



The Science of Reading Work in North Dakota

Kerri Whipple
kerri.whipple@k12.nd.us
701.361.1392

SCIENCE OF READING LITERACY SUMMIT



2024

School District Trainings

Implementation of SoR in School Districts

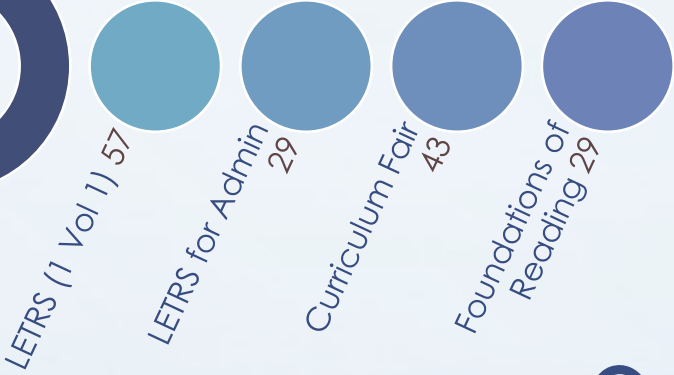
ND Literacy Framework (KPS for Teachers of Reading)

Current State

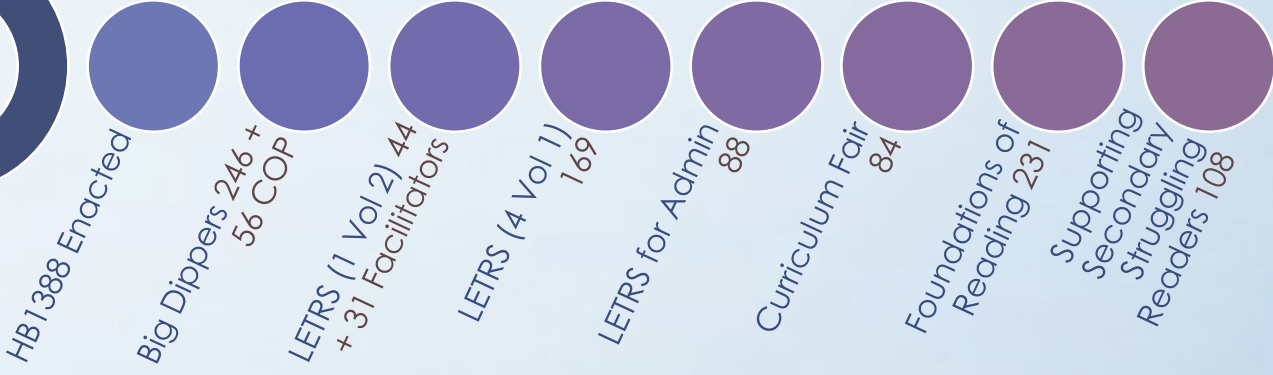


NDSOR Timeline

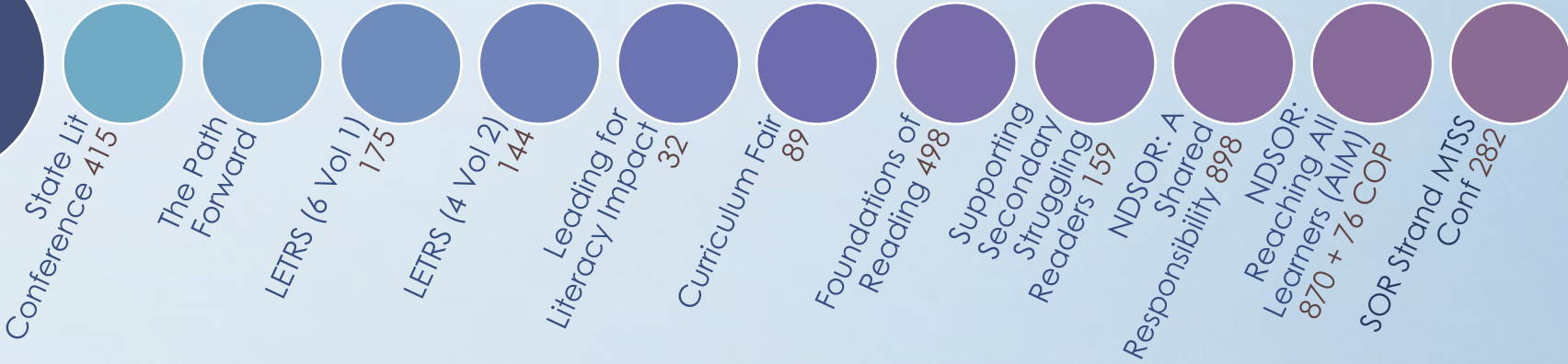
2020



2021



2022



NDSOR Timeline

2023

LETRS (7 Vol 1) 271
