09/01/09 REVISOR JFK/DI AR3834

Board of Teaching

1.1

1.2

1.3

1.4

1.5

1.6

1.7

1.8

1.9

1.10

1.11

1.12

1.13

1.14

1.15

1.16

1.17

1.18

1.19

1.20

1.21

1.22

1.23

1.24

1.25

Adopted Permanent Rules Relating to Teacher and Professional Staff Licensure

8710.0200 FEES.

Each application for the issuance or renewal of a license to teach shall be accompanied by a processing fee in compliance with the fee authorized by the legislature. The fees shall be paid to the commissioner of education who shall deposit them with the commissioner of finance, as provided by law, and report each month to the commissioner of finance the amount of fees collected.

The fee shall be nonrefundable for applicants not qualifying for a license, except the fee is refundable when the applicant for a license already holds the license for which application is made and that license does not expire in the year the application is submitted.

8710.2000 STANDARDS OF EFFECTIVE PRACTICE FOR TEACHERS.

[For text of subps 1 and 2, see M.R.]

Subp. 3. **Standard 2, student learning.** A teacher must understand how students learn and develop and must provide learning opportunities that support a student's intellectual, social, and personal development. The teacher must:

[For text of items A to E, see M.R.]

- F. link new ideas to familiar ideas; make connections to a student's experiences; provide opportunities for active engagement, manipulation, and testing of ideas and materials; and encourage students to assume responsibility for shaping their learning tasks;
- G. use a student's thinking and experiences as a resource in planning instructional activities by encouraging discussion, listening and responding to group interaction, and eliciting oral, written, and other samples of student thinking; and
- H. demonstrate knowledge and understanding of concepts related to technology and student learning.

09/01/09	REVISOR	JFK/DI	AR3834

Subp. 4. **Standard 3, diverse learners.** A teacher must understand how students differ in their approaches to learning and create instructional opportunities that are adapted to students with diverse backgrounds and exceptionalities. The teacher must:

2.1

2.2

2.3

2.4

2.5

2.6

2.9

2.10

2.11

2.12

2.13

2.14

2.17

2.18

2.19

2.20

2.21

2.22

[For text of items A to O, see M.R.]

- P. bring multiple perspectives to the discussion of subject matter, including attention to a student's personal, family, and community experiences and cultural norms;
- Q. develop a learning community in which individual differences are respected; and
 - R. identify and apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
 - Subp. 5. **Standard 4, instructional strategies.** A teacher must understand and use a variety of instructional strategies to encourage student development of critical thinking, problem solving, and performance skills. The teacher must:
 - A. understand Minnesota's graduation standards and how to implement them;
- B. understand the cognitive processes associated with various kinds of learning and how these processes can be stimulated;
 - C. understand principles and techniques, along with advantages and limitations, associated with various instructional strategies;
 - D. nurture the development of student critical thinking, independent problem solving, and performance capabilities;
 - E. demonstrate flexibility and reciprocity in the teaching process as necessary for adapting instruction to student responses, ideas, and needs;

8710.2000 2

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

3.1	F. design teaching strategies and materials to achieve different instructional
3.2	purposes and to meet student needs including developmental stages, prior knowledge,
3.3	learning styles, and interests;
3.4	G. use multiple teaching and learning strategies to engage students in active
3.5	learning opportunities that promote the development of critical thinking, problem solving,
3.6	and performance capabilities and that help students assume responsibility for identifying
3.7	and using learning resources;
3.8	H. monitor and adjust strategies in response to learner feedback;
3.9	I. vary the instructional process to address the content and purposes of
3.10	instruction and the needs of students;
3.11	J. develop a variety of clear, accurate presentations and representations of
3.12	concepts, using alternative explanations to assist students' understanding and present
3.13	varied perspectives to encourage critical thinking;
3.14	K. use educational technology to broaden student knowledge about technology,
3.15	to deliver instruction to students at different levels and paces, and to stimulate advanced
	•
3.16	levels of learning; and
3.17	L. develop, implement, and evaluate lesson plans that include methods and
3.18	strategies to maximize learning that incorporate a wide variety of materials and technology
3.19	resources.
3.20	[For text of subp 6, see M.R.]
3.21	Subp. 7. Standard 6, communication. A teacher must be able to use knowledge of
3.22	effective verbal, nonverbal, and media communication techniques to foster active inquiry,

