GROTON BOARD OF EDUCATION COMMITTEE OF THE WHOLE MEETING MINUTES MAY 20, 2024 @ 6:00 P.M. CENTRAL OFFICE, ROOM 11

MEMBERS PRESENT: Jay Weitlauf-Chairperson, Beverly Washington-Vice Chairperson (remote),

Andrea Ackerman, Dean Antipas, Adrian Johnson, Matthew Shulman (remote),

Ian Thomas, Jennifer White

ALSO PRESENT: Susan Austin, Phil Piazza, Lisa Hernandez Corcoran, David Sabilia, Jackie Wilson,

Amanda Chiasson, Sarah Beth Stonoha, Shannon Dabney (remote),

Stephney Gonzales (remote), Dean Petrucelli (remote), Eric Oberg (remote)

I. <u>CALL TO ORDER</u> – Mr. Jay Weitlauf, Chairperson called the meeting to order at 6:03 p.m.

II. REVIEW OF THE MAY 13, 2024, MEETING MINUTES

MOTION: Ackerman, White: To approve the minutes of May 13, 2024.

PASSED - UNANIMOUSLY

III. <u>LITERACY UPDATE</u> (Attachments #1, #2)

Dr. Piazza and Mrs. Lisa Hernandez Corcoran gave an overview of the 11 categories reviewed via the HILL for Literacy rubric. Dr. Piazza noted that at this point he was sharing the committee's work with the Board.

Ms. Stephney Gonzales, consultant from the HILL for Literacy, gave an overview of the survey results and answered questions around the rubric grading and validity.

Dr. Piazza reviewed the timeline of the work of the committee:

- January The Literacy Leadership Team visited some local schools that were using the different programs that Groton is considering.
- February We began the review process.
- March Did an overview of Wit and Wisdom as a compendium. Did an overview of the EL Education program. They spent 10 full hours on each program.
- May Making recommendations to the full Board.

It is the Superintendent's recommendation to proceed with Wit and Wisdom.

Teachers from the District Curriculum Review Committee shared their support of the Wit and Wisdom Program and their experiences with the review process, as well as feedback regarding implementation of portions of both programs in their classrooms.

Mrs. White suggested bringing the Team back in about six months to get a progress report as to how the program is working.

IV. <u>FACILITIES REPORT</u> (Attachments #3, #4)

- Roof Replacement at CB Dean Petrucelli from Silver Petrucelli & Associates gave an overview of the roof replacement at CB.
- Roof-Mounted Solar Photovoltaic Array at CB Dean Petrucelli, with input from Eric Oberg, gave an overview of the Roof-Mounted Photovoltaic Array at CB.

V. <u>DISCUSSION RE: BYLAW 9324 MEETING CONDUCT & PARLIAMENTARY PROCEDURES –</u> RECORDING, BROADCASTING OR PHOTOGRAPHING MEETINGS (Attachment #5)

It was noted that this policy would be going for a first reading at the next Regular Board meeting.

Mr. Shulman suggested new language in the first sentence to the addition to the policy, "...shall ensure..." to "...shall endeavor..."

VI. REVIEW REFERRAL TRACKING SHEET

Board members were encouraged to forward any referral to Mr. Weitlauf or Superintendent Austin.

Referrals to the COW: Grade Reform, Board members on the hiring committee for top administrative positions.

Matt Shulman asked if having a Board Retreat was a duplicate on the Referral List.

VII. <u>ADJOURNMENT</u>

MOTION: Ackerman, Johnson: To adjourn at 9:10 p.m.

PASSED UNANIMOUSLY



Curriculum Review Results





- Jan: Literacy Leadership team visits local schools
- Feb: Begin the planning process with The Hill
- March: Overview and Review of Wit and Wisdom as part of a compendium
- April: Overview and review of EL Education
- May: Recommendation for State approved Tier 1 curricular resource







Education



The committee recommends...





Instructional Design

n Phonological
Awareness

Phonics

Comprehension



Fluency

Vocabulary

Listening and

Speaking

Writing

Culturally
Responsive
and
Sustaining
Education

Motivation and Engagement

Assessment



Phonological Awareness

Phonics

Culturally
Responsive
and
Sustaining
Education



Fluency

Vocabulary

Motivation and Engagement

Listening and Speaking



Instructional Design

Comprehension

Assessment

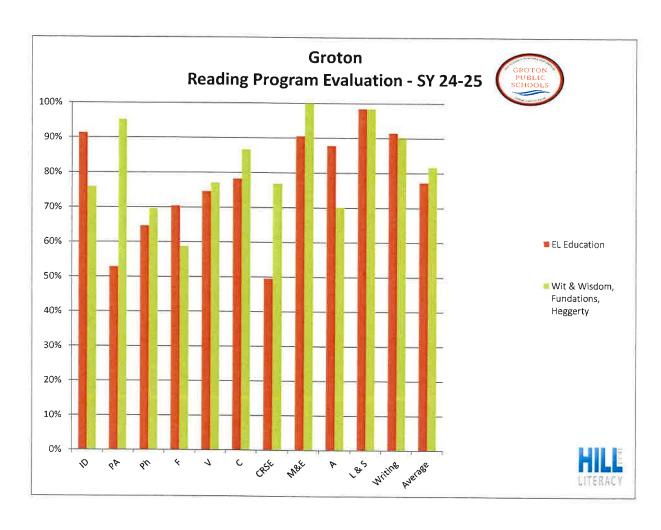
Writing



Next Steps...

- **June:** Introduce the new resource to K-5 staff
 - Provide digital access to resources
- July-Aug: Plan for professional development to roll out our new curricular resource
- Sept: Begin implementation

	Overall T	otals
Section	EL Education	Wit & Wisdom, Fundations, Heggerty
ID	91%	76%
PA	53%	95%
Ph	65%	70%
F	70%	59%
V	75%	77%
С	78%	87%
CRSE	49%	77%
M&E	90%	100%
Α	88%	70%
L&S	98%	98%
Writing	91%	90%
Average	77%	82%



Key:

PA: Phonological Awareness CRSE: Culturally Responsive and Sustaining Education

Ph: Phonics M&E: Motivation and Engagement

F: Fluency A: Assessment

V: Vocabulary L&S: Listening and Speaking

	C C	OMBINED				TI HIT			
	INSTRUCT	IONAL DES	IGN (ID)						
Question #	Question	К	1	2	3	4	5	S/I	
1	Is there empirical research on this program's efficacy?	3	3	3	3	3	3	3	21
2	Are resources available to help the teacher understand the rationale for the instructional approach and program stragegies (e.g., articles, explanations in the teach manuals, references, and reliable websites)?	3	3	3	3	3	3	3	21
3	Does the comprehensive program address the 5 components of reading (phonological/phonemic awareness, phonics, fluency, vocabulary, comprehension)?	3	3	3	3	2	2		18
4	In addition to the 5 components of reading, are other dimensions of reading such as spelling, writing, oral language, and listening comprehension addressed?	3	3	3	3	2	2		18
5	Does the supplemental/intervention program adequately address the component(s) targeted? (Some programs concentrate on one, two, or a few of the components.)				_			3	3
6	Is there a scope and sequence?	3	3	3	3	3	3	3	21
7	Are goals and objectives clearly stated?	3	3	3	3	3	3	3	21
8	Are student materials aligned with the instructional objective of the lesson?	3	3	3	3	3	3	3	21
9	Do the instructional materials increase in difficulty as students' skills strengthen?	3	3	3	3	3	3	3	21
10	Are all lessons and activities (e.g., whole group, small group, and centers) reading related?	3	3	3	3	3	3	3	21
11a	Is there a clear and logical organization to the lessons in: the order and procedure of each day's lesson?	3	3	3	3	3	3	3	21
11b	Is there a clear and logical organization to the lessons in: the inclusion of all necessary materials?	3	3	3	3	3	3	3	21

11c	Is there a clear and logical organization to the lessons in: the consistency of each day's lesson format?	3	3	3	3	3	3	3	21
11d	Is there a clear and logical organization to the lessons in: addressing the components of reading every day?	3	3	3	3	3	3	3	21
12	Is instruction consistently explicit? Is it concise, specific, and related to the objective?	3	3	3	3	3	3	3	21
13	Are teacher directives highly detailed to ensure accurate implementation?	3	3	3	3	3	3	3	21
14	Does the lesson format reflect frequent interactions between teacher and students?	3	3	3	3	3	3	3	21
15	Is instruction consistently systematic? Is there a prescribed order of introducing specific skills within each component of reading?	3	3	3	3	3	3	3	21
16a	Are there coordinated instructional sequences and routines which include: modeling?	3	3	3	3	3	3	3	21
16b	Are there coordinated instructional sequences and routines which include: guided practice with feedback?	3	3	3	3	3	3	3	21
16c	Are there coordinated instructional sequences and routines which include: student practice and application?	3	3	3	3	3	3	3	21
16d	Are there coordinated instructional sequences and routines which include: cumulative review?	3	3	3	3	3	3	3	21
17	Are there ample guided student practice opportunities, including multiple opportunities for explicit teaching and teacher directed feedback (e.g., 5-15 for typically progressing readers and 40 or more for struggling readers)?								21
18	Does the program provide clear guidance for the teacher to document student progress and inform instruction?	3	3	3	3	3	3	3	21
19	Are the five components of reading clearly linked with a coherent instructional design?	3	3	3	3	3	3		18
20	Is scaffolding a prominent part of the lessons?	3	3	3	3	3	3	3	21

21	Are instructions for scaffolding specific?	3	2	2	2	2	2	3	21
22	Are teachers encouraged to give immediate, specific feedback (corrective or positive)?	2	2	2	2	3	3	2	21
23	Is differentiated instruction prominent?	1	1	1	1	1	1	2	21
24	Is instruction differentiated based on assessment?	1	1	1	1	1	1	2	21
25	Are directions for differentiating instruction specific?	1	1	1	1	1	1	2	21
26	Is small group instruction (small teacher- pupil ratio) part of daily instruction?	2	2	2	2	2	2	3	21
27	Are there guidelines for forming flexible groups based on student progress?							3	21
28	Are enrichment activities included for advanced students?	1			1	1	1		21
29	Does the program provide instruction for English Language Learners?	3	3	3	3	3	3	3	21
30a	Does the program address culturally responsive & sustaining education through Instructional Engagement?	2	2	2	2	1	1	2	21
30b	Do teacher's materials provide guidance on egaging students in culturally sensitive experiential learning activities?	1	1	1	1	1	1	1	21
30c	Does implementation take into consideration students' lived experiences?	2	2	2	2	2	2	2	21
30d	Does implementation include opportunities for students to contribute prior knowledge on a culturally relevant topic?	2	2	2	2	2	2	2	21
30e	Do teacher's materials provide guidance on seeing diverse identitiesas an asset; prompting the teacher to embrace and value diversity as a positive?	1	1	1	1	1	1	1	21
30f	Does the program support connections to social, political or environmental concerns that affect them and their lives and promote avenues through which students can take action?								21
30g	Do teacher materials offer suggestions to use social- emotional learning approaches to draw out and build upon students' assets to facilitate learning?	1	1	1	1	1	1	1	21

	behind their peers, students more than one grade level behind their peers)? Does the program specify who should provide instruction for accurate implementation (e.g., special								
32	education teacher, general education teacher, paraprofessional, or volunteer)?								3
33	Does the program specify the instructional setting (e.g., general education classroom, computer lab, or resource room)?								3
	TOTALS:	95	93	93	94	92	92	96	76%