+ 11 Facilitators

LETRS (5 Vol 2) 165
+ 14 Facilitators

Leading for
Literacy Impact 17

Curriculum Fair 134

Foundations of
Reading 115

Supporting
Secondary
Struggling
Readers 143

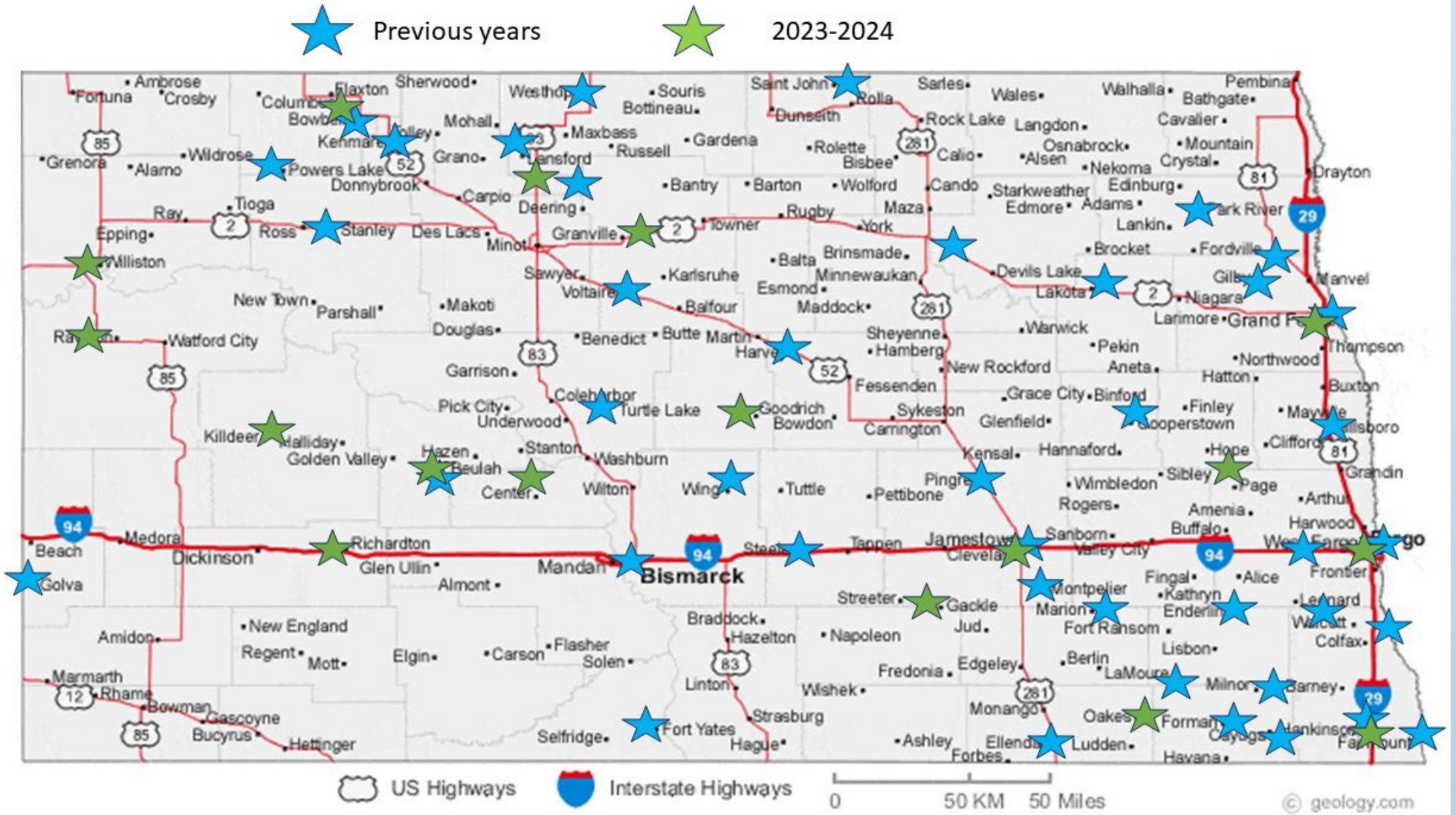
NDSOR: A Shared
Responsibility 74

NDSOR: Reaching
All Learners (AIM) 561

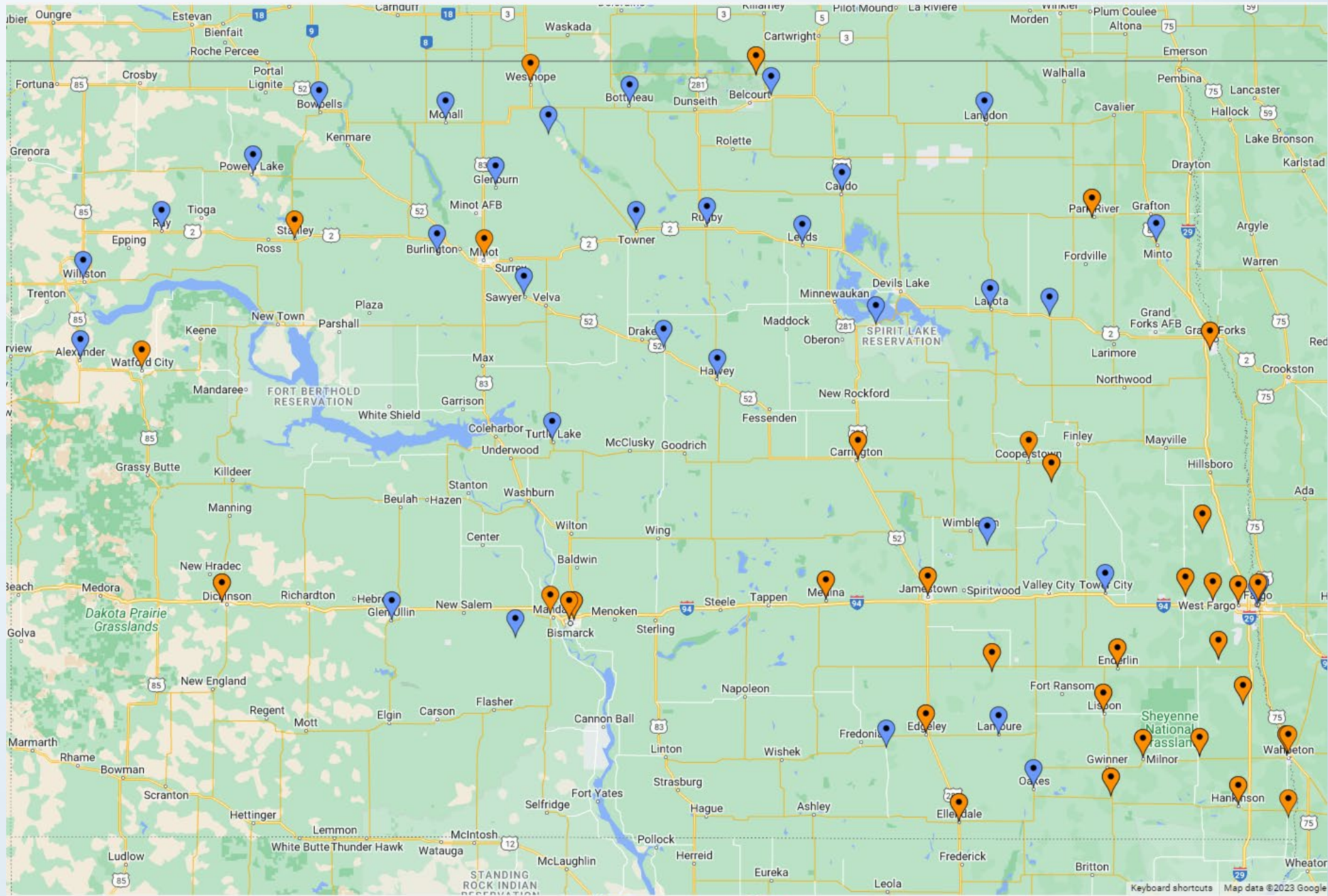
Accelerating
Disciplinary
Writers 55

NDSOR Trainer
Support 37

ND Curriculum Fair Event Map

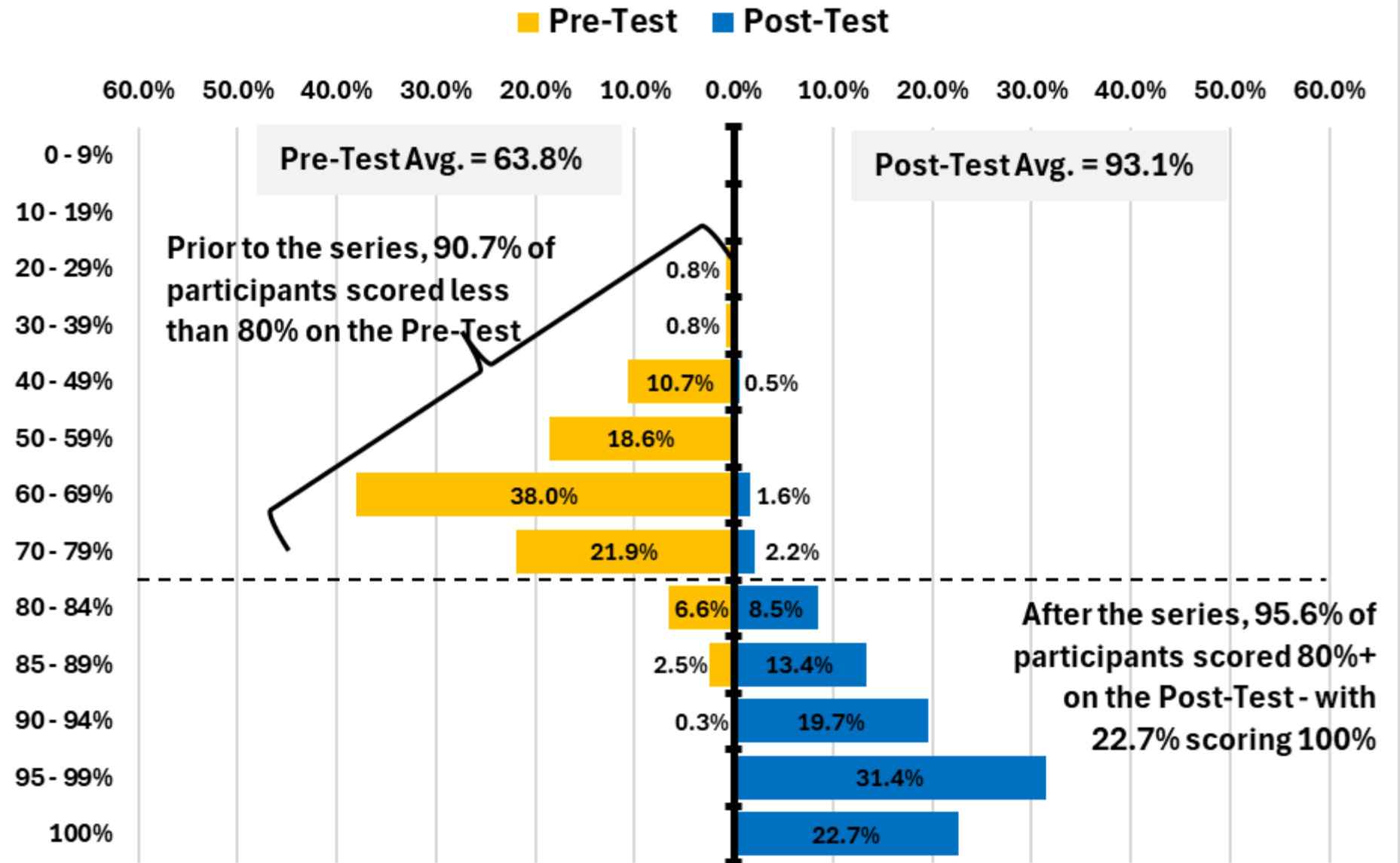


ND LETRS Map (state-sponsored)



LETRS Pre and Post Test

LETRS Unit 1-4 Pre and Post Test Score Distributions (Participants with Both Scores ONLY)



n=366

One Student's Growth – 2 weeks

abcdefghijklmnopqrstuvwxyz
4/11 2:13

1.
4/25 1min 18secs.
abcdefghijklmnopqrstuvwxyz
X V E S

How has LETRS changed your school?



https://youtu.be/9nTiWmx_2KM

One School's Growth – 1 year

	Beginning of Year	Middle of Year	End of Year
Well Below Benchmark	36% 37 Students	41% 48 Students	21% 24 Students
Below Benchmark	16% 16 Students	16% 19 Students	11% 12 Students
At Benchmark	30% 31 Students	30% 35 Students	42% 48 Students
Above Benchmark	18% 18 Students	13% 15 Students	26% 30 Students

One School's Growth – 1st to 2nd grade

NORTHERN CASS ORAL READING FLUENCY PROGRESS

First Grade 2021



9 learners at high fluency risk




12 learners at some fluency risk

One Parent's Comment

“Decodable books
have been a game
changer in terms of
my child's self esteem
and confidence as a
reader.”