[For text of items A to J, see M.R.] 3.24

collaboration, and supportive interaction in the classroom. The teacher must:

8710.2000 3

3.22

3.23

09/01/09	REVISOR	JFK/DI	AR3834

4.1	K. use a variety of media and educational technology to enrich learning
4.2	opportunities.
4.3	Subp. 8. Standard 7, planning instruction. A teacher must be able to plan and
4.4	manage instruction based upon knowledge of subject matter, students, the community,
4.5	and curriculum goals. The teacher must:
4.6	[For text of items A to D, see M.R.]
4.7	E. design lessons and activities that operate at multiple levels to meet the
4.8	developmental and individual needs of students and to help all progress;
4.9	F. implement learning experiences that are appropriate for curriculum goals,
4.10	relevant to learners, and based on principles of effective instruction including activating
4.11	student prior knowledge, anticipating preconceptions, encouraging exploration and
4.12	problem solving, and building new skills on those previously acquired;
4.13	G. evaluate plans in relation to short-range and long-range goals, and
4.14	systematically adjust plans to meet student needs and enhance learning; and
4.15	H. plan for the management of technology resources within the context
4.16	of learning activities and develop strategies to manage student learning in a
4.17	technology-integrated environment.
4.18	Subp. 9. Standard 8, assessment. A teacher must understand and be able to
4.19	use formal and informal assessment strategies to evaluate and ensure the continuous
4.20	intellectual, social, and physical development of the student. The teacher must:
4.21	[For text of items A to D, see M.R.]
4.22	E. select, construct, and use assessment strategies, instruments, and technologies
4.23	appropriate to the learning outcomes being evaluated and to other diagnostic purposes;
4.24	[For text of items F to K, see M.R.]

8710.2000 4

09/01/09	REVISOR	IFK/DI	AR3834

5.1	L. establish and maintain student records of work and performance;
5.2	M. responsibly communicate student progress based on appropriate indicators
5.3	to students, parents or guardians, and other colleagues; and
5.4	N. use technology resources to collect and analyze data, interpret results, and
5.5	communicate findings to improve instructional practice and maximize student learning.
5.6	Subp. 10. Standard 9, reflection and professional development. A teacher must be
5.7	a reflective practitioner who continually evaluates the effects of choices and actions on
5.8	others, including students, parents, and other professionals in the learning community, and
5.9	who actively seeks out opportunities for professional growth. The teacher must:
5.10	[For text of items A to J, see M.R.]
5.11	K. understand standards of professional conduct in the Code of Ethics for
5.12	Minnesota Teachers in part 8700.7500;
5.13	L. understand the responsibility for obtaining and maintaining licensure, the
5.14	role of the teacher as a public employee, and the purpose and contributions of educational
5.15	organizations; and
5.16	M. understand the role of continuous development in technology knowledge
5.17	and skills representative of technology applications for education.
5.18	Subp. 11. Standard 10, collaboration, ethics, and relationships. A teacher must be
5.19	able to communicate and interact with parents or guardians, families, school colleagues,
5.20	and the community to support student learning and well-being. The teacher must:
5.21	[For text of items A to J, see M.R.]
5.22	K. establish productive relationships with parents and guardians in support of
5.23	student learning and well-being;
5.24	L. understand mandatory reporting laws and rules; and

8710.2000 5

09/01/09	REVISOR	JFK/DI	AR3834

M. understand the social, ethical, legal, and human issues surrounding the use of information and technology in prekindergarten through grade 12 schools and apply that understanding in practice.

Subp. 12. **Effective date.** The requirements in this part for licensure are effective on September 1, 2010, and thereafter.

8710.3000 TEACHERS OF EARLY CHILDHOOD EDUCATION.

6.1

6.2

6.3

6.4

6.5

6.6

6.7

6.8

6.9

6.10

6.11

6.12

6.13

6.14

6.15

6.16

6.17

6.18

6.19

6.20

6.21

6.22

6.23

[For text of subps 1 and 2, see M.R.]