	PHONOLOGIC	CAL AWAR	ENESS (PA	.)				
Question #	Question	К	1	2	3	4	5	S/I
1	Is phonological awareness instruction explicit?	3	3					3
2	Is phonemic awareness instruction explicit?	3	3					3
3	Is phonological awareness instruction systematic?	3	3					3
4	Is phonemic awareness instruction systematic?	3	3					3
5	Is phonological awareness instruction scaffolded?	2	2					3
6	Is phonemic awareness instruction scaffolded?	2	2					3
7	Does phonological awareness instruction include cumulative review?	3	3					3
8	Does phonemic awareness instruction include cumulative review?	3	3					3
9	Are assessments included to measure and monitor progress in phonological awareness?	3	3					3
10	Are assessments included to measure and monitor progress in phonemic awareness?	3	3					3
11	Is PA only a small portion of the daily lesson?	3	3					3
12	Does each day's lesson focus on only one or two PA skills (as opposed to several)?	1	1					1
13	Are there instructions for PA activities to alert the teacher to student readiness?	2	2					1

14	Does the program contain instructional activities that are designed to stimulate the growth of phonological awareness?	3	3			3
15	Does the program contain instructional activities that are designed to stimulate the growth of phonemic awareness?	3	3		X	3
16 1	Does PA start with rhyming and progress to phoneme isolation, blending, segmenting, and manipulation?	3	3			3
17 I	Do students count the number of words in spoken sentences?	3				3
18 1	Are there rhyming activities (recognition and production)?	3				3
	Are there alliteration activities?	3				3
20 1	Are there activities that involve counting the number of syllables in a word?	3				3
- 21 - 1	Are there activities that involve blending syllables in a word?	3				3
77 1	Are there activities that involve segmenting syllables in a word?	3				3
ノイー	Are there activities for students to blend onsets and rimes?	3				3
24 1	Are there activities for students to segment onsets and rimes?	3				3
25	Do activities follow the continuum of word types (beginning with consonants & short words that contain 2 or 3 phonemes)	3	3			3
	Does instruction include physical representations (e.g., clapping, Elkonin boxes with markers, counters, tiles, fingers, and auditory cues) to help students make the connection between sounds and print (the alphabetic principle)?	3	3			3
27	When PA activities are at the phoneme level, do students' activities target the first sound in words and then move to the last sound in words and finally focus on the middle sound in words?	3	3			3
28	Are there blending activities at the phoneme level?	3	3			3

29	Are there segmenting activities at the phoneme level?	3	3				T	3	1 9
30	Does instruction include manipulation of phonemes in words (i.e., deletion, addition, and substitution)?		3					3	6
31	Once students demonstrate early phonemic awareness, is PA instruction linked with phonics instruction?	3	3					3	9
32	Does the program specify when oral language PA activities should be phased out?	3	3					3	9
33	Are the words used in PA activities found in subsequent word lists and text readings?	3	3					3	9
34	Does the program include a sound pronunciation guide for the various features of sound production (e.g., stop sounds and continuous sounds)?	3	3					3	9
35	Do computer-based programs pronounce the sounds distinctly, correctly, and without distortion?	3	3					3	9
	TOTALS:	97	76	0	0	0	0	101	95%

	PHONICS INSTRUCTION (Ph)											
Question #	Question	К	1	2	3	4	5	s/i				
1	Is phonics instruction explicit?	3	3	3				3				
2	Is phonics instruction systematic?	3	3	3				3				
3	Does instruction in phonics include coordinated instructional sequences and routines?	3	3	3				3				
4	Is phonics instruction scaffolded?	3	3	3				3				
5	Does phonics instruction include cumulative review?	3	3	3				3				
6	Are assessments included to measure and monitor progress in phonics?	3	3	3				3				
7	Does the program teach both consonants and vowels?	3	3					3				
8	Are short vowels taught before long vowels?	3	3					3				
9 1	Are individual letter-sounds taught first, followed by digraphs, blends, and word families?	3	3	3				3				
10	Are high utility letter-sounds (e.g.,/a/, /m/, /s/, /t/, /r/) found in short, one syllable cvc or ccvc words introduced before low utility letter-sounds (e.g., /x/,/y/, /z/)?	3	3					3				

11	Are digraphs taught as a single sound (e.g., /sh/, /ch/,		3	3				3	9
12	/th/, /ai/, /ea/)? Are the individual sounds in a blend taught?		3	3				3	9
13	Are letter-sound correspondences taught to mastery and reviewed cumulatively?	3	3					3	9
14	Are students taught an explicit strategy to decode words by their individual sounds?	3	3	3				3	12
15	Do students practice decoding words that contain only those letter-sounds that have been previously taught?	3	3	3				3	12
16	Once students have mastered a few letter-sounds, do they immediately apply them to reading words in isolation, lists and short, decodable connected texts?	3	3		6			3	9
17	Is symbol to sound (decoding) taught explicitly?	3	3	3				3	21
18	Is sound to symbol (spelling/encoding) taught explicitly?	3	3	3	1			3	21
19	Is spelling taught during word learning so students can make the connection to how sounds map onto print? (to reinforce the variety of ways in which the 44 speech sounds of English can be written)	3	3	3				3	21
20	Does instruction progress from simple to more complex concepts (e.g., CVC words before CCCVCC words and single syllable words before multisyllabic words)?	3	3	3				3	21
21	Does instruction follow the continuum of word types (beginning w/ CV and CVC words), incorporating continuous and stop sounds and blends in an appropriate sequence?	3	3					3	9
22	Are there frequent and cumulative reviews of previously taught concepts and words?	3	3	3				3	21
23	Is there an emphasis on fluency practice for each phonics component (e.g., sound identification, CVC blending, word recognition, multisyllabic words, and text reading)?	3	3	3	1	1	1	3	21

24	Are there ample decodable texts (familiar and unfamiliar) for students to practice applying their decoding skills with phonic elements in connected text?	2	2	2				3	15
25	Are decodable texts read before trade books (for students to master new skills)?							3	15
26	Does the program clarify that high frequency words can be both regular and irregular?	3	3	3				3	15
27	Are irregular words that are visually or phonemically confusing separated (e.g., saw/was, where/were, of/off)?	3	3					3	9
28	Does the program include explicit instruction in irregular words and decoding strategies for the decodable parts of words (clarifying that the letters represent their most common sounds as well as the irregularities of certain letters)?	3	3	3				3	15
29	Are the number of high frequency, irregular words introduced in one lesson kept to a minimum?	3	3	3				3	15
30	Are irregular words pre-taught before reading connected texts?	3	3	3				3	15
31	Are difficult, high frequency words reviewed often and cumulatively?	3	3	3				3	15
32	Is there sufficient practice with individual letter-sounds before larger orthographic units are taught?		3	3				3	9
33	Are students taught the strategy of chunking when trying to decode multisyllabic words?		3	3	1	1	1	3	18
34	Does the program provide teacher modeling of a think aloud strategy to aid in multisyllabic word analysis?		3	3	1	1	1	3	18
35	Are students taught the strategy to read multisyllabic words by using prefixes, suffixes, and known word parts?		3	3	2	2	2	3	18
36	Is instruction explicit in the use of syllable types (e.g., open, closed, vowel-consonant-e, vowel combinations, r-controlled, and consonant-le)?		3	3				3	18
37	Is a section of the program devoted to advanced phonics skills (structural analysis)?			3	1	1	1	3	15

	TOTALS:	83	118	103	16	13	14	131	70%
44	Are words used in advanced phonics activities also found in the student texts?		3	3	1	1	1	3	18
43	Once advanced phonics strategies have been mastered, are they immediately applied to reading and interpreting familiar and unfamiliar connected texts?	× ×	3	3	1	1	1	3	18
42	Are there activities for distinguishing and interpreting words with multiple meanings?		2	2	2	2	3	2	18
41	Are word parts that occur with high frequency (e.g., un- ,re-, in-, and -ful) taught rather than those that occur only in a few words?		3	3	3	1	1	3	18
40	Is instruction in the meanings of roots and affixes explicit and are there activities for students to analyze the relationship of spelling to meaning of complex words?				2	2	2	3	12
39	Does the program include spelling strategies (e.g., word sorts, categorization activities, word-building activities, and word analogies)?		3	3				3	18
38	Are advanced phonics skills taught explicitly, first in isolation and then in words and connected texts?			3				3	15

	FLUENCY (F)													
Question #	Question	К	1	2	3	4	5	S/I						
1	Is fluency instruction explicit?	3	3	3	3	3	3	2						
2	Is fluency instruction systematic?	3	3	3	3	3	3	2						
3	Does instruction in fluency include coordinated instructional sequences and routines?	3	3	3	3	2	3	2						
4	Is fluency instruction scaffolded?	3	3	3	3	2	2	3						
5	Does fluency instruction include cumulative review?	3	3	3	3									
6	Are assessments included to measure and monitor progress in fluency?	2	2	2	2	2	2	1						
7	Does the program address all dimensions of fluency (accuracy, automaticity/rate, and prosody)?	3	3	3	3	2	2	2						

8	Does fluency instruction begin by applying PA & Phonics skills to first build accuracy and automaticity at the word level before moving on to phrasing and fluency to improve rate and prosody?	3	3	3	3			3	21
9	Does the program encourage the teacher to model accuracy, rate and prosody?	3	3	3	3	3	2	3	21
10	Are letter-sounds taught and practiced frequently to promote automaticity?	3	3					3	9
11	Are regular words taught to be decoded?	3	3		3			2	21
12	Are regular words practiced to promote automaticity?	3	3	2				2	21
13	Are irregular words taught to be recognized automatically?	3	3	3	3			2	21
14	Does fluency practice during letter sound knowledge and text reading involve the teacher providing feedback to students?	2	2	2	2			2	21
15	Is fluency feedback followed up with practice for success opportunities?	3	3	3	3	2	2	2	21
16	Is fluency instruction integrated into each day's lesson?	2	2	2	2	2	2	2	21
17	Is the decoding strategy taught so that it becomes automatized during reading of connected text?	3	3	3	3	1	1	2	21
18	Is there an emphasis on reading multisyllabic words fluently?		3	3	3			2	18
19	Is an explicit strategy taught as students transition from reading words in lists to reading connected text?	2	2					2	9
20	Are research based fluency strategies included (e.g., timed readings, peer reading, and repeated readings)?		3	3	3	2	2	2	18
21	Is fluency practice introduced after students are proficient at reading words accurately (e.g., in lists, sentences, and passages)?		3	3	3	2	2	2	18
22	Does fluency practice involve decodable texts (texts that include phonic elements and word types students have previously been taught)?		3	2	3	1	1	2	18
23	Are both narrative and expository texts provided for students to read aloud?		3	2	3	3	3	3	18

	Are teacher prompts included to encourage students to		1	1	Î		ſ	Ī	1
24	read aloud in order to determine skill application and accuracy?		2	2	2	2	2	2	18
	After error correction, are students asked to reread the								1
25	word, word list, or sentence correctly and then to reread it from the beginning?	2	2	2	2			2	21
26	Are students given ample practice opportunities to use text at their independent or instructional level to help build fluency?		1	1	1			1	18
27	Is the number of texts at each level sufficient to provide adequate practice opportunities?		1	1	1			1	18
28	Does the program clearly show the teacher how to determine independent, instructional, and frustrational reading levels for individual students?								18
29	Is there a guide to help teachers calculate fluency rate?								18
30	Do students have opportunities to time themselves and graph the results after rereading the same text?								15
31	Are there directions for how to pair the students for partner reading?		1	1	1	2	1	1	18
32	Are students taught a specific error correction to use when reading with a partner?								18
33	Are students taught a specific error correction to use when reading with a partner?		1	1	1	1	1	1	18
34	Is an end-of-the-year fluency goal of correct words per minute given for each grade?								18
	TOTALS:	52	73	62	65	35	34	56	59%

