

HQIM CURRICULUM REVIEW

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Kindergarten and First-Grade
HQIM Alignment with Research
on Code-Focused Instruction



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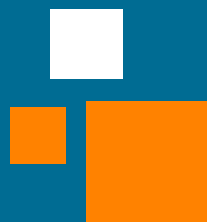


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Table of Contents



<u>Introduction</u>	5
<u>Review Procedure</u>	7
<i>Table 1: Research-Based Code-Focused Instructional Practices</i>	7
<u>Results</u>	10
<i>Table 2: Lesson and Duration Information by HQIM</i>	11
<u>Alignment with the WWC Practice Guide Recommendation Two</u>	13
<i>Figure 1: Alignment with Recommendation Two Practices by HQIM and Grade Level</i>	13
<u>Focus on Phonemic Awareness</u>	14
<i>Figure 2: Percentage of Lessons with Phonological Awareness Instruction in Kindergarten</i>	14
<i>Figure 3: Percentage of Lessons with Phonological Awareness Instruction in First Grade</i>	16
<u>Use of Articulatory Gestures</u>	17
<u>Appropriate Pacing for Letter-Sound Instruction</u>	18
<i>Table 3: Grapheme-Phoneme Correspondences Taught in Kindergarten HQIM</i>	21
<u>Explicit Instruction for Letter-Sounds</u>	26
<u>Instructional Progression of Letter-Sound Instruction</u>	26
<u>Connecting Phonemic Awareness and Print</u>	30
<i>Figure 4: Kindergarten Lessons with Phonemic Awareness Instruction Connected to Print</i>	30
<i>Figure 5: First-Grade Lessons with Phonemic Awareness Instruction Connected to Print</i>	32
<u>Dosage of Isolated Phonemic Awareness</u>	33
<i>Figure 6: Total Hours of Isolated Phonemic Awareness Instruction by HQIM and Grade Level</i>	34
<u>Alignment with the WWC Practice Guide Recommendation Three</u>	35
<i>Figure 7: Alignment with Recommendation Three Practices by HQIM and Grade Level</i>	36
<u>Focus on Blending and Segmenting Skills</u>	36
<i>Figure 8: Percentage of Lessons Teaching or Practicing Phonemic Awareness Skills by HQIM and Grade Level</i>	37
<i>Figure 9: Percentage of Lessons with Blending or Segmenting by HQIM and Grade Level</i>	38
<u>Systematic Phonics Instruction</u>	39
<i>Table 4: Grapheme-Phoneme Correspondences Taught in First-Grade HQIM</i>	41

Table of Contents



<u>Encoding</u>	44
<u>Decodable Text</u>	44
<i>Figure 10: Percentage of Lessons with Connected Text for Students by HQIM and Grade Level</i>	45
<i>Table 5: Student Texts in Kindergarten HQIM</i>	46
<i>Table 6: Student Texts in First-Grade HQIM</i>	52
<u>High-Frequency Word Instruction</u>	59
<i>Table 7: High-Frequency Words Taught in Kindergarten by HQIM</i>	61
<i>Figure 11: Kindergarten High-Frequency Word Regularity by HQIM</i>	64
<i>Figure 12: Kindergarten High-Frequency Word Activities by HQIM</i>	65
<i>Table 8: High-Frequency Words Taught in First-Grade HQIM</i>	67
<i>Figure 13: First-Grade High-Frequency Word Regularity by HQIM</i>	73
<i>Figure 14: First-Grade High-Frequency Word Activities by HQIM</i>	75
<u>Implications</u>	75
<u>Benchmark Advance Recommendations</u>	76
<u>CKLA Recommendations</u>	77
<u>Imagine Learning EL Education Recommendations</u>	78
<u>Wonders Recommendations</u>	79
<u>References</u>	80
<u>Technical Appendix</u>	85

The meaning of the term *high-quality instructional materials* (HQIM) can vary. However, according to EdReports, this term often means that the instructional materials are aligned to a set of standards designed to ensure students are being taught necessary skills and content (Chan, 2024). The [Tennessee Literacy Success Act](#) reiterated that school districts must use instructional materials aligned with the state’s academic standards by adopting materials from the approved [Tennessee Textbook and Instructional Materials Quality Commission list](#) or receive a waiver to use other materials. Sometimes the term *HQIM* is defined as aligning with evidence- or research-based practices (Texas Education Agency, n.d.), meaning those practices that have been shown to be effective from rigorous research studies (i.e., evidence-based practices) or are generally supported by research findings (i.e., research-based practices).

Although there are similarities between state literacy standards and research-based instructional practices, there also may be some differences. This is because state standards tend to focus more on “what” students should know and be able to do, whereas research can complement the work of applying standards by providing the “how” for teachers to implement instruction. For example, Tennessee literacy standards specify that kindergarten students should “demonstrate knowledge of one-to-one letter sound correspondence by producing the most frequent sound for each consonant” (K.FL.PWR.3). However, research can help suggest how to teach letter-sound correspondence in effective and efficient ways by considering the order, pacing, and activities that may best help students learn letter-sound correspondences and apply them in reading and spelling.





Prior to the upcoming English Language Arts [textbook adoption cycle](#) in 2026, four HQIM were reviewed for alignment with research-based instructional practices for code-focused¹ instruction. Effective early literacy instruction and intervention is key to preventing reading difficulties, and code-focused instruction (e.g., teaching how to isolate and manipulate the sounds in words, decode words, and recognize some words on sight) is an important lever in helping students develop adequate word recognition skills needed to become proficient readers (Scarborough, 2001). The four HQIM in this review were chosen because they were on the approved list and commonly used in districts in Tennessee (see report on [Patterns of Adopting HQIM](#)):

1. Amplify *Core Knowledge Language Arts (CKLA)*
2. Benchmark Education *Benchmark Advance*
3. Imagine Learning *EL Education*
4. McGraw Hill *Wonders*

This review aimed to provide stakeholders with detailed information about these four HQIM and their alignment with a set of research-based recommendations to support the already comprehensive review of HQIM for alignment with Tennessee literacy standards conducted by the Tennessee Textbook and Instructional Materials Quality Commission.

¹ Code-focused skills are reading skills associated with decoding print such as phonological awareness, understanding grapheme-phoneme correspondences, and identifying words with automaticity.

Review Procedure

To conduct this review, researchers at the Tennessee Reading Research Center organized a list of research-based recommendations starting with the [*What Works Clearinghouse Foundational Skills to Support Reading for Understanding in Kindergarten through 3rd Grade Practice Guide*](#) (Foorman et al., 2016). Two of the four recommendations were related to code-focused skills: “Develop awareness of the segments of sound in speech and how they link to letters,” (Recommendation 2) and “Teach students to decode words, analyze word parts, and write and recognize words,” (Recommendation 3). Using these recommendations and the specific practices listed in the guide as a framework, a set of research-based instructional practices (see Table 1) was organized and expanded upon using the literature on the scientific basis of learning to read (e.g., science of reading).

Table 1 *Research-Based Code-Focused Instructional Practices*

WWC Practice Guide Recommendation	Research-Based Practice	Research-Based Practice Description
Recommendation 2: Develop awareness of the segments of sound in speech and how they link to letters.		
Teach students to recognize and manipulate segments of sound in speech.	Focus on Phonemic Awareness	Instruction including larger units of phonological awareness (word, syllable, onset-rime) is present, but the instructional focus is at the phoneme level (phonemic awareness).
	Use of Articulatory Gestures	Teacher instruction of phoneme articulation (e.g., placement of teeth, tongue, and lips) is present in phoneme instruction.
Teach students letter-sound relations.	Appropriate Pacing for Letter-Sound Instruction	Pacing of letter-sound instruction is quicker than one letter per week (e.g., 2-4 per week).

Table 1 *Research-Based Code-Focused Instructional Practices (cont.)*

WWC Practice Guide Recommendation	Research-Based Practice	Research-Based Practice Description
	Explicit Instruction for Letter-Sounds	Explicit instruction (i.e., modeling, guided practice, and independent practice) in letter-sound instruction is present and not merely the teaching of letters in context (e.g., pointing out letters in shared reading activities).
	Instructional Progression of Letter-Sound Instruction	The instructional order of letter sounds follows a research-based progression including: 1. Introducing a short vowel or two early on to allow for decoding/ encoding words, meaning not all consonants are introduced before the vowels; 2. Introducing continuous phonemes (e.g., m, s) early as continuous phonemes may be easier to manipulate (e.g., blend); 3. Separates visually or phonetically similar letters from each other (e.g., b and d or v and f).
Use word-building and other activities to link students' knowledge of letter-sound relationships with phonemic awareness.	Connecting Phonemic Awareness and Print	Phonemic awareness activities include the use of letters/print to link students' knowledge of letter-sound relationships with phonemic awareness.
	Dosage of Isolated Phonemic Awareness	The time spent on isolated (i.e., oral only, not connected to print/phonics) phonemic awareness instruction aligns with research, which suggests around 10 total hours may be sufficient.

Table 1 *Research-Based Code-Focused Instructional Practices (cont.)*

WWC Practice Guide Recommendation	Research-Based Practice	Research-Based Practice Description
Recommendation 3: Teach students to decode words, analyze word parts, and write and recognize words.		
Teach students to blend letter sounds and sound-spelling patterns from left to right within a word to produce a recognizable pronunciation.	Focus on Blending and Segmenting Skills	Phonemic awareness instruction focuses on one or two skills at a time, with blending and segmenting being commonly instructed skills.
Teach students to recognize common word parts.	Systematic Phonics Instruction	Phonics instruction is systematic, following a clearly defined sequence.
Instruct students in common sound-spelling patterns.	Encoding	Encoding is present and connected to phonics instruction.
Have students read decodable words in isolation and in text.	Decodable Text	Decodable text (sentences and connected text) is used for students to apply decoding skills to recently learned patterns.
Teach regular and irregular high-frequency words so that students can recognize them efficiently. Introduce non-decodable words that are essential to the meaning of the text as whole words.	High-Frequency Word Instruction	Regular high-frequency words are taught with decoding strategies. Instruction with irregular high-frequency words, including those temporarily irregular based on the GPCs that have not been taught, draws students' attention to the irregular parts that must be learned (e.g., see, say, spell; marking heart parts; repetition).

Note. WWC = What Works Clearinghouse; GPC = grapheme-phoneme correspondence.



For each HQIM, the code-focused sections of each daily lesson were reviewed and coded. For *CKLA* and *Imagine Learning EL Education*, the code-focused lessons were in a separate skills block teacher guide. For *Benchmark Advance* and *Wonders*, the research team examined the parts of the lessons associated with code-focused skills. When available, the team also reviewed small-group guidance to note any instruction that was present in the small-group lesson but not the whole-class lesson. A code sheet was developed to record detailed information about each lesson examined in the HQIM. The data collected about each HQIM were then compared to the research-based instructional practices (see Table 1) and each HQIM was rated as meeting, partially meeting, or not meeting each recommended practice.

Results

General information about each HQIM reviewed by grade level, including the total number of lessons reviewed, total number of suggested minutes for whole-class code-focused instruction, and the inclusion of small-group instruction, is available in Table 2.

Table 2 Lesson and Duration Information by HQIM

HQIM	Grade Level	# Lessons Reviewed	Whole-Class Instructional Time in Total Min (Hrs)	Code-focused Instructional Minutes Per Lesson M (SD)	# Lessons with Suggested Small-Group Instruction Count (% of lessons)
<i>Benchmark Advance</i>	K	150	2,782 (46.37)	18.55 (1.27)	120 (80%)
<i>CKLA</i>	K	171	8,395 (139.92)	49.09 (11.69)	83 (49%)
<i>Imagine Learning EL Education</i>	K	130	2,681 (44.68)	20.62 (2.05)	130 (100%)
<i>Wonders</i>	K	149	3,026 (50.43)	20.31 (4.27)	149 (100%)
<i>Benchmark Advance</i>	1	150	2,807 (46.78)	18.71 (1.36)	120 (80%)
<i>CKLA</i>	1	160	7,240 (120.67)	45.25 (14.22)	83 (52%)
<i>Imagine Learning EL Education</i>	1	130	2,544 (42.40)	19.57 (2.62)	130 (100%)
<i>Wonders</i>	1	150	2,760 (46.00)	18.4 (4.99)	149 (99%)

Note. HQIM = High-Quality Instructional Materials; CKLA = Core Knowledge Language Arts; K = kindergarten; 1 = first grade; Min = minutes; Hrs = hours; M = mean; SD = standard deviation.

For kindergarten, the number of lessons in each HQIM ranged from 130 to 171, with the total whole-class instructional time across all lessons ranging from 44.68 hours to 139.92 hours. For three of the HQIM (i.e., *Benchmark Advance*, *Imagine Learning EL Education*, and *Wonders*), the whole-class instructional time was approximately 20 minutes per lesson, and small-group instruction was recommended as part of the code-focused lessons for a majority of the lessons (i.e., 80% to 100%). *Benchmark Advance* typically recommended 10-15 minutes for small-group instruction in 80% of the lessons, *Imagine Learning EL Education* typically recommended 40 minutes for small-group instruction in 100% of the lessons, and *Wonders* did not provide a suggested time for the small-group instruction recommended in 100% of the lessons.



For *CKLA*, more time was spent in whole-class code-focused instruction, with an average of nearly 50 minutes per lesson. However, small-group instruction was only recommended for about half of the lessons (49%) and for short periods of time, typically 20 minutes.

Similarly, for first grade, the number of lessons in each HQIM ranged from 130 to 160, with the total whole-class instructional time across all lessons ranging from 42.40 hours to 120.67 hours. Again, three of the HQIM (i.e., *Benchmark Advance*, *Imagine Learning EL Education*, and *Wonders*) suggested approximately 20 minutes per lesson for whole-class code-focused instruction time, with small-group instruction being recommended for a majority of the lessons (i.e., 80% to 100%). The same recommended times for small-group instruction were provided in first grade as in kindergarten: *Benchmark Advance* (10-15 minutes, 80% of lessons), *Imagine Learning EL Education* (40 minutes, 100% of lessons), and *Wonders* (no time recommendation, 99% of lessons). For *CKLA*, the time spent in whole-class code-focused instruction was longer, with an average of approximately 45 minutes per lesson. Again, small-group instruction was only recommended for about half of the lessons (52%) and for short periods of time, typically 20 minutes.

Alignment with the WWC Practice Guide Recommendation Two

Across the four HQIM and two grade levels, seven research-based practices were examined related to teaching students to develop an awareness of the segments of sound in speech (i.e., phonological awareness) and how those sounds link to letters (i.e., the alphabetic principle). A stoplight chart was created for the seven practices (see Figure 1) with green meaning the practice was clearly evident, yellow meaning the practice was partially evident, and red meaning there was little evidence of the practice. The evidence used to determine the rating for each of the seven practices is discussed in detail below.

Figure 1 *Alignment with Recommendation Two Practices by HQIM and Grade Level*

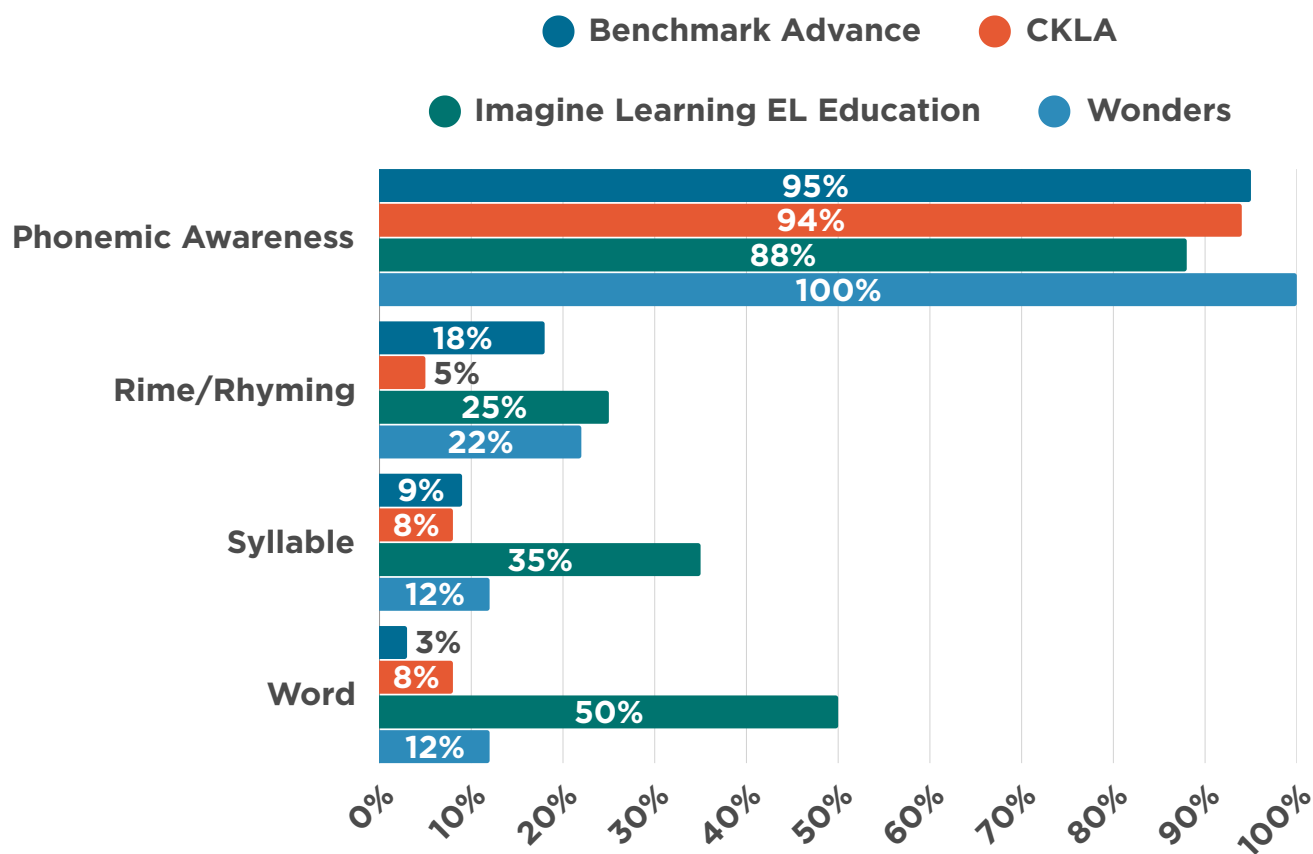
	<i>Benchmark</i>		<i>CKLA</i>		<i>Imagine Learning EL Education</i>		<i>Wonders</i>	
	K	1	K	1	K	1	K	1
Focus on Phonemic Awareness								
Use of Articulatory Gestures		N/A		N/A		N/A		N/A
Appropriate Pacing for Letter-Sound Instruction		N/A		N/A		N/A		N/A
Explicit Instruction for Letter-Sounds								
Instructional Progression of Letter-Sound Instruction		N/A		N/A		N/A		N/A
Connecting Phonemic Awareness and Print								
Dosage of Isolated Phonemic Awareness								

Note. Green = the practice was clearly evident; yellow = the practice was partially evident; red = little evidence of the practice being implemented; N/A = Not applicable, K = kindergarten, 1 = first grade.

