The Teacher Knowledge of Early Literacy Skills survey is Appendix B of—
Educator outcomes associated with implementation of Mississippi's K–3 early literacy professional development initiative, which is available for download at:
https://files.eric.ed.gov/fulltext/ED573545.pdf

Of note, items on the Teacher Knowledge of Early Literacy Skills survey were modified and sourced from previous research (Binks-Cantrell et al., 2012; Bos et al., 2001; Carlisle et al., 2009; Carlisle et al., 2011; Cunningham et al., 2004; Mather et al., 2001; Moats & Foorman, 2003; Reutzel et al., 2011; Salinger et al., 2010; Spear-Swerling & Cheesman, 2012).

Citation:
Folsom, J. S., Smith, K. G., Burk, K., & Oakley, N. (2017). Educator outcomes associated with implementation of Mississippi's K–3 early literacy professional development initiative (REL 2017–270). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from http://ies.ed.gov/ncee/edlabs.

Appendix B. Teacher Knowledge of Early Literacy Skills survey

This appendix includes both of the Teacher Knowledge of Early Literacy Skills survey forms (tables B1 and B2) and the raw-to-scale score conversions (table B3) based on the psychometric analysis described in appendix A. All items were sourced from other research tools either in the public domain or used with permission (Binks-Cantrell et al., 2012; Bos et al., 2001; Carlisle et al., 2009; Carlisle et al., 2011; Cunningham et al., 2004; Mather et al., 2001; Moats & Foorman, 2003; Reutzel et al., 2011; Salinger et al., 2010; Spear-Swerling & Cheesman, 2012; see appendix A for details on item selection and modification).

Because the forms were equated—meaning that educators would receive the same score regardless of form—respondents were randomly assigned (by the survey software) to a form at each survey administration. This ensured that a particular form was not associated with a particular administration window. Approximately half of respondents received form A, and the other half received form B at each administration. There were no controls to ensure that the same form was not administered twice in a row to the same respondent. That is, each respondent had an equal chance of receiving either form at each administration, so it is possible respondents may have received the same form in consecutive survey administration windows.

Table B1. Teacher Knowledge of Early Literacy Skills survey form A

Item	Question	Choice A	Choice B	Choice C	Choice D	Correct answer
1	What does morphemic analysis help students do?	identify letter-sound correspondence	blend speech sounds	examine words for meaningful parts	separate syllables into onsets and rimes	C
2	What is a requirement of a syllable?	it contains at least one consonant letter	it contains no more than one vowel letter	it be a pronounceable unit	it contains no more than one phoneme	C
3	What can sentence combining help students learn to do?	question the text	correct grammatical errors	form complex sentence structures	analyze word structure	C
4	What is vocabulary instruction in the primary grades most concerned with teaching students?	highly frequent words	base words and meaningful parts (e.g., prefixes, suffixes)	decodable words	word meanings	D
5	Which of the following is NOT an irregular, high frequency word?	when	does	were	said	A
6	If "tife" is a word, the letter "i" would probably sound like the "i" in which word?	if	beautiful	find	ceiling	C
7	How should writing lessons be explicitly taught?	by explaining and modeling a task, skill, or strategy, and providing feedback while students write	by engaging students in correcting sample sentences on a daily basis	by explaining a task, skill, or strategy, and giving students an opportunity to practice	by engaging students in shared or interactive writing	A
8	Which of the following sets of words would be best for a teacher to use when providing students with examples of words conforming to the "silent e" phonics generalization?	time, make, cube, done	lake, breathe, raise, fate	brake, use, hope, shine	tree, lie, blue, toe	C
9	As a teacher reads aloud to his students from a social studies text he comments aloud, "This word pioneer is in bold print so that means it is an important word," and "The chapter headings in the book can help me understand the main ideas in the book, so I will be sure to read them." The teacher is helping students improve their comprehension of informational text primarily how?	teaching them how to use graphic organizers	modeling attention to useful features of informational text	improving students' recall of the details of the text	teaching them how to infer word meanings from context	B
10	Two or three times each week Mrs. Hruby teaches "phonics through spelling" with her students. She pronounces words sound-by-sound as her students listen, write the appropriate letters, and then blend the letters to identify the words. Why is this activity likely to be effective?	reinforces students' recognition of common spelling patterns	requires students to use letter-sound relationships to blend unfamiliar words	reviews and strengthens students' ability to recognize and blend word chunks	prepares students to combine letter-sound relationships with meaning-based clues	B

(continued)

