range from 0 (never) to 3 (almost always). Total scores range from 0 to 57, with higher scores indicative of more appropriate functioning.

The Engagement with Learning: Teacher Report Scale (EWL; Skinner, Kindermann & Furrer, 2009) is an additional screening tool focused specifically on student engagement (behavioral and emotional). On this scale, a teacher rates one student (1-2 minutes) by indicating how frequently statements about behavioral engagement (5 items) and emotional engagement (5 items) are true for the student. Internal consistency reliability estimates (α) for the 10-item EWL scale range from .89 to .92; the fall-to-spring stability coefficient (r) is .78. Similar to the SAEBRS, item ratings range from 0 (never) to 3 (almost always). Total scores range from 0 to 30, with higher scores indicative of a higher level of engagement.

Implementation in ABC Support: Classroom teachers complete the combined SAEBRS (ABC Support Behavior Screening Tool) and EWL (ABC Support Engagement Screening Tool) during pre-baseline to screen students for eligibility to receive the ABC Support intervention (concurrent with the administration of the DIBELS Next ORF measures). At the conclusion of the 8-week intervention (post-intervention), teachers, again, complete the combined SAEBRS and EWL scales to determine behavior risk status.

Scores or Data Obtained from Measure: Students with SAEBRS scores at or below the cut points for risk are eligible for participation in *ABC Support:* \leq 36 for Total Behavior; \leq 17 for Emotional Behavior; \leq 9 for Academic Behavior; and \leq 12 for Social Behavior. Students with EWL scores at or below the cut point for risk (\leq 15) are eligible for participation. For the post-intervention assessment, the same risk cut points are used to determine risk status.

Selected Research:

Kilgus, S. P., Bowman, N. A., Christ, T. J., & Taylor, C. N. (2017). Predicting academics via behavior within an elementary sample: An evaluation of the Social, Academic, and Emotional Behavior Risk Screener (SAEBRS). *Psychology in the Schools*, *54*, 246-260.

- Kilgus, S. P., Chafouleas, S. M., & Riley-Tillman, T. C. (2013). Development and initial validation of the Social and Academic Behavior Risk Screener for elementary grades. *School Psychology Quarterly*, 28, 210-226.
- Kilgus, S. P., Chafouleas, S. M., Riley-Tillman, T. C., & von der Embse, N. P. (2014). *Social, Academic, and Emotional Behavior Risk Screener (SAEBRS)*. Minneapolis, MN: Theodore J. Christ & Colleagues.
- Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, 69, 493-525.
- Wellborn, J. G. (1991). *Engaged and disaffection action: The conceptualization and measurement of motivation in the academic domain.* Rochester, NY: University of Rochester.

Date:		[student ID label]
[check one]	pre-baseline	-
	nost-intervention	

ABC Support Behavior Screening Tool ¹

<u>Directions</u>: Using the following scale, identify how frequently the student has displayed each of the following behaviors <u>during the previous month</u>. Circle only one number for each behavior.

0 = Never, 1 = Sometimes, 2 = Often, 3 = Almost Always

	, , ,				
Socia	al Behavior	Never	Sometimes	Often	Almost Always
1.	Arguing	0	1	2	3
2.	Cooperation with peers	0	1	2	3
3.	Temper outbursts	0	1	2	3
4.	Disruptive behavior	0	1	2	3
5.	Polite and socially appropriate responses toward others	0	1	2	3
6.	Impulsiveness	0	1	2	3
Acad	emic Behavior	Never	Sometimes	Often	Almost Always
1.	Interest in academic topics	0	1	2	3
2.	Preparedness for instruction	0	1	2	3
3.	Production of acceptable work	0	1	2	3
4.	Difficulty working independently	0	1	2	3
5.	Distractedness	0	1	2	3
6.	Academic engagement	0	1	2	3
Emot	cional Behavior	Never	Sometimes	Often	Almost Always
1.	Sadness	0	1	2	3
2.	Fearfulness	0	1	2	3
3.	Adaptable to change	0	1	2	3
4.	Positive attitude	0	1	2	3
5.	Worry	0	1	2	3
6.	Difficulty rebounding from setbacks	0	1	2	3
7.	Withdrawal	0	1	2	3

¹ The *Social, Academic, & Emotional Behavior Risk Screener* (SAEBERS) form was created by Stephen P. Kilgus, Sandra M. Chafouleas, T. Chris Riley-Tillman, and Nathaniel P. von der Embse. Copyright © 2013 by Stephen P. Kilgus.

Date:		[student ID label]
[check one]	pre-baseline	
	post-intervention	

ABC Support Engagement Screening Tool ²

<u>Directions:</u> Using the following scale, identify how frequently the following statements are true for this student <u>during the previous month</u>. Circle only one number for each statement.

0 = Never, 1 = Sometimes, 2 = Often, 3 = Almost Always

Beha	vioral Engagement	Never	Sometimes	Often	Almost Always
1.	In my class, this student works as hard on reading as he/she can.	0	1	2	3
2.	When reading, this student appears involved.	0	1	2	3
3.	When I explain new material, this student listens carefully.	0	1	2	3
4.	In my class, this student does more than required.	0	1	2	3
5.	When this student does not do well, he/she works harder.	0	1	2	3
Emot	cional Engagement	Never	Sometimes	Often	Almost Always
Emot	In my class, this student is enthusiastic about reading.	Never 0	Sometimes	Often 2	Almost Always
1.	In my class, this student is enthusiastic about reading.	0	1	2	3
1.	In my class, this student is enthusiastic about reading. In class, this student appears happy when reading.	0	1	2	3

² Adapted from: Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in the academic activities in the classroom. *Educational and Psychological Measurement, 69,* 493-525.

ORAL READING FLUENCY SCREENING TOOL

Description: The *Dynamic Indicators of Basic Early Literacy Skills-Next* (DIBELS Next) oral reading measures are short fluency probes that can be used for screening and benchmark assessment. The most recent technical manual reports high validity coefficients from multiple investigations of content, predictive, and discriminant validity (Good et al., 2019). In addition, with one exception, alternate-form reliability (WCPM=.96; ACC=.83), test-retest reliability (WCPM=.91; ACC=.57), and inter-rater reliability (WCPM and ACC=.99) estimates for Grade 2 oral reading fluency are above .80.

The standardized administration of each Oral Reading Fluency (ORF) probe requires the student to read aloud a short passage for one minute while the examiner records reading errors on a separate copy of the passage. The examiner calculates two scores: (a) words correct per minute (WCPM) – number of errors subtracted from the total number of words read; and (b) accuracy rate (ACC) – percentage of words read correctly relative to the total number of words read.

The DIBELS Next Assessment Manual provides "benchmark goals" and "cut points for risk" for ORF at each benchmark assessment time – fall, winter, and spring (Good et al., 2011). The benchmark goals and cut points for risk are based on normative data collected during the 2010-2011 school year (Cummings, Kennedy, Otterstedt, Baker, & Kame'enui, 2011). A benchmark goal is the level of skill at (or above) which students are likely to achieve grade-level proficiency in reading fluency if they receive effective core instruction. Conversely, a cut point for risk indicates a level of skill below which students are unlikely to achieve proficiency without intensive support. Students whose scores fall between the benchmark goal and the cut point for risk are likely to need a supplemental intervention, like ABC Support, to be successful in reading.

Implementation in ABC Support: During pre-baseline, a member of the research team administers the fall benchmark passages to screen students for participation. Specifically, the student reads each of three grade-level (Grade 2) passages for one minute. The assessor calculates WCPM and ACC for each passage, and, then, determines the median WCPM and ACC to gauge eligibility to receive the *ABC Support* intervention.

At post-intervention, a member of the research team administers the three winter (December-February) or spring (March-May) benchmark passages (using the same standard administration procedures) to determine progress toward the grade-level benchmark goal.

Score or Data Obtained from Measure: Students with scores that are *below* the Grade 2 fall benchmark goal (WCPM = 52; ACC = 90%) and *at or above* the cut point for risk (WCPM = 37; ACC = 81%) are eligible to participate in the *ABC* Support intervention (range = 52-51). For winter assessment, the targeted benchmark goals are 72 (median) for WCPM and 96% (median) for ACC. For spring

assessment, the targeted benchmark goals are 87 (median) for WCPM and 97% (median) for ACC.

Selected Research:

Cummings, K. D., Kennedy, P. C., Otterstedt, J., Baker, S. K., & Kame'enui, E. J. (2011). *DIBELS Data System: 2010-2011 Percentile Ranks for DIBELS Next Benchmark Assessments* (Technical Report 1101). Eugene, OR: University of Oregon.

Good, R. H., Kaminski, R. A., Cummings, K., Defour-Martel, C., Petersen, K., Powell-Smith, K., ... & Wallin, J. (2011). *DIBELS Next Assessment Manual*. Eugene, OR: Dynamic Measurement Group.

Good, R. H., Kaminski, R. A., Dewey, E. N., Wallin, J., Powell-Smith, K. A., & Latimer, R. J. (2019). *DIBELS Next Technical Manual*. Eugene, OR: Dynamic Measurement Group.

Hintze, J.M., Ryan, A.L., & Stoner, G. (2003). Concurrent validity and diagnostic accuracy of the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the Comprehensive Test of Phonological Processing. *School Psychology Review*, *32*, 541-556.

Hoffman, A. R., Jenkins, J. E., & Dunlap, S. K. (2009). Using DIBELS: A survey of purposes and practices. *Reading Psychology*, 30(1), 1-16.

ABC Support Oral Reading Fluency Screening: DIBELS Next

For pre-baseline screening to determine eligibility for participation:

Pre-baseline date:		
Administer <u>Set 1</u> (fall) reading pass	sages:	
Grade 2 / Benchmark 1.1 Grade 2 / Benchmark 1.2 Grade 2 / Benchmark 1.3 Median	WCPM WCPM WCPM	ACC ACC
For post-intervention screening grade-level benchmarks:	to determine p	progress toward
Post-intervention date:		
Administer <u>Set 2</u> (winter) reading poccurs between December and Febr		st-intervention assessment
Grade 2 / Benchmark 2.1 Grade 2 / Benchmark 2.2 Grade 2 / Benchmark 2.3 Median	WCPM WCPM WCPM	ACC ACC
	- OR -	
Post-intervention date:		
Administer <u>Set 3</u> (spring) reading p occurs between March and May:	assages if the po	est-intervention assessment
Grade 2 / Benchmark 3.1 Grade 2 / Benchmark 3.2 Grade 2 / Benchmark 3.3 Median	WCPM WCPM WCPM	ACC ACC ACC

Oral Reading Fluency

- I would like you to read a story to me. Please do your best reading. If you do not know a word, I will read the word for you. Keep reading until I say "stop." Be ready to tell me all about the story when you finish. (Place the passage in front of the student.)
- Begin testing. Put your finger under the first word (point to the first word of the passage). Ready, begin.