Focus on Phonemic Awareness

The first instructional practice examined considered whether the focus of phonological awareness instruction was on phonemic awareness (i.e., the phoneme level) rather than on larger units of sound (e.g., word, syllable, rime). Although larger units of sound are generally easier to manipulate than smaller units (Anthony et al., 2003), research suggests that children do not need to master larger sound units before beginning phoneme-level instruction (Ukrainetz et al., 2011). Identifying and manipulating individual phonemes is beneficial for reading and spelling outcomes (Foorman et al., 2016; National Reading Panel, 2000) and should be the focus of phonological awareness instruction (Piasta & Hudson, 2022). In order to rate the HQIM on this practice, the percentage of lessons that included phonemic awareness instruction, with or without print, was compared to the percentage of lessons that included word level, syllable level, and onset-rime level instruction for the kindergarten HQIM (see Figure 2) and the first-grade HQIM (see Figure 3).

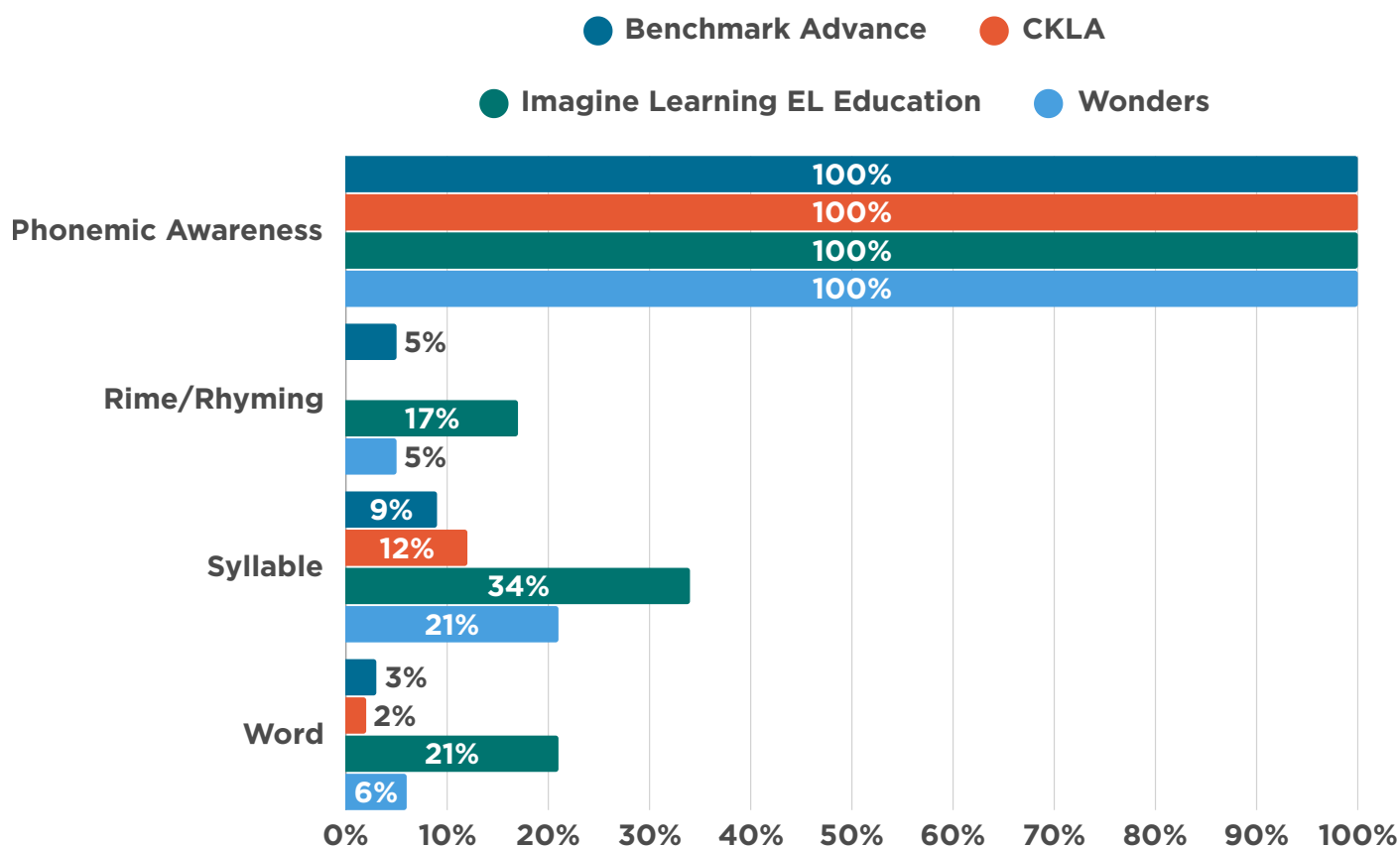
Figure 2 *Percentage of Lessons with Phonological Awareness Instruction in Kindergarten*



For kindergarten, instruction at the word level (e.g., counting/ tapping words in a sentence, manipulating compound words) occurred in a small percentage of lessons for three of the HQIM: *Benchmark Advance* (3%), *CKLA* (8%), and *Wonders* (12%). For *Imagine Learning EL Education*, 50% of the lessons had word-level instruction. This instruction often occurred in the short (i.e., 2 minute) warm-up section. For example, the warm-up for all of Module 1 (i.e., Lessons 1-25) was manipulating compound words. For three HQIM, a similar and still relatively small percentage of lessons included phonological awareness instruction at the syllable level (e.g., counting/tapping syllables in a word, manipulating syllables in a word): *Benchmark Advance* (9%), *CKLA* (8%), and *Wonders* (12%). Again, *Imagine Learning EL Education* suggested instruction at the syllable level in a larger percentage of lessons (35%) than the other HQIM. As for instruction focused on the onset-rime level or rhyming words (i.e., matching rimes of words), there was again a similar percentage of lessons teaching this skill across three HQIM: *Benchmark Advance* (18%), *Imagine Learning EL Education* (25%), and *Wonders* (22%). For rime/ rhyming instruction, only a small percentage (5%) of lessons taught this skill in *CKLA*. Finally, all four HQIM provided phonemic awareness instruction in a large percentage of their kindergarten lessons, especially compared to the other phonological awareness skills: *Benchmark Advance* (95%), *CKLA* (94%), *Imagine Learning EL Education* (88%), and *Wonders* (100%). Given these percentages, all four HQIM were rated as green for kindergarten, which means they had evidence of a focus on phonemic awareness instruction in their lessons.



Figure 3 *Percentage of Lessons with Phonological Awareness Instruction in First Grade*



For first grade, instruction at the word level (e.g., counting/tapping words in a sentence, manipulating compound words) occurred in a small percentage of lessons for all the HQIM: *Benchmark Advance* (3%), *CKLA* (2%), *Imagine Learning EL Education* (21%), and *Wonders* (6%). For three HQIM, a similar and still relatively small percentage of lessons included phonological awareness instruction at the syllable level (e.g., counting/tapping syllables in a word, manipulating syllables in a word): *Benchmark Advance* (9%), *CKLA* (12%), and *Wonders* (21%). Again, *Imagine Learning EL Education* suggested instruction at the syllable level in a larger percentage of lessons (34%) than the other HQIM.

As for instruction focused on the onset-rime level or rhyming words (i.e., matching rimes of words), there was again a small percentage of lessons teaching this skill across three HQIM: *Benchmark Advance* (5%), *Imagine Learning EL Education* (17%), and *Wonders* (5%). For onset rime/rhyming instruction, none of lessons in first grade focused on rhyming instruction in *CKLA*. All four HQIM included phonemic awareness instruction in 100% of the first-grade lessons. Given these percentages, all four HQIM were rated as green, which means they had evidence of a focus on phonemic awareness instruction in their lessons.

Use of Articulatory Gestures

The second practice examined was whether the HQIM included guidance for teachers and instruction on how to articulate English phonemes. Articulatory gestures can include showing students the proper placement of their teeth, tongue, and lips as well as noticing whether the sound is voiced or unvoiced. The inclusion of articulatory gesture instruction along with phonemic awareness and alphabet instruction has been shown to be beneficial for phonemic awareness skills (Becker & Sylvan, 2021; Boyer & Ehri, 2011; Castiglioni-Spalten & Ehri, 2003). The use of this practice can help draw students' attention to the articulatory differences between similar phonemes. In order to rate the HQIM on this practice, the research team calculated for each HQIM the number of lessons that taught a specific phoneme (i.e., lessons that taught new grapheme-phoneme correspondences [GPCs] or letter-sound connections) that also included articulatory gestures.



Only kindergarten was examined as this is when basic GPCs (i.e., one letter for one phoneme) are introduced, and students may benefit from this articulation instruction such as how to articulate and notice the difference between the /f/ and /v/ sounds. In the kindergarten HQIM, the use of articulatory gestures was very prevalent, and three of the HQIM (i.e., *Benchmark Advance*, *Imagine Learning EL Education*, *Wonders*) were rated green for high consistency in providing this guidance. For *Benchmark Advance*, *Imagine Learning EL Education*, and *Wonders*, the teacher guides always provided articulatory gesture guidance for all GPCs taught. *CKLA* was rated as yellow, as articulatory gesture guidance was provided for 81% of the GPCs taught, with the teacher guides not providing this guidance for several phonemes, including /t/, /d/, /j/, and /k/. Several of these are similar to other phonemes, so students may benefit from articulatory gestures during instruction of these phonemes.

Appropriate Pacing for Letter-Sound Instruction

The third practice considered was the pace for introducing letter-sound correspondences for the 26 letters of the alphabet. The pacing of initial letter-sound instruction should be quicker than one letter per week. Research has suggested that students have demonstrated better letter-sound learning when letter-sounds were introduced at a faster rate (e.g., 2-4 per week) than a slower rate (e.g., letter of the week; Piasta, 2023; Vadasy & Sanders, 2021). Only the kindergarten HQIM were reviewed for the pacing recommended by research as this is the grade level when letter-sounds are first introduced. [Table 3](#) shows the letter-sound correspondences taught by week for each kindergarten HQIM reviewed.

The pace of letter-sound instruction varied widely across the four HQIM. *Benchmark Advance* was rated as not implementing research-based pacing. For the most part, students were taught just one letter-sound per week except for the last two weeks when two letter-sounds were taught. This meant that all 26 letters of the alphabet were taught by Week 25 of kindergarten. There was an option for a fast-track introduction for some letters; however, these letters were not explicitly taught or incorporated into the activities. Additionally, these letters were then the focus letter on a later week. Spending 25 weeks teaching 26 letters is approximately one letter per week.



CKLA was rated as meeting the recommended pacing. Although no letter-sound correspondences were taught for the first four weeks of lessons, the pace then went at four letter-sounds per week, with 25 of the 26 letters being taught by Week 12 and a couple of review weeks occurring during this time. The letter “Q” was taught later in Week 20 once digraphs had been introduced. Teaching 25 letters in 12 weeks averages approximately two letters per week.

Similarly, Imagine Learning *EL Education* also was rated as meeting the recommended pacing. Two to three letter-sounds were introduced each week after the first two weeks when just one letter was taught, which means all 26 letters were taught by Week 12, and the pace averaged approximately two letter-sounds per week.

Finally, *Wonders* was rated as partially implementing the recommended pacing. There were 14 weeks where just one letter-sound was taught. However, for the remaining 12 letter-sounds, two letter-sounds per week were introduced. Due to the inclusion of review weeks and introducing blends before all the letters of the alphabet had been taught, it took 23 weeks to introduce all 26 letters of the alphabet and their corresponding sounds. This is an average of about one letter per week.



Table 3 *Grapheme-Phoneme Correspondences Taught in Kindergarten HQIM*

Week	Benchmark Advance	CKLA	Imagine Learning <i>EI</i> Education	Wonders
Week 1			/t/ (t)	/m/ (m)
Week 2	/m/ (m)		/ă/ (a)	/ă/ (a)
Week 3	/ă/ (a)		/h/ (h) /p/ (p)	/s/ (s)
Week 4	/s/ (s)		/n/ (n) /k/ (c)	/p/ (p)
Week 5	/t/ (t)	/m/ (m) /ă/ (a) /t/ (t) /d/ (d)	/m/ (m) /r/ (r)	/t/ (t)
Week 6	/n/ (n)	/ö/ (o) /k/ (c) /g/ (g) /i/ (i)	/s/ (s) /v/ (v)	
Week 7	/i/ (i)		/i/ (i) /g/ (g)	/i/ (i)
Week 8	/f/ (f)	/n/ (n) /h/ (h) /s/ (s) /f/ (f)	/d/ (d) /f/ (f) /l/ (l)	/n/ (n)
Week 9	/p/ (p)	/v/ (v) /z/ (z) /p/ (p) /ë/ (e)	/y/ (y) /k/ (k)	/k/ (c)
Week 10	/ö/ (o)		/ü/ (u) /ks/ (x) /kw/ (q/qu)	/ö/ (o)

Table 3 *Grapheme-Phoneme Correspondences Taught in Kindergarten HQIM (cont.)*

Week	Benchmark Advance	CKLA	Imagine Learning <i>EI</i> Education	Wonders
Week 11	/k/ (c)	/b/ (b) /l/ (l) /r/ (r) /ü/ (u)	/ö/ (o) /b/ (b) /w/ (w)	/d/ (d)
Week 12	/h/ (h)	/w/ (w) /j/ (j) /y/ (y) /ks/ (x) /k/ (k)	/ë/ (e) /z/ (z) /j/ (i)	s- blends (sn, sp, st)
Week 13	/b/ (b)		/sh/ (sh) /ch/ (ch) /th/ (th)	/h/ (h)
Week 14	/ü/ (u)	consonant blends /z/ (s)		/ë/ (e)
Week 15	/r/ (r)			/f/ (f) /r/ (r)
Week 16	/ë/ (e)			/b/ (b) /l/ (l)

Table 3 *Grapheme-Phoneme Correspondences Taught in Kindergarten HQIM (cont.)*

Week	Benchmark Advance	CKLA	Imagine Learning <i>EI</i> Education	Wonders
Week 17	/g/ (g)			/k/ (k, ck)
Week 18	/d/ (d)	/ch/ (ch) /sh/ (sh) /th/ (th)		l- blends (cl, bl, fl, sl)
Week 19	/w/ (w)	/kw/ (q/qu) /ng/ (ng)		/ü/ (u)
Week 20	/l/ (l)			/g/ (g) /w/ (w)
Week 21	/j/ (j)			/v/ (v) /ks/ (x)
Week 22	/k/ (k)			/j/ (j) /kw/ (q/qu)
Week 23	/y/ (y)	/k/ (ck) /b/ (bb) /d/ (dd) /f/ (ff) /g/ (gg) /k/ (cc) /l/ (ll) /m/ (mm)	/s/ (ss) /z/ (zz) /f/ (ff) /l/ (ll)	/y/ (y) /z/ (z)

Table 3 Grapheme-Phoneme Correspondences Taught in Kindergarten HQIM (cont.)

Week	Benchmark Advance	CKLA	Imagine Learning EI Education	Wonders
Week 24	/v/ (v) /kw/ (q/qu)	/s/ (ss) /z/ (zz) /p/ (pp) /t/ (tt) /n/ (nn) /r/ (rr)	/ā/ (a_e) /ī/ (i_e)	
Week 25	/ks/ (x) /z/ (z)		/ō/ (o_e) /ū/ (u_e)	/ā/ (a_e)
Week 26	/ā/ (a_e)		/ar/ (ar) /or/ (or) /er/ (er, ir, ur)	/ī/ (i_e)
Week 27	/ō/ (o_e)			/ō/ (o_e, o)
Week 28	/ī/ (i_e)			/ū/ (u_e)
Week 29	/ū/ (u_e)			/ē/ (e_e, e, ee)

Note: The gray boxes mark weeks that were not included in the HQIM.

Table 3 *Grapheme-Phoneme Correspondences Taught in Kindergarten HQIM (cont.)*

Week	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning El Education</i>	<i>Wonders</i>
Week 30	/ē/ (e_e, e)			
Week 31		/ē/ (ee)		
Week 32		/ā/ (a_e)		
Week 33		/ī/ (i_e)		
Week 34		/ō/ (o_e)		
Week 35		/ū/ (u_e)		
Week 36				

Note: The gray boxes mark weeks that were not included in the HQIM.



Explicit Instruction for Letter-Sounds

The fourth practice evaluated was the presence of explicit instruction (i.e., modeling, guided practice, and independent practice) for letter-sound correspondences rather than merely “in context” teaching (e.g., pointing out letters in shared reading activities). Children have been shown to learn more letter sounds when letters are taught in isolation when compared to children who experienced letters being taught only in context (e.g., children’s names, within a storybook), which suggests explicit letter instruction is beneficial (Piasta, 2023; Roberts et al., 2020). When a new letter-sound correspondence or GPC was taught, the lesson(s) were coded for whether or not the guidance provided teacher modeling, guided practice, and independent practice with the GPC in words. Explicit instruction was marked for all new GPCs taught in the kindergarten and first-grade HQIM. All four HQIM in both kindergarten and first grade showed consistent (i.e., 100%) use of explicit teaching for lessons involving new GPCs.

