



Department of  
Higher Education

# Science of Reading Audit Metrics:

Standards Alignment for the  
Ohio Department of Higher Education

## Course Alignment and Planning Tool for Analyzing Alignment to the Science of Reading

Science of Reading Audit Metrics have been determined to perform the eventual audits for Ohio’s teacher preparation programs that will begin in early 2025. The metrics are aligned with the standards and qualifications for educator licenses adopted by the State Board of Education under section 3319.22 of the Revised Code and the requirements of the Ohio teacher residency program established under section 3319.223 of the Revised Code. The metrics also align with the International Dyslexia Association’s Knowledge and Practice Standards (KPS) for Teachers of Reading (2018) and the Ohio Department of Higher Education (ODHE) 12-Hour Reading and Literacy Core Standards (2023).

### Part 1: Course Alignment Review

Domain 1: Teacher Knowledge		
	Topic	IDA KPS and ODHE Alignment
1	Describe the key features of the definition of reading science and understand seminal research (e.g., Simple View of Reading (Gough & Tunmer, 1986); Ehri’s Phases of Word Recognition (1985); The Reading Rope (Scarborough, 2001); The Four-Part Processing Model of Word Recognition (Seidenberg & McClelland, 1989)), and regions of the brain necessary for skilled reading.	KPS 1.2; 1.6; 4A.1 ODHE 1.1
2	Interpret current NAEP data on student reading outcomes and understand the impact on subgroups (e.g., minority populations, students with disabilities, ML learners, etc.).	KPS 1.5; 1.6
3	Explain the importance of research in education and the role it has in informing teaching.	KPS 1.6; 4A.1
4	Describe the differences between and the relationship between written and spoken language.	KPS 1.3; 1.9
5	Explain the contribution of cognitive psychology to reading development and instruction (including how the brain learns to read). Include the underlying cognitive and linguistic processes that contribute to reading and differentiate good from struggling readers.	KPS 1.1; 1.3; 1.4; 1.6; 1.7; 1.9 ODHE 1.2

6	Know phases in the typical developmental progression of oral language, phoneme awareness, decoding skills, printed word recognition, spelling, reading fluency, reading comprehension, and written expression.	KPS 1.8
7	Define and describe Language Systems: orthography, phonetics, phonology, morphology, syntax, semantics, and discourse.	KPS 1.1
8	Explain how environmental, cultural, behavioral, and social factors contribute to literacy development.	KPS 1.5
9	Define and describe the components of effective reading and spelling instruction, including explicit, systematic, cumulative, teacher-directed instruction and multimodal.	KPS 4A.1; 4A.2
10	Demonstrate the ability to adapt instruction to accommodate individual differences in cognitive, linguistic, sociocultural, and behavioral aspects of learning.	KPS 4A.3 ODHE 8.2
11	Demonstrate an understanding of the impact on reading and writing development for students who struggle with phonemic awareness, encoding/decoding, fluency, vocabulary, and comprehension, including the impact on students with language and dialect variations (e.g., multilingual learners, Black language, etc.).	KPS 4B.7; 4B.3; 4C.5 ODHE 3.5
12	Demonstrate understanding of State and Federal special education laws related to literacy including but not limited to learning disabilities, specifically language-based disabilities such as dyslexia.	KPS 2.2 ODHE 1.3
Comments		
<b>Domain 2: Phonological Awareness</b>		
<b>Topic</b>		<b>IDA KPS and ODHE Alignment</b>
13	Demonstrate an understanding that phonological processing is a foundational requirement necessary for decoding.	ODHE 2.4
14	Explain the differences between and relationships among phonological awareness, phonemic awareness, and phonics.	ODHE 2.3
15	Explain the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge.	KPS 1.3 ODHE 2.2

16	Demonstrate an understanding of how the relationship between phonological awareness and early concepts of print impacts literacy development.	KPS 1.1; 1.3; 1.4; 1.5 ODHE 2.13
17	Identify, pronounce, classify, and compare the consonant and vowel phonemes of English and their application to other languages and dialects.	KPS 1.5; 1.7; 4B.1 ODHE 2.5; 2.6; 2.11
18	Demonstrate the ability to assess the levels and skills of phonemic awareness and how to use assessment data to inform instruction.	KPS 3.4; 3.6; 4B.3 ODHE 8.6
19	Define and differentiate the developmental levels of phonological awareness (word, syllable, phoneme level) and the skills associated with them (discrimination, rhyming, isolation, blending, segmentations, deletion, manipulation) with an emphasis on blending and segmenting of phonemes as most predictive of future reading ability.	KPS 1.6; 1.8; 4B.2; 4B.4 ODHE 2.1; 2.7; 2.8
20	Demonstrate understanding of intervention materials and techniques and the impact of difficulty with phonemic awareness on reading and writing development, including the impact of language and dialect variation on teaching and learning English phonemes	KPS 1.5; 1.7; 4A.3; 4B.3; 4B.7 ODHE 2.5; 2.9; 2.11
21	Observe, plan, and deliver PA lessons that are direct, brief, articulatory, and cumulative using tokens and letters to support conceptual understanding.	KPS 4B.5; 4B.6 ODHE 2.10; 2.12
Comments		