			_	
Reminders		Discontinue	Wait	Timing
If the student stops (not a hesitation on a specific item), say Keep going . (Repeat as often as needed.) If the student loses his/her place, point. (Repeat as often as needed.)	Retell or passages #2 and #3. If fewer than 40 words are read correctly on any passage, use professional judgment whether to administer Retell for that passage.	If no words are read correctly in the first line, say Stop , record a score of 0, and do not administer Retell. If fewer than 10 words are read correctly on passage #1, do not administer	If no response in 3 seconds, say the word and mark it as incorrect.	1 minute. Start your stopwatch after the student says the first word of the passage. Place a bracket () and say Stop after 1 minute.

Grade 2/Benchmark 1.1

Grade 2/Benchmark 1.2

Now read this story to me. Please do your best reading. Ready, begin.

Words correct: =	Errors (include skipped words): -	Total words:
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246	drew. She is already enjoying her first camping trip!	237
237	show their drawings to each other. Lily loves seeing what everyone	226
226	Fifteen minutes later, the family meets back at the camp site. They	214
214	in her notebook.	211
211	is the first wild animal she has ever seen. Lily hurriedly sketches its picture	197
197	Just after she leaves the camp site with her dad, Lily sees a deer! It	182
182	two paths.	180
180	family thinks the plan sounds like fun. They get ready and set off on the	165
165	two groups can compare all the different things they have seen. The	153
153	have fifteen minutes to hike and then return to the camp site. Then the	139
139	hikes. They will draw pictures of things in nature that they see. They will	125
125	a fantastic ideal She says they should split into two groups and go on	111
$\stackrel{\rightarrow}{=}$	After Lily eats, she throws her trash away in the trash can. Then she has	96
96	Everyone sits down and eats sack lunches they brought from home.	85
85	sleeping bag inside.	82
82	many steps to follow. Finally, the tent is ready, and each person puts a	68
83	up their tent. It is not as easy as Lily thought it would be! There are so	51
51	Lily, her parents, and her sister drive to the camp site. First, they set	37
37	Will she see any wild animals?	31
31	her first camping trip. She wonders what it will be like to sleep in a tent.	15
15	Some people like to camp. Will Lily be one of them? She is going on	0

Grade 2/Benchmark 1.3

Now read this story to me.

Please do your best reading.

Ready, begin.

Words correct: =	Errors (include skipped words): -	Total words:

260	ice.	259
259	when you look around, you will only see flat land covered with snow and	245
245	live. Of course, you will see the red and white pole, too. Other than that,	230
230	travel there, you will see a few buildings where the scientists work and	217
217	Perhaps you would like to see the South Pole for yourself. If you	204
204	each year. The South Pole is like a frozen desert.	194
194	place. Yes, there is a lot of snow and ice, but little new sleet or snow falls	177
177	Most people are surprised to learn that the South Pole is a dry	164
164	leave in the winter. It is just too cold.	155
155	the summer, some whales come to the South Pole. Even the whales	143
143	including penguins and seals. There are many fish in the water, too. In	130
130	While the scientists are at the South Pole, they see some animals,	118
118	else lives at the South Pole.	112
112	warmer summer months. Very few stay for the harsh winters. No one	100
100	It is so cold that most scientists only live at the South Pole during the	85
85	on Earth. Even in the summer the temperature is below zero degrees.	73
73	The scientists have learned that the South Pole is the coldest place	67
61	together to study the climate.	56
56	it. Scientists from these countries come to the South Pole. They work	44
44	red and white like a candy cane. The flags of many countries surround	3
31	see a pole in your mind? There really is a pole at the South Pole. It is	14
14	What do you think of when you hear the words South Pole? Do you	0

The teacher told the class that they would have their pictures taken the next day. Nick did not look forward to picture day. He did not understand why all of the other kids were so excited. Why did they like picture day so much?

Nick took the picture order form home and gave it to Mom. Even she was excited. She filled out the form and put it in an envelope with money. Then she went into Nick's room to find the right outfit. Nick wondered again why everyone got so excited about picture day.

The next day, Nick went to school in his best red shirt and new blue jeans. His hair was combed neatly. His mom had even sprayed his hair with hair spray!

The classroom buzzed with excitement. The other children could not wait to have their picture taken! Nick sat at his desk and felt puzzled. Someone sat down at the desk next to him. Nick saw that it was his friend Cody, and he was smiling. Nick asked Cody why he was so happy. Nick could not believe his ears when Cody told him that the school had a new plan for picture day. This year there would be real animals in the pictures! You could pet the animal while they took the picture. Nick suddenly was looking forward to picture day!

Some people like to camp. Will Lily be one of them? She is going on her first camping trip. She wonders what it will be like to sleep in a tent. Will she see any wild animals?

Lily, her parents, and her sister drive to the camp site. First, they set up their tent. It is not as easy as Lily thought it would be! There are so many steps to follow. Finally, the tent is ready, and each person puts a sleeping bag inside.

Everyone sits down and eats sack lunches they brought from home. After Lily eats, she throws her trash away in the trash can. Then she has a fantastic idea! She says they should split into two groups and go on hikes. They will draw pictures of things in nature that they see. They will have fifteen minutes to hike and then return to the camp site. Then the two groups can compare all the different things they have seen. The family thinks the plan sounds like fun. They get ready and set off on the two paths.

Just after she leaves the camp site with her dad, Lily sees a deer! It is the first wild animal she has ever seen. Lily hurriedly sketches its picture in her notebook.

Fifteen minutes later, the family meets back at the camp site. They show their drawings to each other. Lily loves seeing what everyone drew. She is already enjoying her first camping trip!

What do you think of when you hear the words South Pole? Do you see a pole in your mind? There really is a pole at the South Pole. It is red and white like a candy cane. The flags of many countries surround it. Scientists from these countries come to the South Pole. They work together to study the climate.

The scientists have learned that the South Pole is the coldest place on Earth. Even in the summer the temperature is below zero degrees. It is so cold that most scientists only live at the South Pole during the warmer summer months. Very few stay for the harsh winters. No one else lives at the South Pole.

While the scientists are at the South Pole, they see some animals, including penguins and seals. There are many fish in the water, too. In the summer, some whales come to the South Pole. Even the whales leave in the winter. It is just too cold.

Most people are surprised to learn that the South Pole is a dry place. Yes, there is a lot of snow and ice, but little new sleet or snow falls each year. The South Pole is like a frozen desert.

Perhaps you would like to see the South Pole for yourself. If you travel there, you will see a few buildings where the scientists work and live. Of course, you will see the red and white pole, too. Other than that, when you look around, you will only see flat land covered with snow and ice.

2 Oral Reading Fluency

- ▶ I would like you to read a story to me. Please do your best reading. If you do not know a word, I will read the word for you. Keep reading until I say "stop." Be ready to tell me all about the story when you finish. (Place the passage in front of the student.)
- ▶ Begin testing. Put your finger under the first word (point to the first word of the passage). Ready, begin.

	_			D		
	Reminders			Discontinue	Wait	Timing
If the student loses his/her place, point. (Repeat as often as needed.)	If the student stops (not a hesitation on a specific item), say Keep going . (Repeat as often as needed.)	If fewer than 40 words are read correctly on any passage, use professional judgment whether to administer Retell for that passage.	If fewer than 10 words are read correctly on passage #1, do not administer Retell or passages #2 and #3.	If no words are read correctly in the first line, say Stop , record a score of 0, and do not administer Retell.	If no response in 3 seconds, say the word and mark it as incorrect.	1 minute. Start your stopwatch after the student says the first word of the passage. Place a bracket () and say Stop after 1 minute.

Grade 2/Benchmark 2.1

			_
Words correct: =	Errors (include skipped words):	Total words:	

Grade 2/Benchmark 2.2

Now read this story to me.
Please do your best reading.
Ready, begin.

Grade 2/Benchmark 2.3

Now read this story to me.
Please do your best reading.
Ready, begin.

Total words: Errors (include skipped words): Words correct: =	
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242	brother. "No," he said. "We're the best!"	235
235	As Max hugged Kevin, he realized he had become a lot like his big	221
221	best," he said.	218
218	game, Kevin congratulated Max on having a great game. "You're the	207
207	Kevin! He had come home from college to watch Max's game. After the	194
194	a familiar voice yelling in excitement. Max scanned the stands and saw	182
182	two goals in the first half. When he scored the second goal, he heard	168
168	One Saturday, Max was having a great soccer game. He scored	157
157	had soccer practice, and he had soccer games on Saturdays.	147
147	After school, he had band practice twice a week. Two days a week he	133
133	first. Max was very sad, but his schoolwork and activities kept him busy.	120
120	Kevin went to college. What would Max do without his big brother? At	107
107	Years went by, and Max got better at what he did. Then one day,	93
93	now!	92
92	was right, he still felt disappointed. He wanted to be just like Kevin right	78
78	would be able to play soccer just like Kevin. Although Max knew Kevin	65
65	reminded him that he was six years younger. When Max was older, he	52
52	tried to do something Kevin did, he was never as good. Kevin always	39
39	good student, too. Max wanted to be just like Kevin. However, when Max	26
26	He was a great soccer player, and he played in the band. He was a	⇉
⇉	Max thought his big brother Kevin was awesome. Kevin was perfect.	0

There are many reasons to go to a library. You can find many books there. Did you know that a library also has movies and music? Many have programs just for kids, too. You can go to story time or meet a real author.

If you want to borrow something from the library, you need to get a library card. To get a card, an adult must fill out a form. The form has information such as the person's name and address. At many libraries, children may get a card too, but an adult must sign the form. When you get your card, learn the library's rules. Ask how many items you can check out at one time. Also ask how long you may keep them.

Once you have your card, you are ready to find something to check out. You can use the library's computer to find a book or a movie. Search by title, author's name, or subject. Or, you can always just browse. Maybe you want to read a fiction book. Look at the books in the fiction section. Or browse the movie section. You are sure to find something you like!

Once you have chosen the items you want, take them to the front desk. Give the librarian your library card and your items. He or she will check them out for you and tell you when to bring them back. Remember to return the items by their due date. Then come back to the library to check out more items!

Mom was sitting at the table writing in a notebook. Sue asked what she was doing. Mom said she was making a list of goals she wanted to meet at work. Sue was interested. She wondered how it would feel to set a goal and reach it.

Sue decided she would write down one goal a day. She thought about what she wanted to do for her first goal. At school she was learning about healthy foods. That gave Sue a great idea. She would set a goal to eat two servings of vegetables that day. Later, at lunch, Sue looked in the fridge. She got out a stalk of celery to eat with her sandwich. At dinner, Sue had a helping of spinach. That night, she drew a line through the goal on her paper. She felt great about meeting her first goal. Sue even decided she liked eating spinach.

The next morning, Sue set a new goal. She would clean out a drawer in her dresser. Sue opened the drawer and took everything out. She made a pile to keep and a pile to give away. She could not believe how much stuff was in the drawer. Sue neatly placed things she wanted to keep in the drawer. She carried the other pile to her mother. Her mother helped her decide which things were in good enough shape to be given away.

Sue smiled as she crossed the second goal off her list. She was proud of what she had done. She began to think about the goal she would set for tomorrow.