	VOCABULARY INSTRUCTION (V)												
Question #	Question	К	1	2	3	4	5	s/I					
1	Question	3	3	3	3	3	3	2					
2	Is vocabulary instruction systematic?	3	3	3	3	3	3	2					

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	Does instruction in vocabulary include coordinated		_	_				
3	instructional sequences and routines?	3	3	3	3	3	3	2
4	Is vocabulary instruction scaffolded?	2	3	1	3	2	2	2
5	Does vocabulary instruction include cumulative review?	3	3	2	3	3	3	2
6	Are assessments included to measure and monitor progress in vocabulary?	3	3	3	3	3	2	2
7	Is there an emphasis on listening and speaking vocabulary?	3	3	3	3	3	3	2
8	Is there an emphasis on reading and writing vocabulary?	3	3	3	3	3	3	3
9	Are students exposed to diverse vocabulary through listening to or reading narrative and expository texts?	3	3	3	3	3	3	3
10	Does the program include frequent use of teacher read- alouds using higher level books with explanation and instruction of key vocabulary?	3	3	2	3	2	2	2
11	Does the program include a variety of texts that allow students ample opportunities to engage in wide reading at their independent levels?							
12	Does vocabulary instruction occur before, during, and after reading?	3	3	3	3	2	2	2
13	Are a limited number of words selected for robust, explicit vocabulary instruction?	2	3	2	3	3	3	2
14	Are important, useful, and difficult words taught?	3	3	2	3	3	3	2
15a	Does the instructional routine for vocabulary include: first, introducing the word?	3	3	3	3	2	3	2
15b	Does the instructional routine for vocabulary include: second, presenting a student-friendly explanation?	2	2	2	2	2	3	2
15c	Does the instructional routine for vocabulary include: next, clarifying the word with examples?	3	3	3	3	2	3	2
15d	Does the instructional routine for vocabulary include: checking students' understanding?	3	3	3	3	3	3	2

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16a	Are ample opportunities provided to engage in oral vocabulary activities that: repeat exposure to words in rich and multiple contexts?	2	2	2	2	2	2	2	21
16b	Are ample opportunities provided to engage in oral vocabulary activities that: use everyday language to explain word meanings?	3	3	3	3	3	2	2	21
16c	Are ample opportunities provided to engage in oral vocabulary activities that: connect word meanings to prior knowledge?	2	2	2	2	2	2	2	21
17	Are students given multiple opportunities to use new words in reading sentences, paragraphs, or longer texts?	2	1	1	1	1	1	1	21
18	Is extended instruction provided in multiple contexts to promote word awareness using word banks, vocabulary logs, writing, semantic maps, concept definition mapping, and word classification?	3	3	3	3	3	3	3	21
19	Are the processes involved in using a strategy taught over time to ensure understanding and correct application?	3	3	3	3	3	3	3	21
20	Are meanings of prefixes, roots, and suffixes taught before connecting them to words?		1	1	2	3	3	2	18
21	Is a strategy to determine word meanings based on meanings of prefixes, roots, and suffixes taught?		1	2	2	3	3	2	18
22a	Are various aspects of word study included (either under vocabulary or word recognition) such as: concepts of word meaning?	3	3	3	3	3	3	3	21
22b	Are various aspects of word study included (either under vocabulary or word recognition) such as: multiple meanings?	2	1	2	3	2	3	2	21
22c	Are various aspects of word study included (either under vocabulary or word recognition) such as: synonyms?	2	1	2	3	2	3	2	21
22d	Are various aspects of word study included (either under vocabulary or word recognition) such as: antonyms?	2		2	1	2	2	2	21

22h	vocabulary or word recognition) such as: etymologies?					2	2	2	12
23	Is dictionary use explicitly taught using grade		4	2			_	_	12
23	appropriate dictionaries?		1	2	1	2	2	2	18
24	Is the use of context to gain the meaning of an unfamiliar word kept to a minimum?	2	2	2	2	2	2	2	21
	TOTALS:	74	74	76	87	85	89	72	77%

	COMPREHENSION INSTRUCTION (C)												
Question #	Question	К	1	2	3	4	5	S/I					
1	Is comprehension instruction explicit?	3	3	3	3	3	3	3					
2	Is comprehension instruction systematic?	3	3	3	3	3	3	3					
3	Does instruction in comprehension include coordinated instructional sequences and routines?	3	3	3	3	3	3	3					
4	Is comprehension instruction scaffolded?	3	3	3	3	3	3	3					
5	Does comprehension instruction include cumulative review?	3	3	3	3	3	3	3					
6	Are assessments included to measure and monitor progress in comprehension?	3	3	3	3	3	3	3					
/	Is learning to determine which strategy to use and why (metacognition) part of instruction?	3	3	3	3	3	3	3					
_ ^	When a strategy is taught, is it applied frequently so students understand its usefulness?	3	3	3	3	3	3	3					
9 1	Are students asked to apply previously learned strategies to new texts?	3	3	3	3	3	3	3					

10	Is appropriate text provided to practice applying strategies?	3	3	3	3	3	3	3	21
11	Does the program instruction enable students to establish and adjust purposes for reading (e.g., reading to understand, interpret, inform, to enjoy, and to solve problems)?	3	3	3	3	3	3	3	21
12	Does the program provide instruction and support for the use of multiple, coordinated comprehension strategies?	3	3	3	3	3	3	3	21
13	Are guided and supported cooperative learning groups suggested as an instructional technique?	3	3	3	3	3	3	3	21
14	Does instruction begin with the use of short passages?	3	3	3	3	3	3	3	21
15	Does instruction emphasize that students have a conceptual understanding of beginning, middle, and end?	3	3	3	3	3	3	3	21
16	Does the program provide prompts for the teacher to guide the students through texts using think alouds?	1	1	1	1	1	1	1	21
17	Are models of effective questioning techniques (e.g., Bloom's taxonomy) provided to guide and monitor students' comprehension?	2	2	2	2	2	2	2	21
18	Are there ample opportunities for students to listen to narrative text?	3	3	3	3	3	3	3	21
19	Are there ample opportunities for students to listen to expository text?	3	3	3	3	3	3	3	21
20	Is instruction in narrative ext structures explicit?	3	3	3	3	3	3	3	21
21	Is instruction in expository text structures explicit?	3	3	3	3	3	3	3	21
22	Are there ample opportunities to read narrative texts on independent and instructional levels?		2	2	2	2	2	2	18
23	Are there ample opportunities for students to engage with narrative text at an instructional level with scaffolded teacher instruction?	3	3	3	3	3	3	3	21
24	Are there ample opportunities to read expository texts on independent and instructional levels?		2	2	2	2	2	2	18

25	Are there ample opportunities for students to engage with expository text at an instructional level with scaffolded teacher instruction?	3	3	3	3	3	3	3	21
26	Is there a variety of narrative books for students to practice reading at the appropriate readability level (leveled or controlled expository text for small group instruction)?								21
27	Is there a variety of expository books for students to practice reading at the appropriate readability level (leveled or controlled expository text for small group instruction)?								21
28	Do texts contain useful and familiar concepts and vocabulary?	3	3	3	3	3	3	3	21
29	Are there instructional routines for comprehension strategies for before, during, and after reading (e.g., setting a purpose, prediction, story grammar, main idea, summarization, graphic organizers, and answering and generating questions)?	3	3	3	3	3	3	3	21
30	Is the main idea strategy taught systematically (e.g., using pictures as short-term scaffold, then individual sentences, then paragraphs, etc.)?	2	2	2	2	2	2	2	21
31	Once students have grasped main idea, are more complex texts used in which the main idea is not explicit?		2	2	2	2	2	2	18
32	Are elements of story grammar (e.g., setting, characters, important events, etc.) taught and used for retelling a story?	3	3	3	3	3	3	3	21
33	Does instruction focus on discussing story grammar and comparing stories?	2	2	2	2	2	2	2	21
34	Is story grammar introduced systematically, beginning with simple text that gradually becomes more complex?	3	3	3	3	3	3	3	21
35	Are students taught to use graphic organizers to illustrate interrelationships among concepts in text (e.g., story maps, Venn diagrams, and semantic maps)?	3	3	3	3	3	3	3	21

	TOTALS:	97	109	109	109	109	109	109	87%
33	from text to prior knowledge, underlining and note taking, and visualizing relationships and events in the text)?		J	J	J	J	J	Ĵ	18
39	Does the program provide instruction for students to become self-directed in comprehension strategies (e.g., rereading, paraphrasing, making explicit connections		3	3	3	3	3	3	
38d	After instruction, is there systematic review of: summarization?	3	3	3	3	3	3	3	21
38c	After instruction, is there systematic review of: main idea?	3	3	3	3	3	3	3	21
38b	After instruction, is there systematic review of: retelling?	3	3	3	3	3	3	3	21
38a	After instruction, is there systematic review of: literal comprehension?	3	3	3	3	3	3	3	21
37	Are explicit strategies to interpret information from charts, graphs, tables, and diagrams taught?								21
36	Are the conventions of expository text (e.g., chapter headings, charts, and graphs) taught?		3	3	3	3	3	3	18

	Culturally Responsive & Sustaining Education (CRSE)												
Question #	Question	К	1	2	3	4	5	S/I					
1	Do program materials promote critical consciousness?			2	2	2	3	2	2				
2	Do program materials provoke critical consciousness?			2	2	2	3	2] 2				
3	Do program texts present alternative points of view as equally worth considering? (situating the context historical events from various groups' perspectives) [i.e. Thanksgiving]		2	3	3	3	3	3	2				
4	Do program activities present alternative points of view as equally worth considering? (situating the context historical events from various groups' perspectives) [i.e. Thanksgiving]			3	3	3	3	2	2				

5	Do program materials avoid stereotypic depictions in terms of race?	3	3	3	3	3	3	3	21
6	Do program materials avoid stereotypic depictions in terms of gender?	3	3	3	3	3	3	3	21
7	Do program materials avoid stereotypic depictions in terms of sexuality?	3	3	3	3	3	3	3	21
8	Do program materials avoid stereotypic depictions in terms of language?	3	3	3	3	3	3	3	21
9	Do program materials avoid stereotypic depictions in terms of ability?	3	3	3	3	3	1	3	21
10	Do program texts avoid use of language that suggests groups of people were order-less compared to the dominant culture?	3	3	3	3	3	3	3	21
11	Do program texts avoid using language that suggests groups of people were uncivilized compared to the dominant culture?	3	3	3	3	3	3	3	21
12	Do program materials avoid centering one group's cultural practices as the standard to which all others are compared (i.e. Euro-centric, male-centric etc.)?	3	3	3	3	3	3	3	21
13	Do program activities encourage students to take actions that combat inequity?	2	2	2	2	2	2	2	21
14	Do program activities encourage students to take actions that promote equity within the school or local community? (i.e. service learning or community action projects)	1	1	1	1	1	1	1	21
15	Do program materials present different points of view on the same event or experience?	2	2	2	3	3	3	2	21
16	Do program materials present points of view of marginalized people/communities on the same event or experience?	2	2	2	3	3	3	2	21