-SoR Informed Parent

One teaching using HQIM



**"This program
didn't take away
my craft...
it enhanced it in
ways I never
thought possible."**

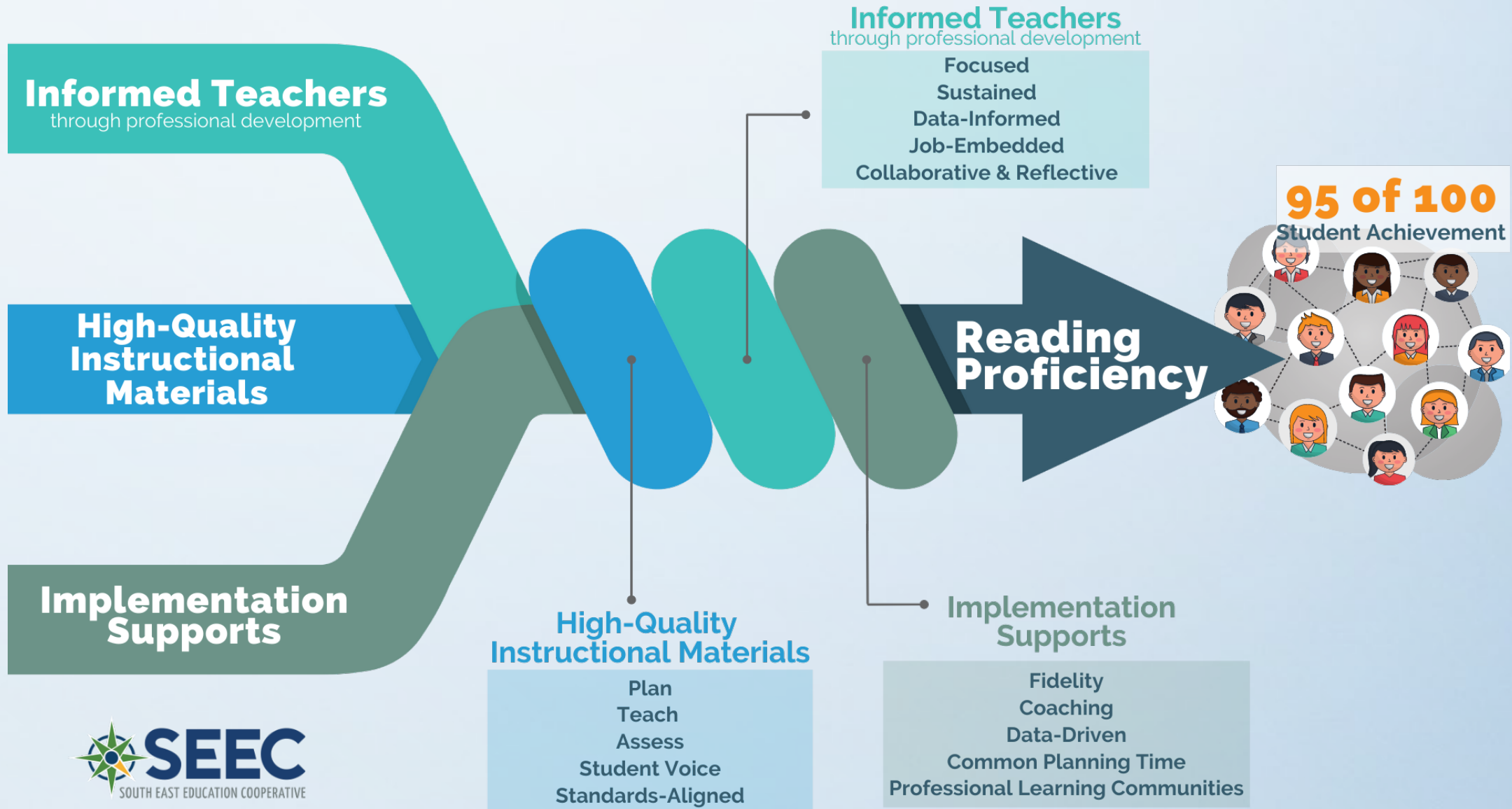
**Casey Mills, 5th Grade Educator,
Westhope**

School District Trainings
Implementation of SoR in School Districts
ND Literacy Framework (KPS for Teachers of Reading)

Agenda



NDSOR Strands of Success



LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE

(facts, concepts, etc.)

VOCABULARY

(breadth, precision, links, etc.)

LANGUAGE STRUCTURES

(syntax, semantics, etc.)

VERBAL REASONING

(inference, metaphor, etc.)

LITERACY KNOWLEDGE

(print concepts, genres, etc.)