Max thought his big brother Kevin was awesome. Kevin was perfect. He was a great soccer player, and he played in the band. He was a good student, too. Max wanted to be just like Kevin. However, when Max tried to do something Kevin did, he was never as good. Kevin always reminded him that he was six years younger. When Max was older, he would be able to play soccer just like Kevin. Although Max knew Kevin was right, he still felt disappointed. He wanted to be just like Kevin right now!

Years went by, and Max got better at what he did. Then one day, Kevin went to college. What would Max do without his big brother? At first, Max was very sad, but his schoolwork and activities kept him busy. After school, he had band practice twice a week. Two days a week he had soccer practice, and he had soccer games on Saturdays.

One Saturday, Max was having a great soccer game. He scored two goals in the first half. When he scored the second goal, he heard a familiar voice yelling in excitement. Max scanned the stands and saw Kevin! He had come home from college to watch Max's game. After the game, Kevin congratulated Max on having a great game. "You're the best," he said.

As Max hugged Kevin, he realized he had become a lot like his big brother. "No." he said. "We're the best!"

3 Oral Reading Fluency

- ▶ I would like you to read a story to me, Please do your best reading. If you do not know a word, I will read the word for you. Keep reading until I say "stop." Be ready to tell me all about the story when you finish. (Place the passage in front of the student.)
- Begin testing. Put your finger under the first word (point to the first word of the passage).
 Ready, begin.

Reminders If the student stops (not a hes (Repeat as often as needed.)	If fewer than 10 words are rea Retell or passages #2 and #3 If fewer than 40 words are rea judgment whether to administ	Discontinue If no words are read con do not administer Retell	Wait If no response in	Timing 1 minute. Start y passage. Place a
If the student stops (not a hesitation on a specific item), say Keep going . (Repeat as often as needed.) If the student loses his/her place, point, (Repeat as often as needed.)	If fewer than 10 words are read correctly on passage #1, do not administer Retell or passages #2 and #3. If fewer than 40 words are read correctly on any passage, use professional judgment whether to administer Retell for that passage.	If no words are read correctly in the first line, say Stop , record a score of 0, and do not administer Retell.	If no response in 3 seconds, say the word and mark it as incorrect.	1 minute. Start your stopwatch after the student says the first word of the passage. Place a bracket (]) and say Stop after 1 minute.

Grade 2/Benchmark 3.1

Words correct: =	Errors (include skipped words):	Total words:	
rect: =	rds):	ords:	

Li was the first day of summer vacation. (Savir) was excited. He had	13
decided to jump off the diving board at the community pool!	24
Last summer, many of Gavin's friends jumped off the diving board.	35
Gavin watched them, but he knew he was not ready to jump. Instead,	48
he practiced his swimming strokes while they took turns jumping off the	60
diving board. Then they all swam and played together.	69
When Gavin woke up this morning, he knew he was ready to jump	82
off the diving board. He was looking forward to it. He hopped out of	96
bed and went to the kitchen to eat some oatmeal.	106
Just then, Gavin's uncle came into the kitchen for his coffee. He told	119
Gavin they could go to the pool that afternoon. When Gavin told his	132
uncle that he planned to jump off the diving board, his uncle patted him	146
on the shoulder. "I know you can do it," he said encouragingly.	158
Finally it was time to go to the pool. When Gavin arrived, his friends	172
were already there. He surprised them by saying he was going to the	185
diving board. Gavin waited in line. His friends stood behind him. When	197
it was his turn, he walked out to the edge of the diving board. He saw	213
his uncle smile at him. He heard his friends saying, "You can do it!" Gavin	228
counted to three and jumped into the water. He shot up to the surface	242
with a huge smile on his face. He could not wait to jump again!	256

Grade 2/Benchmark 3.2

Now read this story to me. Please do your best reading. Ready, begin.

Words correct: =	Errors (include skipped words): -	Total words:
------------------	-----------------------------------	--------------

866	one of these customs with your family.	221
221	How do you celebrate the New Year? Maybe you would like to try	208
208	friends.	207
207	dishes, you are happy. Finding a lot of dishes means you have many	194
194	you wake up on the first day of the New Year and find a lot of broken	177
177	On New Year's Eve, they throw the broken dishes at friends' doors. If	164
164	In the country of Denmark, people save their broken dishes all year.	152
152	people chew carefully. They wonder who the lucky person will be.	141
141	pieces. It is lucky to get the piece of bread with the coin. All of the	125
125	No one knows where the coin is. After the bread is baked, it is cut into	109
109	coin gets mixed up in the bread dough and is baked inside the bread.	95
95	bread is being made, the baker puts a gold coin in the dough. The	9
8	In some places, people make special New Year's bread. When the	70
70	Then they blow horns and make a lot of noise.	60
60	People count down the seconds until midnight when the New Year starts.	48
48	costumes. In our country, people often celebrate by having a party.	37
37	fireworks. In other places, there are parades with people in colorful	26
26	celebrate the New Year in different ways. In some places, people watch	14
14	The first day of the year is a special day. People around the world	0

Grade 2/Benchmark 3.3

Now read this story to me. Please do your best reading. Ready, begin.

Words correct: =	Errors (include skipped words):	Total words:	

0	Every Saturday Dad and Craig did something together. This morning	10
10	Dad had a surprise. They were going to go roller skating. Craig was	23
23	excited. He had never been roller skating. Dad said it was a lot of fun, so	39
39	Craig got dressed and put on his coat. They walked to the bus and rode	54
54	to the skating rink.	58
58	As soon as they walked in, Dad started smiling and telling stories	70
70	about his childhood. He told how he had skated at this same rink. He	84
84	told of birthday parties and skating contests. Dad was very happy. Craig	96
96	liked to hear about the things his dad did when he was a boy. They were	112
112	both excited to start skating.	117
117	Dad and Craig went to the counter to rent skates. Then they sat on	131
131	a bench and laced up their skates. Loud music played, and Craig sang	144
144	along with the song. Red and blue lights flashed, calling the skaters to the	158
158	wooden floor.	160
160	Together, Dad and Craig stood up. Craig was a bit shaky on four	173
173	wheels. Dad had an easier time skating, remembering the skating he	184
184	did as a boy. They both moved closer to the rink and entered through	198
198	a gate. Dad led the way. Craig had a hard time at first. He clung to the	215
215	wall, inching slowly around the rink. Dad did one lap and skated up to	229
229	Craig. He took Craig's hand and led him away from the wall. Soon, Craig 243	43
243	found it easier to skate. He let go of Dad's hand and was skating on his	259
259	own. Craig smiled. Skating with Dad was a lot of fun.	270

► It was the first day of summer vacation. Gavin was excited. He had decided to jump off the diving board at the community pool!

Last summer, many of Gavin's friends jumped off the diving board. Gavin watched them, but he knew he was not ready to jump. Instead, he practiced his swimming strokes while they took turns jumping off the diving board. Then they all swam and played together.

When Gavin woke up this morning, he knew he was ready to jump off the diving board. He was looking forward to it. He hopped out of bed and went to the kitchen to eat some oatmeal.

Just then, Gavin's uncle came into the kitchen for his coffee. He told Gavin they could go to the pool that afternoon. When Gavin told his uncle that he planned to jump off the diving board, his uncle patted him on the shoulder. "I know you can do it," he said encouragingly.

Finally it was time to go to the pool. When Gavin arrived, his friends were already there. He surprised them by saying he was going to the diving board. Gavin waited in line. His friends stood behind him. When it was his turn, he walked out to the edge of the diving board. He saw his uncle smile at him. He heard his friends saying, "You can do it!" Gavin counted to three and jumped into the water. He shot up to the surface with a huge smile on his face. He could not wait to jump again!

The first day of the year is a special day. People around the world celebrate the New Year in different ways. In some places, people watch fireworks. In other places, there are parades with people in colorful costumes. In our country, people often celebrate by having a party. People count down the seconds until midnight when the New Year starts. Then they blow horns and make a lot of noise.

In some places, people make special New Year's bread. When the bread is being made, the baker puts a gold coin in the dough. The coin gets mixed up in the bread dough and is baked inside the bread. No one knows where the coin is. After the bread is baked, it is cut into pieces. It is lucky to get the piece of bread with the coin. All of the people chew carefully. They wonder who the lucky person will be.

In the country of Denmark, people save their broken dishes all year. On New Year's Eve, they throw the broken dishes at friends' doors. If you wake up on the first day of the New Year and find a lot of broken dishes, you are happy. Finding a lot of dishes means you have many friends.

How do you celebrate the New Year? Maybe you would like to try one of these customs with your family. Every Saturday Dad and Craig did something together. This morning Dad had a surprise. They were going to go roller skating. Craig was excited. He had never been roller skating. Dad said it was a lot of fun, so Craig got dressed and put on his coat. They walked to the bus and rode to the skating rink.

As soon as they walked in, Dad started smiling and telling stories about his childhood. He told how he had skated at this same rink. He told of birthday parties and skating contests. Dad was very happy. Craig liked to hear about the things his dad did when he was a boy. They were both excited to start skating.

Dad and Craig went to the counter to rent skates. Then they sat on a bench and laced up their skates. Loud music played, and Craig sang along with the song. Red and blue lights flashed, calling the skaters to the wooden floor.

Together, Dad and Craig stood up. Craig was a bit shaky on four wheels. Dad had an easier time skating, remembering the skating he did as a boy. They both moved closer to the rink and entered through a gate. Dad led the way. Craig had a hard time at first. He clung to the wall, inching slowly around the rink. Dad did one lap and skated up to Craig. He took Craig's hand and led him away from the wall. Soon, Craig found it easier to skate. He let go of Dad's hand and was skating on his own. Craig smiled. Skating with Dad was a lot of fun.

OUTCOME ASSESSMENT

Outcome assessment for the evaluation of a school-based intervention is the process of collecting information that will indicate whether the intervention (in this case, ABC Support) is having the desired effect on student performance (Busse, McGill, & Kennedy, 2015). High-quality outcome assessment is multi-method, using both direct indicators (e.g., observation of student performance) and indirect measures (e.g., teacher ratings of performance) (Riley-Tillman & Burns, 2009). The evaluation design for ABC Support is characterized by repeated assessment of targeted outcomes over time (Kratochwill & Levin, 2014). Specifically, outcome assessment involves repeated measurement of the same outcomes (reading and behavior indicators) for all students across each experimental phase (baseline; teacher training; pre-intervention; intervention; and follow-up).

Outcome assessment in *ABC Support* includes both direct and indirect measures of reading fluency and learning-related classroom behavior. The direct measure of reading involves brief (one minute) sampling of oral reading fluency performance on grade-level passages. The direct measure of behavior involves 20-minute classroom observations. The indirect measure of both reading and behavior is a global teacher rating of the student's progress toward a reading fluency goal and a behavior goal.

When does OUTCOME ASSESSMENT occur in ABC Support?

Outcome assessment in *ABC Support* occurs continuously and repeatedly across the 18-week study period:

- 1. The direct measures of reading (ORF passages) and behavior (observations) occur twice weekly for each student (36 measurement points).
- 2. The indirect measure of reading and behavior (teacher rating) occurs once (Friday) of each week (18 measurement points).