17	Do the teacher's materials provide guidance on customizing the curriculum to reflect the culture of the student population?	1	1	1	1	1	1	1	21
18	Do the teacher's materials provide guidance on supplementing the curriculum to reflect the culture of the student population?	1	1	1	1	1	1	1	21
19	Does the curriculum prompt the teacher to reflect on one's biases between one's own culture and students' cultures?	3	3	3	3	3	3	3	21
20	Do program materials avoid minimizing unpleasant facts in history?	2	2	2	2	2	2	2	21
21	Do program materials avoid minimizing unpleasant events in history?	2	2	2	2	2	2	2	21
22	Do program materials acknowledge prejudice?	2	2	2	2	2	2	2	21
23	Do program materials acknowledge racism?	2	2	2	2	2	2	2	21
24	Do program materials acknowledge discrimination?	2	2	2	2	2	3	2	21
25	Do program materials acknowledge exploitation?		3	3	2	2	3	3	21
26	Do program materials acknowledge oppression?		3	3	3	3	3	3	21
27	Do program materials acknowledge sexism?		2	2		2	3	1	21
28	Do program materials acknowledge privilege?	2	3	3	2	2	3	2	21
29	Do program materials acknowledge ableism?			3		2		1	21
30	Do program materials acknowledge inter-group conflict?	2	3	3	2	3	3	3	21

	Do program materials portray diverse ethnicities?						1		1
31		3	3	3	3	3	3	3	21
32	Do program materials portray diverse nationalities?	3	3	3	3	3	3	3	21
33	Do program materials portray differently-abled characters?	2	2	3	2	2		2	21
34	Do program materials portray diverse family structures (e.g. single parents, adopted or foster children, samesex parents, other relatives living with the family)?	3	3	3	3	2	3	3	21
35	Do teachers' materials have authors who are people of diverse identities?	3	3	3	3	3	2	3	21
36	Do students' materials have authors who are people of diverse identities?	3	3	3	3	3	2	3	21
	TOTALS:	67	79	91	84	88	87	85	77%

	MOTIVATION AND ENGAGEMENT (M&E)										
Question #	Question	K	1	2	3	4	5	S/I			
1	Does the program direct the teacher in ways to increase student motivation such as: Making reading relevant to students lives?	3	3	3	3	3	3	3			
	Does the program direct the teacher in ways to increase student motivation such as: Providing meaningful goals for learning from texts?	3	3	3	3	3	3	3			

2	Does the program direct the teacher in ways to increase student motivation such as: Making available a variety of choices (e.g., texts and assignments) that align with instruction?	3	3	3	3	3	3	3	21
4	Does the program direct the teacher in ways to increase student motivation such as: Providing opportunities for students to work collaboratively?	3	3	3	3	3	3	3	21
P	TOTALS:	12	12	12	12	12	12	12	100%

	ASSE	SSMENT (A)						
Question #	Question	К	1	2	3	4	5	S/I	
1	Are assessments included that teachers can use to guide student movement through the program?	3	3	3	3	3	3	3	
2	Evidence of research-supported screening assessments exist?	1	1	1					
3	Progress Monitoring tools are included?	3	3	3	3	3	3	3	
4	Assessments include diagnostic measures?	3	3	3	3	3	3	3	
5	Outcome measure assessments are included?	3	3	3	3	3	3	3	
6	Does the program provide teacher guidance using assessment results to differentiate instruction?	2	2	2	2				
/	Do the assessments identify students who are at risk or already experiencing difficulty learning to read?	2	2	2	2				
	TOTALS:	17	17	17	16	12	12	12	

	LISTENING AT	ND SPEAKI	NG (L & S)					
Question #	Question	К	1	2	3	4	5	S/I
1	As a regular part of comprehension instruction, materials must contain activities designed to promote frequent opportunities for speaking with and listening to peers about texts (listened to or read)?	3	3	3	3	3	3	2

	TOTALS:	9	9	9	9	9	9	8	98%
3	Materials demonstrate connections and alignment between the speaking and listening standards, reading standard 4, and the related language standards?	3	3	3	3	3	3	3	21
2	Instruction and assignments include a variety of authentic, real world speaking and listening activities for student practice?	3	3	3	3	3	3	3	21

WRITING INSTRUCTION (Writing)										
Question #	Question	К	1	2	3	4	5	S/I		
1	Writing assignments are prominent and varied?	3	3	3	3	3	3	3		
2	Writing assignments ask students to draw on their experience, imagination, current capacities, and most frequently, the texts they encounter through reading or read-alouds as source material?	3	3	3	3	3	3	3		
3	Materials provide sufficient opportunities for all students to practice newly acquired foundational skills as well as other forms of self-expression?	3	3	3				3		
4	Students engage in writing about what they are hearing or reading?	3	3	3	3	3	3	3		
5	Students engage in writing narratives both real and imagined?	3	3	3	3	3	3	3		
6	Students engage in writing to inform or explain?	3	3	3	3	3	3	3		
7	Students engage in opinion writing?	3	3	3	3	3	3	3		
8	Writing assignments address grade-level foundational standards that require students in the early grades to know their letters, phonetic conventions, sentence structures, and spelling.	3	3	3	3	3	3	3		
9	Materials provide opportunities for educators to monitor student progress in the development of the foundational skills and respond to the needs of individual students?	3	3	3				3		

	TOTALS:	58	58	57	49	49	49	58	90%
20	Materials require students to engage in many short research projects annually to enable students to develop the expertise needed to conduct research independently?	3	3	3	3	3	3	3	21
19	Extensive practice with short, focused research projects is provided?	3	3	3	3	3	3	3	21
18	Writing opportunities for students are prominent and varied?	3	3	3	3	3	3	3	21
17	Materials and writing assignments place a focus on narrative writing 35% of the time?	2	3	2	2	2	2	2	21
16	Materials and writing assignments place a focus on persuasion writing 30% of the time?	2	2	2	2	2	2	2	21
15	Materials and writing assignments place a focus on exposition writing 35% of the time?	3	2	2	3	3	3	3	21
14	Students are asked in their writing to present careful analysis, well-defended claims and clear information?	3	3	3	3	3	3	3	21
13	Students are asked in their writing to analyze and synthesize sources?	3	3	3	3	3	3	3	21
12	Writing to sources is a key task?	3	3	3	3	3	3	3	21
11	Written and oral tasks require students to confront the text directly, to draw on textual evidence, and to support valid inferences from the text?	3	3	3	3	3	3	3	21
10	Progress monitoring of writing includes attention to phonetic spelling as appropriate for its diagnostic value?	3	3	3				3	21

EL Education

HIT I	C	OMBINED							
	INSTRUCT	IONAL DES	IGN (ID)						
Question #	Question	К	1	2	3	4	5	S/I	
1	Is there empirical research on this program's efficacy?	3	3	3	3	3	3	3	21
2	Are resources available to help the teacher understand the rationale for the instructional approach and program stragegies (e.g., articles, explanations in the teach manuals, references, and reliable websites)?	3	3	3	3	3	2	3	21
3	Does the comprehensive program address the 5 components of reading (phonological/phonemic awareness, phonics, fluency, vocabulary, comprehension)?	3	3	3	3	3	3		18
4	In addition to the 5 components of reading, are other dimensions of reading such as spelling, writing, oral language, and listening comprehension addressed?	3	3	3	3	3	3		18
5	Does the supplemental/intervention program adequately address the component(s) targeted? (Some programs concentrate on one, two, or a few of the components.)							3	3
6	Is there a scope and sequence?	3	3	3	3	3	3	3	21
7	Are goals and objectives clearly stated?	3	3	3	3	3	3	3	21
8	Are student materials aligned with the instructional objective of the lesson?	3	3	3	3	3	3	3	21
9	Do the instructional materials increase in difficulty as students' skills strengthen?	3	3	3	3	3	3	3	21
10	Are all lessons and activities (e.g., whole group, small group, and centers) reading related?	3	3	3	3	3	3	3	21
11a	Is there a clear and logical organization to the lessons in: the order and procedure of each day's lesson?	3	3	3	3	3	3	3	21
11b	Is there a clear and logical organization to the lessons in: the inclusion of all necessary materials?	1	1	1	1	1	1	1	21

11c	Is there a clear and logical organization to the lessons in: the consistency of each day's lesson format?	3	3	3	3	3	3	3	21
11d	Is there a clear and logical organization to the lessons in: addressing the components of reading every day?	3	3	3	3	3	3	3	21
12	Is instruction consistently explicit? Is it concise, specific, and related to the objective?	2	2	2	2	2	2	2	21
13	Are teacher directives highly detailed to ensure accurate implementation?	1	1	1	1	1	1	1	21
14	Does the lesson format reflect frequent interactions between teacher and students?	3	3	3	3	3	3	3	21
15	Is instruction consistently systematic? Is there a prescribed order of introducing specific skills within each component of reading?	3	3	3	3	3	3	3	21
l		3	3	3	3	3	3		
16a	Are there coordinated instructional sequences and routines which include: modeling?	3	3	3	3	3	3	3	21
16b	Are there coordinated instructional sequences and routines which include: guided practice with feedback?	3	3	3	3	3	3	3	21
16c	Are there coordinated instructional sequences and routines which include: student practice and application?	3	3	3	3	3	3	3	21
16d	Are there coordinated instructional sequences and routines which include: cumulative review?	3	3	3	3	3	3	3	21
17	Are there ample guided student practice opportunities, including multiple opportunities for explicit teaching and teacher directed feedback (e.g., 5-15 for typically progressing readers and 40 or more for struggling readers)?	3	3	3	3	3	3	3	21
18	Does the program provide clear guidance for the teacher to document student progress and inform instruction?	2	2	2	2	2	2	2	21
19	Are the five components of reading clearly linked with a coherent instructional design?	3	3	3	3	3	3		18
20	Is scaffolding a prominent part of the lessons?	3	3	3	3	3	3	3	21

21	Are instructions for scaffolding specific?	3	3	3	3	3	3	3	21
22	Are teachers encouraged to give immediate, specific feedback (corrective or positive)?	3	3	3	3	3	3	3	21
23	Is differentiated instruction prominent?	3	3	3	3	3	3	3	21
24	Is instruction differentiated based on assessment?	3	3	3	3	3	3	3	21
25	Are directions for differentiating instruction specific?	3	3	3	3	3	3	3	21
26	Is small group instruction (small teacher- pupil ratio) part of daily instruction?	3	3	3	3	3	3	3	21
27	Are there guidelines for forming flexible groups based on student progress?	3	3	3	3	3	3	3	21
28	Are enrichment activities included for advanced students?	1	1	1	1	1	1	1	21
29	Does the program provide instruction for English Language Learners?	3	3	3	3	3	3	3	21
30a	Does the program address culturally responsive & sustaining education through Instructional Engagement?	2	2	2	2	2	2	2	21
30b	Do teacher's materials provide guidance on egaging students in culturally sensitive experiential learning activities?	2	2	2	2	2	2	2	21
30c	Does implementation take into consideration students' lived experiences?	3	3	3	3	3	3	3	21
30d	Does implementation include opportunities for students to contribute prior knowledge on a culturally relevant topic?	1	1	1	2	1	3	2	21
30e	Do teacher's materials provide guidance on seeing diverse identitiesas an asset; prompting the teacher to embrace and value diversity as a positive?	3	2	2	2	2	2	2	21
30f	Does the program support connections to social, political or environmental concerns that affect them and their lives and promote avenues through which students can take action?	3	3	3	3	3	3	3	21
30g	Do teacher materials offer suggestions to use social- emotional learning approaches to draw out and build upon students' assets to facilitate learning?	3	3	3	3	3	3	3	21

	room)?	114	113	113	114	113	114	108	91%
33	Does the program specify the instructional setting (e.g., general education classroom, computer lab, or resource								3
32	Does the program specify who should provide instruction for accurate implementation (e.g., special education teacher, general education teacher, paraprofessional, or volunteer)?								3
31	Does the program specify for whom it is appropriate (e.g., students on or above grade level, students slightly behind their peers, students more than one grade level behind their peers)?							3	3