Table B1. Teacher Knowledge of Early Literacy Skills survey form A *(continued)*

Item	Question	Choice A	Choice B	Choice C	Choice D	Correct answer
11	Why are there two n's in "running"?	because the base word ends in a single consonant preceded by a single vowel	because the final consonant is always doubled when adding -ing	because the letter u has many different pronunciations	because the consonant n is not well articulated	A
12	Mr. Lewis' class has been learning spelling rules for adding "ing" to base words. He is looking for groups of words that illustrate the various rules to give his students a complex challenge. Which of the following groups of words would be best for this purpose?	hopping, running, sending, getting	hoping, buying, caring, baking	seeing, letting, liking, carrying	all of the word sets are useful for this purpose	C
13	Mrs. Card wants to help her students become good spellers. Which activity should Ms. Card do?	pronounce a word and have students write each sound	display letter cards and have students pronounce the sounds	say each sound of a word and have students say the word	ask students whether pairs of spoken words rhyme	A
14	Why is metacognition important in reading comprehension?	it helps students to monitor their own comprehension	it makes the teacher aware of when the students are experiencing difficulty during reading	it prompts students to create mental images	it causes automatic processing of the text so that students can make meaning of the text	A
15	Teachers often read texts aloud as students follow along before the students try to read the text themselves. Which of the following is the best reason why teachers might do this?	to teach comprehension strategies directly	to model their expert decoding skills to students	to present a challenge to the students to read the text quickly	to demonstrate appropriate phrasing and expression for the text	D
16	What is a reading method that focuses on teaching the application of phonemes to letters called?	phonics	phonemics	orthography	phonetics	A
17	What would the open syllable of the nonsense word "botem" most likely rhyme with?	coat	hot	rah	low	D
18	After reading a story, what should the discussion focus on in order to maximize comprehension?	sequencing the events of the story	the most important parts of the story	the details of the story	the characters in the story	B
19	Which of the following is an example of reading comprehension instruction that helps to promote active construction of meaning?	independent silent reading	doing a think aloud	sounding out difficult words	looking up words in a dictionary	B
20	What is the most important reason that oral segmentation and oral blending activities should be a part of reading instruction in the primary grades?	strengthen students' fluency development through oral practice	help students hear and identify short and long vowel sounds	allow students to hear the mistakes of other students	give students practice with skills they will use in silent reading	D
21	Which word(s) is/are phonetically irregular?	done	give	peach	a and b	D

(continued)

Table B1. Teacher Knowledge of Early Literacy Skills survey form A *(continued)*

Item	Question	Choice A	Choice B	Choice C	Choice D	Correct answer
22	Following her lesson on recognizing diphthongs in words, Mrs. Byrnes wants to provide her students with additional practice. Which type of text should she select to provide the best practice?	predictable text with repetitious phrases	authentic text from children's literature	text with a high percentage of selected decodable words	none of the above	C
23	Mr. Kubota teaches his grade 3 students to decode unfamiliar words by breaking words into parts such as word root, prefix, and/or suffix (e.g., un-imagine-able). Which skill is he teaching?	structural analysis	analyze the meaning of the word parts	syllabication	chunking the word	A
24	What is the difference between sight words and vocabulary words?	sight words are learned through decoding and vocabulary words are not	sight words are learned on sight and vocabulary words are learned by decoding	sight words are related to recognition and vocabulary words are related to meaning	none of the above	C
25	A teacher assigns pairs of students to reread a text aloud to each other three times. What skill will this activity strengthen most effectively?	choral reading	text comprehension	fluency development	automatic word recognition	C
26	How many morphemes are in the word "unhappiness"?	2	3	4	5	B
27	Which phonemic awareness activity would be the most difficult for a student?	blending phonemes into real words	blending onset-rime units into real words	deleting a phoneme and saying the word that remains	segmenting words into phonemes	C
28	Mrs. Newswander begins a writing lesson by creating with the students a web that contains the word "said," surrounded by words like shouted, sulked, and replied. She did this to teach students:	prewriting	drafting	revising	editing	C
29	How many phonemes are in the word "box"?	1	2	3	4	D
30	Decoding skills will benefit a student's understanding of text only if the words he or she decodes are what?	recognized at sight	encountered several times	included in the student's oral vocabulary	also defined by context clues	C
31	Which of the following is a nonsense word that does not follow English spelling patterns?	shease	toyn	squive	clow	B

Source: Authors' modification of items sourced from previous research (Binks-Cantrell et al., 2012; Bos et al., 2001; Carlisle et al., 2009; Carlisle et al., 2011; Cunningham et al., 2004; Mather et al., 2001; Moats & Foorman, 2003; Reutzel et al., 2011; Salinger et al., 2010; Spear-Swerling & Cheesman, 2012).