References:

Busse, R. T., McGill, R. J., & Kennedy, K. S. (2015). Methods for assessing single-case school-based intervention outcomes. *Contemporary School Psychology*, 19, 136-144.

Kratochwill, T. R., & Levin, J. R. (2014). *Single-case intervention research: Methodological and statistical advances.* Washington, DC: American Psychological Association.

Riley-Tillman, T. C., & Burns, M. K. (2009). *Evaluating educational interventions:* Single-case design for measuring response to intervention. New York, NY: Guilford.

DIRECT BEHAVIOR RATING

Description: Direct Behavior Rating (DBR; Chafouleas, Christ & Riley-Tillman, 2009) is a tool that involves a brief rating (percentage of occurrence) of target behaviors following a specified observation period. According to Chafouleas et al., DBR combines "the strengths of behavior rating scales and the benefits of systematic direct observation" (p. 195). Similar to observation, DBR is a means to repeatedly assess target behavior(s) over time. Similar to rating scales, DBR is an efficient and flexible data-recording procedure.

Implementation in ABC Support: Trained assessors, who are "blind" to the experimental phase, complete DBRs twice weekly for 18 weeks across all experimental phases (baseline; teacher training; pre-intervention; intervention; follow-up). For each observation, assessors rate the occurrence (percentage of time) of two target behaviors (engaged behavior and disruptive behavior) within a 20-minute period that occurs during regular classroom instruction in reading. Each 20-minute period is divided into shorter observation intervals (\leq 5 minutes), the length of which is determined by a shift in the instructional format (independent work, small group, or large group). That is, each interval coincides with a specific instructional format. At the end of an observation period, assessors also (a) rate specific engagement behaviors (e.g., "Did the student pay attention?") using a 3-point scale, and (b) provide 2-3 narrative comments regarding the student's behavior and/or classroom instruction.

Scores or Data Obtained from Measure: Three types of information are derived from each DBR: (a) average percentage of occurrence of Engaged Behavior and Disruptive Behavior (0% to 100%) for each of three instructional formats; (b) average item ratings (1.0 to 3.0) for each specific engagement behavior; and (c) narrative or descriptive data regarding student behavior and/or classroom reading instruction. Two independent observers conduct approximately 20% to 25% of all observations (5-6 observations per student) to evaluate inter-rater reliability.

Selected Research:

Briesch, A. M., Chafouleas, S. M., & Riley-Tillman, T. C. (2010). Generalizability and dependability of behavior assessment methods to estimate academic engagement: A comparison of systematic direct observation and Direct Behavior Rating. *School Psychology Review*, 39, 408-421.

Chafouleas, S. M., Riley-Tillman, T. C., & Christ, T. J. (2009). Direct Behavior Rating (DBR): An emerging method for assessing social behavior within a tiered intervention system. *Assessment for Effective Intervention*, *34*, 195-200.

Christ, T. J., Riley-Tillman, T. C., & Chafouleas, S. M. (2009). Foundation for the development and use of Direct Behavior Rating (DBR) to assess and evaluate student behavior. *Assessment for Effective Intervention*, *34*, 201-213.

Christ, T. J., Riley-Tillman, T. C., Chafouleas, S. M., & Boice, C. H. (2010). Generalizability and dependability of Direct Behavior Ratings (DBR) across raters and observations. *Educational and Psychological Measurement*, 70, 825-843.

Riley-Tillman, T. C., Chafouleas, S. M., Sassu, K. A., Chanese, J. A. M., & Glazer, A. D. (2008). Examining the agreement of Direct Behavior Ratings and Systematic Direct Observation for on-task and disruptive behavior. *Journal of Positive Behavior Interventions*, 10, 136-143.

ABC Support Direct Behavior Rating

Directions:

- 1. In the box on the top of the DBR recording form:
 - a. Write the date.
 - b. Circle the day of the week.
 - c. Note the start time of the 20-minute observation period.
 - d. Write your name ("Rater").
- 2. The total 20-minute observation period (during classroom reading instruction) is divided into shorter observation intervals. The maximum length of each interval is **5 minutes**. A new interval begins at the *end of 5 minutes* **OR** when there is a shift in the instructional format that occurs before the end of the 5-minute interval.
- 3. For each interval:
 - a. Note the start time of the interval ("Time: <u>00.00</u> to _____").
 - b. Observe the target student continuously during the interval, focusing on two behaviors (engaged behavior + disruptive behavior; see definitions on the next page).
 - c. At the end of the interval (end of 5 minutes OR shift in the instructional format), note the end time ("Time: _____ to <u>00.00</u>").
 - d. Record the percentage of time each behavior occurred during the interval.
 - e. Check the *Instructional Format* that most accurately represents what occurred during the interval.
- 4. Complete 3.a. through 3.e. for every interval.
- 5. At the end of the 20-minute observation period:
 - a. Note the end time (in the box at the top of the DBR recording).
 - b. Complete the 3-point ratings of the target student's specific engagement behaviors during the entire observation period (on the last page).
 - c. Add 2-3 relevant comments/notes in the space provided regarding the student's behavior, attitude, engagement, etc. and/or significant aspects of the classroom instruction.

Target Behavior Definitions:

Engaged behavior is actively or passively *participating appropriately* in the classroom activity and/or complying with adult directives and expectations.

<u>For example</u>: reading, writing, raising hand, answering a question, talking about a lesson, listening to the teacher, listening to a peer during paired or group work, reading silently, looking at instructional materials, paying attention, following teacher directions

Disruptive behavior is behavior and/or *actions that interrupt* regular school or classroom activity.

<u>For example</u>: talking to a peer when prohibited, getting out of seat, fidgeting, playing with objects, talking/yelling about topics that are unrelated to classroom instruction, acting aggressively

Instructional Format Descriptions:

Independent work: Target student child is doing assigned/relevant work by him/herself – e.g., working at a table/desk or on a computer; reading aloud or silently; doing an activity/project alone. Teacher/adult may be working with other students, rotating around the classroom, or at his/her desk.

Small group: Target student is doing assigned/relevant work in a small group (eight children or fewer) – e.g., paired reading; reading aloud; working together on a project or on a computer; participating in a group discussion. Teacher/adult may be working directly with the small group or just be present in the classroom.

Large group: Target child is doing assigned/relevant work in a large group (usually the whole classroom) that is directed by teacher/adult – e.g., teacher is delivering instruction or giving directions; teacher is reading aloud; teacher is guiding a large-group discussion; peers are making presentations to the whole class.

Direct Behavior Rating ¹ Recording Form

Date:	Rater:
M T W Th F	Start Time: End Time:
Interval 1	Interval 2
Time: to	Time: to
Engaged Behavior (% of time) 0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always Disruptive Behavior (% of time) 0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always	Engaged Behavior (% of time)
Independent workSmall groupLarge group	Independent workSmall groupLarge group
Interval 3 Time: to Engaged Behavior (% of time)	Interval 4 Time: to Engaged Behavior (% of time)
0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always Disruptive Behavior (% of time)	0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always
0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always	Disruptive Behavior (% of time) 0 1 2 3 4 5 6 7 8 9 10 0% 50% 100% Never Sometimes Always

- O Independent work
- O Small group
- O Large group

- O Independent workO Small group
- O Large group

Interval 5

Time: _____ to ____ Engaged Behavior (% of time) 8 10 0% 50% 100% Never Sometimes Always Disruptive Behavior (% of time) Ó 10 0% 50% 100% Never Sometimes Always

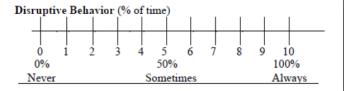
Interval 7

Time: ______to ____

Engaged Behavior (% of time)

0 1 2 3 4 5 6 7 8 9 10
0% 50% 100%

Never Sometimes Always



O Independent work

O Independent work

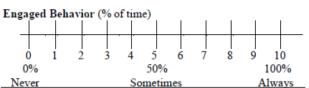
O Small group

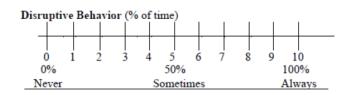
O Large group

- O Small group
- O Large group

Interval 6

Time: _____ to ____





- O Independent work
- O Small group
- O Large group

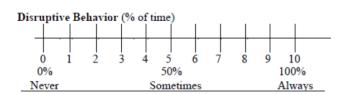
Interval 8

Time: _____ to ____

Engaged Behavior (% of time)

0 1 2 3 4 5 6 7 8 9 10
0% 50% 100%

Never Sometimes Always



- O Independent work
- O Small group
- O Large group

Overall, during the observation period today...

	[1]	[2]	[3]			
Did the student pay attention?	Mostly No	Sometimes	Mostly Yes			
Did the student follow directions?	Mostly No	Sometimes	Mostly Yes			
Did the student participate appropriately?	Mostly No	Sometimes	Mostly Yes			
Did the student show interest?	Mostly No	Sometimes	Mostly Yes			
Did the student show enthusiasm and enjoyment?	Mostly No	Sometimes	Mostly Yes			
Add 2-3 relevant comments/notes in the space below regarding the student's behavior, attitude, engagement, etc. and/or significant aspects of the classroom instruction.						

¹ Adapted from: Chafouleas, S. M., Riley-Tillman, T. C., & Christ, T. J. (2009). Direct Behavior Rating (DBR): An emerging method for assessing social behavior within a tiered intervention system. *Assessment for Effective Intervention, 34,* 195-200.

ORAL READING FLUENCY PROBES

Description: An *Oral Reading Fluency* (ORF) probe is a type of curriculum-based measurement (CBM) procedure to assess students' proficiency in reading connected text aloud. More than 30 years of research has validated the use of ORF probes as a time-efficient, standardized method for monitoring oral reading fluency over time (Deno, 2003; Shapiro, 2011). ORF probes are brief (one minute) and easy to administer and score. Each probe is different in content, but assesses the same skill (fluency, or the number of words read correctly in one minute) at the same level of difficulty.

Since the initial development of CBM for oral reading (Deno, 1985), ORF passages have become standardized and available commercially. One commonly known published tool is the *Dynamic Indicators of Basic Early Literacy Skills*, or DIBELS. Included in the DIBELS battery is an oral reading fluency measure, which includes multiple grade-level reading passages appropriate for benchmark assessment or more frequent progress monitoring.

Implementation in ABC Support: Trained assessors, who are "blind" to the experimental phase, administer two ORF passages twice weekly to participating students for 18 weeks (i.e., across all experimental phases):

- 1. <u>Standard Passage</u>: For each assessment, the student reads a grade-appropriate (Grade 2) DIBELS (standard) passage for one minute. Assessors record reading errors on a separate copy of the passage while the student reads aloud. For consistency across training and outcome assessment, the directions for administering and scoring the ORF *outcome-assessment* passages are the same as the directions for administering and scoring *ABC Support training* passages.
- 2. <u>Training Passage</u>: For each assessment, the student also reads a training passage for one minute. The administration and scoring of training passages are the same as for the standard passages.

Scores or Data Obtained from Measure: Two scores are obtained from each ORF passage reading: (a) number of words read correctly (WCPM; total number of words read in one minute minus the total number of errors), and (b) accuracy (ACC; percentage of words read correctly in one minute). All recording forms are double-scored to ensure accuracy in the calculation of scores.