	PHONOLOGIC	AL AWAR	RENESS (PA)				
Question #	Question	К	1	2	3	4	5	s/I
1	Is phonological awareness instruction explicit?	2						1
2	Is phonemic awareness instruction explicit?	2	2					2
3	Is phonological awareness instruction systematic?	2						1
4	Is phonemic awareness instruction systematic?	2	2					2
5	Is phonological awareness instruction scaffolded?	2						1
6	Is phonemic awareness instruction scaffolded?	2	2					2
7	Does phonological awareness instruction include cumulative review?	3						1
8	Does phonemic awareness instruction include cumulative review?	3	2					1
9	Are assessments included to measure and monitor progress in phonological awareness?	3						2
10	Are assessments included to measure and monitor progress in phonemic awareness?	3	2					2
11	Is PA only a small portion of the daily lesson?	1	3					1
12	Does each day's lesson focus on only one or two PA skills (as opposed to several)?	2	3					2

13	Are there instructions for PA activities to alert the teacher to student readiness?	3	1			1
14	Does the program contain instructional activities that are designed to stimulate the growth of phonological awareness?	2	1			1
15	Does the program contain instructional activities that are designed to stimulate the growth of phonemic awareness?	2	1			1
16	Does PA start with rhyming and progress to phoneme isolation, blending, segmenting, and manipulation?	2				1
17	Do students count the number of words in spoken sentences?	2				2
18	Are there rhyming activities (recognition and production)?	3				1
19	Are there alliteration activities?					
20	Are there activities that involve counting the number of syllables in a word?	2				1
21	Are there activities that involve blending syllables in a word?	2				1
22	Are there activities that involve segmenting syllables in a word?	2				1
23	Are there activities for students to blend onsets and rimes?	2				1
24	Are there activities for students to segment onsets and rimes?	2				1
25	Do activities follow the continuum of word types (beginning with consonants & short words that contain 2 or 3 phonemes)	2			No.	2
26	Does instruction include physical representations (e.g., clapping, Elkonin boxes with markers, counters, tiles, fingers, and auditory cues) to help students make the connection between sounds and print (the alphabetic principle)?	3				2

	TOTALS:	70	35	0	0	0	0	47	53%
35	Do computer-based programs pronounce the sounds distinctly, correctly, and without distortion?] ,
34	Does the program include a sound pronunciation guide for the various features of sound production (e.g., stop sounds and continuous sounds)?	1	3					1	9
33	Are the words used in PA activities found in subsequent word lists and text readings?	2	3					1	9
32	Does the program specify when oral language PA activities should be phased out?		2						9
31	Once students demonstrate early phonemic awareness, is PA instruction linked with phonics instruction?	2	2					2	9
30	Does instruction include manipulation of phonemes in words (i.e., deletion, addition, and substitution)?] 6
29	Are there segmenting activities at the phoneme level?	3	3					3	1 9
28	Are there blending activities at the phoneme level?	3	3					3	1 9
27	When PA activities are at the phoneme level, do students' activities target the first sound in words and then move to the last sound in words and finally focus on the middle sound in words?	3						3	

PHONICS INSTRUCTION (Ph)										
Question #	Question	К	1	2	3	4	5	s/i		
1	Is phonics instruction explicit?	3	2	2	1	1	1	3		
2	Is phonics instruction systematic?	3	2	2	1	1	1	3		
3	Does instruction in phonics include coordinated instructional sequences and routines?	1	1	1				1		
4	Is phonics instruction scaffolded?	2	2	2	1	1	1	2		
5	Does phonics instruction include cumulative review?	2	2	2				2		
ь	Are assessments included to measure and monitor progress in phonics?	2	3	2	1	1	1	2		
7	Does the program teach both consonants and vowels?	3	3					3		

8	Are short vowels taught before long vowels?	3	3					3	9
9	Are individual letter-sounds taught first, followed by digraphs, blends, and word families?	3	3	3				3	12
10	Are high utility letter-sounds (e.g.,/a/, /m/, /s/, /t/, /r/) found in short, one syllable cvc or ccvc words introduced before low utility letter-sounds (e.g., /x/,/y/, /z/)?	3	3					3	9
11	Are digraphs taught as a single sound (e.g., /sh/, /ch/, /th/, /ai/, /ea/)?	1 4	3	3				3	9
12	Are the individual sounds in a blend taught?		3					3	9
13	Are letter-sound correspondences taught to mastery and reviewed cumulatively?	3	2					2	9
14	Are students taught an explicit strategy to decode words by their individual sounds?	3	3	3				3	12
15	Do students practice decoding words that contain only those letter-sounds that have been previously taught?	3	3	3				3	12
16	Once students have mastered a few letter-sounds, do they immediately apply them to reading words in isolation, lists and short, decodable connected texts?	3	2					2	9
17	Is symbol to sound (decoding) taught explicitly?	3	2	2				2	21
18	Is sound to symbol (spelling/encoding) taught explicitly?	3	1	1				1	21
19	Is spelling taught during word learning so students can make the connection to how sounds map onto print? (to reinforce the variety of ways in which the 44 speech sounds of English can be written)	1	1	1				1	21
20	Does instruction progress from simple to more complex concepts (e.g., CVC words before CCCVCC words and single syllable words before multisyllabic words)?	3	2	2	1	1	1	1	21
21	Does instruction follow the continuum of word types (beginning w/ CV and CVC words), incorporating continuous and stop sounds and blends in an appropriate sequence?	2	2					2	9

									=25
22	Are there frequent and cumulative reviews of previously taught concepts and words?	3	2	2				2	21
23	Is there an emphasis on fluency practice for each phonics component (e.g., sound identification, CVC blending, word recognition, multisyllabic words, and text reading)?	2	3	3	2	2	2	2	21
24	Are there ample decodable texts (familiar and unfamiliar) for students to practice applying their decoding skills with phonic elements in connected text?	1	1	1				1	12
25	Are decodable texts read before trade books (for students to master new skills)?	3	3	3				3	12
26	Does the program clarify that high frequency words can be both regular and irregular?	3	3	3				3	12
27	Are irregular words that are visually or phonemically confusing separated (e.g., saw/was, where/were, of/off)?	3	3					3	9
28	Does the program include explicit instruction in irregular words and decoding strategies for the decodable parts of words (clarifying that the letters represent their most common sounds as well as the irregularities of certain letters)?	3	3	3	3			3	15
29	Are the number of high frequency, irregular words introduced in one lesson kept to a minimum?	3	1	1	2			3	15
30	Are irregular words pre-taught before reading connected texts?	3	3	3	3			3	15
31	Are difficult, high frequency words reviewed often and cumulatively?	2	2	2	2			2	15
32	Is there sufficient practice with individual letter-sounds before larger orthographic units are taught?		3	3				2	9
33	Are students taught the strategy of chunking when trying to decode multisyllabic words?		3	3				2	18
34	Does the program provide teacher modeling of a think aloud strategy to aid in multisyllabic word analysis?		3	3	2	2	2	2	18

	TOTALS:	75	98	83	34	24	24	100	65%
44	Are words used in advanced phonics activities also found in the student texts?		3	3	2	2	2	2	18
43	Once advanced phonics strategies have been mastered, are they immediately applied to reading and interpreting familiar and unfamiliar connected texts?		2	2	2	2	2	2	18
42	Are there activities for distinguishing and interpreting words with multiple meanings?			2	2	2	2	2	18
41	Are word parts that occur with high frequency (e.g., un-, re-, in-, and -ful) taught rather than those that occur only in a few words?		3	3	3	3	3	2	18
40	Is instruction in the meanings of roots and affixes explicit and are there activities for students to analyze the relationship of spelling to meaning of complex words?				2	2	2	2	12
39	Does the program include spelling strategies (e.g., word sorts, categorization activities, word-building activities, and word analogies)?		3	3	2	2	2	2	18
38	Are advanced phonics skills taught explicitly, first in isolation and then in words and connected texts?		I I	2				2	15
37	Is a section of the program devoted to advanced phonics skills (structural analysis)?			3				2	15
36	Is instruction explicit in the use of syllable types (e.g., open, closed, vowel-consonant-e, vowel combinations, r-controlled, and consonant-le)?		3	3				3	18
35	Are students taught the strategy to read multisyllabic words by using prefixes, suffixes, and known word parts?		3	3	2	2	2	2	18

	FLUENCY (F)												
Question #	Question	К	1	2	3	4	5	S/I					
1	Is fluency instruction explicit?	2	2	3	2	3	2	2					
2	Is fluency instruction systematic?	2	3	3	2	2	2	2					

3	Does instruction in fluency include coordinated instructional sequences and routines?	2	3	3	2	2	2	2	21
4	Is fluency instruction scaffolded?	3	3	3	2	2	2	2	21
5	Does fluency instruction include cumulative review?	2	2	2	2	2	2	2	21
6	Are assessments included to measure and monitor progress in fluency?	2	3	3	2	3	2	2	21
7	Does the program address all dimensions of fluency (accuracy, automaticity/rate, and prosody)?	3	3	3	3	3	2	3	21
8	Does fluency instruction begin by applying PA & Phonics skills to first build accuracy and automaticity at the word level before moving on to phrasing and fluency to improve rate and prosody?	3	3	2	1	1	1	2	21
9	Does the program encourage the teacher to model accuracy, rate and prosody?	3	3	3	2	3	2	3	21
10	Are letter-sounds taught and practiced frequently to promote automaticity?	3	3					3	9
11	Are regular words taught to be decoded?	3	3	3				2	21
12	Are regular words practiced to promote automaticity?	3	3	3		1	1	2	21
13	Are irregular words taught to be recognized automatically?	3	3	3				2	21
14	Does fluency practice during letter sound knowledge and text reading involve the teacher providing feedback to students?	3	3	3	2	2	2	2	21
15	Is fluency feedback followed up with practice for success opportunities?	3	3	3	3	3	3	3	21
16	Is fluency instruction integrated into each day's lesson?	2	2	2	2	2	2	2	21
17	Is the decoding strategy taught so that it becomes automatized during reading of connected text?	3	3	3	1	2	2	2	21
18	Is there an emphasis on reading multisyllabic words fluently?		2	2	2	2	2	2	18
19	Is an explicit strategy taught as students transition from reading words in lists to reading connected text?	2	2		*-			2	9

	Are research based fluency strategies included (e.g.,	ì		Î	ĺ	ĺ	i)		
20	timed readings, peer reading, and repeated readings)?		3	3	3	3	3	3	18
21	Is fluency practice introduced after students are proficient at reading words accurately (e.g., in lists, sentences, and passages)?		2	2	2	2	2	2	18
22	Does fluency practice involve decodable texts (texts that include phonic elements and word types students have previously been taught)?		3	3	1	2	1	2	18
23	Are both narrative and expository texts provided for students to read aloud?		3	3	3	3	3	3	18
24	Are teacher prompts included to encourage students to read aloud in order to determine skill application and accuracy?		3	3	3	3	2	2	18
25	After error correction, are students asked to reread the word, word list, or sentence correctly and then to reread it from the beginning?	2	2	2	2	2	1	2	21
26	Are students given ample practice opportunities to use text at their independent or instructional level to help build fluency?		2	2	2	2	2	1	18
27	Is the number of texts at each level sufficient to provide adequate practice opportunities?		2	2	2	2	2	2	18
28	Does the program clearly show the teacher how to determine independent, instructional, and frustrational reading levels for individual students?	100	2	2	1	1	1	1	18
29	Is there a guide to help teachers calculate fluency rate?		3	3	1	1	1	1	18
30	Do students have opportunities to time themselves and graph the results after rereading the same text?			2	1	1	2	2	15
31	Are there directions for how to pair the students for partner reading?		2	2	2	1	1	1	18
32	Are students taught a specific error correction to use when reading with a partner?		2	2				1	18
33	Are students taught a specific error correction to use when reading with a partner?		3	3	2	2	2	2	18