Instructional Progression of Letter-Sound Instruction

The fifth research-based practice evaluated was the extent to which the instructional progression of letter sounds in the four kindergarten HQIM followed three research-based recommendations for the order of letter introduction. Given that having students decode and encode short words (i.e., consonant-vowel-consonant [CVC] or vowel-consonant [VC]) benefits reading and spelling development, careful planning of the order of letter introduction allows for this to happen as soon as possible over having to wait until children have been taught all the letter sounds.



The first recommendation is that one or two short vowels should be introduced early on to allow for decoding and encoding words rather than introducing all consonants before the vowels. All four HQIM introduced a vowel (i.e., the letter *a*) as the second letter taught, and thus, met this recommendation. However, *Benchmark Advance*, *CKLA*, and *Wonders* introduced additional vowels more quickly (i.e., three of the first 10 letters taught were vowels) than *Imagine Learning EL Education*, which only introduced one vowel in the first 10 letters taught.

The second recommendation suggests continuous phonemes or sounds that can be stretched out and held as long as there is breath should be introduced early in the progression in order to facilitate students decoding words. Manipulating continuous sounds (e.g., /m/, /s/) may be easier than clipped sounds (e.g., /t/, /k/), which has led to suggestions that initial instruction focuses on continuous sounds at the beginning of words (Gonzalez-Frey & Ehri, 2021; Piasta & Hudson, 2022). Although there are no exact criteria for how to implement this practice alongside the other considerations, there are several common continuous consonant phonemes (i.e., /m/, /s/, /n/, /f/, /l/, and /r/) that could be introduced early when teaching letter-sounds.

Across all four HQIM, five of the first 10 consonants introduced were continuous phonemes, with the other five consonants being clipped or stopped phonemes. This suggests that all HQIM were introducing some continuous phonemes and their corresponding graphemes or letters that could be used to build words that students could continuously blend. Interestingly though, if only the first five consonant letter-sounds are considered, *Benchmark Advance* introduced the most continuous phonemes (i.e., four), *Wonders* introduced three continuous phonemes, and *CLKA* and *Imagine Learning EL Education* had only one continuous phoneme among the first five consonant letter-sounds.

The third recommendation for letter-sound introduction is that the order used separates visually or phonetically similar letters from each other (e.g., b and d or /v/ and /f/). Research has found that students are more likely to learn visually or phonetically similar letters when they are presented at separate time points in instruction (Piasta, 2023). Visually similar letters are ones that children are likely to confuse because the shape or form of the letter is similar, including letter pairs: b and d, p and q, i and l, m and n, h and n, M and W, or e and c.



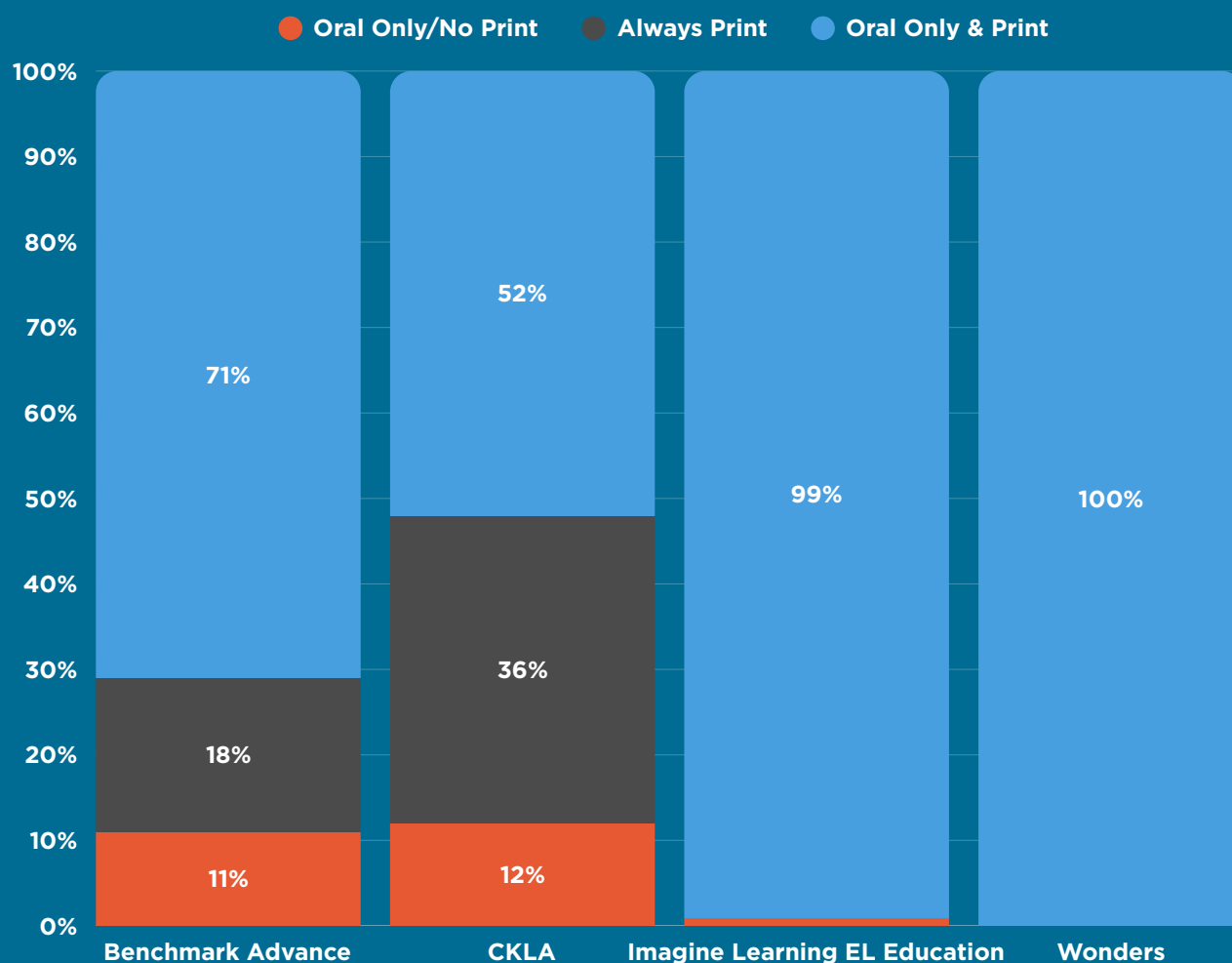
Given that there are 26 letters in the alphabet, there were 25 transitions (i.e., neighboring pairs of letters in the order of introduction) to consider and determine whether any contained visually similar letters, and all four HQIM suggested non-visually similar letters in consecutive weeks/lessons at least 84% of the time. In *Imagine Learning EL Education*, none of the 25 transitions put two visually similar letters next to each other. For *Wonders*, only two transitions were with visually similar letters (i.e., c and o, w and v). *CKLA* had three pairs of visually similar letters taught consecutively that could be confusing, including c and o, n and h, and u and w. For *Benchmark Advance*, four pairs of visually similar letters taught consecutively were identified, including o and c, h and b, e and g, and y and v. As to phonetically similar letters, again, there are 25 transitions to consider for the 26 letters of the alphabet, with potentially confusing letter pairs including: v and f, b and p, d and t, z and s, g and k, and e and i. Students sometimes confuse these letters in their early spelling such as by spelling “have” as “haf.” Three of the HQIM (i.e., *Benchmark Advance*, *Imagine Learning EL Education*, and *Wonders*) all separated phonetically similar letters in the recommended progression of letter-sound introduction. *CKLA* had some of these pairs together, including c and g, and f and v; however, the lessons were planned to specifically draw attention to these similarities through activities (e.g., sister sounds, minimal pairs).

Although all four HQIM utilized different orders to introduce letter-sounds, overall, all provided evidence that the progression followed research-based recommendations such as introducing vowels and continuous consonants early on to help facilitate blending in CVC words and separating or providing instruction acknowledging many potentially confusing letters for students.

Connecting Phonemic Awareness and Print

The sixth research-based practice is that phonemic awareness activities should include the use of letters or print to link students' knowledge of letter-sound relationships with phonemic awareness. Phonemic awareness instruction that includes letters (i.e., links instruction to knowledge of letters and sounds) has been found to be more beneficial for reading and spelling (National Reading Panel, 2000; Rehfeld et al., 2022; Rice et al., 2022) and is a recommended practice (Foorman et al., 2016). The percentage of lessons that only taught phonemic awareness without any print connection was compared to the percentage of lessons that only taught phonemic awareness connected to print for all HQIM for kindergarten (see Figure 4) and first grade (see Figure 5).

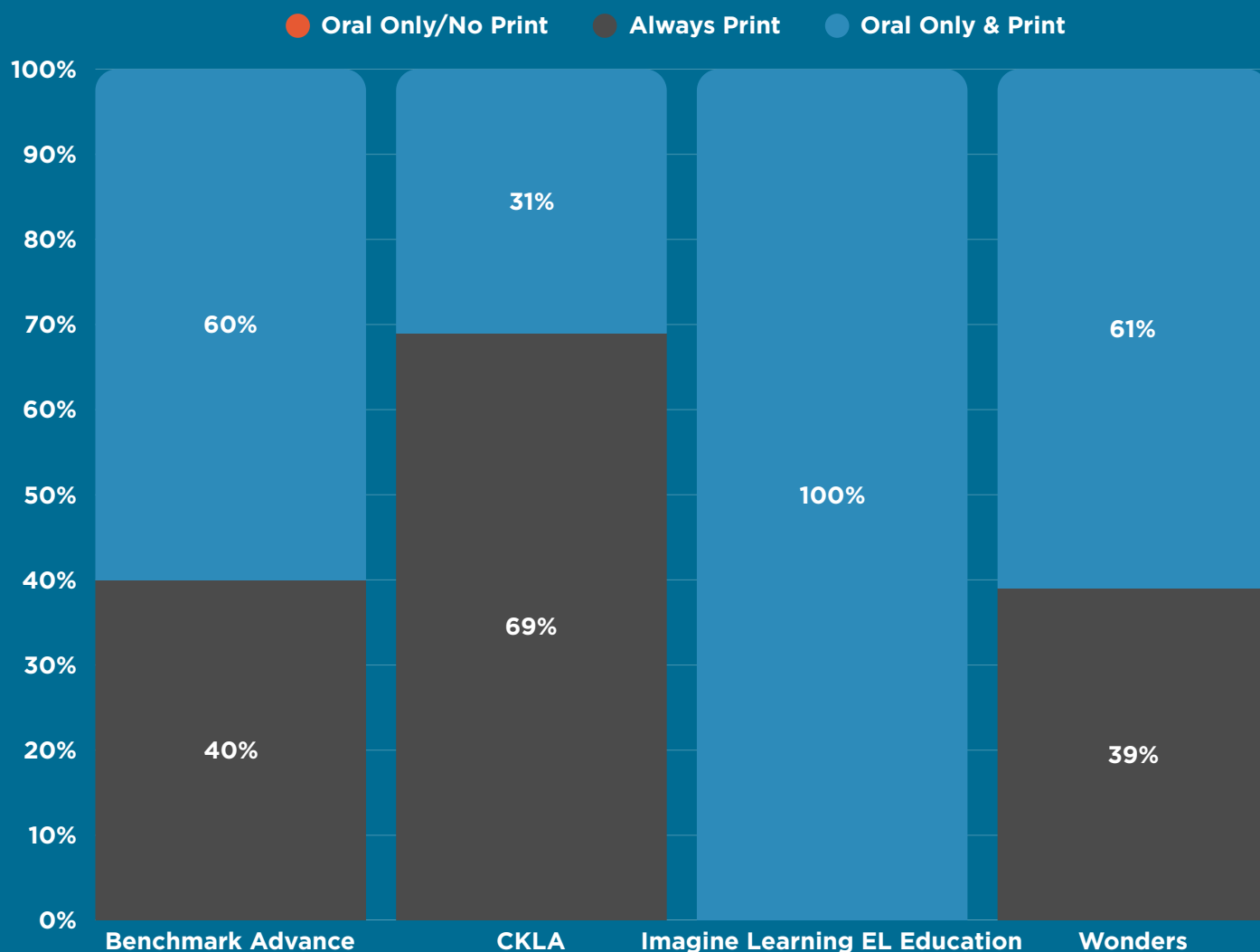
Figure 4 *Kindergarten Lessons with Phonemic Awareness Instruction Connected to Print*



In the kindergarten HQIM, the percentage of lessons that only had oral-only phonemic awareness with no print varied as follows: *Benchmark Advance* = 11%, *CKLA* = 12%, *Imagine Learning EL Education* = 1%, and *Wonders* = 0%. Similarly, the percentage of lessons that always suggested teaching phonemic awareness with print also varied as follows: *Benchmark Advance* = 18%, *CKLA* = 36%, *Imagine Learning EL Education* = 0%, and *Wonders* = 0%. This means the majority of lessons in all HQIM had both, such that part of the lesson suggested oral only with no print and part connecting phonemic awareness to print: *Benchmark Advance* = 71%, *CKLA* = 52%, *Imagine Learning EL Education* = 99%, and *Wonders* = 100%. Given that the majority of all lessons had both oral-only and print-connected phonemic awareness instruction, all four HQIM were rated as partially meeting this practice, with further exploration needed to consider the dosage of the oral-only phonemic awareness instruction.



Figure 5 *First-Grade Lessons with Phonemic Awareness Instruction Connected to Print*



For the first-grade HQIM, the percentage of lessons that only had oral-only phonemic awareness with no print had no variation, as all of the percentages were 0%. In contrast, the percentage of lessons that always suggested teaching phonemic awareness with print did vary as follows: *Benchmark Advance* = 40%, *CKLA* = 69%, *Imagine Learning EL Education* = 0%, and *Wonders* = 39%.

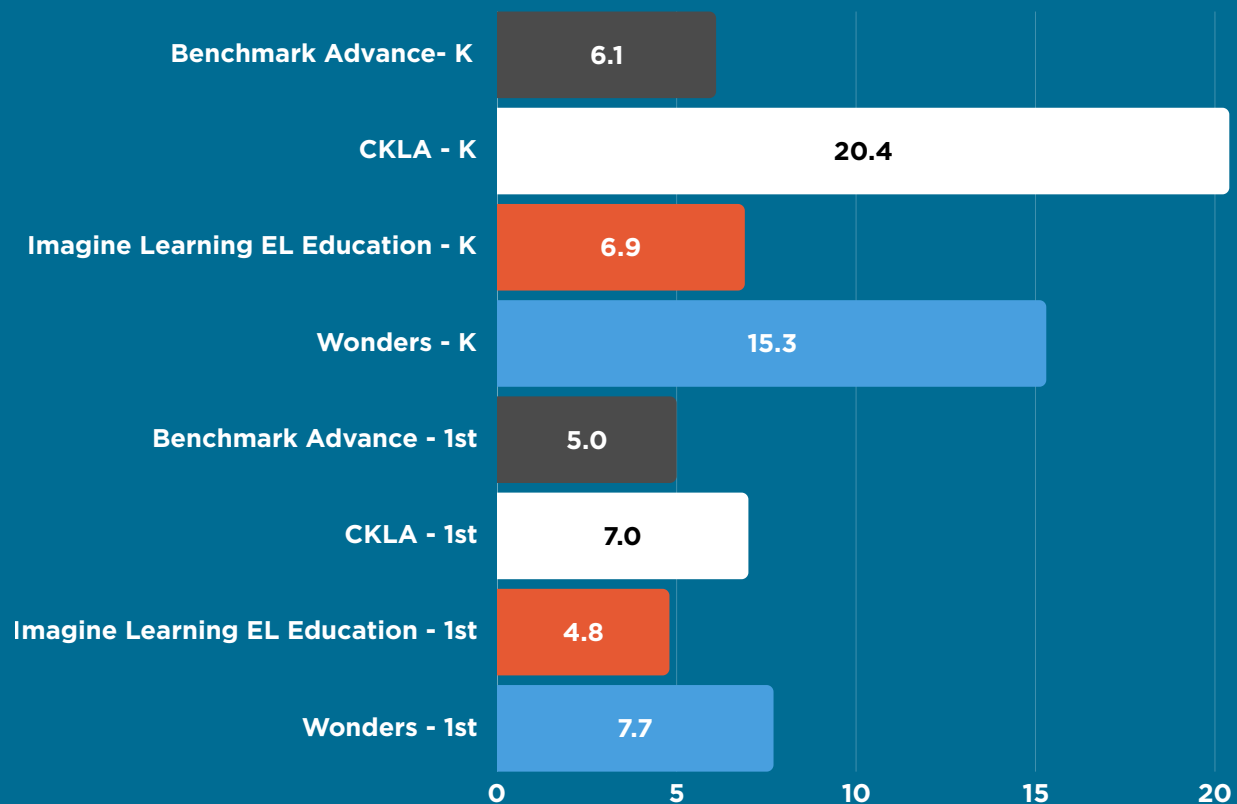
This means the majority of the lessons in three HQIM had both, such that part of the lesson suggested oral-only with no print and part connecting phonemic awareness to print: *Benchmark Advance* = 60%, *Imagine Learning EL Education* = 100%, and *Wonders* = 61%. For *CKLA*, about a third (31%) of the lessons had both an oral-only phonemic awareness part and a part connected to print. For first grade, three HQIM (i.e., *Benchmark Advance*, *Imagine Learning EL Education*, and *Wonders*) were rated as partially meeting this practice because all three had a majority of lessons with at least some oral-only phonemic awareness practice not connected to print. *CKLA* was rated as meeting this practice because the majority of the lessons in this HQIM always connected phonemic awareness and print.

Dosage of Isolated Phonemic Awareness

The seventh and final research-based practice connected to the *What Works Clearinghouse Practice Guide Recommendation Two* was to examine the dosage of isolated (i.e., oral only, not connected to print or phonics) phonemic awareness instruction in the HQIM. Given the findings about the percentage of lessons across the HQIM with some oral-only phonemic awareness sections and some sections connecting phonemic awareness to print, it is important to consider whether the total amount of instructional time devoted to isolated phonemic awareness is reasonable. The National Reading Panel (2000) found overall that studies with between 5 and 18 hours of phonemic awareness instruction showed more effective results than studies with phonemic awareness instruction of shorter or longer durations.