Selected Research:

Deno, S. L. (1985). Curriculum-based measurement: The emerging alternative. *Exceptional Children*, *52*, 219--232.

Ford, J. W., Missal, K. N., Hosp, J. L., & Kuhle, J. L. (2017). Examining oral passage reading rate across three curriculum-based measurement tools for predicting grade-level proficiency. *School Psychology Review, 46*, 363-378.

Hosp, M. K., & Hosp, J. L. (2003). Curriculum-based measurement for reading, spelling, and math: How to do it and why. *Preventing School Failure*, 48(1), 10-17.

Hosp, M. K., Hosp, J. L., & Howell, K. W. (2016). *The ABCs of CBM: A practical guide to curriculum-based measurement* (2nd ed.). New York, NY: Guilford Press.

Shapiro, E. S. (2011). *Academic skills problems: Direct assessment and intervention* (4th ed.). New York, NY: Guilford Press.

ORAL READING FLUENCY OUTCOME ASSESSMENT

Directions for Administering and Scoring:

- 1. To administer and score each one-minute passage reading, give the following directions: When I say, "begin," start reading aloud at the top of the page. Try to read each word, but if you come to one you do not know, I will say it for you. Do you have any questions?
- 2. Say "**begin**," and start the stopwatch when the student says the first word. At the end of one minute, say, "**stop**."
- 3. While the student reads the passage aloud (from the *Student Copy*), mark on the *Recording Copy* by (a) drawing a slash () through each error, and (b) drawing a vertical line just after the last word read at one minute ().
- 4. The following are types of reading errors that should be marked with a slash:
 - *Misread word* (ex: reading "truck" for "trust," or "steep" for "step")
 - *Omitted or skipped word* (ex: reading "the dog" for "the <u>black</u> dog")
 - Added/omitted word part (ex: reading "hitting" for "hit," or "car" for "cars")
 - **> 3-second hesitation** (taking 3 seconds or longer to read "danger")
- 5. The following are not errors:
 - **Added words** (ex: reading "the <u>blue</u> dress" instead of "the dress")
 - Mispronunciation due to accent, dialect, or speech impediment
 - Repetitions in which the wording is correct
 - Self-correcting a mistake; it is not an error if the word is corrected
- 6. If the student pauses on a word for three or more seconds, slash it and say the word for the student. This is the *only* type of assistance or correction that may be provided while the student is reading.
- 7. At the top of the *Recording Copy*, write: (a) *total number of words read in one minute* (i.e., word count up to the vertical line marking the end of one minute), and (b) *total number of errors* (i.e., words marked with a slash).

Sample Oral Reading Fluency Probe (Grade 2):

When I say, "BEGIN," start reading aloud at the top of the page [point].

Try to read each word, but if you come to one you do not know,
I will say it for you. Do you have any questions?

Date:
Total # words read:
Total

At my house, Friday night is family night. Our whole family	11
gets together to do something fun. Two weeks ago we went	22
bowling. Last Friday we went to an art show. This week we	34
planned to see a movie at the movie theater.	43
"What movie shall we see?" Dad asked.	50
"I like action movies," my brother said. "I like to watch cars	62
crash. I like to watch super-heroes fly."	70
"I like animal movies," my sister said. "I want to see horses	82
run free in fields. I want to see whales swim in the sea."	95
"I like funny movies," Dad said. "I laugh when people throw	106
pies. I laugh when people tell funny jokes."	114
"I like movies about love," Mom said. "I like it when a man	127
and a woman get married and live happily ever after."	137
"I like cartoons," I said. "I like colorful movies with a lot of	150
music."	151
What could we do? Our family could not choose a movie to	163
watch together.	165
Dad thought he'd solve the problem. He said, "Why don't	175
we stay home and play a family game?" We all thought that	187
was a good idea.	191
"Let's play puzzles!" I said.	196
"Let's play cards!" my brother said.	202
"Let's play checkers!" my sister said.	208
Dad just shook his head and rolled his eyes. "I'll be in bed,"	221
he said. "Wake me when family night begins."	229

GOAL ATTAINMENT SCALES

Description: A Goal Attainment Scale (GAS) provides a criterion-referenced approach to measuring changes in academic skills and/or classroom behaviors over time (Kiresuk, Smith, & Cardillo, 1994). The basic methodology of GAS involves three steps: (a) select a target behavior or academic skill; (b) describe in objective terms the desired outcome (goal) for the target behavior or skill; and (c) develop 5-7 descriptions of possible outcomes that correspond to progress toward the goal, e.g., +2/+3 [best possible outcome]; 0 [no change]; and -2/-3 [worst possible outcome]. By using numerical ratings for each of the descriptive levels of functioning relative to the desired outcome, a rater can provide a weekly (or daily) quantitative report of student progress.

Implementation in ABC Support: Teachers complete two GAS ratings weekly (every Friday) for 18 weeks across all experimental phases (baseline; teacher training; pre-intervention; intervention; follow-up). For the first rating, teachers evaluate the student's progress toward the academic engagement goal (student consistently is engaged during reading instruction – consistently pays attention, follows directions, participates appropriately, and shows interest and enthusiasm without prompts, reminders or redirection) using a 7-point scale (-3 to +3). For the second rating, teachers evaluate the student's progress toward the oral reading fluency goal (student consistently reads grade-level material with fluency [100% of the time]. Student consistently reads with accuracy, vocal expression, confidence, and reading speed [not too slow] so as not to impede comprehension), again using a 7-point scale.

Scores or Data Obtained from Measure: Two GAS ratings are obtained each week: (a) rating of academic engagement (converted to a scale ranging from 1.0 to 7.0), and (b) rating of oral reading fluency (converted to a scale ranging from 1.0 to 7.0).

Selected Research:

Brintnall, G. (1976). *Applications of goal attainment scaling*. Bethesda, MD: National Institute of Mental Health.

Cytrynbaum, S., Ginath, Y., Bridwell, J., & Brandt, L. (1979). Goal attainment scaling: A critical review. *Evaluation Quarterly*, 3(1), 5-40.

Kiresuk, T. J., Smith, A., & Cardillo, J. (1994). *Goal attainment scaling: Applications, theory and measurement.* Hillsdale, NJ: Erlbaum.

Maher, C. A. (1983). Goal attainment scaling: A method for evaluating special education services. *Exceptional Children, 49,* 529-536.

Roach, A. T., & Elliott, S. N. (2005). Goal attainment scaling: an efficient and effective approach to monitoring student progress. *Teaching Exceptional Children,* 37(4), 8-17.

[student ID label]	Date:

Academic Engagement Rating

Think about this student's academic engagement over the past week relative to the class average of engagement during reading instruction. Please circle the appropriate number indicating the highest level achieved over the past week.

+3	The student consistently is engaged during reading instruction – consistently pays attention, follows directions, participates appropriately, and shows interest and enthusiasm without prompts, reminders or redirection.
+2	The student usually is engaged during reading instruction – usually pays attention, follows directions, participates appropriately, and shows interest and enthusiasm without additional prompts, reminders or redirection.
+1	The student frequently is engaged during reading instruction – often pays attention, follows directions, participates appropriately, and shows interest enthusiasm. Some prompts, reminders or redirection are occasionally needed to achieve or maintain engagement.
0	The student occasionally is engaged during reading instruction sometimes pays attention, follows directions, participates appropriately, and shows interest and enthusiasm. Prompts, reminders and redirection are usually needed to achieve or maintain engagement.
-1	The student infrequently is engaged during reading instruction. Strong prompts, reminders and redirection are needed to achieve or maintain engagement.
-2	The student rarely is engaged during reading instruction. Repeated strong prompts, reminders, and redirection are needed to achieve or maintain some engagement.
-3	The student virtually never is engaged during reading instruction. Constant strong prompts, reminders, and redirection infrequently result in engagement.

Oral Reading Fluency Rating

Think about this student's oral reading fluency over the past week relative to the class average of reading fluency on grade-level materials. Please circle the appropriate number indicating the highest level achieved over the past week.

+3	The student consistently reads grade-level material with fluency (100% of the time). Student consistently reads with accuracy, vocal expression, confidence, and reading speed (not too slow) so as not to impede comprehension.
+2	The student usually reads grade-level material with fluency (85% to 95% of the time). Student usually reads with accuracy, vocal expression, confidence, and reading speed (not too slow) so as not to impede comprehension.
+1	The student frequently reads grade-level material with fluency (65% to 80% of the time). Student frequently reads with accuracy, vocal expression, confidence, and reading speed (not too slow) so as not to impede comprehension.
0	The student occasionally reads grade-level material with fluency (40% to 60% of the time). Student occasionally reads with accuracy, vocal expression, confidence, and reading speed (not too slow) so as not to impede comprehension.
-1	The student infrequently reads grade-level material with fluency (20% to 35% of the time). Student frequently reads with low accuracy, vocal expression, confidence, and reading speed that likely impedes comprehension.
-2	The student rarely reads grade-level material with fluency (5% to 15% of the time). Student usually reads with low accuracy, vocal expression, confidence, and reading speed that likely impedes comprehension.
-3	The student never reads grade-level material with fluency (0% of the time).

INTERVENTION FIDELITY ASSESSMENT

Intervention fidelity (or "intervention integrity") assessment is the evaluation of "the extent to which essential intervention components are delivered in a comprehensive and consistent manner by an [educator] trained to deliver the intervention" (Sanetti & Kratochwill, 2009; p. 448). The most common procedure for evaluating (and, in turn, supporting) intervention fidelity is to develop a checklist that operationally describes the essential components of an intervention. Once the checklist is developed, an external assessor observes the implementation of the intervention and records the occurrence or nonoccurrence of each intervention component (Roach, Lawton, & Elliott, 2014).

Two estimates of fidelity are typically calculated (Gresham, 2017). *Component integrity* is the percentage of observation sessions in which each component is implemented correctly. *Session integrity* is the mean percentage of intervention components implemented correctly during observation sessions. Benchmarks for evaluating integrity data are: (a) 80% or above for "high integrity," and (b) 50% or lower for "low integrity" (Perepletchikova & Kazdin, 2005).

When does INTERVENTION FIDELITY ASSESSMENT occur in ABC Support?

Intervention fidelity assessment in *ABC Support* occurs during the 8-week Intervention Phase. A member of the research team observes approximately 25% to 30% of the intervention sessions (6-7 sessions per teacher) using the *ABC Support Implementation Observation* form.

References:

Gresham, F. M. (2017). Features of fidelity in schools and classrooms: Constructions and measurement. In G. Roberts, S. Vaughn, S. N. Beretvas, & V. Wong (Eds.), *Treatment fidelity in studies of educational intervention* (pp. 22-38). New York, NY: Routledge.

Perepletchikova, F., & Kazdin, A. E. (2005). Treatment integrity and therapeutic change: Issues and research recommendations. *Clinical Psychology: Science and Practice*, 12, 365-383.

Roach, A. T., Lawton, K. M., & Elliott, S. N. (2014). Best practices in facilitating and evaluating the integrity of school-based interventions. In P. L. Harrison & A. Thomas (Eds.), *Best practices in school psychology: Data-based and collaborative decision making* (pp. 133-146). Bethesda, MD: National Association of School Psychologists.