34	Is an end-of-the-year fluency goal of correct words per minute given for each grade?		3	3			1	1	18
	TOTALS:	49	87	84	53	58	53	68	70%

	VOCABULA	RY INSTRU	CTION (V)					
Question #	Question	К	1	2	3	4	5	S/I
1	Question	3	3	3	3	3	3	3
2	Is vocabulary instruction systematic?	3	3	3	3	3	3	3
3	Does instruction in vocabulary include coordinated instructional sequences and routines?	3	3	2	2	2	3	2
4	Is vocabulary instruction scaffolded?	3	3	3	3	3	3	3
5	Does vocabulary instruction include cumulative review?	2	2	2	2	2	2	2
6	Are assessments included to measure and monitor progress in vocabulary?	2	2	2	2	2	2	2
7	Is there an emphasis on listening and speaking vocabulary?	3	3	3	3	3	3	3
8	Is there an emphasis on reading and writing vocabulary?	3	3	3	3	3	3	3
9	Are students exposed to diverse vocabulary through listening to or reading narrative and expository texts?	3	3	3	3	3	3	3
10	Does the program include frequent use of teacher readalouds using higher level books with explanation and instruction of key vocabulary?	3	3	3	3	3	3	3
11	Does the program include a variety of texts that allow students ample opportunities to engage in wide reading at their independent levels?		2	2	2	2	2	2
12	Does vocabulary instruction occur before, during, and after reading?	2	2	2	2	2	2	2
15	Are a limited number of words selected for robust, explicit vocabulary instruction?	3	3	3	3	3	3	3
14	Are important, useful, and difficult words taught?	3	3	3	3	3	3	3
158 1	Does the instructional routine for vocabulary include: first, introducing the word?	3	3	3	3	3	3	3

					1.00		201 15		
15b	Does the instructional routine for vocabulary include: second, presenting a student-friendly explanation?	3	3	3	3	3	3	3	21
15c	Does the instructional routine for vocabulary include: next, clarifying the word with examples?	3	3	3	3	3	3	3	21
15d	Does the instructional routine for vocabulary include: checking students' understanding?	3	3	3	2	2	3	2	21
16a	Are ample opportunities provided to engage in oral vocabulary activities that: repeat exposure to words in rich and multiple contexts?	3	3	3	2	2	2	2	21
16b	Are ample opportunities provided to engage in oral vocabulary activities that: use everyday language to explain word meanings?	3	3	3	2	2	3	3	21
16c	Are ample opportunities provided to engage in oral vocabulary activities that: connect word meanings to prior knowledge?	2	2	2	2	2	2	2	21
17	Are students given multiple opportunities to use new words in reading sentences, paragraphs, or longer texts?	3	2	2	2	2	2	2	21
18	Is extended instruction provided in multiple contexts to promote word awareness using word banks, vocabulary logs, writing, semantic maps, concept definition mapping, and word classification?	2	2	2	3	2	3	2	21
19	Are the processes involved in using a strategy taught over time to ensure understanding and correct application?	2	2	2	3	2	2	2	21
20	Are meanings of prefixes, roots, and suffixes taught before connecting them to words?		1	2	2	2	2	2	18
21	Is a strategy to determine word meanings based on meanings of prefixes, roots, and suffixes taught?		1	2	2	2	2	2	18
22a	Are various aspects of word study included (either under vocabulary or word recognition) such as: concepts of word meaning?	3	2	2	2	2	2	2	21
22b	Are various aspects of word study included (either under vocabulary or word recognition) such as: multiple meanings?	1	1	2	2	1	1	1	21

	TOTALS:	71	72	75	81	80	82	78	75%
24	Is the use of context to gain the meaning of an unfamiliar word kept to a minimum?	2	2	2	1	2	1	1	21
23	Is dictionary use explicitly taught using grade appropriate dictionaries?					1	1	1	18
22h	Are various aspects of word study included (either under vocabulary or word recognition) such as: etymologies?				2	2	2	1	12
22g	Are various aspects of word study included (either under vocabulary or word recognition) such as: morphemic analysis?				2	2	2	2	15
22f	Are various aspects of word study included (either under vocabulary or word recognition) such as: figurative meanings?				2	2	2	1	18
22e	Are various aspects of word study included (either under vocabulary or word recognition) such as: homonyms?				1	1		1	18
22d	Are various aspects of word study included (either under vocabulary or word recognition) such as: antonyms?				1	1	1	1	21
22 c	Are various aspects of word study included (either under vocabulary or word recognition) such as: synonyms?	2	1	2	2	2	2	2	21

	COMPREHENSION INSTRUCTION (C)												
Question #	Question	K	1	2	3	4	5	S/I					
1	Is comprehension instruction explicit?	3	3	3	3	3	3	3					
2	Is comprehension instruction systematic?	3	3	3	3	3	3	3					
3	Does instruction in comprehension include coordinated instructional sequences and routines?	3	3	3	3	3	3	3					
4	Is comprehension instruction scaffolded?	3	3	3	3	3	3	3					
5	Does comprehension instruction include cumulative review?	3	3	3	3	3	3	3					
6 I	Are assessments included to measure and monitor progress in comprehension?	3	3	3	3	3	3	3					

7	Is learning to determine which strategy to use and why (metacognition) part of instruction?	1	2	1	3	2	2	1	21
8	When a strategy is taught, is it applied frequently so students understand its usefulness?	3	3	3	3	3	3	3	21
9	Are students asked to apply previously learned strategies to new texts?		3	3	3	3	3	3	18
10	Is appropriate text provided to practice applying strategies?		2	2	2	2	2	2	18
11	Does the program instruction enable students to establish and adjust purposes for reading (e.g., reading to understand, interpret, inform, to enjoy, and to solve problems)?	3	3	3	3	3	3	3	21
12	Does the program provide instruction and support for the use of multiple, coordinated comprehension strategies?	3	3	3	3	3	3	3	21
13	Are guided and supported cooperative learning groups suggested as an instructional technique?	3	3	3	3	3	3	3	21
14	Does instruction begin with the use of short passages?	3	3	3	2	3	3	3	21
15	Does instruction emphasize that students have a conceptual understanding of beginning, middle, and end?		3	3	3	3	3	3	18
16	Does the program provide prompts for the teacher to guide the students through texts using think alouds?	2	1	3	2	2	1	2	21
17	Are models of effective questioning techniques (e.g., Bloom's taxonomy) provided to guide and monitor students' comprehension?	2	2	2	2	2	2	2	21
18	Are there ample opportunities for students to listen to narrative text?	2	2	2	2	2	1	2	21
19	Are there ample opportunities for students to listen to expository text?	2	2	2	2	1	1	2	21
20	Is instruction in narrative ext structures explicit?	2	2	3	2	1	1	2	21
21	Is instruction in expository text structures explicit?	3	2	2	2	1	2	2	21
22	Are there ample opportunities to read narrative texts on independent and instructional levels?		2	2	2	2	2	2	18

23	Are there ample opportunities for students to engage with narrative text at an instructional level with scaffolded teacher instruction?	3	3	3	3	3	3	3	21
24	Are there ample opportunities to read expository texts on independent and instructional levels?		2	2	2	2	2	2	18
25	Are there ample opportunities for students to engage with expository text at an instructional level with scaffolded teacher instruction?	2	2	2	2	2	2	2	21
26	Is there a variety of narrative books for students to practice reading at the appropriate readability level (leveled or controlled expository text for small group instruction)?	1	1	1	1	1	1	1	21
27	Is there a variety of expository books for students to practice reading at the appropriate readability level (leveled or controlled expository text for small group instruction)?	1	1	1	1	1	1	1	21
28	Do texts contain useful and familiar concepts and vocabulary?	2	2	2	2	2	2	2	21
29	Are there instructional routines for comprehension strategies for before, during, and after reading (e.g., setting a purpose, prediction, story grammar, main idea, summarization, graphic organizers, and answering and generating questions)?	2	2	2	2	2	2	2	21
30	Is the main idea strategy taught systematically (e.g., using pictures as short-term scaffold, then individual sentences, then paragraphs, etc.)?	3	3	3	2	3	3	3	21
N /	Once students have grasped main idea, are more complex texts used in which the main idea is not explicit?		2	2	2	2	2	2	18
32	Are elements of story grammar (e.g., setting, characters, important events, etc.) taught and used for retelling a story?	3	3	3	3	3	3	3	21
1 33 1	Does instruction focus on discussing story grammar and comparing stories?	2	2	2	2	2	2	2	21

	TOTALS:	82	100	100	98	96	96	99	78%
	taking, and visualizing relationships and events in the text)?								18
39	Does the program provide instruction for students to become self-directed in comprehension strategies (e.g., rereading, paraphrasing, making explicit connections from text to prior knowledge, underlining and note		2	2	2	2	2	2	
38d	After instruction, is there systematic review of: summarization?	1	1	1	1	2	3	2	2:
38c	After instruction, is there systematic review of: main idea?	3	3	3	2	3	3	3	2:
38b	After instruction, is there systematic review of: retelling?	2	2	2	1	1	1	2	21
38a	After instruction, is there systematic review of: literal comprehension?	2	2	2	2	2	2	2	2:
37	Are explicit strategies to interpret information from charts, graphs, tables, and diagrams taught?	3	3	2	3	2	2	2	2:
36	Are the conventions of expository text (e.g., chapter headings, charts, and graphs) taught?		3	2	3	2	2	2	18
35	Are students taught to use graphic organizers to illustrate interrelationships among concepts in text (e.g., story maps, Venn diagrams, and semantic maps)?	3	3	3	3	3	3	3	21
34	Is story grammar introduced systematically, beginning with simple text that gradually becomes more complex?	2	2	2	2	2	2	2	21

	Culturally Responsive & Sustaining Education (CRSE)											
Question #	Question	К	1	2	3	4	5	S/I				

	Do program materials promote critical consciousness?								
1			1	1	3	2	3	2	21
2	Do program materials provoke critical consciousness?		1	1	3	2	3	2	21
3	Do program texts present alternative points of view as equally worth considering? (situating the context historical events from various groups' perspectives) [i.e. Thanksgiving]	2	1	1	2	2	3	2	21
4	Do program activities present alternative points of view as equally worth considering? (situating the context historical events from various groups' perspectives) [i.e. Thanksgiving]	2	1	1	2	2	2	2	21
5	Do program materials avoid stereotypic depictions in terms of race?	2	2	2	3	2	3	2	21
6	Do program materials avoid stereotypic depictions in terms of gender?	2	2	2	3	2	3	2	21
7	Do program materials avoid stereotypic depictions in terms of sexuality?	2	2	2	2	2	2	2	21
8	Do program materials avoid stereotypic depictions in terms of language?		2	2	2		3	2	21
9	Do program materials avoid stereotypic depictions in terms of ability?		2	2	2	2	3	2	21
10	Do program texts avoid use of language that suggests groups of people were order-less compared to the dominant culture?		2	2	2	2	3	2	21