Further research has suggested that an average of approximately 10 hours of oral-only phonemic awareness instruction may be associated with the largest effect size on phonemic awareness skills, and after that point, there may be diminishing returns on the instructional investment (Erbeli et al, 2024). Researchers have often suggested that small doses of instruction are sufficient to develop phonemic awareness (Piasta & Hudson, 2022; Ukrainetz et al., 2009). In both the kindergarten and first-grade HQIM, we calculated the total number of hours of isolated (i.e., oral only) phonemic awareness instruction (see Figure 6).

Figure 6 *Total Hours of Isolated Phonemic Awareness Instruction by HQIM and Grade Level*



Note. CKLA = Core Knowledge Language Arts, K = kindergarten, 1st = first grade.

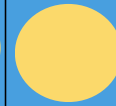
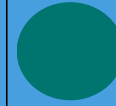
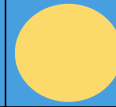
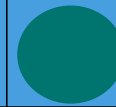
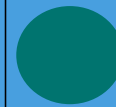
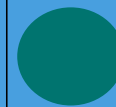
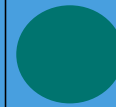
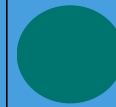
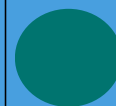
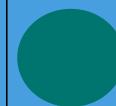
In kindergarten, *Benchmark Advance* and *Imagine Learning EL Education* both had a total of approximately 6-7 hours of oral-only phonemic awareness instruction and showed evidence of meeting this practice. This falls within the range suggested by research and does not likely overemphasize oral-only instruction. *Wonders* suggested a total of 15.3 hours of oral-only instruction in kindergarten, which falls within the range of 5-18 hours, but may overemphasize oral-only instruction. Thus, *Wonders* was rated as partially meeting this research-based practice. *CKLA* did not provide evidence of meeting this practice because the kindergarten lessons had the largest total of oral-only phonemic awareness instruction among the four HQIM at 20.4 hours, which is above the suggested amounts currently aligned with research. As for the first-grade HQIM, there was much less variability in the total hours of oral-only instruction, with a range of 4.8 to 7.7 hours. All four HQIM were rated as meeting research-based recommendations associated with the dosage of isolated phonemic awareness instruction based on these findings.

Alignment with the WWC Practice Guide Recommendation Three

Five research-based practices were examined across the four HQIM and two grade levels related to teaching students to decode words, analyze word parts, and write and recognize words. A stoplight chart was created for the five practices (see Figure 7) with green meaning the practice was clearly evident, yellow meaning the practice was partially evident, and red meaning there was little evidence of the practice being implemented. The evidence used to determine the rating for each of the five practices is discussed in detail below.



Figure 7 Alignment with Recommendation Three Practices by HQIM and Grade Level

	Benchmark Advance		CKLA		Imagine Learning EL Education		Wonders	
	K	1	K	1	K	1	K	1
Focus on Blending and Segmenting Skills								
Systematic Phonics Instruction								
Encoding								
Decodable Text								
High-Frequency Word Instruction								

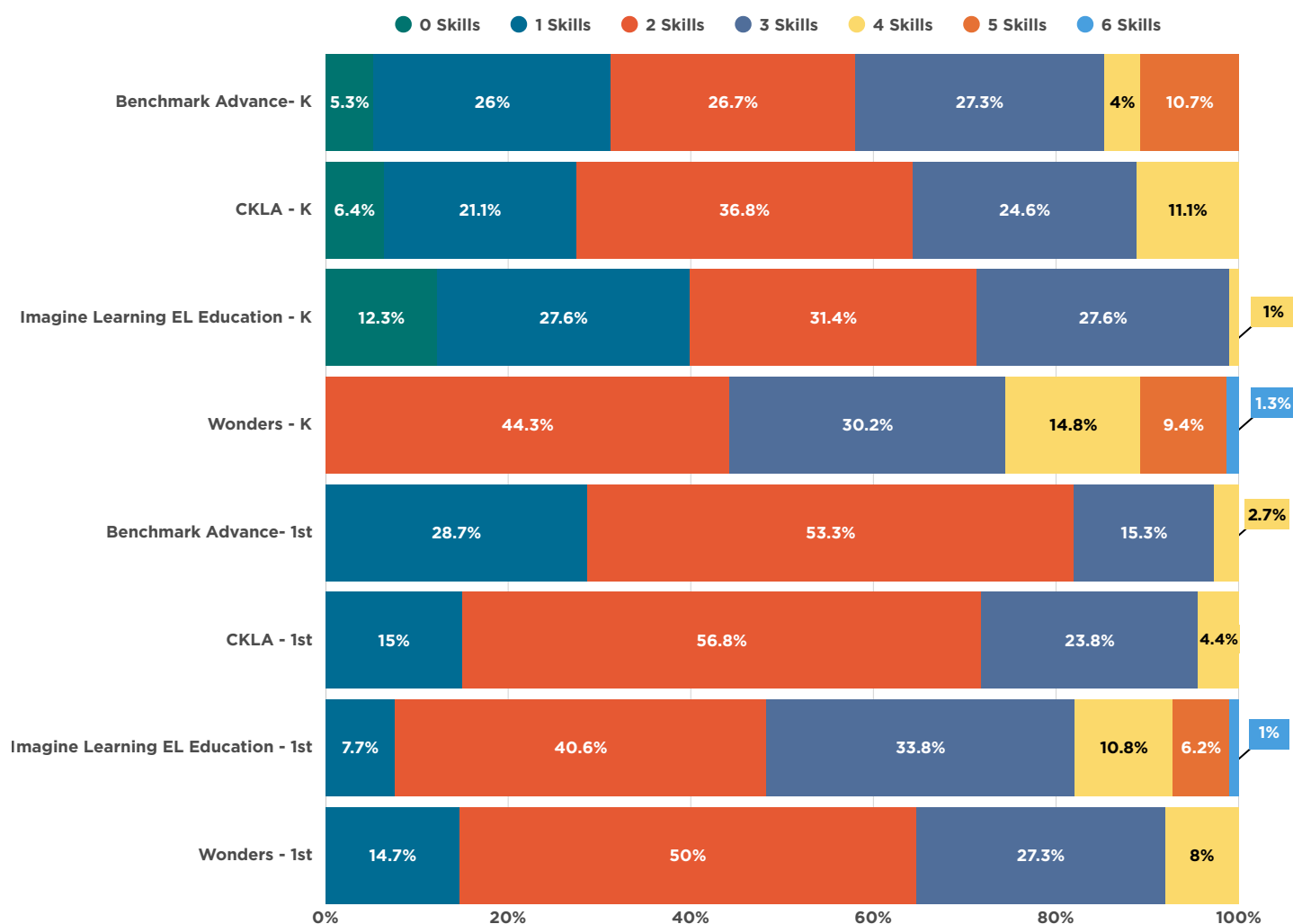
Note. K = kindergarten, 1 = Grade 1. Green = the practice was clearly evident; yellow = the practice was partially evident; red = little evidence of the practice being implemented.

Focus on Blending and Segmenting Skills

Phonemic awareness includes eight skills that are often taught and assessed. These skills include: (1) identification: the ability to recognize words with a certain phoneme; (2) categorization: the ability to group or exclude words from a set based on phonemes; (3) isolation: the ability to produce a phoneme from a word, such as *mop* starts with /m/; (4) blending: the ability to combine phonemes to pronounce a word; (5) segmenting: the ability to produce all the phonemes in a spoken word; (6) addition: the ability to add a phoneme to a word to create a new word; (7) deletion: the ability to remove a phoneme from a word; and (8) substitution: the ability to change one phoneme to another in a word.

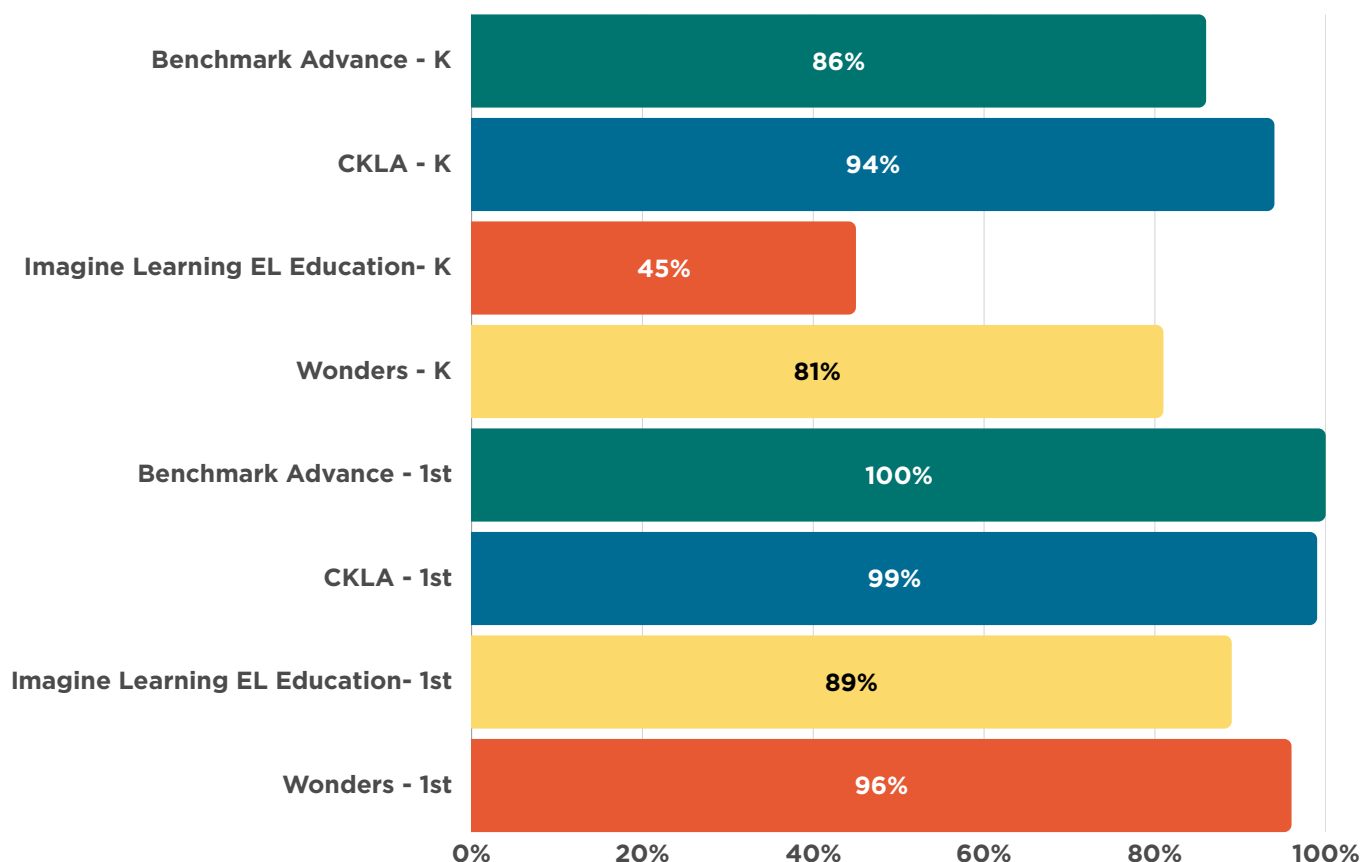
Research has suggested that phonemic awareness instruction is most effective when the instruction focuses on one or two skills at a time, and blending and segmenting are the most important skills for reading (e.g., blending phonemes) and spelling (e.g., segmenting phonemes; National Reading Panel, 2000; Rehfeld et al., 2022; Rice et al., 2022). In this study, each HQIM and grade level was rated based on the number of phonemic awareness skills taught or practiced in each lesson (see Figure 8) and what percentage of the lessons included phonemic blending or segmenting as one of the phonemic awareness skills taught or practiced (see Figure 9).

Figure 8 *Percentage of Lessons Teaching or Practicing Phonemic Awareness Skills by HQIM and Grade Level*



Across the kindergarten HQIM, three of the HQIM focused on one or two phonemic awareness skills in the majority of the lessons: *Benchmark Advance* = 53%, *CKLA* = 58%, and *Imagine Learning EL Education* = 59%. For *Wonders*, slightly less than the majority of lessons (44%) focused on two skills with none of the lessons only focusing on one skill. For the first-grade HQIM, again three HQIM focused on one or two phonemic awareness skills in the majority of the lessons: *Benchmark Advance* = 82%, *CKLA* = 72%, and *Wonders* = 65%. For *Imagine Learning EL Education*, approximately 49% of the lessons focused on one or two phonemic awareness skills, with the majority of lessons focusing on three or more skills.

Figure 9 *Percentage of Lessons with Blending or Segmenting by HQIM and Grade Level*



In kindergarten, three of the HQIM suggested activities focused on instruction or practice for blending and segmenting skills across the majority of the the lessons (81%- 94%), including both activities with and without print. However, one HQIM, Imagine Learning *EL Education*, had a smaller percentage of lessons (45%) that focused on blending or segmenting skills. In this HQIM, neither blending or segmenting with phonemes was taught nor practiced until Module 3, or about halfway through the kindergarten year. In first grade, all four HQIM provided suggestions for instruction or practice of blending or segmenting skills in most of the lessons (89%-100%).

Based on these findings, Imagine Learning *EL Education* was rated as partially meeting this recommendation in both kindergarten and first grade, and *Wonders* was rated as partially meeting for kindergarten.

Systematic Phonics Instruction

Students should be provided with phonics instruction that is systematic and follows a clearly defined sequence to learn common sound-spelling patterns and word parts to decode words. Systematic phonics instruction, one with a planned scope and sequence, has been found to result in the best reading outcomes for children when compared to non-systematic or no phonics instruction (National Reading Panel, 2000). Although research has not identified one scope and sequence to follow, a panel of experts recommended the following logical progression: CVC with short vowels, CCVC/CVCC with consonant blends and digraphs, CVCe long vowel words, and then CVVC with more complex vowel patterns (e.g., vowel teams, diphthongs).

It also is recommended that *r*-controlled vowels and some syllable types are taught (Foorman et al., 2016). The order of GPCs introduced in kindergarten was provided earlier in [Table 3](#), and the GPCs introduced in first grade by week are provided in [Table 4](#). For kindergarten, the scope and sequence likely would cover CVC, CCVC/CVCC (blends & digraphs), and CVCe patterns. For first grade, review of the kindergarten patterns would be expected along with instruction in CVVC (vowel teams and diphthongs) and *r*-controlled vowels.

One kindergarten HQIM, *CKLA*, was rated green because it had a scope and sequence completely aligned with recommendations, moving from CVC words, to blends and digraphs in CVCC/CCVC words, and then to CVCe words with long vowels. Two HQIM, Imagine Learning *EL Education* and *Wonders*, were rated yellow for having a scope and sequence that was partially aligned with the recommendations by starting with CVC words, then covering CCVC/CVCC words with blends (i.e., *Wonders* only) or digraphs (i.e., Imagine Learning *EL Education* only), and finally covering CVCe words with long vowels. It is important to note that Imagine Learning *EL Education* also introduced *r*-controlled vowels at the end of kindergarten. Finally, *Benchmark Advance* was also only partially aligned with the recommended scope and sequence, by introducing CVC words and then CVCe words with long vowels without covering blends or digraphs. For first grade, all four HQIM generally covered the recommended GPCs in order. All started with reviewing or teaching CVC, CCVC/CVCC (e.g., blends and digraphs), and CVCe words. Additionally, all four covered other long vowel patterns, diphthongs, and *r*-controlled vowels. The order for these varied slightly but were still in line with the general recommendations.