Sanetti, L. M. H., & Kratochwill, T. R. (2009). Toward developing a science of treatment integrity: Introduction to the special series. *School Psychology Review,* 38, 445-449.

ABC SUPPORT IMPLEMENTATION OBSERVATION

Description: The ABC Support Implementation Observation procedure incorporates two formats frequently used for evaluating the extent to which a teacher implements intervention sessions as intended (O'Donnell, 2008). The first is a checklist format whereby the observer notes the occurrence or nonoccurrence of each ABC Support intervention step (21 steps total). The second is a rating format whereby the observer rates six overall characteristics of the teacher's performance (e.g., level of enthusiasm) using a 4-point Likert scale, ranging from "very low" to "very high."

Implementation in ABC Support: Members of the research team conduct observations of 20-minute intervention sessions using the ABC Support Implementation Observation form. For each teacher-student dyad, approximately 25% to 30% intervention sessions (6-7 sessions per dyad) are randomly selected for observation.

Scores or Data Obtained from Measure: Three types of information are obtained: (a) percentage of observed sessions during which each intervention step/component is implemented correctly (component integrity); (b) average percentage of intervention steps/components implemented correctly across observed sessions (session integrity); and (c) average item ratings (1.00 to 4.00) for each teacher characteristic observed during the intervention sessions.

Selected Research:

O'Donnell, C. L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K-12 curriculum intervention research. *Review of Educational Research*, *34*, 33-84.

Roberts, G., Vaughn, S., Beretvas, S. N., & Wong, V. (Eds.). (2017). *Treatment fidelity in studies of educational intervention*. New York, NY: Routledge.

Schulte, A. C., Easton, J. E., & Parker, J. (2009). Advances in treatment integrity research: Multidisciplinary perspectives on the conceptualization, measurement, and enhancement of treatment integrity. *School Psychology Review, 38,* 460-475.

ABC Support Implementation Observation

Date:		Observer:	Session #:			
Sta	Start Time: End Time:					
		lid the interventionist (and/ ps in accordance with the m	or student, when indicated) do nanualized procedures?	Yes		
1	Expectations	Review READ expectations us	sing READ Expectations Card.			
2	Goal Setting		and draw goal line on <i>Reading Graph</i> . and draw goal line on <i>Behavior Graph</i> .			
3	Prompting	Prompt READ expectations fo	or <u>first</u> timed reading of passage.			
4	Repeated Practice (1st reading)	Implement <u>first</u> timed reading Score reading and calculate V	g of passage. NCPM for <u>first</u> reading of passage.			
5	Feedback + Recording + Praise for Reading	☐ Provide feedback. ☐ Record WCPM on graph a ☐ Give praise.	and teacher copy.			
6	Feedback + Recording + Praise for <u>Behavior</u>	☐ Provide feedback. ☐ Circle behavior points on ☐ Give praise.	card.			
7	Prompting (for modeling)	Prompt READ expectations pr passage reading.	rior to <u>teacher demonstration</u> of			
8	Modeling		ons while reading the passage; and nterspersed points in the passage.			
9	Prompting	Prompt READ expectations fo	r <u>second</u> time reading of passage.			
10	Repeated Practice (2 nd reading)	Implement <u>second</u> timed read Score reading and calculate V	ding of passage. NCPM for <u>second</u> reading of passage.			
11	Reading Error Correction	Use letter-word-phrase corre	ction procedure for 1-3 words			
12	Feedback + Recording + Praise for Reading	☐ Provide feedback.☐ Record WCPM on graph a☐ Give praise.	and teacher copy.			
13	Feedback + Recording + Praise for Behavior	☐ Provide feedback. ☐ Circle behavior points on ☐ Give praise.	card.			

14	Prompting	Prompt READ expectations for <u>third</u> time reading of passage.	
15	Repeated Practice (3rd reading)	Implement <u>third</u> timed reading of passage. Score reading and calculate WCPM for <u>third</u> reading of passage.	
16	Feedback + Recording + Praise for Reading	☐ Provide feedback. ☐ Record WCPM on graph and teacher copy. ☐ Give praise.	
17	Feedback + Recording + Praise for <u>Behavior</u>	☐ Provide feedback. ☐ Circle behavior points on card. ☐ Give praise.	
18	Graphing + Feedback/Praise for <u>Reading</u>	Graph performance (draw line to connect three WCPM scores) on <i>Reading Graph.</i> Give feedback/praise on session performance for <u>reading</u> .	
19	Graphing + Feedback/Praise for <u>Behavior</u>	Graph performance (draw circle for total behavior points) on Behavior Graph. Give feedback/praise on session performance for behavior.	
20	Reward	 Determine goal attainment for <u>reading</u> and give reward (as appropriate) on <i>Reward Chart</i>. Determine goal attainment for <u>behavior</u> and give reward (as appropriate) on <i>Reward Chart</i>. Give reward if student met both reading and behavior goals. 	
21	I CAN READ Reminder	Give reminder about using <i>I CAN READ</i> self-checklist.	

In four instances of paired intervention steps (4-5; 12-13; 16-17; and 18-19), the two steps within the pair may be implemented *in reverse* order. The paired steps are identified in the above checklist with an arrow.

These are the only instances in which teachers may implement an intervention step out of numerical order. All other intervention steps must be implemented in the prescribed sequence to be coded "yes."

Based on your observation of today's session, answer the following questions (circle response) about the STUDENT:

(Mostly Yes > 50% of time)	Sometimes (= 50% of time)	Mostly No (< 50% of time)
Did the student pay attention ?	Mostly Yes	Sometimes	Mostly No
Did the student follow directions?	Mostly Yes	Sometimes	Mostly No
Did the student participate appropriately?	Mostly Yes	Sometimes	Mostly No
Did the student show interest ?	Mostly Yes	Sometimes	Mostly No
Did the student show enthusiasm and enjoyment	? Mostly Yes	Sometimes	Mostly No
Did the student have reading success?	Mostly Yes	Sometimes	Mostly No
Did the student have behavioral success?	Mostly Yes	Sometimes	Mostly No

Based on your observation of today's session, rate the following characteristics of the TEACHER'S performance:

	Very Low	Low	High	Very High
Level of teacher's fidelity of implementation (implementation according to manual).	1	2	3	4
Level of teacher's enthusiasm (visible enjoyment and interest in student, verbal and non-verbal).	1	2	3	4
Overall effectiveness of the session.	1	2	3	4
Appropriateness of the amount of praise delivered during the session.	1	2	3	4
Specificity of praise relative to READ expectations .	1	2	3	4
Appropriateness of the amount of teacher direction and support provided during the session.	1	2	3	4

Notes:				
	 · · · · · · · · · · · · · · · · · · ·		 	

SOCIAL VALIDITY ASSESSMENT

Social validity refers to the acceptability of and satisfaction with intervention procedures (Luiselli & Reed, 2011). Social validity is typically assessed by soliciting opinions from individuals who receive the intervention (e.g., students who participate in ABC Support) and individuals who implement the intervention (e.g., teachers who implement ABC Support) (Carr, Austin, Britton, Kellum, & Bailey, 1999). Intervention procedures are socially valid when individuals judge them as being acceptable. Kennedy (2002) also considers the degree to which treatment gains are maintained across time within natural contexts as another indicator of social validity.

Social validity assessment in *ABC Support* includes traditional forms of social validation – student and teacher evaluations of treatment acceptability (described in this section of the manual) – as well as repeated measurement of reading and behavior outcomes during the *Follow-Up Phase* to assess maintenance (described in the section of the manual entitled, *OUTCOME MEASUREMENT*).

When does SOCIAL VALIDITY ASSESSMENT occur in ABC Support?

Student and teacher evaluations of ABC Support occur at two measurement times:

- 1. *Post-Intervention Phase*: Immediately following the final *ABC Support* intervention session.
- 2. Post-Follow-Up Phase: After completion of the 3- to 6-week Follow-Up Phase.

References:

Carr, J. E., Austin, J. L., Britton, L. N., Kellum, K. K., & Bailey, J. S. (1999). An assessment of social validity trends in applied behavior analysis. *Behavior Interventions*, *14*, 223-231.

Kennedy, C. H. (2002). The maintenance of behavior change as an indicator of social validity. *Behavior Modification*, *26*, 594-604.

Luiselli, J. K., & Reed, D. D. (2011). Social validity. In S. Goldstein & J. A. Naglieri (Eds.), *Encyclopedia of Child Behavior and Development*. Boston, MA; Springer.

STUDENT ACCEPTABILITY MEASURE

Description: The *Kids Intervention Profile* (KIP; Eckert, Hier, Hamshom & Malandrino, 2017) is an 8-item rating scale designed to measure the acceptability of school-based interventions from the perspective of students who participate in the intervention. The KIP includes questions (written at a beginning Grade 3 level) to which a student responds using a five-point anchored scale, ranging from "not at all" to "very, very much." The response format on the KIP (five boxes of increasing size) allows students to respond using a visual indicator of the relative strength of their response (e.g., largest box means "very, very much"). The KIP demonstrates adequate internal consistency (α = .79) and stability across a 3-week interval (r = .70). An exploratory factor analysis revealed two factors: (1) *General Intervention Acceptability*, and (2) *Skill Improvement*. Because *ABC Support* targets both reading fluency and classroom behavior, we added two parallel items to allow students to rate improvement (or worsening) of reading separate from behavior. Finally, we added one item to assess the helpfulness of the *I CAN READ* selfmonitoring procedure. The final scale is 11 items.

Implementation in ABC Support: Members of the research team administer the expanded 11-item KIP to students individually (*Student Evaluation of ABC Support*). The researcher reads aloud each question, and the student marks the appropriate box to indicate his/her response. Students who participate in *ABC Support* complete the KIP at *Post-Intervention* and, again, at *Post Follow-Up*.

Scores or Data Obtained from Measure: The resulting scores include average item ratings (1.00 to 5.00) and total scores for three scales: (a) *Total Scale* (11-55); (b) *General Intervention Acceptability* (6-30); and (c) *Skill Improvement* (4-20). Higher scores on the KIP indicate greater intervention acceptability levels. Based on Eckert et al., a Total Scale score > 33 is above an acceptability threshold.

Selected Research:

Eckert, T. L., Hier, B. O., Hamsho, N. F., & Malandrino, R. D. (2017). Assessing children's perceptions of academic interventions: The Kids Intervention Profile. *School Psychology Quarterly*, *32*, 268-281.

Eckert, T. L., & Hintze, J. M. (2000). Behavioral conceptions and applications of acceptability: Issues related to service delivery and research methodology. *School Psychology Quarterly*, *15*, 123-148.

Shapiro, E. S., & Goldberg, R. (1990). In vivo rating of treatment acceptability by children: Group size effects in group contingencies to improve spelling performance. *Journal of School Psychology*, 28, 233-250.

Turco, T. L., & Elliott, S. N. (1986). Assessment of students' acceptability ratings of teacher-initiated interventions for classroom misbehavior. *Journal of School Psychology*, 24, 277-283.