Table B2. Teacher Knowledge of Early Literacy Skills survey form B

Item	Question	Choice A	Choice B	Choice C	Choice D	Correct answer
1	What is the rule for using a "ck" in spelling?	when the vowel sound is a diphthong	when the vowel sound is short	when the vowel sound is long	all of the above	B
2	Decoding skills will benefit a student's understanding of text only if the words he or she decodes are what?	recognized at sight	encountered several times	included in the student's oral vocabulary	also defined by context clues	C
3	Which word contains a consonant digraph?	flop	bang	sink	box	B
4	Which is a distinguishing characteristic of phonemic awareness instruction?	uses printed letters	uses two cueing systems	does not use printed letters	links meaning to sound	C
5	Which strategy for building students' phonemic awareness is the least likely to support beginning reading skills?	teaching blending and segmenting of phonemes in words	beginning phonemic awareness instruction in preschool	teaching letter sounds in combination with phoneme manipulation	teaching 3 or more types of phoneme manipulation skills at a time	D
6	Mrs. Funke is teaching her students to identify multisyllable words. Which is an appropriate first step for her to do?	model analyzing words for familiar prefixes and suffixes	show students how to blend individual letter-sounds, left-to-right	model how to look for little words in big words	demonstrate sequentially blending onsets and rimes	A
7	What is one reason that teaching students the meanings of a new word's parts (affixes and root words) is useful for vocabulary development?	helps students learn alternate spellings for words	helps students use the new word to understand the sentence	helps students decode multisyllabic new words	helps students comprehend other new words	D
8	How many phonemes are in the word "box"?	1	2	3	4	D
9	Which set of words is decodable?	bed, the, sit	side, some, roam	wash, boil, gave	chap, slew, soft	D
10	What would the word be if you say the word "ice," and then reverse the order of the sounds?	easy	sea	size	sigh	D
11	After reading a story, what should the discussion focus on in order to maximize comprehension?	sequencing the events of the story	the most important parts of the story	the details of the story	the characters in the story	B
12	If "tife" is a word, the letter "i" would probably sound like the "i" in which word?	if	beautiful	find	ceiling	C
13	Which of the following is the most effective instructional strategy for helping students simultaneously strengthen word recognition, fluency, and comprehension?	calling on students one at a time to read aloud from a story	having students read words from a word wall	having students select their own books and read them silently	having students "echo-read" paragraphs that the teacher has read aloud	D
14	Which word is an example of this spelling rule: double the final consonant of a closed syllable that ends in one consonant when adding a suffix beginning with a vowel?	ripple	accommodate	grassy	winning	D

Table B2. Teacher Knowledge of Early Literacy Skills survey form B *(continued)*

Item	Question	Choice A	Choice B	Choice C	Choice D	Correct answer
15	Mrs. Newswander begins a writing lesson by creating with the students a web that contains the word, said, surrounded by words like shouted, sulked, and replied. She did this to teach students:	prewriting	drafting	revising	editing	C
16	Which of the following words has an example of a final stable syllable?	wave	bacon	paddle	napkin	C
17	What can sentence combining help students learn to do?	question the text	correct grammatical errors	form complex sentence structures	analyze word structure	C
18	Which of the following is the best description of reading fluency?	reading fluency is the ability to read grade-appropriate text with good comprehension and a high degree of engagement	reading fluency is the ability to read grade-appropriate text with a high degree of accuracy and comprehension	reading fluency is the ability to read individual words, including both real words and nonsense words, with a high degree of accuracy	reading fluency is the ability to read grade-appropriate text accurately, effortlessly, and with appropriate intonation and expression	D
19	Which of the following is the most effective strategy for teaching new vocabulary words?	direct instruction in varied contexts or subjects, and indirect instruction through use of new words in conversation and topically-related texts	direct instruction in the context or subject during which the words are most often used, and indirect instruction through the use of text with controlled vocabulary	direct instruction only; indirect vocabulary instruction is ineffective	indirect instruction only; direct vocabulary instruction is ineffective	A
20	Why may students confuse the sounds /b/ and /p/ or /f/ and /v/?	students are visually scanning the letters in a way that letters are misperceived	the students can't remember the letter sounds so they are randomly guessing	the speech sounds within each pair are produced in the same place and in the same way, but one is voiced and the other is not	the speech sounds within each pair are both voiced and produced in the back of the mouth	C
21	What is the most important reason that oral segmentation and oral blending activities should be a part of reading instruction in the primary grades?	strengthen students' fluency development through oral practice	help students hear and identify short and long vowel sounds	allow students to hear the mistakes of other students	give students practice with skills they will use in silent reading	D
22	Mrs. Ellefsen is determined to increase her students' blending abilities. She has them sort words according to spelling patterns and they are doing well. What else could Mrs. Ellefsen do to increase her students' blending abilities?	have students read widely from easy texts	segment words orally for students to write the word spellings from dictation	model a word spelling strategy for students (e.g., see the word, spell the word, write the word)	explicitly teach students how to blend sounds to pronounce words	D