Table 4 *Grapheme-Phoneme Correspondences Taught in First-Grade HQIM*

Week	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 1	/ă/ (a)	Review (p, c, g, n, a, i, o, t, d, m, f, v, s, z, h)		/ă/ (a)
Week 2	/ĩ/ (i)	Review (b, l, r, w, e, u, j, y)	Review (t, a, p, n, h, c, s, m, r, v, g, th)	/ĩ/ (i) Consonants (ss, ll, zz, tt)
Week 3	/ö/ (o)	Review (x, k, ch, sh, th, qu, ng)		l-blends (cl, bl, gl, pl, sl)
Week 4	/ě/ (e)	Review (ck, bb, dd, ff, gg, ll, ss, cc, nn, pp, rr, tt, zz)	Review (i, k, y, z, d, l, sh, ch)	/ö/ (o)
Week 5	/ũ/ (u)		Review (u, q/qu)	r- blends (br, gr, cr, dr, fr, tr, pr) & s-blends (sk, sp, st, sm, sn, sw)
Week 6	l- blends (bl, fl, gl, pl, sl)	/ē/ (ee, e)	Review (o, b, j, w, x, p) /ng/ (ng) /ou/ (ow)	/ě/ (e, ea)
Week 7	r- blends (br, cr, fr, gr, pr, tr, dr)	/ā/ (a_e) /ĩ/ (i_e)	Review (e), final consonant blends (st, nk, nd)	/ũ/ (u)
Week 8	s- blends (sk, sm, st, sw, sl, sp, sn, sc)	/ō/ (o_e)	/ĩ/ (y)	Final consonant blends (st, nk, nd, nt, sk, mp)
Week 9	Final consonant blends (mp, nd, nk, st, nt)	/ū/ (u_e)	/k/ (ck) /w/ (wh)	/th/ (th) /sh/ (sh) /ng/ (ng)
Week 10	/th/ (th) /sh/ (sh) /ng/ (ng)		/s/ (ss) /z/ (zz) /f/ (ff) /l/ (ll)	/ch/ (ch, tch) /w/ (wh) /f/ (ph)

Table 4 *Grapheme-Phoneme Correspondences Taught in First-Grade HQIM (cont.)*

Week	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 11	/ch/ (ch, tch) /w/ (wh)	/ōō/ (oo)	Consonant blends (l- blends & r-blends)	/ā/ (a_e)
Week 12	Three letter blends (scr, spr, squ, str)	/oo/ (oo) /ou/ (ou)	/ou/ (ou)	/ī/ (i_e)
Week 13	/ā/ (a_e)	/oi/ (oi) /ō/ (aw)		/s/ (c) /j/ (g, dge)
Week 14	/ō/ (o_e)			/ō/ (o_e) /ū/ (u_e) /ē/ (e_e)
Week 15	/s/ (c) /j/ (g)	/er/ (er) /ar/ (ar)		/oo/ (u, oo)
Week 16	/ī/ (i_e)	/or/ (or)	/ā/ (a_e)	/ā/ (a, ai, ay)
Week 17	/ē/ (e_e) /ū/ (u_e)		/ī/ (i_e) /ō/ (o_e)	/ē/ (e, ee, ea, ie)
Week 18	/ā/ (a, ai, ay)		/ū/ (u_e) /ē/ (e_e)	/ō/ (o, oa, ow, oe)
Week 19	/ō/ (o, oa, oe, ow)			/ī/ (i, y, igh, ie)
Week 20	/ē/ (e, ea, ee, ie)		/ar/ (ar) /or/ (or)	/ē/ (y, ey)
Week 21	/ī/ (i, ie, igh, y)	/j/ (g, ge) /ch/ (tch, ch)	/er/ (er, ir, ur)	/ar/ (ar)
Week 22	/ar/ (ar)	/v/ (ve)	/ā/ (ai) /ō/ (oa) /ē/ (ea)	/er/ (er, ir, or, ur)
Week 23	/or/ (or, ore, oar)	/r/ (wr)	/ā/ (ay) /ō/ (ow)	/or/ (or, ore, oar)

Table 4 *Grapheme-Phoneme Correspondences Taught in First-Grade HQIM (cont.)*

Week	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 24	/er/ (er, ir, ur)		/ē/ (ee, y) /ōō/ (oo)	/ou/ (ou, ow)
Week 25	/ou/ (ou, ow)	/s/ (c, ce, se)	/ī/ (ie, igh)	/oi/ (oi, oy)
Week 27	/ōō/ (oo) /oo/ (oo)	/w/ (wh) /ng/ (n)		/ō/ (a, aw, au, augh, al)
Week 28	/n/ (gn, kn) /r/ (wr)			/n/ (kn, gn) /r/ (wr)
Week 29	/ō/ (aw, au, augh, al)	/ā/ (ai, ay)		Three letter blends (spl, scr, spr, str, shr)
Week 30	/ē/ (y, ey)			/ār/ (air, are, ear)
Week 31		/ō/ (oa)		
Week 32				

Note. The gray boxes mark weeks that were not included in the HQIM.

Encoding

The sound patterns students are taught for decoding words also should be applied to encoding. Spelling or making words is an effective strategy for reinforcing the sound-spelling patterns being taught in phonics (Foorman et al., 2016). All four HQIM in both grade levels provided clear evidence of meeting this recommended practice. Students had opportunities to write, spell, or make (i.e., manipulate letter cards or tiles to form words) words connected to each GPC taught during the weekly lessons.

Decodable Text

Decodable text should be provided and used for students to apply recently learned GPC patterns. Research has shown that students benefit from reading both word lists (e.g., words in isolation) and texts (e.g., connected sentences and text) that allow them to apply recently learned letter-sounds and patterns in decoding the words (Foorman et al., 2016). For both grade levels, the research team counted whether students had the opportunity to do a first or repeated reading of a text (e.g., independent text, decodable text) connected to the GPCs in the daily lessons (see Figure 10). The percentage of lessons with practice reading connected text varied widely across the four HQIM. Imagine Learning *EL Education* suggested connected text reading in the smallest percentage of lessons (kindergarten = 11%; first grade = 28%) and *Wonders* suggested connected text reading in the largest percentage of lessons (100% for both kindergarten and first grade).



Figure 10 *Percentage of Lessons with Connected Text for Students by HQIM and Grade Level*

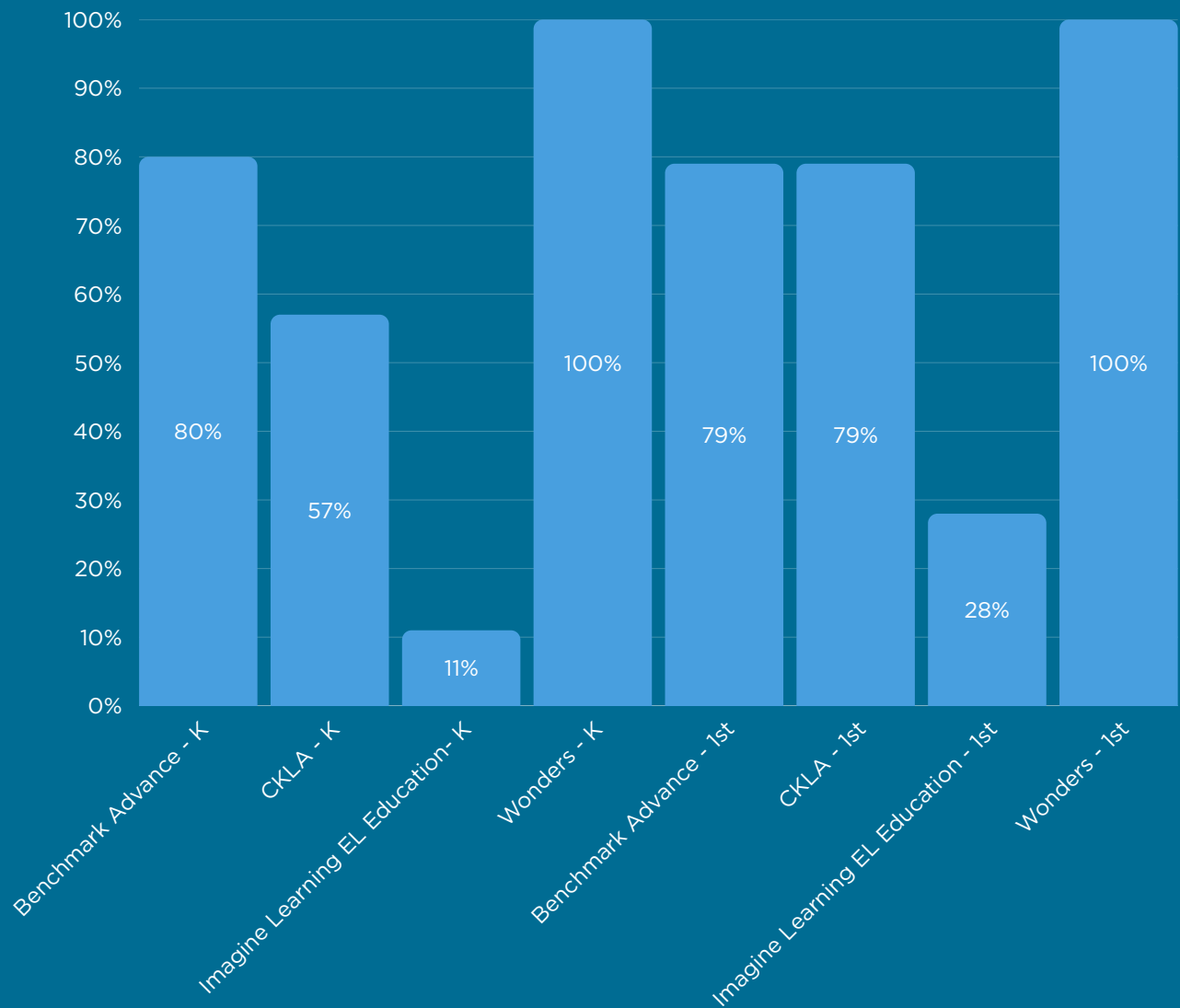


Table 5 lists the texts that were named in the lesson guides for kindergarten students to read, and Table 6 lists them for the first-grade HQIM. In order to see how aligned the texts were with the GPCs taught in the HQIM, each text was marked for approximately how “decodable” the text would be for students based on the high-frequency words and GPC patterns that had been explicitly taught. Of note, there may be additional texts that are available in the HQIM supplemental materials for intervention or extension, but only those listed for student use in the whole or daily small-group code-focused lessons are included here.

Table 5 *Student Texts in Kindergarten HQIM*

Week	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 1	My ABCs (naming alphabet letters) The ABC Train (naming alphabet letters)			The Mouse and the Moose (67% + P) I Can (60% + P) Can I? (67% + P) I Can (56% + P) Can I? (56% + P)
Week 2	I Know My ABCs (naming alphabet letters) I Can Do It (50% + P)			We Hop! (43% + P) We Can (67% + P) I Am (67% + P) I Can, We Can (67% + P) We Can (58% + P)
Week 3	I Like (67% + P) I Am Big (72% + P)			At School (75% + P) Sam Can See (83% + P) Sam Can See (79% + P) I Can See (71% + P) Sam (79% + P)
Week 4	Sam (85% + P) Sam Likes the Farm (81% + P)			A Trip (83% + P) Pam Can See (83% + P) A Sap Map (88% + P) We Can See! (81% + P) Pam Can See (80% + P)
Week 5	Go (75% + P) We See (81%)			Play With Shapes! (75% + P) We Like Tam! (91% + P) Tap the Mat (100%) I Like Sam (83% + P) I Am Pat (86% + P)
Week 6	Nat (68%) We Sat (100%)			The Bugs Run (50% + P) Pat (81% + P) We See Tam (82% + P) Tap! Tap! Tap! (78% + P) Tap! Tap! Tap! (81% + P)
Week 7	My Friend Sam (62% + P) In School (65% + P)			Go, Nat! (22% + P) Can I Pat It? (100%) Tim Can Sit (91% + P) Tim Can Tip It (83% + P) We Like It (81% + P)
Week 8	Can We Fit? (84% + P) A Fat Pumpkin (67%)			Farm Sounds (40% + P) Nat and Tip (80% + P) Nat and Nan (96% + P) Tim and Nan (73% + P) Nan and Nat See (93% + P)

Table 5 *Student Texts in Kindergarten HQIM (cont.)*

Week	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 9	Pam the Cat (91% + P) Pat and Pam (81% + P)			Going by Cab (60% + P) We Go to See Nan (97% + P) Cam Cat (93% + P) Can We Go? (86% + P) See the Cat (94% + P)
Week 10	The Boy (81% + P) It Can Pop (92%)	Pet Fun (100%)		On the Job (60% + P) Tom on Top! (84% + P) Tom Can (93%) Mom and Nan (93%)
Week 11	Little Cat (90% + P) Cam the Cat (100%)			Neighborhood Party (52% + P) Sid (91% + P) Did Sid See Don? (100%) Did Dan? (100%)
Week 12	Hop, Hop, Hot (75%) It is Hot (90%)			Can You Fix It? (60% + P) I Can, You Can! (98%) Tip It (100%) Stop the Top! (100%)
Week 13	Play Ball (78%) Bob Can Go (93%)	Ox and Man (100%)		My Garden Grows (50% + P) Hop Can Hop! (100%) Hap Hid the Ham (100%) Hip Hop (98%)
Week 14	The Fun Bus (88% + P) What is It? (85% + P)	Kit (100%) Kit and Stan (100%) Kit's Hats (100%) Kit's Cats (100%)	A Book of Animals (78% + P)	Many Trees (25% + P) Ed and Ned (93%) Ed and Ted Can Go On (100%) Not a Pet! (100%)
Week 15	Ron Has a Robot (72% + P) Rob at School (81% + P)	Kit's Mom (100%) Kit's Pants (100%)	The Ham Sandwich (100%)	Let's Make a Salad! (50% + P) Ron With Red (91% + P) Ron Ram (100%) Red and Ron (100%)

Table 5 *Student Texts in Kindergarten HQIM (cont.)*

Week	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 16	The Red Hen (81%) Red Hens (100%)	Mumps (100%) Up (100%)	The Milkshake (100%)	Little Bear (64% + P) Is It Hot? (100%) Bob and Ben (100%) Ben, Deb, Lin (100%)
Week 17	Good Pig, Bad Pig (87%) Meg Likes Bugs (98%)	Fast Fred (100%)	Fun with Gum (100%)	Weather Is Fun (52% + P) Kim and Nan (100%) Pack It, Kim (100%) Kick it, Nick! (100%)
Week 18	Dan's Dog (91%) Where is Dan? (100%)		The Mop is a Dog! (100%)	Getting Ready (31% + P) Mack and Ben (100%) Rock Ken (100%) Flip, Flop, Flip! (100%)
Week 19	Summer Fun (91%) We Have Fun (100%)	Seth (100%) Seth's Mom (100%)	Josh's New Home (100%)	Animal Bodies (37% + P) A Pup and a Cub (100%) Sun Fun (100%) Pup and Cub (100%)
Week 20	What Is It? (92%) Lin Can See (98%)	Seth's Dad (100%) Sal's Fish Shop (100%) Lunch (100%)	Chip Can't Nap! (100%)	Their Pets (44% + P) I Hug Gus! (100%) Wet Gus (100%) See a Bug? (100%)
Week 21	I Am Happy (82%) Jim and Jan Have Fun (98%)	Seth's Finch (100%)	Josh Takes a Bath (100%)	A New Home (81% + P) A Vet in a Van (100%) Rex the Vet (100%) Fox Had a Big Box (100%)
Week 22	Kim's Day (90%) Look at the Kids (89%)	Sam and the Fish (100%) Fun at the Pond (100%) Sam's Pets (100%)	Josh and Chip at the Farm (100%)	Run, Quinn! (93% + P) Dad Got a Job (100%) Get It Quick! (100%) Jen Is Quick! (100%)
Week 23	Yip-Yap (88%) Mom and the Cubs (98%)	Tasks (100%) The Van (99.2%) On the Bus (100%)	The Bowling Alley (93%)	Places to See (76% + P) Pack a Bag! (100%) Yes, Zack Can Go! (100%) Rex, Kim, and Zig (100%)
Week 24	Come Quick (92% + P) Val and Vic (100%)	Sam in Class (100%) The Chills (100%) Stop that Bus! (100%)	Time to Bake (100%)	In The Clouds (75% + P) Up! Up! Up! (100%) Zig-Zag Jet Can Zip (100%) A Big Trip for Gram (100%)

Table 5 *Student Texts in Kindergarten HQIM (cont.)*

Week	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 25	The Two Boxes (79%) Mr. Max's Job (97%)	Sam and the Duck (100%) Max in the Mud (100%) The Band (100%)	The Mystery Moth (87%)	How Can Jane Help? (87% + P) Jake and Dale Help! (100%) Jake Made Cake (100%) We Help Make It (100%)
Week 26	What Am I? (90%) At Work (97%)	The Bad Crab (100%) Ann's Dress (100%)	The Jazz Trio (100%)	Clive and His Friend (60% + P) We Can Play (100%) Lake Time Fun (100%) Pike Lane (100%)
Week 27	Vote (77%) Mr. and Mrs. Mole (91%)	Zack Gets a Pet (100%) On the Mat (100%) Fix that Ship (100%)		What's for Breakfast (77% + P) Look! A Home! (100%) Jo Made It At Home (100%) Joke Note (100%)
Week 28	Do You Want? (74%) It Is Time to Tug (100%)	The Tent (100%) A Gift from Mom (100%)		We Want Honey (70%) A Good Time for Luke! (100%) Tube Race (100%) The Sad Duke (100%)
Week 29	I Saw This Box (98%) Ned Makes a Home (100%)	Bug and Frog (100%) Swing that Net (100%) Spot's Bath (100%) The Pots and Pans Band (100%)		Let's Make a Band (75%) We Come on Time! (100%) Pete and Eve (100%) Pete Can Fix It (100%)
Week 30	Pete and Eve (88%) It Can Go Up (100%)	When It's Hot (100%) Ann's Hat Box (100%)		Let's Save Earth (67% + P) Who Can Help? (100%) We Can Save! (100%) We Can Use It! (100%)

Table 5 *Student Texts in Kindergarten HQIM (cont.)*

Week	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 31		Scott and Lee (100%) Red Ants (100%) The Bees (100%)		
Week 32		Cake and Grapes (100%) Fun in the Sand (100%) Skates (100%)		
Week 33		A Fine Hike (100%) The Bike Ride (100%) The Plane Ride (100%)		
Week 34		The Gift (100%) The Sled Ride (100%) Scott's Snack Stand (100%)		
Week 35		In the Pet Shop (100%) Scott Bakes a Cake (100%)		
Week 36		The Cave (100%) The Skiff Ride (100%) Lunch Trades (100%)		
Total Texts:	60	59	13	129

Note. The gray boxes mark weeks that were not included in the HQIM. The percentages next to the book indicated the percentage of words in the text that are likely decodable based on the instructional plan for that HQIM. This was calculated by dividing the number of words that were decodable (i.e., words that had GPC patterns and high-frequency words that had been taught) by the total number of words in the text. CKLA = Core Knowledge Language Arts; P = predictable/patterned text (i.e., text with a repetitive pattern across pages, such as I can jump.; I can hop.; I can swim.).

The data in Table 5 reveal that the number of texts provided in each kindergarten HQIM varied widely as follows: *Benchmark Advance* = 60, *CKLA* = 59, *Imagine Learning EL Education* = 13, and *Wonders* = 129. In kindergarten, two HQIM (i.e., *CKLA* and *Imagine Learning EL Education*) did not introduce text until students had been taught many letter-sounds and had begun blending to decode CVC words. For *CKLA*, this was approximately Week 10 of kindergarten and for *Imagine Learning EL Education*, it was approximately Week 14. For these two HQIM, the majority of the texts included were highly decodable and aligned to the GPCs taught.

In contrast, two HQIM (i.e., *Benchmark Advance* and *Wonders*) started with text immediately, before students had learned many letter-sounds to be able to decode words. For these HQIM, many of the early texts were patterned or predictable text that repeated high-frequency words and substituted one or two words in each page's pattern. An example of patterned text would be, "I can see the tiger. I can see the elephant. I can see the cat. I can see the monkey." These texts can sometimes be problematic if students form bad habits of guessing words based on pictures rather than attending to the printed words. However, both HQIM did have at least one decodable text for the majority of the weeks of instruction that were aligned to the GPCs taught.