[st	udent ID label]				Date:	
					[check one] Post-Intervention Ph Post Follow-Up Pha	
			Student Evaluat	tion of ABC Supp		
Pu the RE ver bet	t a check mark in just e short passages a EAD expectations <i>at</i> ry, very much, put a	st one of the boxes nd practicing the all, put a check ma check mark in the mark in either the b	to show your answer to READ expectations of rk in the smallest box a biggest box above the box above the words "A	to each question. The first each week? If you did not above the words "Not at a words "Very, very much"	id with your teacher over the past of the past of the teacher over the past of the passages and profil point to box. If you liked the a point. If your answer is somewhat point to each box as you say the transfer over the past of the p	like reading acticing the ctivities ere in
1.	How much did week?	you like readi	ng the short pass	ages and practicing	g the READ expectations of	ach
	Not at all	A little bit	Some	A lot	Very, very much	
	attention and t	•	•	A lot	Very, very much	
3.	Were there tim	nes when you o	lid <i>not</i> want to re	ad the passages an	d practice the READ expe	ctations?
	Not at all	A little bit	Some	A lot	Very, very much	
4.	Were there tim practicing the			ive worked <i>mor</i> e or	reading the passages and	t c
	Not at all	A little bit	Some	A lot	Very, very much	
 5.	How much did earned?	you like being	told how many v	vords you read and	how many behavior point	s you

Some

A lot

A little bit

Not at all

Very, very much

6.	. How much do you think it helped when you were told how many words you read and how many behavior points you earned?					
	Not at all	A little bit	Some	A lot	Very, very much	
7.	Do you think	your reading l	has improved?			
	Not at all	A little bit	Some	A lot	Very, very much	
8.	Do you think	your behavior	has improved?			
	Not at all	A little bit	Some	A lot	Very, very much	
9.	Do you think	your reading l	has gotten any wo	rse?		
	Not at all	A little bit	Some	A lot	Very, very much	
10	Do you think	your behavio	r has gotten any w	vorse?		
	Not at all	A little bit	Some	A lot	Very, very much	
11	. Did the I CAN	<i>I READ</i> card h	nelp you remembe	r the READ expecta	ations?	
	Not at all	A little bit	Some	A lot	Very, very much	

¹ Adapted from: Eckert, T. L., Hier, B. O., Hamsho, N. F., & Malandrino, R. D. (2017). Assessing children's perceptions of academic interventions: The Kids Intervention Profile. *School Psychology Quarterly*, *32*, 268-281.

TEACHER ACCEPTABILITY MEASURE

Description: One of the most frequently used instruments for measuring treatment acceptability is the *Intervention Rating Profile* (IRP; Will & Elliott, 1985). The IRP was developed to assess teachers' perceptions of acceptability of educational interventions. The internal consistency (alpha coefficient) of the IRP ranges from .89 to .98. Over the years, researchers have modified the IRP for use in various acceptability studies. Finn and Sladeczek (2001) reviewed nine treatment acceptability measures – including multiple variations of the IRP – and found that no single measure of treatment acceptability is more comprehensive or psychometrically appropriate than any other. Similar to the student acceptability measure (KIP), we expanded the IRP to include parallel items to assess acceptability of *ABC Support* as an intervention for both reading and behavior. The final scale includes 23 items (statements) that teachers rate using a 4-point Likert scale (1 = strongly disagree; 4 = strongly agree). Space is also provided for specific comments at the end of the scale.

Implementation in ABC Support: Teachers who implement *ABC Support* complete the expanded 23-item IRP (*Teacher Evaluation of ABC Support*) at *Post-Intervention* and, again, at *Post Follow-Up*.

Scores or Data Obtained from Measure: The resulting scores include average item ratings (1.00 to 4.00) and a total score (possible range = 23-92). Higher scores indicate greater intervention acceptability levels. Based on Witt and Elliott (1985), a total score > 46 is above an acceptability threshold.

Selected Research:

Carter, S. L. (2007). Review of recent treatment acceptability research. *Education and Training in Developmental Disabilities*, 42, 301-316.

Elliott, S. N., & Von Brock Treuting, M. (1991). The Behavior Intervention Rating Scale: Development and validation of a pretreatment acceptability and effectiveness measure. *Journal of School Psychology*, 29, 43-51.

Finn, C. A., & Sladeczek, I. E. (2001). Assessing the social validity of behavioral interventions: A review of treatment acceptability measures. *School Psychology Quarterly*, 16, 176-206.

Martens, B. K., Witt, J. C., Elliott, S. N., & Darveaux, D. X. (1985). Teacher judgements concerning the acceptability of school-based interventions. *Professional Psychology: Research and Practice, 16,* 191-198.

Witt, J. C., & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In T. R. Kratochwill (Ed.), *Advances in school psychology* (Vol. 4, pp. 251-288). Hillsdale, NJ: Erlbaum.

Nato:	Teacher Evaluation of ARC Support 1
[teacher ID label]	[check one] Post-Intervention Phase Post Follow-Up Phase

Based on your experience with implementation of *ABC Support*, please circle your agreement with each statement. There is space provided for specific comments at the end of the survey.

Evaluation Items	Strongly disagree	Disagree	Agree	Strongly agree
I was able to carry out the ABC Support intervention as described in the implementation manual.	1	2	3	4
ABC Support is effective for strengthening positive learning behaviors, such as engagement.	1	2	3	4
I would use ABC Support again.	1	2	3	4
My student enjoyed participating in ABC Support.	1	2	3	4
ABC Support is acceptable in terms of the amount of time required to implement.	1	2	3	4
Most teachers would find <i>ABC Support</i> acceptable for students with similar concerns.	1	2	3	4
ABC Support is effective for improving reading fluency.	1	2	3	4
ABC Support is appropriate for culturally and linguistically diverse students.	1	2	3	4
I would recommend ABC Support to other teachers.	1	2	3	4
The implementation of <i>ABC Support</i> fit into my regular classroom schedule and routine.	1	2	3	4
Compared to other supplemental interventions for similar target behaviors (i.e., learning-related behaviors like engagement), ABC Support is acceptable.	1	2	3	4
Overall, I like the ABC Support intervention.	1	2	3	4
My student experienced success during the intervention sessions.	1	2	3	4
Overall, the ABC Support materials are easy to use.	1	2	3	4
ABC Support is practical and reasonable in terms of the time and resources required.	1	2	3	4
The training and support from the research team were adequate to be able to implement <i>ABC Support</i> .	1	2	3	4

The duration (number of intervention weeks) of <i>ABC Support</i> is acceptable.	1	2	3	4
Overall, ABC Support is an acceptable supplemental intervention.	1	2	3	4
Compared to other supplemental interventions for similar <i>reading skills</i> (i.e., fluency), <i>ABC Support</i> is acceptable.	1	2	3	4
My student paid attention and participated appropriately in the intervention sessions.	1	2	3	4
I made modifications to the intervention procedures to accommodate the needs of my student.	1	2	3	4
ABC Support fits well with my school's system for providing supplemental interventions for at-risk students.	1	2	3	4
Overall, ABC Support is beneficial.	1	2	3	4

COMMENTS:			

 $^{^1}$ Adapted from: Witt, J. C., & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In T. R. Kratochwill (Ed.), *Advances in school psychology* (Vol. 4, pp. 251-288). Hillsdale, NJ: Erlbaum.

ANALYSIS OF CONTEXT VARIABLES

An analysis of context variables involves collecting data (quantitative and descriptive) about the environmental context in which an intervention is implemented which may affect performance outcomes (McLaughlin & Talbert, 1993). School-related contextual variables often function as moderators because they have an impact on the effectiveness, strength, implementation, and/or sustainability of an educational intervention (McIntosh, Horner, & Sugai, 2009). Over the years, educational researchers have investigated many factors that may affect student learning and development (e.g., Harker & Tymms, 2004). Similarly, intervention researchers have examined the influence of contextual factors at multiple levels on both the quality of implementation and resulting outcomes (Domitrovich et al., 2008; Ringeisen, Henderson, & Hoagwood, 2003).

In ABC Support, information is gathered during about three types of contextual variables: (a) school-level implementation of MTSS; (b) classroom-level implementation of evidence-based universal instruction as well as classroom student composition (e.g., ethnicity, gender); and (c) teacher-level characteristics (e.g., experience, education).

When does ANALYSIS OF CONTEXT VARIABLES occur in ABC Support?

With one exception, an assessment of school-, classroom-, and teacher-level variables occurs prior to the initiation of the 18-week study period (i.e., prebaseline). The one exception is the assessment of classroom-level universal instruction; this assessment also occurs at post-intervention to examine changes in a teacher's classroom instruction/practices that may result from his/her implementation of *ABC Support*.

References:

Domitrovich, C. E., Bradshaw, C. P., Poduska, J., Hoagwood, K., Buckley, J., Olin, S., ... Ialongo, N. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools: A conceptual framework. *Advances in School Mental Health Promotion: Training and Practice, Research and Policy, 1*(3), 6-28.

Harker, R., & Tymms, P. (2004). The effects of student composition on school outcomes. *School Effectiveness and School Improvement, 15,* 177-200.

McLaughlin, M. W., & Talbert, J. E. (1993). Contexts that matter for teaching and learning. Stanford, CA: Center for Research on the Context of Secondary School Teaching, Stanford University.

McIntosh, K., Horner, R. H., & Sugai, G. (2009). Sustainability of systems-level evidence-based practices in schools: Current knowledge and future directions. In W. Sailor, G. Dunlap, G. Sugai, & R. Horner (Eds.), *Handbook of positive behavior support* (pp. 327-352). New York, NY: Springer.

Ringeisen, H., Henderson, K., & Hoagwood, K. (2003). Context matters: Schools and the "research to practice gap" in children's mental health. *School Psychology Review*, 32, 153–68.

Teacher Rating of School-Wide MTSS Implementation

Description: A critical context variable that affects the implementation and effectiveness of supplemental interventions, such as *ABC Support*, is the extent to which a school has in place a school-wide, multi-tiered system of academic and behavior supports for all students (Forman, Lubin, & Tripptree, 2014). Specifically, the level of implementation of school-wide MTSS for positive behavior and academic skills is likely to moderate the benefits of *ABC Support*. We developed a measure, entitled *Teacher Rating of School-Wide MTSS Implementation*, based on a review of similar research-based ratings of school-wide MTSS implementation (see **Selected Research** below). On this measure, teachers rate 17 implementation features of MTSS as being *fully*, *partially*, or *not much* in place in their schools. They also rate (*very much*, *partially*, or *not much*) the degree to which the school-wide system of behavior support and core reading program provide students with evidence-based components for strengthening positive behavior (4 elements) and reading proficiency (5 elements).

Implementation in ABC Support: Teachers who participate in ABC Support complete this measure once during the *Pre-Baseline Phase*.

Scores or Data Obtained from this Measure: The information obtained from the measure is primarily descriptive in nature, including (a) total scores for MTSS implementation (range = 17-51), with higher values indicating a higher level of implementation, and (b) total scores for evidence-based behavior support elements (range = 4-12) and reading instruction elements (range = 5-15).