Domain 3: Decoding and Encoding		
Topic		IDA KPS and ODHE Alignment
22	Demonstrate knowledge of the structure of English orthography and the patterns that inform teaching single and multisyllabic word reading and spelling.	KPS 4C.1 ODHE 3.1

23	Describe the difference between code emphasis vs. meaning emphasis approaches to word recognition instruction and summarize the characteristics of each and why meaning emphasis approaches are not support by research.	KPS 1.6; 4C.3 ODHE 3.6
24	Describe and apply research-supported methods for assessing and teaching phoneme/grapheme relationships for word recognition and spelling.	KPS 4C.2; 4C.3 ODHE 3.6; 8.6
25	Recognize phonetically irregular words and apply evidence-based techniques to support instruction.	KPS 4C.6 ODHE 3.6
26	Know and apply research to plan and deliver instruction of syllable types to read multisyllabic words.	KPS 4C.7 ODHE 3.7
27	Observe, plan, and deliver a structured phonics lesson that is explicit, systematic, sequential, and multimodal to enhance student engagement and memory.	KPS 1.2; 4A.1; 4A.2; 4C.1; 4C.2; 4C.3; 4C.4; 4C.7 ODHE 3.2; 3.3; 3.4
28	Demonstrate understanding of the different types and purposes of texts, with emphasis on the role of decodable texts in teaching beginning readers.	KPS 4C.8 ODHE 3.8
29	Explain and provide examples of the impact of language and dialect variations on encoding and decoding instruction.	KPS 1.5; 1.7; 4A.3

Comments

#### Domain 4: Vocabulary and Oral Language

Topic	IDA KPS and ODHE Alignment	
30	Know and apply the research on the role of word knowledge (word recognition, spelling, syntax, etc.) and vocabulary development in oral (listening and speaking) and text (reading and writing) comprehension.	KPS 4E.1 ODHE 4.1
31	Describe the vocabulary gap and identify research-based practices for vocabulary development with consideration to the wide differences in students' vocabularies.	KPS 4E.2 ODHE 4.2

32	Demonstrate understanding of developing vocabulary skills through the systems of language, including phonology, orthography, syntax, semantics, morphology, etymology, and the relationships among them.	ODHE 4.3
33	Know and apply research-based methods of incidental vocabulary instruction (oral language experiences, teacher read-alouds, and independent reading).	KPS 4E.3 ODHE 4.4
34	Demonstrate the ability to assess vocabulary knowledge and how to use the assessment data to inform instruction.	KPS 3.6 ODHE 8.6
35	Observe, plan, and deliver a vocabulary lesson using intentional (direct) methods of vocabulary instruction (tiered-framework, word-learning strategies) and word consciousness (adept diction, word play, etymology).	KPS 4E.4 ODHE 4.5
36	Demonstrate understanding of the importance of wide reading in vocabulary development through the selection of rigorous, culturally responsive, complex grade-level texts.	ODHE 4.6
37	Demonstrate the impact of dialect variation and multilingual learning on vocabulary acquisition in reading and writing development.	KPS 1.5; 1.7; 4A.3; 4E.1; 4E.2
Comments		

Domain 5: Reading Fluency		
	Topic	IDA KPS and ODHE Alignment
38	Define and demonstrate understanding of the term fluency (i.e., reading accurately with appropriate pace and expression to facilitate and demonstrate comprehension) and the progression of fluency levels including letter recognition, sound-symbol corresponds, word-level reading, phrase level reading, sentence level reading, and connected text.	ODHE 5.1; 5.2
39	Demonstrate understanding of text reading fluency as an indicator of typical reading development that can be advanced through informed instruction and progress monitoring practices.	KPS 3.4; 3.6; 4D.3 ODHE 5.5

40	Demonstrate an understanding of the three important components of fluency: accuracy, automaticity, and prosody and how these play a role in reading comprehension and motivation to read.	KPS 4D.1 ODHE 5.3; 5.7
41	Observe, plan, and deliver evidence-based approaches for assessing and teaching reading fluency to improve fluency outcomes.	KPS 4D.2; 4D.3 ODHE 5.4; 8.6
42	Demonstrate understanding of appropriate uses of assistive technology for students with serious limitations in reading fluency (e.g., speech-to-print translators, audiobooks, etc.).	KPS 4D.4 ODHE 5.6
43	Explain the impact of language and dialect variation and multilingual learning on the acquisition of reading fluency.	KPS 1.5; 1.7; 4A.3
Comments		

Domain 6: Reading Comprehension		
Topic		IDA KPS and ODHE Alignment
44	Demonstrate an understanding of factors that contribute to deep comprehension (e.g., background knowledge, vocabulary, verbal reasoning ability, sentence processing, literary structures, conventions, strategies for close reading such as self-monitoring, motivation).	KPS 4F.1 ODHE 6.1
45	Describe the importance of sentence-level comprehension in reading and listening comprehension (syntactic awareness).	KPS 4F.3 ODHE 6.5
46	Explain how explicit instruction in writing can impact reading comprehension.	KPS 1.2 ODHE 6.6; 7.9
47	Observe, plan, and deliver a comprehension lesson using the tenants of explicit instruction.	KPS 4F.4 ODHE 6.3
48	Demonstrate understanding of selecting rich texts appropriate for instruction that includes a wide range of genres (informational text, narrative text, and persuasive) to facilitate comprehension	KPS 4F.2 ODHE 6.2