Given these findings, *Imagine Learning EL Education* was rated as red for decodable text due to the inclusion of only a small number of texts in a small percentage of the lessons. *Benchmark Advance*, *CKLA*, and *Wonders* were rated green for including decodable text in the majority of the kindergarten lessons.



Table 6 *Student Texts in First-Grade HQIM*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 1	At The Pond (93%) Pals Help (99%) We Like to Bat (93%)			Jack Can (100%) We Like to Share (94%) Pam Can (100%) Pack a Bag (100%) Look at Signs (85%)
Week 2	A Cub Grows (84%) Get a Big Pot (95%) A Cub is Fun (97%)		Pat's Mess (96%)	Six Kids (98%) A Trip to the City (72%) Jill and Jim (100%) Kim and Nick Zip (100%) Where I Live (93%)
Week 3	Let's Plant Seeds (81%) Crops for Us (93%) A Frog Can Jump (97%)			A Pig for Cliff (98%) Pet Show (83%) Cliff Has a Plan (100%) A Good Black Cat (100%) Love That Llama! (63%)
Week 4	Little Red (87%) When Red Hen Fell (99%) Red at the Vet (100%)	Beth (100%) Nat (100%)	Pat's Map (96%)	Toss! Kick! Hop! (94%) Friends Are Fun (81%) Dog and Fox (100%) Bob Is a Fun Pal (100%) I Like to Play (79%)
Week 5	Come Here, Friend (94%) Big Bus Gets Stuck (98%) Bud, Gus, and Dot (96%)	The Trip to the UK (100%) Bud the Cat (100%) The Fish (100%)	Pat's Lunch (100%)	Move and Grin! (98%) We Can Move! (70%) Snap, Skip, Trot! (100%) Snip and Trip Can Move (100%) What's Under Your Skin? (70%)
Week 6	What Is It? Riddles (94%) Let's Sled (97%) Glenn the Robot (95%)	The Flag Shop (100%) Which Is the Best? (100%) The Bus Stop (100%) On the Bus (100%)	Sam's Box (96%)	Good Job, Ben! (97%) Ben Brings the Mail (92%) Ted Gets a Job (100%) I Sell Crabs (100%) At the Post Office (75%)

Table 6 *Student Texts in First-Grade HQIM (cont.)*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 7	Bag and Grab It (85%) Mr. Drake's Plan (93%) Make It Safe (92%)	The Man in the Black Hat (100%) The Man in the Kilt (100%)	Sam Wants a Pet (100%)	Cubs in a Hut (100%) Staying Afloat (86%) Can Bud Stop Bug? (100%) It's Up to Us (100%) A Day on a Houseboat (76%)
Week 8	Tim Can Clean (98%) Stop For Socks (99%) Kids Can Fix It (99%)	Gran's Trips (100%) The Pet (100%) Wong (100%) Where is Wong? (100%)	Dad's Plan (98%)	The Best Spot (95%) Meerkat Family (74%) In a Land of Grass (98%) Stomp and Romp (100%) I Live in a House! (70%)
Week 9	One Fast Wagon (94%) Grant's Coat (94%) Let's Clean It Up (91%)	The Swim Meet (100%) At the Reef (100%) The Bug Glass (100%)	Sam's Rock (98%)	Thump Thump Helps Out (99%) Squirrels Help (91%) Dash Has a Wish (100%) Help in a Flash (100%) The Helping Gang (100%) Send a Big Thanks! (100%) Food Drive (70%)
Week 10	The King's Wish (86%) I Wish, I Wish (97%) Trish's Birthday (94%)	The Tape (100%) Fuzz and Mel (100%) The Sweet Shop (100%) King and Queen (100%)	Sam and Nell Have a Ball (98%)	Which Way on the Map? (95%) How Maps Help (88%) A Map Match (100%) A Fun Chest! (100%) Phil and Steph Get Lost (100%) Maps and Graphs (100%) On the Map (94%)
Week 11	I Saw It (94%) Chad and Patch (98%) A Picnic Lunch (98%)	The Trip West (100%)	On the Pond (100%)	Nate the Snake is Late (97%) Kate Saves the Date (81%) Dave Was Late (100%) Is It Late? (100%) Use a Calendar (83%)

Table 6 *Student Texts in First-Grade HQIM (cont.).*

	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 12	One Spring Day (98%) Splat and Sprat (94%) Splash at the Pond (97%)	King Log and King Crane (100%) The Two Dogs (100%)	I Look Out (99%)	Time to Plant! (95%) Yum, Strawberries! (71%) A Fine Plant (100%) Plants Take Time to Grow (100%) Strawberry Plant (72%)
Week 13	Make a Robot (85%) At The Lake (97%) Blake and Shane Play (93%)	The Hares and the Frogs (100%) The Two Mules (100%) The Dog and the Mule (100%)	A Sunset Picnic (100%)	The Nice Mitten (97%) The Magic Paintbrush (80%) King and Five Mice (100%) Tales from a Past Age (100%) Make New Friends (75%)
Week 14	You Can Find It (95%) Around the Globe (93%) All Kinds of Holes (93%)	The Bag of Coins (100%) The Dog and the Ox (100%) The Fox and the Grapes (100%)	Pat's Backpack (99%)	Life at Home (93%) Schools Then and Now (83%) Those Old Classes (100%) That Old Globe (100%) School Days (78%)
Week 15	Dear Family (95%) Mole City (94%) We Live In Space (90%)	Meet Vern (100%) Things that Swim (100%)	Pat's Donut (96%)	A Look at Breakfast (91%) Apples from Farm to Table (87%) A Good Cook (100%) That Looks Good (100%) A Dairy Treat (62%)
Week 16	Mike Can Fix It (96%) Five Kittens (97%) Fox Jumps (99%)	Chimps (100%) Mandrills (100%)	James and Sam Make a Flame (98%)	Snail and Frog Race (98%) Snail's Clever Idea (93%) Snail Mail (100%) Tails (100%) A Basic Dog (100%) April the Agent (100%) Snails: Small, Slow, and Slimy (81%)

Table 6 *Student Texts in First-Grade HQIM (cont.).*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 17	Steve's House (92%) A Hat for Pete (93%) Zeke's Garden (95%)	Things with Wings (100%) Big Cats (100%) Groundhogs (100%)	James and Sam Take a Hike (98%)	A Team of Fish (98%) Penguins All Around (85%) The Green Eel (100%) Clean Up the Team (100%) Animals Work Together! (81%)
Week 18	Which Train? (97%) Painting in May (92%) Gail and Gram (98%)	The Reptile Room (100%) Termites (100%)	Cubes and Cones (98%)	Go Wild! (93%) Go, Gator! (90%) Toads (100%) Joan and Elmo Swim (100%) A Doe and a Buck (100%) Joe Goes Slow (100%) Ducklings (86%)
Week 19	From Place to Place (84%) How We Go (92%) Toad's Big Boat (98%)	River Otters (100%) Cranes and Spoonbills (100%)	Baseball (94%)	Creep Low, Fly High (97%) The Hat (88%) Jay Takes Flight (100%) Be Kind to Bugs (100%) Why Hope Flies (100%) Glowing Bugs Fly By (100%) Let's Look at Insects! (91%)
Week 20	Fun and Games (94%) Grandpa's Party (90%) Bees, Bees, Bees (93%)	A Letter from Kate (100%) In the Cave (100%)	Looking for Mars (99%)	From Puppy to Guide Dog (94%) Teach a Dog! (95%) Study with Animals (100%) Race Pony! (100%) Working with Dolphins (88%)
Week 21	Our Flag (92%) Way Up High (93%) Bright Lights (96%)	The Coin Shop (100%) You Never Can Tell (100%) The Offer (100%) The Campsite (100%)	Sam's Hammer (96%)	A Barn Full of Hats (92%) Dog Bones (89%) Car Parts (100%) Charm Scarves (100%) Sorting Balls (91%)

Table 6 *Student Texts in First-Grade HQIM (cont.).*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 22	The Night Sky (93%) Mark and the Stars (99%) Sparkling Stars (98%)	Jack's Tale (100%) The Visit (100%) The Hike (100%)	Sam's Throat Hurts (98%)	A Bird Named Fern (97%) Hide and Seek (96%) Birds in the Sky (100%) Bats Under the Dark Sky (100%) Sir Worm and Bird Girl (99%) Ginger and the Stars (100%) Our Sun Is a Star! (90%)
Week 23	The Sun and the Moon (90%) Search for Food (93%) The Sun is Important (95%)	The Bone Man (100%) Two Good Things and One Bad Thing (100%)	Pat's Birthday (97%)	The Story of a Robot Inventor (97%) The Wright Brothers (92%) Born to Learn (100%) Sports Stars (100%) A Board That Can Soar (100%) Hard Chores (100%) Fly Away, Butterfly (97%)
Week 24	Cloud Shapes (94%) Red Bird Flies (97%) Thunderstorms (98%)	The Big Dig (100%) The Scoop (100%)	A Little Seed (98%)	Now, What's That Sound? (98%) Down on the Farm (98%) Up or Down Sounds (100%) Sounds Around Us (100%) How to Make a Rain Stick (98%)
Week 25	Trading Then and Now (92%) Our Town (95%) All Around Town (95%)	Mister Spencer and the Rabbits (100%) The Picnic by the River (100%) Ants (100%) The Band (100%)	Night Skies (99%)	The Joy of a Ship (99%) Joy's Birdhouse (100%) Beavers Make Noise (100%) What Is a Yurt? (98%) Treehouses (98%)

Table 6 *Student Texts in First-Grade HQIM (cont.).*

	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 26	Good Boy, Scruffs (92%) Roy and Joy (95%) Earthworm's Soil (97%)	The Yard Sale (100%) The Storm (100%) Dark Clouds and Wind (100%) In the Storm Shelter (100%) The Visit (100%)	Reading Together (100%)	Super Tools (96%) What a Feast! (98%) Rooster and Goose (100%) Choose a Room (100%) The Flute Youth (100%) Group Rules (100%) Lewis and His New Suit (100%) A Cruise Crew (100%) Sue and Lucy (100%) A True Team (100%) Helpers Bring Food (97%)
Week 27	Jack's Jobs (97%) One Cool Day (99%) Broom Sweep (96%)	The Soccer Game (100%) Supper (100%) Grace the Performer (100%) The Frog Jumping Contest (100%)		All Kinds of Helpers (94%) Helping Me, Helping You! (96%) Paul's Paw (100%) Thank You Authors! (100%) Not Too Small (100%) My Baseball Coach (100%) A Walk with Mayor Moose (100%) Teacher Talk (100%) Fire! (95%)
Week 28	Do You Know Me? (93%) All About Storms (97%) Food Grows (96%)	The Spinning Wheel (100%) Buster the Pig (100%) Whisper (100%) The Harvest (100%) The Harvest Marvel (100%)		Wrapped in Ice! (97%) Heat Wave (97%) Miss Wright's Job (100%) Know About Snowstorms (100%) Stay Safe When It's Hot (95%)

Table 6 *Student Texts in First-Grade HQIM (cont.)*

	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 29	Loud All Around (95%) What Does Paul See (98%) Crows Caw (96%)	Martez, Martez, Martez (100%) Dinner with Kay (100%) The Red Dish (100%)		A Spring Birthday (92%) Latkes for Sam (93%) Three Shrimp (100%) A Thrilling Dance (100%) What Is a Taco? (91%)
Week 30	Light and Shadow (95%) Lights at Night (96%) The Sounds of the City (97%)	In the Mail (100%) The Holiday (100%) Better than the Best (100%) The Long Cab Ride (100%)		Share the Harvest and Give Thanks (94%) It's Labor Day! (96%) A Pair at the Fair (100%) Lights in the Air (100%) The Bears Prepare a Feast (100%) Leaders Care (100%) A Celebration of Trees (93%)
Week 31		The Vote (100%) Mister Gomez (100%) A House in the Clouds (100%)		
Week 32		The Market (100%) A Rainforest Ride (100%) The Dive (100%) At the Airport (100%)		
Total Texts:	90	87	24	176

Note. The gray boxes mark weeks that were not included in the HQIM. The percentages next to the book indicated the percentage of words in the text that are likely decodable based on the instructional plan for that HQIM. This was calculated by dividing the number of words that were decodable (i.e., words that had GPC patterns and high-frequency words that had been taught) by the total number of words in the text. *CKLA* = Core Knowledge Language Arts.

The data in Table 6 again revealed that the number of connected texts provided for students to read in the code-focused lessons varied widely across the first-grade HQIM: *Benchmark Advance* = 90; *CKLA* = 87; *Imagine Learning EL Education* = 24; and *Wonders* = 176. In first grade, all four HQIM started using decodable text during the first or second week of instruction and continued for most weeks. Similarly to kindergarten, three of the HQIM (i.e., *Benchmark Advance*, *CKLA*, and *Wonders*) provided a large number of connected texts and suggested their use in the majority of the lessons (i.e., at least four days per week), which provides clear evidence of the use of decodable text in instruction. *Imagine Learning EL Education* provided the fewest number of connected texts, and their use was suggested in only a small percentage (28%) of the lessons. Thus, students may not have had ample opportunity to practice reading words aligned to the phonics instruction in connected text.

High-Frequency Word Instruction

Students need instruction and practice with high-frequency words so they can recognize them efficiently, or by sight. Regular, high-frequency words (i.e., words that have common GPC patterns that students have learned) can be taught with decoding strategies that draw students' attention to the letters and sounds as part of the orthographic mapping process (Miles et al., 2024). Instruction for irregular high-frequency words (i.e., words that are not decodable based on common GPC patterns) may draw students' attention to the irregular patterns that must be learned (e.g., marking heart or tricky parts, teaching variable pronunciations) or teach students to memorize these words as whole words (e.g., see, say, spell; repetition; Colenbrander et al., 2020).

Students will need explicit instruction in irregular high-frequency words, and effective methods to draw students' attention to the orthography, spelling, and pronunciation of the word and provide repeated exposure to the word (Foorman et al., 2016; O'Connor, 2014).

The research team compiled a list of all high-frequency words for each HQIM and grade level. Each word then was marked as regular (i.e., decodable), irregular (i.e., not decodable), or temporarily irregular (i.e., students do not yet know the GPC needed to decode the word based on the sequence of GPCs for that HQIM and grade level). Additionally, the methods used to teach high-frequency words were documented for each HQIM.

All four HQIM varied some in the approaches to teaching high-frequency words, with some calling them other terms such as *tricky* or *mystery* words. In kindergarten, the number of high-frequency words explicitly taught ranged from 38 (i.e., *Benchmark Advance*) to 49 (i.e., *CKLA*), with typically between one and three new words taught per week (see Table 7 for the full list of high-frequency words by HQIM for kindergarten).



Table 7 *High-Frequency Words Taught in Kindergarten HQIM*

	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 1				1. the (I) 2. I (TI) 3. can (TI)
Week 2	1. I (R)			1. we (TI)
Week 3	1. like (TI)		1. I (TI)	1. see (TI)
Week 4	1. the (I) 2. we (TI)		1. the (I)	1. a (TI)
Week 5	1. go (TI) 2. see (TI)		1. in (TI)	1. like (TI)
Week 6			1. he (TI)	
Week 7	1. can (TI) 2. she (TI)	1. one (I) 2. two (I) 3. three (TI)	1. on (TI)	1. to (I)
Week 8	1. a (TI) 2. is (TI)		1. and (R)	1. and (TI)
Week 9			1. up (R)	1. go (TI)
Week 10	1. he (TI) 2. has (TI)	1. the (I) 2. a (TI)	1. a (TI)	1. you (I)
Week 11	1. little (TI) 2. play (TI)	1. blue (TI) 2. red (R)	1. you (I)	1. do (I)
Week 12		1. yellow (TI)	1. see (TI)	
Week 13	1. and (TI) 2. you (I)	1. look (TI)	1. to (I) 2. do (I)	1. my (TI)
Week 14	1. big (TI) 2. with (TI)	1. I (TI)	1. at (R) 2. has (TI)	1. are (I)
Week 15		1. are (I) 2. is (R)	1. is (TI) 2. it (R)	1. with (TI) 2. he (TI)

Table 7 *High-Frequency Words Taught in Kindergarten HQIM (cont.)*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 16	1.for (TI) 2. no (TI)	1.little (TI) 2. big (R)	1.was (I) 2. his (TI)	1. is (TI) 2. little (TI)
Week 17	1.jump (TI) 2.one (I)		1.or (TI) 2.for (TI)	1.was (I) 2.she (TI)
Week 18		1. down (TI) 2. up (R)	1.be (TI) 2.by (TI)	
Week 19	1.are (I) 2.have (TI)	1. in (R) 2. out (TI)	1.will (TI) 2.with (R) 3.are (I)	1. for (TI) 2. have (TI)
Week 20	1.said (I) 2.two (I)	1. of (I)	1.of (I) 2.have (TI) 3.from (I)	1.of (I) 2.they (I)
Week 21			1.there (I) 2.they (I) 3.where (I)	1.said (I) 2.want (I)
Week 22	1.look (TI) 2.me (TI)	1. funny (TI) 2. all (TI) 3. from (I)	1.one (I) 2.we (TI) 3.all (TI)	1.here (TI) 2.me (TI)
Week 23	1.come (I) 2.here (TI)	1. was (I)	1.no (TI) 2.not (R) 3.but (R)	1.this (TI) 2.what (I)
Week 24			1.what (I) 2.when (TI) 3.then (R)	
Week 25	1.my (TI) 2.to (I)		1.you (I) 2.said (I) 3.were (I)	1.help (R) 2. too (TI)
Week 26	1.of (I) 2. what (I)	1. word (I) 2. when (TI) 3. to (I) 4. why (TI) 5. where (I) 6. no (TI)	1.her (R) 2.she (TI) 3. like (R)	1. has (TI) 2. play (TI)