Selected Research:

Algozzine, B., Barrett, S., Eber, L., George, H., Horner, R., Lewis, T., ... Sugai, G. (2010). *School-wide PBIS tiered fidelity inventory.* Washington, DC: OSEP Technical Assistance Center on Positive Behavioral Interventions and Support.

Forman, S. G., Lubin, A. R., & Tripptree, A. L. (2014). Best practices in implementing evidence-based interventions. In P. L. Harrison & A. Thomas (Eds.), Best Practices in School Psychology: Systems-Level Services (pp. 43-56). Bethesda, MD: National Association of School Psychologists.

Kame'enui, E., & Simmons, D. (2003). *Planning and evaluation tool for effective school-wide reading programs-revised* (PET-R). Eugene, OR: Institute for the Development of Educational Achievement, University of Oregon.

Horner, R. H., Todd, A. W., Lewis-Palmer, T., Irvin, L. K., Sugai, G., & Boland, J. B. (2004). A research instrument for assessing school-wide positive behavior support. *Journal of Positive Behavior Interventions*, 6, 13-12.

McIntosh, K., & Goodman, S. (2016). School-level team checklist for integrated practices. In *Integrated Multi-tiered systems of support: Blending RTI and PBIS* (153). New York, NY: Guildford.

[teacher ID label]

Teacher Rating of School-Wide MTSS Implementation

We want to know the extent to which your school is implementing school-wide multi-tiered systems of support for positive behavior and academic skills. For each item in Section I, indicate whether the feature is *fully* (~75-100%), *partially* (~25-50%), or *not much* (~0-25%) in place in your school. For each item in Sections II and III, indicate the degree to which students receive instruction and practice related to behavior and reading – *very much*, *somewhat*, or *not much*.

I. In my school, there is (are):	Fully in place	Partially in place	Not much in place	Don't know
School-wide system of multi-tiered supports for academic skills				
School-wide system of multi-tiered supports for positive behaviors				
Implementation by all staff of school-wide, multi-tiered interventions				
School-wide staff <i>professional development</i> related to <i>positive behavior support</i>				
School-wide staff <i>professional development</i> related to multi-tiered <i>academic support</i>				
Existence of school-wide <i>team</i> to assist with multi-tiered academic and behavior support				
Administrative support for implementation of school-wide, multi-tiered interventions.				
3-5 positively-stated, school-wide behavior expectations for all students and settings				
School-wide comprehensive, <i>core reading program</i> (with research support)				
School-wide <i>academic screening</i> to determine students' <i>instructional</i> needs				
School-wide behavior screening to determine students' behavioral needs				
Progress-monitoring measures to document and monitor student performance				
Student data that are used to adapt / guide instruction and behavior support				
Supplemental programs to <i>provide reading support</i> for students who need extra help				
Supplemental programs to <i>provide behavior support</i> for students who need extra help				
Resources (personnel, time, etc.) to support teachers in the implementation of supplemental programs to address <i>behavior challenges</i> .				
Resources (personnel, time, etc.) to support teachers in the implementation of supplemental programs to address <i>academic challenges</i> .				

PLEASE RESPOND TO ADDITIONAL ITEMS ON THE REVERSE SIDE.

II. Through implementation of the school-wide approach to discipline and behavior support, my students receive:	Yes, very much	Partially, somewhat	No, not much
Explicit instruction about <i>behavior expectations</i>			
Explicit instruction in <i>classroom routines</i> (e.g., making transitions, turning in work)			
Consistent, clearly defined rewards for positive behavior;			
Consistent, clearly defined consequences for violations of expectations			
III. Through implementation of the school-wide core reading program, my students receive:	Yes, very much	Partially, somewhat	No, not much
Explicit instruction and practice with <i>phonemic awareness</i> skills			
Explicit instruction and practice with <i>phonics</i> skills			
Explicit instruction and practice with <i>reading fluency</i> skills			
Explicit instruction and practice with <i>vocabulary</i> skills			
Explicit instruction and practice with <i>comprehension</i> skills			
Comments:			
			

CLASSROOM SNAPSHOT

Description: The overall classroom context – specifically, the quality of instructional and behavior management practices in the regular classroom – affects the degree to which benefits of supplemental interventions are maintained (Forman, Lubin, & Tripptree, 2014). We developed an observation tool, called the *Classroom Snapshot*, based on a review of similar research-based observation checklists (see **Selected Research** below). The *Classroom Snapshot* is a checklist for recording dimensions of evidence-based classroom instruction and management procedures based on a brief, 5-minute "snapshot" observation or walk-through. Using this checklist, observers rate 16 evidence-based dimensions of effective instruction and classroom management as *mostly* (>75% of time), *somewhat* (25% to 75% of time), or *rarely* (< 25% of time) occurring in the classroom.

Implementation in ABC Support: Trained observers complete a "snapshot" of the classrooms of participating teachers at two time points: (a) once during the *Pre-Baseline Phase* to describe the classroom context prior to the initiation of *ABC Support*, and (b) once at *Post-Intervention* to evaluate changes (if any) in the classroom context associated with *ABC Support* implementation.

Scores or Data Obtained from this Measure: As a measure of classroom quality, the information from the measure is descriptive. A global quantitative indicator of classroom quality (range = 16-48) is obtained at each measurement time.

Selected Research:

Forman, S. G., Lubin, A. R., & Tripptree, A. L. (2014). Best practices in implementing evidence-based interventions. In P. L. Harrison & A. Thomas (Eds.), Best Practices in School Psychology: Systems-Level Services (pp. 43-56). Bethesda, MD: National Association of School Psychologists.

Missouri State Department of Education. (2017). MO SW-PBSD Tier 1 team workbook: Brief classroom observation or walk-through. Jefferson City, MO: Author.

National Institute for Direct Instruction. (1999). *Five-minute observation form*. Washington, DC: Author.

Texas Center for Reading and Language Arts. (2002). *Checklist for effective instruction*. Austin, TX: Author.

Washburn, S. (2010). *Classroom management self-assessment*. Bloomington, IN: Center on Education and Lifelong Learning, Indiana University.

Iteacher	ID	lahal1

Classroom Snapshot

[check]	Pre-Baseline Phase
	Post-Intervention Phase

The purpose of this tool is to derive a "snapshot" of the classrooms of teachers who are implementing *ABC Support* with individual students. The aim is to characterize classrooms relative to key features of effective universal behavior and academic (especially reading) supports. Similar to a "classroom walkthrough checklist," observers indicate which features of classroom instruction and classroom management are present (*mostly, somewhat, rarely*) based on a brief (e.g., five-minute) "snapshot" observation of the classroom.

Focus of reading lesson/instruction:	Date:
Number of students: Number of adults (in addition to classroom teacher):	Time:
Instructional grouping format (check all that apply):	

- O Teacher-led instruction with whole group
- O Small-group instruction with teacher
- O Students working independently in small groups or pairs
- O Students working independently by themselves
- O One-on-one teacher instruction with student(s)

Check each feature of classroom instruction or management as "mostly present or occurring" (> 75% of time); "somewhat present or occurring" (25% to 75% of time); or "rarely present or occurring"	Mostly Present	Somewhat present	Rarely Present	No chance to observe
(< 25% of time).	>75% of time	25% - 75% of time	< 25% of time	
Classroom <i>organized</i> and arranged to minimize crowding and distraction				
High structure and predictability (explicit routines, directions, goals, etc.)				
Positive behavior <i>expectations</i> (stated, posted, reviewed, etc.)				
Praise/reinforcement for positive behavior > reprimands/punishment for inappropriate behavior				
Multiple opportunities for students to respond, participate, and practice skills/behaviors				
Students actively engaged (writing, responding, performing action, etc.)				
Teacher continuously monitoring students (moving around room, checking for understanding, etc.)				
Redirection given in response to inappropriate behavior				
Re-teaching or error correction given after inaccurate academic responding				
Specific, <i>informative feedback</i> for behavior or academic responding				
Explicit instruction and modeling/demonstrating of academic skills				
Students <i>paying attention</i> to task/instruction				
Compliance among students, with minimal disruptions				
High level of <i>academic</i> engaged time – minimal "down time"				
High success rate among students (high level of accurate responding)				
Warm, enthusiastic, positive, and encouraging <i>classroom climate</i>				

TEACHER AND CLASSROOM INFORMATION

DESCRIPTION: Education intervention researchers gather teacher background information and information about the student composition of classrooms to describe the demographics of teachers/classrooms that participate in interventions. This information is used to (a) describe the sample, (b) clarify the characteristics of classroom, teachers and students to which results can generalize, and (c) make comparisons to findings obtained from research samples with similar characteristics (French, 2014). We developed a brief form to collect demographic information based on an analysis of the item content for similar background surveys used in intervention research (Connelly, 2013).

Implementation in ABC Support: Teachers who participate in ABC Support complete this measure once during the *Pre-Baseline Phase*.

Scores of Data Obtained from Measure: The data from this measure are descriptive. Descriptive statistics (e.g., *mean*, *range*, *percentage*) are used to summarize the characteristics of participants in *ABC Support*.

Selected Research:

Connelly, L. M. (2013). Demographic data in research studies. *Nursing*, 22, 269-271.

French, C. (2014). Why demographic data matters. *Information Brief #1, University of New Hampshire Cooperative Extension, 1-5.*

Hansen, M. H., Hurwitz, W. N., & Madow, W. G. (1993). Sample survey methods and theory. In *Research Methods and Applications* (Vol. 1). New York, NY: Wiley.

TEACHER AND CLASSROOM INFORMATION

Tell Us about Yourself.

1.	Which best describes your race [check all that apply]? Asian American Indian or Alaska Native Black or African American Native Hawaiian or Other Pacific Islander White Other (specify):					
2.	What is your ethnicity [check one]? Hispanic Non-Hispanic					
3.	What is the highest level of education you have completed? [check one] Associate degree Bachelor's degree At least one year beyond Bachelor's, but not a graduate degree Master's degree Education specialist or professional diploma (at least one year past Master's) Other (please specify):					
4.	The year you graduated with your <u>highest</u> degree:					
5.	Counting this year How many <u>total</u> years of experience in education? How many years teaching Grade 1 and/or Grade 2? How many years teaching in your <u>current</u> classroom?					
6.	How knowledgeable are you about 1 2 3 4 implementing multi-tiered supports not at all minimally moderately extremely for reading? [circle one]					
7.	How knowledgeable are you about 1 2 3 4 implementing multi-tiered supports not at all minimally moderately extremely for behavior ? [circle one]					
8.	Counting this year How many years of experience implementing multi-tiered supports for academic skills? How many years pf experience implementing multi-tiered supports for behavior?					
Te	II Us about Your Students.					
1.	How many students in your classroom? boys girls total					
2.	. What is the approximate number of students within each racial category? Asian American Indian or Alaska Native Black or African American Native Hawaiian or Other Pacific Islander Other (specify):					
3.	What is the approximate number of students for each ethnicity? Hispanic Non-Hispanic					
4.	How many students in your class qualify for free/reduced lunch? How many students in your class speak a language other than English at home?					