WORD RECOGNITION

PHONOLOGICAL AWARENESS

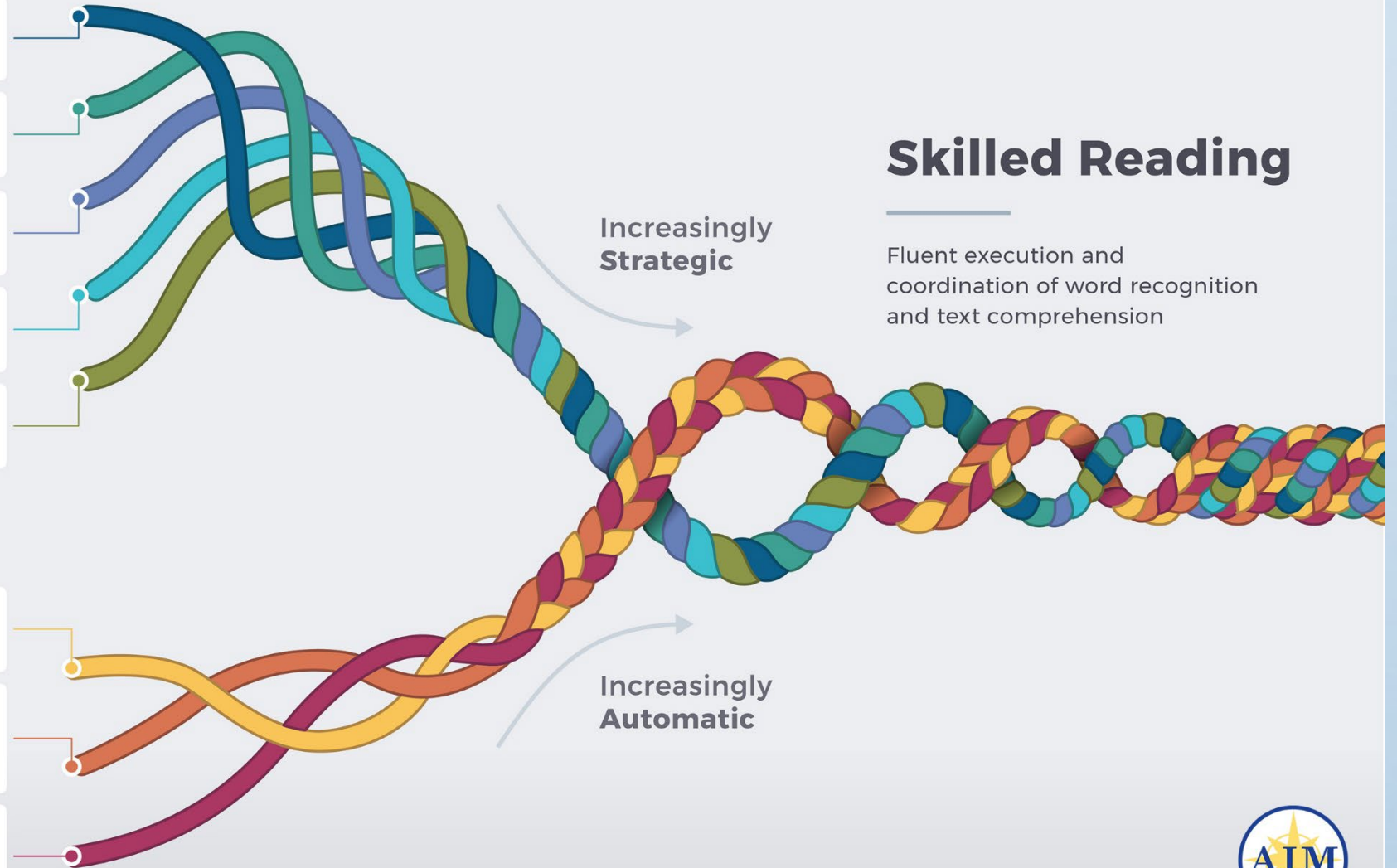
(syllables, phonemes, etc.)

DECODING

(alphabetic principle, spelling-sound correspondences)

SIGHT RECOGNITION

(of familiar words)



Skilled Reading

Fluent execution and coordination of word recognition and text comprehension

SOURCE: Scarborough, H. 2001. Connecting early language and literacy to later reading (disabilities): Evidence, theory, and practice. Pp. 97-110 in S. B. Neuman & D. K. Dickinson (Eds.) Handbook of Early Literacy. NY: Guilford Press.

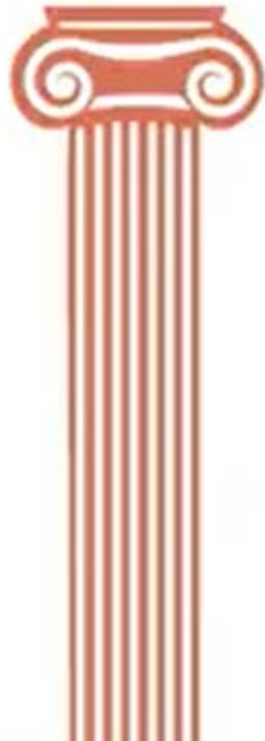


"BIG 5" Pillars of Reading

Phonemic
Awareness



Phonics
Skills



Text Reading
Fluency



Vocabulary
Knowledge



Reading
Comprehension



Language Comprehension

- Vocabulary Knowledge  Background Knowledge
- Vocabulary Knowledge
- Language Structures
- Verbal Reasoning
- Literacy Knowledge

Increasingly Strategic

Skilled Reading

Reading Comprehension 

Text Reading Fluency 

Word Recognition

- Phonemic Awareness  Phonological Awareness
- Phonics Skills  Decoding (and Spelling)
- Sight Recognition

Increasingly Automatic

HB 1388 implemented in 15.1-21-12.1

SECTION 9. A new section to chapter 15.1-21 of the North Dakota Century Code is created and enacted as follows:

Reading curriculum - Content - Professional development - Reports to legislative management.