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of early childhood education must complete a preparation program under subpart 2, item C, that must include the demonstration of the knowledge and skills in items A to M.

[For text of items A to C, see M.R.]

D. A teacher of young children in the primary grades plans, designs, and implements developmentally appropriate learning experiences. The teacher must understand:

[For text of subitems (1) to (3), see M.R.]

- (4) the central concepts and tools of inquiry for teaching language and literacy, including how to:
- (a) use teaching practices that support and enhance literacy development at all developmental levels;
- (b) use appropriate techniques for broadening the listening, speaking, reading, and writing vocabularies of primary-aged children;
 - (c) develop primary-aged children's ability to use spoken, visual, and written language to communicate with a variety of audiences for different purposes; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

7.1	(d) communicate with adult caregivers of primary-aged children about
7.2	concepts of language and literacy development and age-appropriate learning materials;
7.3	[For text of subitems (5) to (9), see M.R.]
7.4	E. A teacher of young children in the primary grades must have knowledge of
7.5	the foundations of reading processes, development, and instruction, including:
7.6	(1) oral and written language development, including:
7.7	(a) relationships among reading, writing, and oral language and the
7.8	interdependent nature of reading, writing, listening, and speaking to promote reading
7.9	proficiency;
7.10	(b) the use of formal and informal oral language and writing
7.11	opportunities across the curriculum to help students make connections between their oral
7.12	language and reading and writing, particularly English language learners; and
7.13	(c) the interrelated elements of language arts instruction that support
7.14	the reading development of English language learners, including ways in which the
7.15	writing systems of other languages may differ from English and factors and processes
7.16	involved in transferring literacy competencies from one language to another;
7.17	(2) phonological and phonemic awareness, including:
7.18	(a) the phonemes that make up the English language;
7.19	(b) the ways in which reading achievement is related to phonological
7.20	and phonemic awareness, including the ability to recognize word boundaries; to rhyme;
7.21	and to blend, segment, substitute, and delete sounds in words; and
7.22	(c) the instructional progression of phonological awareness, for
7.23	example, words, syllables, onsets and rimes, and phonemes;
7.24	(3) concepts about print, including:

09/01/09	REVISOR	JFK/DI	AR3834

8.1	(a) knowledge about how letters, words, and sentences are represented
8.2	in written English;
8.3	(b) the importance of teaching uppercase and lowercase letter
8.4	recognition and formation; and
8.5	(c) the instructional progression of the alphabetic principle;
8.6	(4) phonics and other word identification strategies and fluency, including:
8.7	(a) systematic, explicit phonics instruction that is sequenced according
8.8	to the increasing complexity of linguistic units;
8.9	(b) word identification strategies and common, irregular sight words;
8.10	(c) the stages of spelling development and systematic planning for
8.11	spelling instruction related to the stages of spelling development;
8.12	(d) how the etymology and morphology of words relate to orthographic
8.13	patterns in English; and
8.14	(e) the development of reading fluency;
8.15	(5) knowledge of how to develop vocabulary knowledge, including:
8.16	(a) understanding the critical role vocabulary knowledge plays in
8.17	reading;
8.18	(b) how to provide explicit instruction in vocabulary development and
8.19	how to determine the meaning and accurate use of unfamiliar words encountered through
8.20	listening and reading; and
8.21	(c) how to provide opportunities to engage in early and continual
8.22	language experiences to increase vocabulary by modeling and explicitly teaching student
8.23	a variety of strategies for gaining meaning from unfamiliar words;
8.24	(6) comprehension processes related to reading, including:

09/01/09	REVISOR	JFK/DI	AR3834

9.1	(a) knowledge of how proficient readers read, how to facilitate
9.2	listening comprehension, and how to develop comprehension of print material;
9.3	(b) the levels of comprehension, how to explicitly teach and provide
9.4	guided practice in comprehension skills and strategies; and
9.5	(c) how to facilitate comprehension at various stages of reading
9.6	development by selecting and using a range of texts, activities, and strategies before,
9.7	during, and after reading;
9.8	(7) content area content-area literacy, including:
9.9	(a) knowledge of reading comprehension processes necessary to
9.10	comprehend different types of informational materials and content-area texts; and
9.11	(b) the structures and features of expository (informational) texts and
9.12	effective reading strategies to address different text structures and purposes for reading;
9.13	(8) literary response and analysis, including:
9.14	(a) knowledge of how to provide frequent opportunities to listen to
9.15	and read high-quality literature for different purposes;
9.16	(b) knowledge of how to select, evaluate, and respond to literature
9.17	from a range of genres, eras, perspectives, and cultures; and
9.18	(c) knowledge of how to analyze and teach literary text structures and
9.19	elements and criticism drawing upon literature and instructional needs and interests; and
9.20	(9) structure of the English language, including:
9.21	(a) basic knowledge of English conventions and the structure of the
9.22	English language (sentence structure, grammar, punctuation, capitalization, spelling,
9.23	syntax, and semantics);

20/01/00	DELUCOD	IDIZ/DI	1 D 2 O 2 /
10/111/110			V D 1 A 1 A 1
09/01/09	REVISOR	JFK/DI	AR3834

(b) knowledge of how to enhance literacy skills including helping
students understand similarities and differences between language structures used in
spoken and written English;

10.1

10.2

10.3

10.4

10.5

10.6

10.7

10.8

10.9

10.10

10.11

10.12

10.13

10.14

10.15

10.16

10.17

10.18

10.19

10.20

10.21

10.22

10.23

- (c) basic knowledge of English syntax and semantics and the ability to use this knowledge to improve reading competence including how to help students interpret and apply English grammar and language conventions in authentic reading, writing, listening, and speaking contexts; and
- (d) knowledge of how to help students consolidate knowledge of English grammar and improve reading fluency and comprehension by providing frequent opportunities to listen to, read, and reread materials.
- F. A teacher of young children in the primary grades must have knowledge of and ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction, including:
 - (1) appropriate, motivating instruction, both explicit and implicit, in:
 - (a) oral language development;
- (2) (b) appropriate, motivating instruction, both explicit and implicit, in auditory awareness, discrimination of sounds, phonemic awareness, and word awareness;
- (3) selection, design, and use of engaging instructional strategies, activities, and materials, including multisensory techniques, to ensure that students learn concepts about print, including how to recognize and write letters;
- (4) (c) appropriate, motivating instruction, both explicit and implicit, in the teaching of phonics, sight words, spelling, and fluency, including the selection, design, and use of instructional programs, materials, texts, and activities; and

8710.3000

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

11.1	(d) applying a variety of reading comprehension strategies to different
11.2	types of informational materials and content-area texts including teaching the structures
11.3	and features of expository texts;
11.4	(2) selection, design, and use of appropriate and engaging instructional
11.5	strategies, activities, and materials, including:
11.6	(a) multigeneous techniques to ensure that students learn concents
11.6	(a) multisensory techniques to ensure that students learn concepts
11.7	about print including how to recognize and write letters;
11.8	(5) (b) selection, design, and use of appropriate and engaging instructional
11.9	materials to teach teaching vocabulary using a range of instructional activities to extend
11.10	students' understanding of words;
11.11	(6) (c) selection, design, and use and appropriate and motivating
11.12	instruction, both explicit and implicit, in the teaching of comprehension skills and
11.13	strategies, including opportunities for guided and independent work;
11.14	(7) -appropriate, motivating instruction, both explicit and implicit, in
11.15	applying a variety of reading comprehension strategies to different types of informational
11.16	materials and content-area texts, including teaching the structures and features of
11.17	expository texts;
11 10	(8) (3) selection and appropriate use of a wide range of engaging texts
11.18	
11.19	representing various genres and cultures when designing reading lessons; the ability to
11.20	facilitate and develop students' responses to literature and critical reading abilities through
11.21	high level, interactive discussions about texts;
11.22	(9) (4) selection and appropriate explicit instruction and guided practice to
11.23	teach written-language structures using a range of approaches and activities to develop the
11.24	students' facility to comprehend and use academic language;