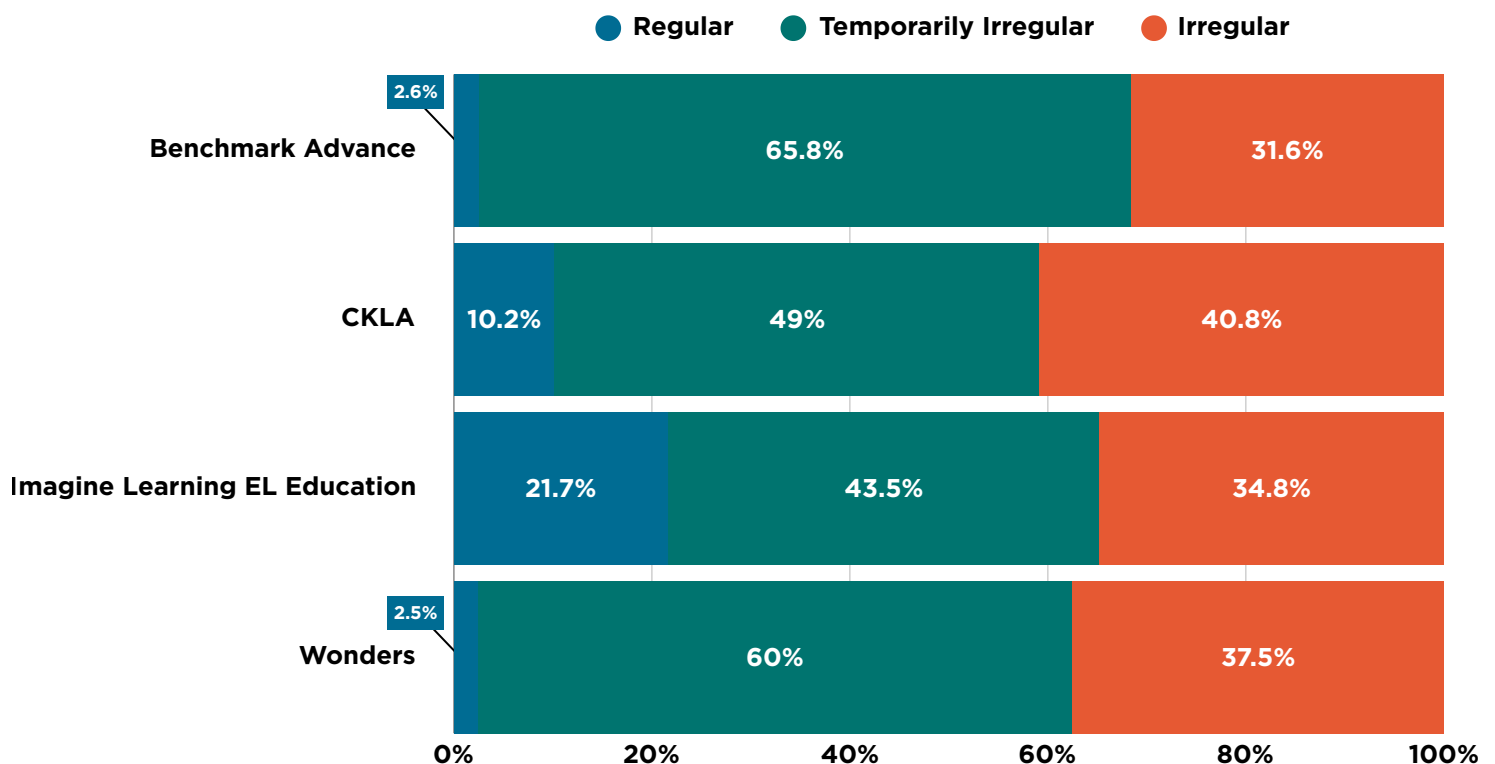
Table 7 *High-Frequency Words Taught in Kindergarten HQIM (cont.)*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 27		1. what (I) 2. so (TI) 3. which (TI)		1. where (I) 2. look (TI)
Week 28	1. put (I) 2. want (I)	1. once (I) 2. said (I) 3. says (I)		1. good (TI) 2. who (I)
Week 29	1. saw (TI) 2. this (TI)	1. were (I) 2. here (TI) 3. there (I)		1. come (I) 2. does (I)
Week 30				
Week 31		1. he (TI) 2. she (TI) 3. we (TI) 4. be (TI) 5. me (TI)		
Week 32		1. they (I) 2. their (I)		
Week 33		1. my (TI) 2. by (TI)		
Week 34				
Week 35		1. you (I) 2. your (I)		
Week 36				
Total:	38	49	46	40

Note. The gray boxes mark weeks that were not included in the HQIM. CKLA = Core Knowledge Language Arts; R = regular word; TI = temporarily irregular; I = irregular.

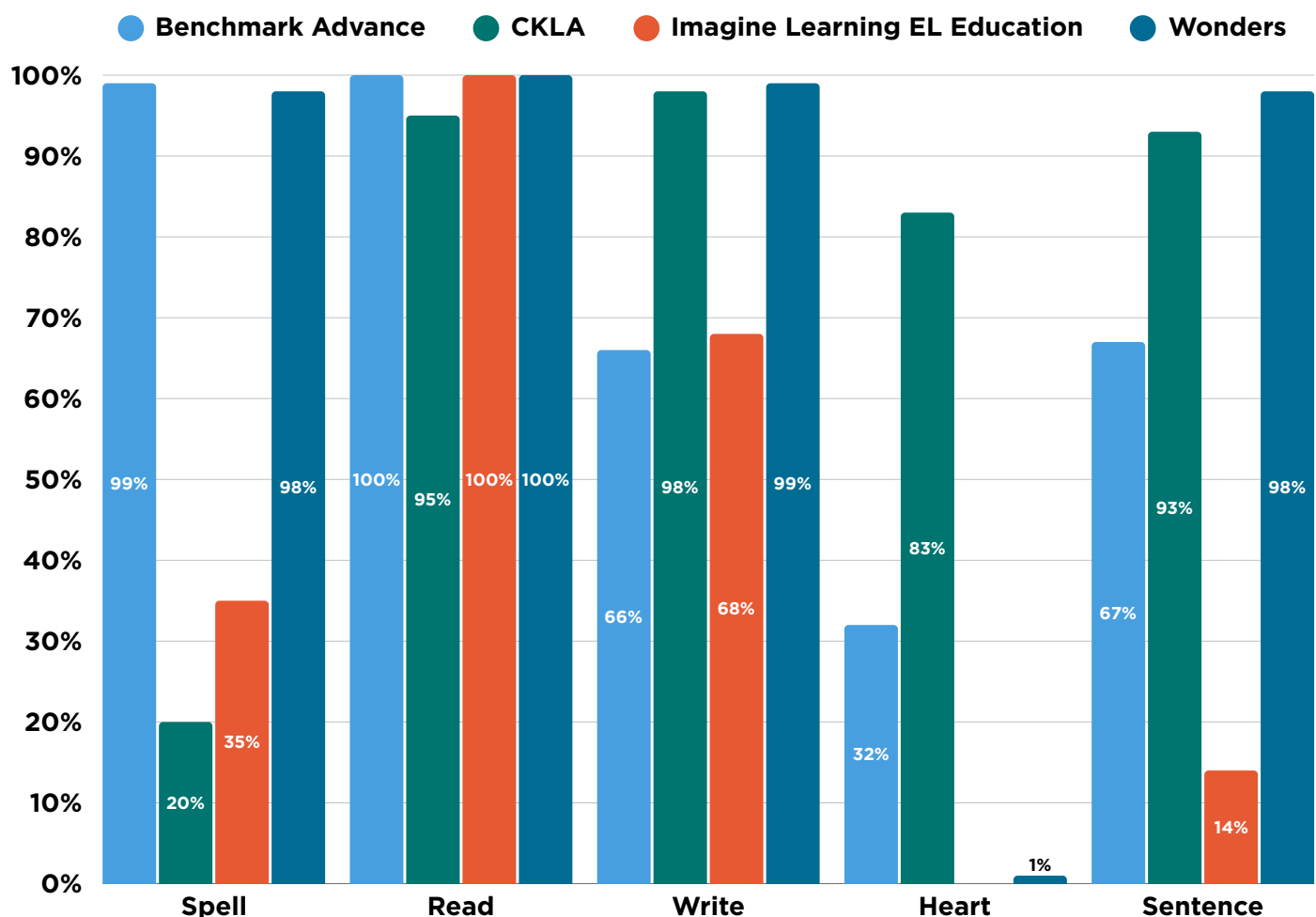
As to the high-frequency words chosen for explicit instruction in kindergarten, all four HQIM focused more on temporarily irregular and irregular words rather than on regular words that students would likely be able to decode based on the scope and sequence of taught GPCs (see Figure 11). *Benchmark Advance* and *Wonders* each had one regular word in their kindergarten list, *CKLA* had five regular words, and *Imagine Learning EL Education* had 10 regular words. It is important to note that the five regular words we counted for *CKLA* are not listed as “tricky words” that are taught in the scope and sequence. However, these words were explicitly taught because they were the opposite of a “tricky word” that was taught in the lesson (e.g., *big* and *little*, *up* and *down*, *in* and *out*).

Figure 11 Kindergarten High-Frequency Word Regularity by HQIM



The research team also identified the frequency of the suggested activities included in the HQIM aligning with research (e.g., see, say, spell orally; reading the word; writing the word; heart method; using the word in a sentence), and many of the lessons were found to use more than one method to teach or practice high-frequency words. In kindergarten, the number of lessons that included high-frequency word instruction varied as follows: *Benchmark Advance* (88 lessons; 59%), *CKLA* (40 lessons; 23%), *Imagine Learning EL Education* (37 lessons; 28%), and *Wonders* (149, 100%). The suggested activities for teaching or practicing high-frequency words by kindergarten HQIM are shown in Figure 12.

Figure 12 *Kindergarten High-Frequency Word Activities by HQIM*



Note. The bars show the percentage of high-frequency word lessons that include the suggested activity.

The most commonly suggested activities in kindergarten were reading the high-frequency words as well as writing the words, with these activities being used in the majority of the lessons for all four HQIM. The least commonly suggested activity was the heart method, which is broadly defined here as when the teacher or students point out or mark the regular and irregular parts of the word with a heart or other symbols (e.g., lines, circles). Only one HQIM, *CKLA*, suggested this practice in a majority of the high-frequency word lessons. For example, in *CKLA*, the teacher guide for the word “said” suggests circling the “s” and “d” as they make the expected sounds and underlining the “ai” as it makes an unexpected sound (i.e., sounds like the short *e* sound). Overall, all four kindergarten HQIM provided evidence of high-frequency word instruction, including focusing on words students would not be able to decode independently and using a variety of activities to teach or practice the words.

For first grade, the number of high-frequency words explicitly taught varied widely from 52 (i.e., *CKLA*) to 165 (i.e., *Wonders*), with anywhere between one and nine new words taught per week. Table 8 provides the full list of high-frequency words by first-grade HQIM.



Table 8 *High-Frequency Words Taught in First-Grade HQIM*

	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 1	1. and (R) 2. go (TI) 3. the (I) 4. see (TI) 5. she (TI)	1. a (TI) 2. I (R) 3. no (TI) 4. so (TI) 5. of (I)		1. does (I) 2. not (R) 3. school (I) 4. what (I)
Week 2	1. little (TI) 2. play (TI) 3. you (I) 4. with (TI)		1. a (TI) 2. an (R) 3. can (R) 4. has (TI) 5. is (TI) 6. the (I) 7. this (R)	1. down (TI) 2. out (TI) 3. up (R) 4. very (I)
Week 3	1. have (TI) 2. jump (R) 3. no (TI) 4. one (I) 5. for (TI)	1. is (R) 2. to (I) 3. all (TI) 4. some (I) 5. from (I) 6. word (I) 7. are (I) 8. were (I) 9. have (TI)		1. be (R) 2. good (TI) 3. come (I) 4. pull (TI)
Week 4	1. look (TI) 2. are (I) 3. said (I) 4. two (I) 5. my (TI)	1. one (I) 2. once (I) 3. do (I) 4. two (I) 5. the (I) 6. who (I) 7. said (I) 8. says (I)	1. at (R) 2. in (R) 3. and (R) 4. look (TI) 5. like (R) 6. his (TI) 7. with (R)	1. fun (R) 2. make (R) 3. they (I) 4. too (TI)
Week 5	1. come (I) 2. here (R) 3. to (I) 4. of (I)	1. was (I) 2. when (TI) 3. why (TI)	1. did (R) 2. her (R) 3. on (R) 4. she (TI) 5. are (I)	1. jump (R) 2. move (I) 3. run (R) 4. two (I)

Table 8 *High-Frequency Words Taught in First-Grade HQIM (cont.)*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 6	1. put (I) 2. what (I) 3. want (I) 4. this (TI) 5. saw (TI)	1. what (I) 2. where (I) 3. which (TI) 4. here (TI) 5. there (I)	1.had (R) 2.says (I) 3.he (TI) 4.see (TI) 5.wants (I) 6.from (I)	1.again (I) 2.help (R) 3.new (TI) 4.there (I) 5.use (TI)
Week 7	1.now (TI) 2.do (I) 3.which (TI) 4.went (R)		1.for (R) 2.get (R) 3.gone (I) 4.no (TI) 5.to (I) 6.am (R)	1.could (I) 2.live (I) 3.one (I) 4.then (TI) 5.three (TI)
Week 8	1.was (I) 2.there (I) 3.then (TI) 4.out (TI)	1. he (R) 2. she (R) 3. me (R) 4. be (R) 5. we (R) 6. they (I) 7. their (I)	1.will (R) 2.my (R) 3.of (I) 4.go (TI) 5.not (R) 6.saw (TI)	1.eat (TI) 2.no (TI) 3.of (I) 4.under (TI) 5.who (I)
Week 9	1.who (I) 2.good (TI) 3.by (TI) 4.them (TI)	1. my (TI) 2. by (TI)	1.when (R) 2.what (I) 3.where (I) 4.who (I) 5.why (R) 6.gives (I) 7.say (TI)	1.all (TI) 2.call (TI) 3.day (TI) 4.her (TI) 5.want (I)
Week 10	1.were (I) 2.our (TI) 3.could (I) 4.these (TI)	1. you (I) 2. your (I)	1.said (I) 2.could (I) 3.all (TI) 4.then (R)	1.around (I) 2.by (TI) 3.many (I) 4.place (TI) 5.walk (TI)

Table 8 *High-Frequency Words Taught in First-Grade HQIM (cont.)*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 11	1.once (I) 2.upon (R) 3.hurt (TI) 4.that (R)		1.by (R) 2.there (I)	1.away (I) 2.now (TI) 3.some (I) 4.today (I) 5.way (TI) 6.why (TI)
Week 12	1.because (I) 2.from (I) 3.their (I) 4.when (R)	1. because (I)	1.some (I) 2.think (TI)	1.green (R) 2.grow (TI) 3.pretty (I) 4.should (I) 5.together (TI) 6.water (TI)
Week 13	1.why (TI) 2.many (I) 3.right (TI) 4.start (TI)	1. should (I) 2. would (I) 3. could (I) 4. down (TI)	1.you (I) 2.was (I) 3.they (I)	1.any (I) 2.once (I) 3.from (I) 4.so (TI) 5.happy (TI) 6.upon (R)
Week 14	1.find (I) 2.how (TI) 3.over (TI) 4.under (TI)		1.do (I) 2.much (R) 3.yes (R)	1.ago (I) 2.boy (TI) 3.girl (TI) 4.how (TI) 5.old (TI) 6.people (I)
Week 15	1.try (TI) 2.give (I) 3.far (TI) 4.too (TI)		1.began (R) 2.behind (TI) 3.thank (TI)	1.after (TI) 2.every (TI) 3.buy (I) 4.soon (TI) 5.done (I) 6.work (I)
Week 16	1.after (TI) 2.call (TI) 3.her (TI) 4.large (TI)	1. today (TI) 2. tomorrow (TI) 3. yesterday (TI)	1.make (R)	1.about (I) 2.eight (TI) 3.animal (TI) 4.give (I) 5.carry (I) 6.our (TI)

Table 8 *High-Frequency Words Taught in First-Grade HQIM (cont.)*

	Benchmark Advance	CKLA	Imagine Learning EL Education	Wonders
Week 17	1.house (TI) 2.long (R) 3.off (R) 4.small (TI)		1.next (R) 2.still (R) 3.ways (TI)	1.because (I) 2.blue (R) 3.into (R) 4.or (TI) 5.other (I) 6.small (TI)
Week 18	1.brown (TI) 2.live (I) 3.work (I) 4.year (TI)		1.kind (TI) 2.many (I) 3.these (R) 4.too (TI) 5.your (I) 6.fly (R) 7.take (R)	1.find (TI) 2.food (TI) 3.more (TI) 4.over (TI) 5.start (TI) 6.warm (I)
Week 19	1.always (TI) 2.found (TI) 3.know (TI) 4.your (I)		1.watch (TI) 2.ago (I) 3.time (R) 4.long (R)	1.caught (TI) 2.flew (TI) 3.know (TI) 4.laugh (I) 5.listen (I) 6.were (I)
Week 20	1.all (TI) 2.draw (TI) 3.people (I) 4.where (I)	1. how (TI)	1.again (I) 2.bye (I) 3.could (I) 4.would (I) 5.does (I) 6.knew (TI) 7.just (R) 8.or (R)	1.found (TI) 2.woman (I) 3.hard (TI) 4.would (I) 5.near (R) 6.write (TI)
Week 21	1.again (I) 2.country (I) 3.round (TI) 4.they (I)		1.about (I) 2.around (I) 3.over (TI) 4.old (TI)	1.four (I) 2.large (R) 3.none (I) 4.only (TI) 5.put (TI) 6.round (TI)
Week 22	1.boy (TI) 2.city (TI) 3.four (I) 4.great (I)	1. picture (I)	1.good (TI) 2.only (TI) 3.very (I) 4.should (I) 5.eat (R) 6.after (R)	1.another (I) 2.climb (I) 3.full (TI) 4.great (I) 5.poor (I) 6.through (I)
Week 23	1.away (I) 2.change (R) 3.laugh (I) 4.move (I)		1.today (R) 2.always (TI) 3.laugh (I) 4.both (I)	1.began (R) 2.better (R) 3.guess (I) 4.learn (I) 5.right (R) 6.sure (I)