1. Beginning July 1, 2022, each school district and nonpublic school shall ensure the portion of its curriculum which is related to reading:
 - a. Is scientifically based, evidence based, and research based;
 - b. Focuses on:
 - (1) Phonemic awareness;
 - (2) Phonics;
 - (3) Fluency;
 - (4) Vocabulary; and
 - (5) Comprehension; and
 - c. Uses systematic direct instruction for students in kindergarten through grade three to ensure all students obtain necessary early reading skills.

1

2

6

7

HB 1231 implemented in 15.1-13-35.1

1. The board shall ensure a candidate for teacher licensure who will be certified to be an early childhood or elementary teacher demonstrates competencies in beginning reading instruction based on scientifically and research-based best practices. Competencies must include the acquisition of knowledge of the essential components of beginning reading instruction, including:
 - a. Phonemic awareness;
 - b. Phonics;
 - c. Fluency;
 - d. Vocabulary;
 - e. Comprehension;
 - f. How to assess student reading ability; and
 - g. How to identify and correct reading difficulties;
 - h. Scientifically based, evidence-based, and research-based curricula; and
 - i. The use of systematic direct instruction to ensure all students obtain necessary early reading skills.

1

2

6

7

8

9

10

HB 1231 implemented in 15.1-13-35.1

2. A prekindergarten, kindergarten, elementary, and special education initial teacher licensure candidate must provide evidence that the candidate meets the competency standards of the components under subsection 1.
3. ~~A prekindergarten through grade twelve and a secondary education~~An early childhood and elementary initial teacher licensure candidate must provide evidence that the candidate meets the competency standards of the components under subsection 1.
4. A teacher licensure candidate satisfies the requirements of this section if the candidate demonstrates the candidate has received training in competencies related to reading instruction from an accredited or approved program, or demonstrates mastery of the topics provided under subsection 1. The board may issue a provisional license for up to two years to a teacher licensure candidate who does not meet the requirements of this section.

School District Trainings
Implementation of SoR in School Districts
ND Literacy Framework (KPS for Teachers of Reading)

Agenda



What are the big changes?



NCTQ Teacher Prep Review, SOR Implementation = A

Program grades in North Dakota

School	Program Level	Grade	Adequate coverage of core components: Graded (Up to 12 points per component; 8 points for adequate coverage; 4 or more contrary practices results in letter grade deduction)						Support for a range of learners: Ungraded (Up to 8 points per group)		
			Phonemic Awareness	Phonics	Fluency	Vocabulary	Comprehension	Count of Contrary Practices (out of 9)	Struggling readers	ELLs	Speakers of language varieties
Dickinson State University	UG	A	Yes (10.33 pts)	Yes (11.33 pts)	Yes (10.5 pts)	Yes (10.67 pts)	Yes (10.5 pts)	1	4 pts	2 pts	0 pts
Mayville State University	UG	F	No (5.46 pts)	Yes (8.75 pts)	No (5.81 pts)	No (6 pts)	No (5.75 pts)	3	4 pts	4 pts	0 pts
Minot State University	UG	F	No (7.82 pts)	No (6.22 pts)	No (7 pts)	No (6.25 pts)	No (6.5 pts)	3	4 pts	0 pts	0 pts
Sitting Bull College	UG	F	No (1 pt)	No (7.5 pts)	No (6.75 pts)	No (7.5 pts)	No (7.5 pts)	0	4 pts	0 pts	0 pts
University of Mary	UG	C	No (4.45 pts)	Yes (9.27 pts)	No (7.53 pts)	Yes (9 pts)	Yes (8 pts)	0	2 pts	2 pts	0 pts
University of North Dakota	UG	B	Yes (9.14 pts)	Yes (10.25 pts)	Yes (11 pts)	Yes (9.25 pts)	Yes (9.25 pts)	4	4 pts	4.75 pts	0 pts
Valley City State University	UG	A	Yes (9 pts)	Yes (9 pts)	Yes (9 pts)	Yes (9 pts)	Yes (9 pts)	0	2.75 pts	6 pts	0 pts

ND Literacy Framework aka Knowledge and Practice Standards for Teachers of Reading

NDESPB Framework

North Dakota Education Standards and Practices Reading Standards
Adopted 1.8.2024.