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	J1 IX/ D1	TINGUUT

12.1	(10) (5) development of a literacy framework to coherently organize
12.2	reading programs and effectively implement lessons, including a variety of grouping
12.3	strategies, guided practice, and independent work; and
12.4	(11) (6) the ability to design purposeful lessons and tasks based on the
12.5	qualities, structures, and difficulty of texts and the reading needs of individual students,
12.6	including the selection and use of supplementary materials to support the reading
12.7	development of struggling and gifted readers.
12.8	G. A teacher of young children in the primary grades must have knowledge
12.9	of and ability to use a variety of assessment tools and practices to plan and evaluate
12.10	effective reading instruction, including:
12.11	(1) formal and informal tools to assess students':
12.12	(a) oral and written language development;
12.13	(2) (b) formal and informal tools to assess auditory awareness,
12.14	discrimination of sounds, and phonological and phonemic awareness;
12.15	(3) (c) formal and informal tools to assess understanding of concepts
12.16	about print and the alphabetic principle;
12.17	(4) (d) formal and informal tools to assess knowledge of and skills in
12.18	applying phonics and other word identification strategies, spelling strategies, and fluency
12.19	(5) (e) formal and informal tools to assess vocabulary knowledge in
12.20	relation to specific reading needs and texts;
12.21	(6) (f) formal and informal tools to assess comprehension of narrative
12.22	and expository texts and the use of comprehension strategies, including determining
12.23	independent, instructional, and frustration reading levels;
12.24	(7) (g) formal and informal tools to assess comprehension in content-area
12 25	reading.

09/01/09	REVISOR	JFK/DI	AR3834

13.1	(8) (n) formal and informal tools to assess the ability to evaluate and
13.2	respond to a range of literature and analyze text structures and elements; and
13.3	(9) (i) formal and informal tools to assess oral and written language to
13.4	determine the understanding and use of English language structures and conventions;
13.5	(10) (2) formal and informal tools to:
13.6	(a) plan, evaluate, and differentiate instruction to meet the needs of
13.7	students from various cognitive, linguistic, and cultural backgrounds; and
13.8	(11) (b) formal and informal tools to design and implement appropriate
13.9	classroom interventions for struggling readers and enrichment programs for gifted readers
13.10	(12) (3) the ability to work with reading specialists, gifted and talented
13.11	specialists, and other staff on advanced intervention and enrichment programs;
13.12	(13) (4) the ability to communicate results of assessments to specific
13.13	individuals in accurate and coherent ways that indicate how the results might impact
13.14	student achievement;
13.15	(14) (5) the ability to administer selected assessments and analyze and
13.16	use data to plan instruction through a structured clinical experience linked to university
13.17	reading course work; and
13.18	(15) (6) the ability to understand the appropriate uses of each kind of
13.19	assessment and the concepts of validity and reliability.
13.20	H. A teacher of young children in the primary grades must have the ability
13.21	to create a literate and motivating environment that fosters reading by integrating
13.22	foundational knowledge, use of instructional practices, approaches and methods,
13.23	curriculum materials, and the appropriate use of assessments, including:
13.24	(1) knowledge of how to use interests, reading abilities, and backgrounds
13.25	as foundations for the reading program and provide authentic reasons to read and write;

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	J1 IX/ D1	TINGUUT

(2) the ability to support students and colleagues in the selection or design of materials that match reading levels, interests, cultural, and linguistic backgrounds;

14.1

14.2

14.3

14.4

14.5

14.6

14.7

14.8

14.9

14.10

14.11

14.12

14.13

14.14

14.15

14.16

14.17

14.18

14.19

14.20

14.21

14.22

14.23

14.24

- (3) the development and implementation of classroom and schoolwide organizational structures that include explicit instruction, guided practice, independent reading, interactive talk, opportunities for response, and reading and writing across the curriculum:
- (4) the ability to create and maintain a motivating classroom and school environment and teacher and student interactions that promote ongoing engagement and literacy for all students;
 - (5) the ability to foster independence and self-efficacy in readers;
- (6) the development of independent reading by encouraging and guiding students in selecting independent reading materials, promoting extensive independent reading by providing daily opportunities for self-selected reading and frequent opportunities for sharing what is read; and motivating students to read independently by regularly reading aloud and providing access to a variety of reading materials; and
- (7) the use of a variety of strategies to motivate students to read at home; encourage and provide support for parents or guardians to read to their children, in English or in the primary languages of English language learners; and to use additional strategies to promote literacy in the home.
- I. A teacher of young children in the primary grades must demonstrate a view of professional development as a career-long effort and responsibility, including:
- (1) exhibiting a particular stance towards professional development.