Table 8 *High-Frequency Words Taught in First-Grade HQIM (cont.)*

	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 24	1.earth (I) 2.every (TI) 3.near (R) 4.school (I)		1.soon (R) 2.under (R) 3.little (TI) 4.every (TI) 5.really (TI) 6.one (I) 7.anymore (I)	1.color (I) 2.early (I) 3.instead (R) 4.nothing (I) 5.oh (R) 6.thought (I)
Week 25	1.before (I) 2.done (I) 3.about (I) 4.even (TI)		1.have (TI) 2.sometimes (I) 3.through (I)	1.above (I) 2.build (I) 3.knew (TI) 4.money (I) 5.toward (I) 6.fall (TI)
Week 26	1.walk (TI) 2.buy (I) 3.only (TI) 4. through (I)		1.come (I) 2.himself (R) 3.together (R)	1.answer (I) 2.brought (I) 3.busy (I) 4.door (I) 5.enough (I) 6.eyes (I)
Week 27	1.does (I) 2.another (I) 3.wash (I) 4. some (I)			1.brother (I) 2.father (R) 3.friend (I) 4.mother (I) 5.love (I) 6.picture (TI)
Week 28	1.better (R) 2.carry (I) 3.learn (I) 4. very (I)	1. cow (TI)		1.been (I) 2.children (R) 3.month (I) 4.question (TI) 5.their (I) 6.year (TI)
Week 29	1.mother (I) 2.father (R) 3.never (R) 4. below (R)			1.before (I) 2.front (I) 3.heard (I) 4.push (R) 5.tomorrow (R) 6.your (I)

Table 8 *High-Frequency Words Taught in First-Grade HQIM (cont.)*

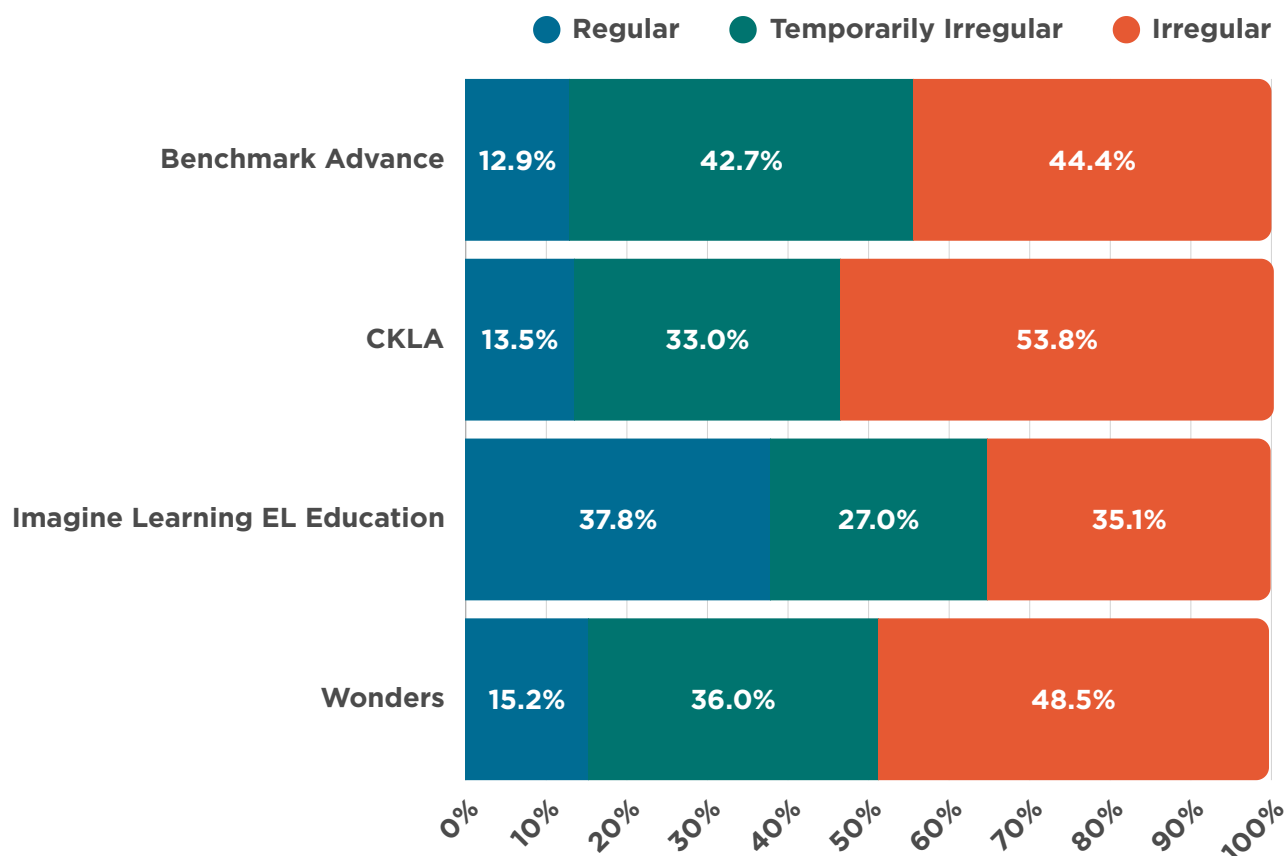
	<i>Benchmark Advance</i>	<i>CKLA</i>	<i>Imagine Learning EL Education</i>	<i>Wonders</i>
Week 30	1. blue (R) 2. answer (I) 3. eight (TI) 4. any (I)			1. favorite (I) 2. few (R) 3. gone (I) 4. surprise (R) 5. wonder (I) 6. young (I)
Week 31				
Week 32				
Total HFWs:	124	52	111	165

Note. The gray boxes mark weeks that were not included in the HQIM. CKLA = Core Knowledge Language Arts; R = regular word; TI = temporarily irregular; I = irregular.



Similarly to kindergarten, all four HQIM focused more on temporarily irregular and irregular words rather than on regular words that students likely would be able to decode based on the scope and sequence of taught GPCs in first grade (see Figure 13). *CKLA* included the fewest regular words with seven, and *Imagine Learning EL Education* included the largest with 42.

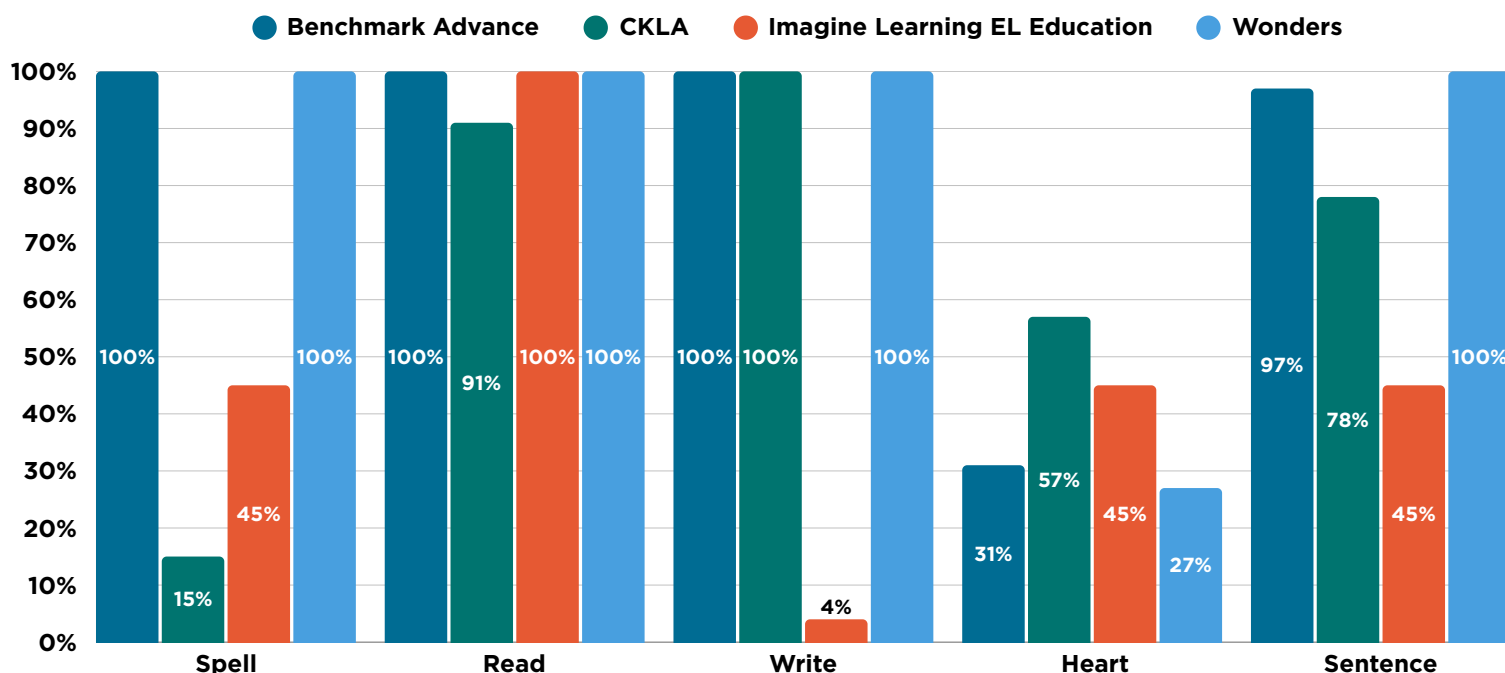
Figure 13 *First-Grade High-Frequency Word Regularity by HQIM*





For first grade, the research team also compiled the frequency of the suggested activities included in the HQIM that aligned with research (e.g., see, say, spell orally; reading the word; writing the word; heart method; using the word in a sentence). The number of lessons that included high-frequency word instruction varied as follows: *Benchmark Advance* (90 lessons; 60%), *CKLA* (46 lessons; 29%), *Imagine Learning EL Education* (53 lessons; 41%), and *Wonders* (120, 80%). The suggested activities for teaching or practicing high-frequency words by first-grade HQIM are shown in Figure 14. Similar to kindergarten, the most commonly suggested activity in first grade was reading the high-frequency words, with this activity being used in nearly all of the lessons for all four HQIM. In contrast to kindergarten, the heart method was used in approximately one-third to one-half of the high-frequency word lessons in all four first-grade HQIM. Again, all HQIM provided evidence of recommended high-frequency word instruction, including focusing on words students would not be able to decode independently and using a variety of activities to teach or practice the words.

Figure 14 *First-Grade High-Frequency Word Activities by HQIM*



Note. The bars show the percentage of high-frequency word lessons that include the suggested activity.

Implications

Overall, the four HQIM reviewed included many of the research-based instructional practices. However, each HQIM reviewed had strengths and areas for improvement in meeting research-based recommendations for code-focused instruction in kindergarten and first grade. Although it is suggested to implement the HQIM with “fidelity,” there may be some adjustments that are warranted to each HQIM because no product is perfect. It may be more effective to make adjustments at the school or district level, with support from instructional coaches, literacy specialists, or curriculum specialists, rather than leaving teachers to make tweaks on their own. These adjustments should be based not only on reviews such as this, but also by incorporating student data to make data-driven instructional decisions. For example, a review might suggest that an HQIM does not meet a recommendation for GPC sequencing, but if the student data suggest that students are not experiencing difficulty learning GPCs and meeting benchmarks for achieving reading proficiency, then adjustment to the materials might not be warranted.

One possible action step at the state or regional level would be to create a product-agnostic toolkit designed to help districts and schools think about how to examine their data in relation to possible adjustments needed with their HQIM. Below are several suggestions for adjustments to consider for each specific HQIM reviewed, but again, schools and districts are encouraged to make changes thoughtfully and based on student data as well as research.

Benchmark Advance Recommendations

For kindergarten, the biggest area for improvement is the pacing of letter-sound instruction. The scope and sequence introduces about one letter per week and works on decoding CVC words with the introduction of CVCe words and long vowels in the final five weeks of kindergarten. This may be too slow an introduction to letter-sounds and does not cover digraphs or blends explicitly in kindergarten. Districts may want to think about how to use the fast-track letter suggestions to explicitly teach letter-sounds at a faster pace and then use supplemental materials to explicitly introduce and practice blends and digraphs in kindergarten. This would take some work on the part of curriculum specialists or instructional coaches to think about how to restructure the scope and sequence and pull together supplemental materials (e.g., decodable text, chaining word lists) that teachers could use.





Additionally, given the use of predictable or patterned text for the first several weeks of kindergarten, schools and districts may want to carefully consider how these books are being used in instruction and ensure children are not being overly prompted to use pictures to guess the words, as is sometimes associated with “three-cueing methods.” For example, teachers can use these books to work on concepts of print (e.g., one-to-one correspondence and tracking print left-to-right and top-to-bottom) and to practice with high-frequency words.

For both kindergarten and first grade, another small adjustment would be to connect phonemic awareness with print more frequently. This could include incorporating letter cards, magnetic letters, or whiteboards into suggested oral-only phonemic awareness activities. For example, during a phoneme isolation activity, students could write the letter for the first phoneme they hear in a word on a whiteboard and say the phoneme. Alternatively, they could hold up a letter card to match the phoneme they are producing—instead of only producing an oral response.

CKLA Recommendations

For kindergarten, the instructional time spent on isolated phonemic awareness activities may be too much for many students. Instructional time may be more effective for reading and spelling development if these activities were connected to print more often. Similarly to the *Benchmark Advance* recommendation above, teachers can add print to some of the oral-only phonemic awareness activities. Additionally, nearly one-third (31%) of the suggested minutes are in Skills Units 1 and 2. Schools and districts may want to consider whether all of these lessons are necessary for their students to complete or whether they could start Skills Unit 3, which is when letter-sounds are introduced, sooner.

The other suggestion would be to add articulatory gesture guidance for all the consonant phonemes in kindergarten, even if it is not stated explicitly in the teacher's lesson guide. For first grade, *CKLA* was marked green on all research-based recommendations reviewed.

Imagine Learning *EL Education* Recommendations

For kindergarten, the biggest area for improvement is the connection between phonemic awareness and print and the instruction of blending and segmenting to read and spell words. Students are not taught to blend or segment CVC words until the midpoint of kindergarten, but this could be incorporated earlier into Modules 1 and 2 as students learn letter-sounds. Instead of time each week spent on syllables and rhyming word instruction with poems, these lessons could be adjusted to the chaining and writing routines to focus on blending and spelling sooner. This also would allow for later chaining lessons to incorporate CCVC words with beginning blends because these word patterns are currently missing from the kindergarten lessons.

For both kindergarten and first grade, phonemic awareness activities could incorporate print more often in similar ways as described above. Each day's lesson could adjust the beginning oral-only phonemic awareness activity to one that incorporates print. Finally, more time likely needs to be spent reading decodable text. This could be incorporated into more of the daily whole-group and small-group lessons. However, with the small number of decodable texts provided, schools and districts may need to acquire additional texts. Although possible, adding outside texts can be challenging because there sometimes are variations in the scope and sequences used to create the decodables.





Wonders Recommendations

Similarly to other HQIM, schools and districts may want to consider some adjustments to the pacing of the letter-sound instruction to teach the letters and sounds at a faster pace, which would then allow teachers to incorporate digraphs into the scope and sequence for kindergarten where currently only blends and CVCe words are covered. Additional recommendations, such as those above, include incorporating print into more oral-only phonemic awareness activities in both kindergarten and first grade as well as carefully planning the use of predictable or patterned texts early in kindergarten to focus on concepts of print and high-frequency words.

Finally, in kindergarten, daily lessons often incorporated the instruction or practice of multiple phonemic awareness skills (i.e., three or more skills per day for the majority of the lessons). Schools and districts may want to recommend that teachers limit or skip some of these activities to focus on one or two skills per day while prioritizing blending and segmenting skills.

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Technical Appendix

Reviewers and Training

Eight research assistants were hired to code the four HQIM. Two team members (hereafter referred to as reviewers) were assigned to each HQIM so that each lesson could be double coded independently. Reviewers attended an initial training (approximately 1 to 1.5 hours, depending on how long individuals needed to complete the steps) where the lead researcher modeled how to examine a lesson, answer each question on the code sheet, record answers with specific details on a digital notes sheet, and enter the information in an online form. Reviewers were provided with descriptions of useful terms and specific examples to use when answering the code sheet questions. The reviewers then completed the first one to two units/modules/cycles (i.e., approximately 15-20 lessons, depending upon HQIM) on their notes sheet with the lead researcher providing feedback, answering questions, and providing additional explanations/examples as needed. Reviewers then entered these training lessons in the online form and reliability with their partner was checked. Additional feedback about responses or data entry errors was provided as needed.

Reviewers then independently coded the next unit of lessons with minimal feedback (i.e., lead researcher only answered specific questions) and entered data in the online form to ensure excellent reliability (>90%) with their partner. As both reviewers completed each unit, responses were checked for reliability. If reliability remained high (>85%), reviewers continued onto the next unit. If reliability dropped below the threshold, reviewers returned to a training phase to address issues in how they were answering the questions or examining the materials.

Code sheet items that had discrepant responses (i.e., each reviewer provided a different response) were evaluated by the lead researcher who consulted the lesson in the HQIM and entered the correct response into the online form. Overall reliability during coding was acceptable across all four HQIM: *Benchmark Advance* = 96% (kindergarten), 93% (first grade); *CKLA* = 92% (kindergarten), 90% (first grade); *Imagine Learning EL Education* = 89% (kindergarten), 84% (first grade); *Wonders* = 91% (kindergarten), 94% (first grade). Any discrepancies between the two reviewers were resolved by the first author.

Analysis Plan

The complete data file was downloaded from the online platform and cleaned for data quality and standardization in variable naming. The data were analyzed using STATA 17.0 for each HQIM (e.g., *CKLA*, *Benchmark Advance*) and grade level (i.e., kindergarten and first grade). The data collected on each HQIM were then compared to the research-based instructional practices (see [Table 1](#)) and each HQIM was rated as meeting, partially meeting, or not meeting each recommended practice.





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