Knowledge and Practice Standards for Teachers of Reading Summary Table <i>Does Not Include Knowledge and Practice Examples</i>	
Standard I: Foundations of Literacy Acquisition	
1.1	Understand the (5) language processing requirements of proficient reading and writing: phonological, orthographic, semantic, syntactic, discourse. <i>Level 1</i>
1.2	Understand that learning to read, for most people, requires explicit instruction. <i>Level 1</i>
1.3	Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge. <i>Level 1</i>
1.4	Identify and explain aspects of cognition and behavior that affect reading and writing development. <i>Level 2</i>

Example Matrix from one EPP in ND

		R = course readings	L = lecture	E = assignment and/or evaluation	F = field experience	1 – topic is introduced	2 – topic is explored in a deep way	3 – topic is reviewed
Foundational Teacher Knowledge								
Topic	Standard 1: Foundations of Literacy Acquisition	EDUC 321		EDUC 323		EDUC 322		EDUC 430
		RLEF	123	REL	123	RLEF	123	RLEF
	1.1 Understand the (5) language processing requirements of proficient reading and writing: phonological, orthographic, semantic, syntactic, discourse.							
	1.2 Understand that learning to read, for most people, requires explicit instruction.							
	1.3 Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge.							
	1.4 Identify and explain aspects of cognition and behavior that affect reading and writing development.							
	1.5 Identify (and explain how) environmental, cultural, and social factors contribute to literacy development.							
	1.6 Explain major research findings regarding the contribution of linguistic and cognitive factors to the prediction of literacy outcomes.							
	1.7 Understand the most common intrinsic differences between good and poor readers (i.e., linguistic, cognitive, and neurological).							
	1.8 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.							

IDA Knowledge and Practice Examples

Knowledge and Practice Standards for Teachers of Reading Includes Knowledge and Practice Examples

STANDARD 1: FOUNDATIONS OF LITERACY ACQUISITION

Substandard	Examples of Coursework Expectations
1.1 Understand the (5) language processing requirements of proficient reading and writing: phonological, orthographic, semantic, syntactic, discourse.	<ul style="list-style-type: none"> ● Explain the domains of language (phonology, morphology, syntax, semantics, pragmatics) and their importance to proficient reading and writing.
1.2 Understand that learning to read, for most people, requires explicit instruction.	<ul style="list-style-type: none"> ● Explain how most people learn to read, how reading acquisition differs from language acquisition, and how writing systems differ from oral language systems. ● Know that the brain has to establish new neural circuits, linking language and visual regions, to become skilled at reading.
1.3 Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge.	<ul style="list-style-type: none"> ● Cite evidence and give practical examples showing how phonemic awareness affects attaining the alphabetic principle, decoding and spelling development, and storage and retrieval of spoken words, and that learning to read affects aspects of language processing, including the extent of phonemic awareness and precision of phonological representations of words in our mental dictionaries.
1.4 Identify and explain aspects of cognition and behavior that affect reading and writing development.	<ul style="list-style-type: none"> ● Cite examples of tasks or tests that measure each general cognitive factor; explain how problems in these areas might be observed in classroom learning. ● Identify how the following aspects of cognition and behavior affect reading and writing development: attention, automaticity, executive function, verbal memory, processing speed, graphomotor control.
1.5 Identify (and explain how) environmental, cultural, and social factors	

ND Literacy Framework aka Knowledge and Practice Standards for Teachers of Reading

NDESPB Framework

North Dakota Education Standards and Practices Reading Standards
Adopted 1.8.2024.



Knowledge and Practice Standards for Teachers of Reading

Summary Table

Does Not Include Knowledge and Practice Examples

Standard I: Foundations of Literacy Acquisition

1.1	Understand the (5) language processing requirements of proficient reading and writing: phonological, orthographic, semantic, syntactic, discourse. <i>Level 1</i>
1.2	Understand that learning to read, for most people, requires explicit instruction. <i>Level 1</i>
1.3	Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge. <i>Level 1</i>
1.4	Identify and explain aspects of cognition and behavior that affect reading and writing development. <i>Level 2</i>

Example Matrix from one EPP in ND

		R = course readings			1 – topic is introduced			
		L = lecture			2 – topic is explored in a deep way			
		E = assignment and/or evaluation			3 – topic is reviewed			
		F = field experience						
Foundational Teacher Knowledge								
Topic	Standard 1: Foundations of Literacy Acquisition	EDUC 321		EDUC 323		EDUC 322		EDUC 430
		RLEF	123	RELF	123	RLEF	123	RLEF
	1.1 Understand the (5) language processing requirements of proficient reading and writing: phonological, orthographic, semantic, syntactic, discourse.							
	1.2 Understand that learning to read, for most people, requires explicit instruction.							
	1.3 Understand the reciprocal relationships among phonemic awareness, decoding, word recognition, spelling, and vocabulary knowledge.							
	1.4 Identify and explain aspects of cognition and behavior that affect reading and writing development.							
	1.5 Identify (and explain how) environmental, cultural, and social factors contribute to literacy development.							
	1.6 Explain major research findings regarding the contribution of linguistic and cognitive factors to the prediction of literacy outcomes.							
	1.7 Understand the most common intrinsic differences between good and poor readers (i.e., linguistic, cognitive, and neurobiological).							
	1.8 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.							

Kerri Whipple
kerri.whipple@k12.nd.us
701.361.1392

Thank You!