									60
11	Do program texts avoid using language that suggests groups of people were uncivilized compared to the dominant culture?		2	1	2	2	3	2	21
12	Do program materials avoid centering one group's cultural practices as the standard to which all others are compared (i.e. Euro-centric, male-centric etc.)?		1	2	2	1	3	2	21
13	Do program activities encourage students to take actions that combat inequity?	2	1		2	2	2	2	21
14	Do program activities encourage students to take actions that promote equity within the school or local community? (i.e. service learning or community action projects)	2	1	1	2	2	2	2	21
15	Do program materials present different points of view on the same event or experience?	1	1	2	2	2	2	2	21
16	Do program materials present points of view of marginalized people/communities on the same event or experience?	A)		1	2	2	3	2	21
17	Do the teacher's materials provide guidance on customizing the curriculum to reflect the culture of the student population?	2	2	2	2	2	3	2	21
18	Do the teacher's materials provide guidance on supplementing the curriculum to reflect the culture of the student population?	2	1	2	2	2	3	2	21
19	Does the curriculum prompt the teacher to reflect on one's biases between one's own culture and students' cultures?			1					21
20	Do program materials avoid minimizing unpleasant facts in history?	2			2	2	3	2	21
21	Do program materials avoid minimizing unpleasant events in history?	2	1		2	2	3	2	21
22	Do program materials acknowledge prejudice?				3	2	3	2	21

	Do program materials acknowledge racism?								
23					2	2	3	2	
						ļ			21
24	Do program materials acknowledge discrimination?				3	2	3	2	21
25	Do program materials acknowledge exploitation?				2	2	2	1	21
26	Do program materials acknowledge oppression?				2	2	3	1	21
27	Do program materials acknowledge sexism?				3		2	1	18
28	Do program materials acknowledge privilege?				3	2	3	2	21
29	Do program materials acknowledge ableism?				2				18
30	Do program materials acknowledge inter-group conflict?				2	2	2	2	21
31	Do program materials portray diverse ethnicities?	1	1	1	3		3	2	21
32	Do program materials portray diverse nationalities?	2		1	3		3	2	21

33	Do program materials portray differently-abled characters?				2			1	21
34	Do program materials portray diverse family structures (e.g. single parents, adopted or foster children, samesex parents, other relatives living with the family)?	1		1	2	2		1	21
35	Do teachers' materials have authors who are people of diverse identities?	2	1		2		3		21
36	Do students' materials have authors who are people of diverse identities?	2			2		3	1	21
	TOTALS:	31	28	31	80	53	88	60	49%

	MOTIVATION AN	ID ENGAG	EMENT (M	≩E)				11	
Question #	Question	К	1	2	3	4	5	S/I	
1	Does the program direct the teacher in ways to increase student motivation such as: Making reading relevant to students lives?	3	3	3	3	3	3	3	
	Does the program direct the teacher in ways to increase student motivation such as: Providing meaningful goals for learning from texts?	3	3	3	3	3	3	3	
2	Does the program direct the teacher in ways to increase student motivation such as: Making available a variety of choices (e.g., texts and assignments) that align with instruction?	2	2	2	2	2	2	2	
	Does the program direct the teacher in ways to increase student motivation such as: Providing opportunities for students to work collaboratively?	3	3	3	3	3	3	2	
	TOTALS:	11	11	11	11	11	11	10	90

ASSE	SSIV	IFNT	(A)

Question #	Question	К	1	2	3	4	5	S/I	
1	Are assessments included that teachers can use to guide student movement through the program?	3	3	3	3	3	3	3	
2	Evidence of research-supported screening assessments exist?	3	3	3				3	
3	Progress Monitoring tools are included?	3	3	3	3	3	3	3	1
4	Assessments include diagnostic measures?	3	3	3	3	3	3	3	1
5	Outcome measure assessments are included?	3	3	3	3	3	3	3	1
ח	Does the program provide teacher guidance using assessment results to differentiate instruction?	3	3	3	3	3	3	3	
/	Do the assessments identify students who are at risk or already experiencing difficulty learning to read?	3	3	3				3	
	TOTALS:	21	21	21	15	15	15	21	88%

	LISTENING A	ND SPEAK	ING (L & S)						1
Question #	Question	К	1	2	3	4	5	S/I	
1	As a regular part of comprehension instruction, materials must contain activities designed to promote frequent opportunities for speaking with and listening to peers about texts (listened to or read)?	3	3	3	3	3	3	3	
2	Instruction and assignments include a variety of authentic, real world speaking and listening activities for student practice?	3	3	3	2	3	3	3	
3	Materials demonstrate connections and alignment between the speaking and listening standards, reading standards?	3	3	3	3	3	3	3	
	TOTALS:	9	9	9	8	9	9	9	

	WRITING INSTRUCTION (Writing)							
Question #	Question	К	1	2	3	4	5	S/I
1	Writing assignments are prominent and varied?	3	3	3	3	3	3	3

2	Writing assignments ask students to draw on their experience, imagination, current capacities, and most frequently, the texts they encounter through reading or read-alouds as source material?	3	3	3	3	3	3	3
3	Materials provide sufficient opportunities for all students to practice newly acquired foundational skills as well as other forms of self-expression?	3	3	3	3	3	3	3
4	Students engage in writing about what they are hearing or reading?	3	3	3	3	3	3	3
5	Students engage in writing narratives both real and imagined?	2	2	2	3	3	2	3
6	Students engage in writing to inform or explain?	3	3	3	3	3	3	3
7	Students engage in opinion writing?	3	2	2	2	3	3	2
8	Writing assignments address grade-level foundational standards that require students in the early grades to know their letters, phonetic conventions, sentence structures, and spelling.	3	3	3	3	3	3	3
9	Materials provide opportunities for educators to monitor student progress in the development of the foundational skills and respond to the needs of individual students?	3	3	3	3	3	3	3
10	Progress monitoring of writing includes attention to phonetic spelling as appropriate for its diagnostic value?	2	2	2	2	2	1	2
11	Written and oral tasks require students to confront the text directly, to draw on textual evidence, and to support valid inferences from the text?	3	3	3	3	3	3	3
12	Writing to sources is a key task?	2	2	2	3	3	3	3
13	Students are asked in their writing to analyze and synthesize sources?				3	3	3	3
14	Students are asked in their writing to present careful analysis, well-defended claims and clear information?	3	3	3	3	3	3	3
15	Materials and writing assignments place a focus on exposition writing 35% of the time?	3	3	3	3	3	2	3

	TOTALS:	53	52	52	57	58	55	57	91%
20	Materials require students to engage in many short research projects annually to enable students to develop the expertise needed to conduct research independently?	3	3	3	3	3	3	3	21
19	Extensive practice with short, focused research projects is provided?	3	3	3	3	3	3	3	21
18	Writing opportunities for students are prominent and varied?	3	3	3	3	3	3	3	21
17	Materials and writing assignments place a focus on narrative writing 35% of the time?	2	2	2	2	2	2	2	21
16	Materials and writing assignments place a focus on persuasion writing 30% of the time?	3	3	3	3	3	3	3	21

EDUCATIONAL SPECIFICATIONS

ROOF REPLACEMENT

Dr. Charles G. Barnum School 68 Briar Hill Rd. Groton, CT 06340

JANUARY 24, 2024

EDUCATIONAL SPECIFICATIONS FOR DR. CHARLES BARNUM SCHOOL ROOF REPLACEMENT

January 24, 2024

1. **PROJECT RATIONALE**

The project rationale for the district shows the Dr. Charles G. Barnum School in Groton, CT calling for the replacement of 30,600 s.f. of low sloped roofs. The last roof replacement project for the facility was performed in 1996 roofed and the roofs are now 28 years old, surpassing their life expectancy. There are numerous areas of current roof leaks, as reported by Maintenance personnel, and it appears that numerous ongoing repairs are being continuously performed.

2. **LONG-RANGE PLAN**

The long-range plan for Groton Public Schools calls for the provision of an energy efficient, safe, healthy and appropriate learning environment. In order to comply with this aspect of the plan, it is necessary for Groton to replace the roof at Dr. Charles Barnum School.

3. **THE REROOF PROJECT**

Groton proposes the following components of its roof replacement project:

- The existing roofs are mainly large flat open areas with a positive roof pitch with one section of roof that is asphalt roof shingles.
- Test and identify any remnant asbestos-containing flashings, roofing or caulk materials.
- Remove roofing down to the existing structural deck and dispose of any hazardous materials that may be present.
- Install a new fully adhered thermoplastic roof system, 45 mil minimum over a cover board and continuous tapered 5" rigid insulation with integrated flashings and drains. New walk pads will be installed as required on all roofing areas.
- Replacement of all roof drains shall be included in the scope as well as installing scuppers and other secondary drains as required by code.
- Secondary drains for flat roofed areas may be required with interior piping to the exterior wall, or provisions of overflow spout shall be provided.

4. **BUILDING SYSTEMS**

Security: Not applicable. Public Address: Not applicable. Technology: Not applicable. Phone System: Not applicable. Clocks: Not applicable.

5. **INTERIOR BUILDING ENVIRONMENT**

The current school includes grades Pre-K to 5 and houses various classroom's, gymnasium, art rooms, music rooms, nurse's office, kitchen, server, cafeteria, custodial spaces, storage, boiler room and school administration offices.

Acoustics: Ceilings: If ceiling tiles are damaged due to water leaking

through the roof, they will be replaced as part of the project. As well, if there are any water marks on the walls,

they will be cleaned and repainted.

Lighting: Not Applicable.

HVAC: Roof-top units will be temporarily moved and then returned

to original location as necessary during the roof

replacement.

Plumbing: New piping to accommodate new roof drains.

Windows/Doors: Not applicable.

FF+F: Will not be affected.

6. **SITE DEVELOPMENT**

Site Acquisition:
Parking:
Not applicable.
Prives:
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Landscaping:
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.

7. **CONSTRUCTION BONUS REQUESTS**

Dr. Charles G. Barnum School does not house any of the special programs eligible for a school construction bonus.

School Readiness: C.G.S. 10-285a(e)--Not applicable. Lighthouse Schools: C.G.S. 10-285a(f)--Not applicable. C.G.S. 10-285a(g), as amended--Not

applicable.

Full-day Kindergarten: C.G.S. 10-285a(h)--YES

Reduced Class Size:

Regional Vo-Ag Center:

Interdistrict Magnet School:

Interdistrict Cooperative School:

Regional Special Education Center:

C.G.S. 10-285a(h)--Not applicable.

C.G.S. 10-264h--Not applicable.

C.G.S. 10-158a--Not applicable.

8. **COMMUNITY USES**

Dr. Charles G. Barnum School is designed for community uses during the school hours, before and after school hours and on many weekends throughout the school year and summer. The uses include but are not be limited to the following:

- PTO
- Groton Recreation Department
- Summer Enrichment Programs
- Neighborhood and Town wide public meetings

Various and sometimes multiple areas are used for these functions.

EDUCATIONAL SPECIFICATIONS ROOF-MOUNTED SOLAR PHOTOVOLTAIC ARRAY

Dr. Charles G. Barnum School 68 Briar Hill Rd. Groton, CT 06340

May 9th, 2024

Educational Specifications Groton, Connecticut Dr. Charles G. Barnum School Roof-mounted Solar Photovoltaic Project

May 9th, 2024

1. **PROJECT RATIONALE**

The long-range plan for Dr. Charles G. Barnum School ("Site") in Groton, CT calls for a photovoltaic solar project ("Project") installed on various sections of the roof. The energy generated by the Project will be consumed by the Site. The installation of this Project will follow a planned roof replacement. The Town and Board of Education will realize the financial benefits of the Project through avoided energy costs. The Town will fund the Project and seek applicable reimbursement through CT Department of Administrative Services ("DAS") Office of School Construction Grants & Review (OSCG&R).

2. **LONG-RANGE PLAN**

The long₋ range plan for the Town and Board of Education is to develop solar projects on multiple school properties in order to reduce operating costs. The Project will have a minimum lifetime of twenty (20) years, but energy production can be expected for up to thirty (30) years.