49	Demonstrate understanding of the teacher’s role as an active mediator of student engagement and strategies with text for deep comprehension	KPS 4F.5 ODHE 6.4
50	Understand the importance of selecting authentic text that supports a variety of cultures, ethnicities, and experiences written by a variety of authors with different cultures and backgrounds.	KPS 1.5
Comments		

Domain 7: Writing		
Topic		IDA KPS and ODHE Alignment
51	Understand and apply knowledge of the importance of the major skill domains that contribute to written expression (e.g., Not-So-Simple View of Writing, transcription, composition, revision, editing).	KPS 4G.1 ODHE 7.1
52	Demonstrate an understanding of connecting writing instruction and practice to the texts/content children are reading/learning while increasing how much students write according to ability and grade.	ODHE 7.2; 7.5
53	Apply research-based practices for teaching mechanics of writing (e.g., punctuation, spelling) and letter formation (cursive and manuscript).	KPS 4G.2; 4G.3 ODHE 7.6
54	Identify and apply the developmental phases of written expression and the instructional implications of each (e.g., sentence construction and syntax, planning, drafting, revision).	KPS 4G.4 ODHE 7.3
55	Demonstrate understanding and apply in practice the considerations for the development of skilled written composition through assessment and explicit instruction, applying the phases of writing.	KPS 3.4; 3.6 ODHE 7.4; 8.6
56	Demonstrate an understanding of the role of background knowledge and vocabulary as applied to clear expression of ideas in writing.	ODHE 7.8
57	Understand the connection between writing & reading, including the need for automaticity (e.g., handwriting, spelling, syntax, text structure) and how writing supports comprehension.	KPS 4G.3 ODHE 7.7; 7.9
58	Increase awareness of assistive technology options and considerations for when and how to use them.	KPS 4G.5 ODHE 7.10



59	Describe instructional considerations for multilingual learners and those with language variations when teaching written expression.	KPS 1.5; 1.7; 4A.3
Comments		
<b>Domain 8: Collaborative Problem Solving and MTSS</b>		
<b>Topic</b>		<b>IDA KPS and ODHE Alignment</b>
60	Demonstrate understanding of language as foundational to reading development, and difficulty with language may lead to reading difficulties.	ODHE 8.1
61	Demonstrate understanding of the differences among and purposes for screening, progress-monitoring, diagnostic, and outcome assessments.	KPS 3.1 ODHE 8.3
62	Demonstrate understanding and utilization of well-validated screening tests designed to identify students at risk for reading difficulties and evaluate the extent to which assessments, curricula, and interventions are aligned to reading research.	KPS 3.4 ODHE 8.4
63	Demonstrate understanding and application of progress monitoring and reporting with Curriculum-Based Measures (CBM).	ODHE 8.5
64	Demonstrate understanding of how to read and interpret frequently utilized diagnostic tests used by psychologists, speech-language professionals, and educational evaluators.	ODHE 8.7
65	Demonstrate the ability to analyze, integrate, summarize, and communicate (orally and in writing) the meaning of educational assessment data for sharing with students, parents, and other teachers through a collaborative problem-solving process as a model for making decisions about systems and students in MTSS.	KPS 3.8 ODHE 8.8
66	Demonstrate understanding of best practices for test construction and formats (e.g., reliability, validity, criterion, normed).	KPS 3.2; 3.3; 3.4; 3.5; 3.7 ODHE 8.9
67	Demonstrate understanding of how to use data to determine the reader profile and intervention needs of struggling readers and writers within a Multi-Tiered System of Support (MTSS) framework and how behavior is connected to reading in the MTSS model.	KPS 1.4; 4A.3 ODHE 8.10

68	Demonstrate understanding of diverse reading profiles for struggling readers, including dyslexia, and for multilingual learners and those with language variations.	KPS 4A.3 ODHE 8.11
69	Demonstrate understanding and application of the general principles and practices of structured language and literacy teaching, including explicit, systematic, cumulative, teacher-directed instruction.	ODHE 8.12
70	Recognize the tenets of IDA's definition of dyslexia and identify the distinguishing characteristics of dyslexia; and explain how reading difficulties vary and change over time in response to development and instruction.	KPS 1.4; 1.5; 2.1; 2.3; 2.4; 2.5
Comments		

Domain 9: High-Quality Instructional Materials		
Topic		IDA KPS and ODHE Alignment
71	Demonstrate understanding of selection and utilization of high-quality instructional materials to develop clear learning goals and outcomes.	ODHE 9.1
72	Demonstrate the ability to differentiate between high-quality instructional materials and instructional materials that do not align with Science of Reading.	ODHE 9.2
73	Demonstrate understanding of the selection and utilization of high-quality instructional materials to design instruction that supports student literacy learning.	ODHE 9.3
Comments		