(continued)

Table B2. Teacher Knowledge of Early Literacy Skills survey form B *(continued)*

Item	Question	Choice A	Choice B	Choice C	Choice D	Correct answer
23	Which of the following is a noun phrase?	wrote the word	beside the stream	an ill-conceived idea	before entering the house	C
24	Which of these would be the final step a teacher would use in an instructional sequence designed to increase students' ability to make inferences about what they read independently?	teacher modeling	student guided practice	student application	teacher direct explanation	C
25	Mr. Kubota teaches his grade 3 students to decode unfamiliar words by breaking words into parts such as word root, prefix, and/or suffix (e.g., un-imagine-able). Which skill is he teaching?	structural analysis	analyze the meaning of the word parts	syllabication	chunking the word	A
26	Mr. Willard is planning a repeated reading activity to strengthen his students' fluency skills. Which of the following reading materials would be most effective for the activity?	a list of words from the social studies textbook	a list of high-frequency words from a teaching manual	two paragraphs from a grade-level text	two paragraphs from a grade 4 level text	C
27	Which of the following words contains a schwa sound?	cotton	phoneme	stopping	preview	A
28	If a student can read a list of words very rapidly and accurately without having to consciously decode, what is the student demonstrating?	comprehension	metacognition	automaticity	vocabulary skills	C
29	Fluency serves as a bridge between which two processes?	word recognition and comprehension	comprehension and vocabulary	phonological awareness and comprehension	word recognition and vocabulary	A
30	Mrs. Jackson's students need to improve their fluency skills. Which of the following activities should she include in her lesson plans for the 90-minute reading period?	students will repeatedly read a text in pairs for 20 minutes	students will read a 20-word list repeatedly until they can read it in 10 seconds	students will repeatedly read a text silently for 50 minutes	students will read along with books on tape for the entire 90 minutes	A
31	What does automaticity in reading refer to?	process complex information with little effort or attention	understand the meaning of the word upon seeing it in text	use the next step in a series of steps that have been memorized	apply an effective comprehension strategy when needed	A

Table B3. Raw-to-scale score conversions for the Teacher Knowledge of Early Literacy Skills survey

Teacher Knowledge of Early Literacy Skills survey form A			Teacher Knowledge of Early Literacy Skills survey form B		
Raw score	Theta equivalent	T-score	Raw score	Theta equivalent	T score
0	—	20	0	—	20
1	–4.033	20	1	–4.235	20
2	–3.257	20	2	–3.409	20
3	–2.839	22	3	–2.956	20
4	–2.546	25	4	–2.639	24
5	–2.311	27	5	–2.388	26
6	–2.107	29	6	–2.173	28
7	–1.920	31	7	–1.979	30
8	–1.740	33	8	–1.796	32
9	–1.563	34	9	–1.621	34
10	–1.384	36	10	–1.449	36
11	–1.201	38	11	–1.278	37
12	–1.012	40	12	–1.105	39
13	–0.817	42	13	–0.928	41
14	–0.618	44	14	–0.745	43
15	–0.417	46	15	–0.552	44
16	–0.212	48	16	–0.347	47
17	–0.002	50	17	–0.128	49
18	0.214	52	18	0.104	51
19	0.440	54	19	0.353	54
20	0.678	57	20	0.618	56
21	0.932	59	21	0.900	59
22	1.203	62	22	1.200	62
23	1.496	65	23	1.516	65
24	1.815	68	24	1.851	69
25	2.166	72	25	2.212	72
26	2.562	76	26	2.614	76
27	3.021	80	27	3.080	80
28	3.583	80	28	3.655	80
29	4.340	80	29	4.430	80
30	5.582	80	30	5.697	80
31	—	80	31	—	80

Source: Authors' analysis of data from Mississippi Department of Education (2015b).