3. THE PROJECT

Groton proposes the following components for this Project:

- The Project size shall be based on available roof space, historical electricity usage data.
 - Project system size of 127.4 kilowatt-direct current ("kWdc")
 - Annual production of 154,973 kilowatt-hours ("kWh")
 - Site's annual historical usage of 233,163 kilowatt-hours ("kWh")

- A structural analysis shall be performed by a professional engineer licensed in the State of Connecticut. The analysis will quantify the available structural capacity of the roof.
- The Project shall interconnect to the Site's existing electrical service entrance equipment.
- Tree removal may be required in order to maximize energy production of the Project.
- Project design shall meet industry standards, utility company requirements and applicable building codes.
- The Project will consist of the following major system components:
 - Module (i.e solar panels) manufacturers must be listed on the most recent version of the Bloomberg New Energy Finance ("BNEF") Tier 1 list.
 - Racking, the module mounting structures, shall be designed to resist wind uplift based on an analysis of the Project footprint and existing site conditions.
 - String level inverters shall be roof mounted throughout the array.
 - Rapid shutdown devices and/or direct-current optimizers shall be installed to ensure compliance with the adopted National Electric Code ("NEC").
 - A data acquisition system shall display real-time energy production data in the school lobby.
- The roof warranty shall remain in full effect following installation of the Project.
 All work shall be performed in accordance with the roofing manufacturer's specifications.
- The Project shall be commissioned and tested to confirm installation was in accordance to Project specifications and forecasted production values are achieved.

4. **PARTIES**

The Board of Education has engaged CSW Energy and Klee Sustainability Advisors ("Project Team") who together will provide project management, legal and administrative support. This includes overseeing the development, contracting and construction of the Project. The Project Team will assist the Town securing DAS funding, issuing a public request for proposals ("RFP"), assisting in the selection of a contractor,

and observing the Project design, installation and commissioning activities. The awarded contractor ("Contractor") will be responsible for the design, installation and commissioning of the Project while maintaining the existing roof warranty. In addition, an add-alternate could be included in the RFP for operation and monitoring services ("O&M"). The O&M scope shall include monitoring the Project's energy production, performing annual preventative maintenance, and conducting reactive maintenance visits as a response to energy production shortfalls. The O&M contract removes the burden of monitoring and maintaining the Project from the Board of Education and helps ensure the projected benefits are realized for the life of the project.

5. **ATTACHMENTS**

The following conceptual layout and production report are included in the Educational Specifications to supplement, clarify, and augment the above information.

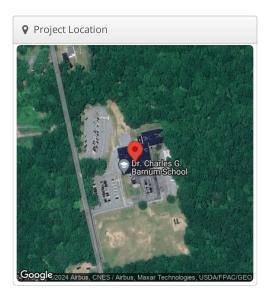


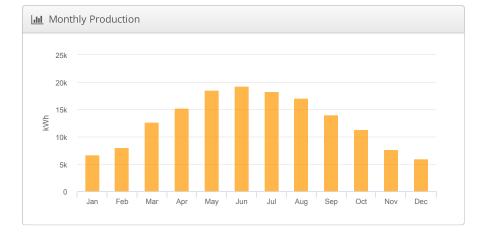
Layout w/ Structural Considerations (3/22) Groton DAS - Barnum School, 68 Brian

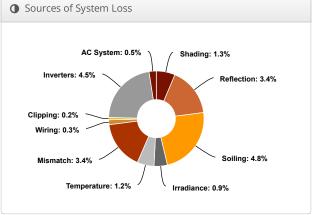
Hill Rd, Groton, CT 06340

№ Report							
Project Name	Groton DAS - Barnum School						
Project Address	68 Briar Hill Rd, Groton, CT 06340						
Prepared By	CSW Energy chris@cswenergy.com						

Lill System Metrics							
Design	Layout w/ Structural Considerations (3/22)						
Module DC Nameplate	127.4 kW						
Inverter AC Nameplate	100.0 kW Load Ratio: 1.27						
Annual Production	155.0 MWh						
Performance Ratio	81.3%						
kWh/kWp	1,216.9						
Weather Dataset	TMY, PROVIDENCE T F GREEN STATE AR, NSRDB (tmy3, I)						
Simulator Version	4c6441182e-e5d686d44a-b7181c5173- 9942b3e8d3						







Annual Production Report produced by CSW Energy

7 Annual P	roduction							
	Description Output							
	Annual Global Horizontal Irradiance	1,390.0						
	POA Irradiance	1,496.4	7.7%					
Irradiance	Shaded Irradiance	1,476.9	-1.3%					
(kWh/m ²)	Irradiance after Reflection	1,426.9	-3.4%					
	Irradiance after Soiling	1,359.0	-4.8%					
	Total Collector Irradiance	1,359.0	0.0%					
	Nameplate	173,242.2						
	Output at Irradiance Levels	171,641.3	-0.9%					
	Output at Cell Temperature Derate	169,634.1	-1.2%					
Energy	Output After Mismatch	163,936.3	-3.4%					
(kWh)	Optimal DC Output	163,388.6	-0.3%					
	Constrained DC Output	163,114.3	-0.2%					
	Inverter Output	155,751.8	-4.5%					
	Energy to Grid	154,973.1	-0.5%					
Temperature N	letrics							
Avg. Operating Ambient Temp								
Avg. Operating Cell Temp								
Simulation Met	rics							
Operating Hours								
Solved Hours								

Canditian Sat													
Condition Set													
Description	Condition Set 1												
Weather Dataset	TMY, PROVIDENCE T F GREEN STATE AR, NSRDB (tmy3, I)												
Solar Angle Location	Meteo	Lat/L	ng										
Transposition Model	Perez Model												
Temperature Model	Sandia Model												
	Rack Type			a	a b		Ten		mper	ature	Delta		
	Fixed	Tilt		-3.5	-3.56		-0.075		3°	С			
Temperature Model Parameters	Flush	Moun	t	-2.8	-2.81		045	5	0°	С			
	East-\	Vest		-3.5	6	-0.0	075		3°	С			
	Carport			-3.5	-3.56 -0.		075		3°	С			
Soiling (%)	J	F	М	Α	M	J		J	Α	S	0	N	D
8 (,	12	15	8	3	3	3		3	3	3	3	3	10
Irradiation Variance	5%	5%											
Cell Temperature Spread	4° C												
Module Binning Range	-2.5% to 2.5%												
AC System Derate	0.50%												
	Module						Uploaded By			Characterization			
Module Characterizations	TSM-DEG18MC.20(II) 475 (Trina Solar)						Н	HelioScope		Ch	Spec Sheet Characterization, PAN		
	CS3W-450MS (1000V) (2022) (Canadian Solar)						HelioScope		Ch	Spec Sheet Characterization, PAN			
Component	Device						Uploaded By			Characterization			
Characterizations	PVI50kW-480 (Solectria Renewables)						HelioScope			CEC 2014-08-16			

☐ Components									
Component Name Count									
Inverters	PVI50kW-480 (Solectria Renewables)	2 (100.0 kW)							
Strings	10 AWG (Copper)	30 (3,025.6 ft)							
Module	Canadian Solar, CS3W-450MS (1000V) (2022) (450W)	283 (127.4 kW)							

♣ Wiring Zones										
Description		Combiner Poles		Stri	ng Size	Stringing				
Wiring Zone -		- 8-1				Along Rac	Racking			
Ⅲ Field Segments										
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power	
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	168.12599°	1.4 ft	1x1	283	283	127.4 kW	
Field Segment 2	Fixed Tilt	Landscape (Horizontal)	5°	168.661°	0.8 ft	1x1			0	





Bylaws of the Board

Meeting Conduct & Parliamentary Procedures

Meeting Protocol

To ensure that the Board's meetings are conducted with maximum effectiveness and efficiency, members will:

- come to meetings adequately prepared;
- identify issues of concern before the meeting, whenever possible;
- circulate proposed motions and amendments, whenever possible, at least 48 hours before meeting;
- speak only when recognized;
- not interrupt each other during debate;
- not engage in disruptive and disrespectful side conversations;
- minimize unnecessary repetition;
- not monopolize the discussion;
- address the merits of the issue being discussed without appealing to the biases, prejudices and emotions of the audience:
- support the chair of the meeting's efforts to facilitate an orderly meeting;
- communicate openly and actively in discussion and dialog to avoid surprises;
- value equal participation of all members;
- practice respectful body language;
- listen actively when other members speak;
- not surprise or embarrass each other or members of the staff; and
- limit discussion/comments to 5 minutes per member per round unless extended by the chairperson.

Legal Notice

All Board of Education meetings shall be appropriately posted and conducted as provided by Connecticut General Statutes; under governing statutes, a meeting is any quorum of the Board of Education convened in person or electronically to discuss or act upon a Board matter, but meetings shall not include:

- 1. any meeting of a personnel search committee for executive level positions;
- 2. any chance meeting or a social meeting neither planned nor intended for discussing Board of Education business;
- 3. strategy or negotiations with respect to collective bargaining;
- 4. a caucus of members of a single political party notwithstanding that such members also constitute a quorum of the Board of Education:
- 5. communications limited to notice of meetings of the Board of Education or the agendas for such meetings.

Upon written request to the Superintendent of Schools, any person(s) may receive by mail notice of any Board meeting at least one week prior to the meeting where practical. An annual fee, payable to the school district, shall be made for this service. The amount of the fee shall be determined by the Superintendent of Schools and shall be directly related to the cost of providing this service.

Meeting Conduct & Parliamentary Procedures - cont.

Recording, Broadcasting, or Photographing Meetings

The Board of Education shall ensure that all Regular, Committee of the Whole or Sub-Committee meetings are recorded, excluding any portion of any meeting that is an executive session, and any such recording is posted on the District's online video content channel or internet web site and made available for the public to listen to, view and copy.

At any meeting of the Board of Education or its committees which is open to the public, pursuant to the provisions of CGS sec. 1-226, the proceedings may be recorded, photographed, broadcast or recorded for broadcast by any person or by any newspaper, radio broadcasting company or television broadcasting company. The photographer or broadcaster and its personnel, or the person recording the proceedings, shall be required to handle the photographing, broadcast or recording as inconspicuously as possible and in such manner as not to disturb the proceedings of the meeting.

Conduct of Meetings

In the event that a Board of Education meeting is interrupted by any person or group of persons who render the orderly conduct of the meeting unfeasible and order cannot be restored by the removal of individuals who are willfully interrupting the meeting, the Chairman of the Board of Education may order the meeting room cleared and continue in session. Only regular items on the agenda may be considered in such case. Media representatives, unless they were disorderly, shall be permitted to attend the sessions held in this manner.

After time has passed, the Chairman, in his or her discretion, may suspend the Board meeting and invite back those members of the public not responsible for the disruption.

Voting Method

Voting at Board meetings shall be conducted in accordance with state statute and **Robert's Rules of Order**, newly revised.

Parliamentary Procedures

Board meetings shall be conducted according to the rules of parliamentary procedure laid down in <u>Robert's Rules of Order, Newly Revised</u>, unless otherwise specified by state law or in written Bylaws for Board of Education operating procedures.

(cf. 9321 - Time, Place, Notification for Meetings)

Reference: Robert's Rules of Order, Newly Revised

Legal Reference: Connecticut General Statutes

1-200 Definitions. ("Public Agency")

1-225 Meetings of government agencies to be public. Recording of votes. Schedule and

agenda of meetings to be filed. Notice of special meetings. Executive sessions.

1-226 Recording, broadcasting or photographing meetings.

1-227 Mailing of notice of meeting to persons filing written request.

Bylaw adopted by the Board: November 13, 2023

Revised: March 25, 2024

GROTON PUBLIC SCHOOLS
Groton, Connecticut