 Beginning teachers view learning about reading processes and reading development, and becoming more proficient as a teacher of reading, as a career-long effort and responsibility;

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

(2) displaying positive dispositions toward the act of reading and the
teaching of reading, including a belief that all students can learn to read regardless of
cognitive, cultural, or linguistic backgrounds;

15.1

15.2

15.3

15.4

15.5

15.6

15.7

15.8

15.9

15.10

15.11

15.12

15 13

15.14

15.15

15.16

15.17

15.18

15.19

15.20

15.21

15.22

15.23

15.24

- (3) providing support for reading development by communicating regularly with parents or caregivers and eliciting support in reading development;
- (4) understanding how to provide instructions for paraprofessionals and volunteers working in the classroom to ensure that these individuals provide effective supplementary reading instruction;
- (5) engaging in personal learning as a daily and long-term goal to inform instructional practices, including reflection on practices, to improve daily instructional decisions and interactions with students; and
 - (6) collaborate with other professionals on literacy learning initiatives.
- J. A teacher of young children establishes and maintains positive, collaborative relationships with families. The teacher must understand:
- (1) the need to respect families' choices and goals for their children and the need to communicate with families about curriculum and their children's progress;
- (2) the need to be sensitive to differences in family structures and social and cultural backgrounds;
- (3) theories of families and dynamics, roles, and relationships within families and between families and communities;
- (4) how to support families in assessing educational options and in making decisions related to child development and parenting; and
- (5) how to link families with a range of family-oriented services based on identified resources, priorities, and concerns.

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

K. A teacher of young children uses informal and formal assessment and evaluation strategies to plan and individualize curriculum and teaching practices. The teacher must understand:

16.1

16.2

16.3

16.4

16.5

16.6

16.7

16.8

16.9

16.10

16.11

16.12

16.13

16.14

16.15

16.16

16.17

16.18

16.19

16.20

16.21

16.22

16.23

16.24

16.25

- (1) observing, recording, and assessing young children's development and learning and engage children in self-assessment;
- (2) using information gained by observation of family dynamics and relationships to support the child's learning;
- (3) using assessment results to identify needs and learning styles and to plan appropriate programs, environments, and interactions; and
- (4) developing and using formative and summative program evaluation instruments to enhance and maintain comprehensive program quality for children, families, and the community.
- L. A teacher of young children understands historical and contemporary development of early childhood education. The teacher must understand:
- (1) the multiple historical, philosophical, and social foundations of early childhood education and how these foundations influence current thought and practice; and
- (2) the effects of societal conditions on children and families, and current issues and trends, legal issues, and legislation and other public policies affecting children, families, and programs for young children and the early childhood profession.
- M. The teacher of young children applies effective teaching practices for teaching young children through a variety of early and ongoing clinical experiences with infant and toddler, preprimary-aged, and primary-aged children within a range of educational programming models.
- Subp. 4. **Continuing licensure.** A continuing license shall be issued and renewed according to the Board of Teaching rules governing continuing licensure.

09/01/09	REVISOR	JFK/DI	AR3834

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of early childhood education are effective on September 1, 2010, and thereafter.

8710.3200 TEACHERS OF ELEMENTARY EDUCATION.

17.1

17.2

17.3

17.8

17.9

17.12

17.13

17.14

17.15

17.16

17.17

17.18

17 21

17.22

17.23

17.24

- Subpart 1. **Scope of practice.** The teacher of elementary education is authorized to teach all subjects to children in kindergarten through grade 6.
- 17.6 Subp. 2. **Licensure requirements.** A candidate for licensure to teach elementary students in kindergarten through grade 6 shall:
 - A. hold a baccalaureate degree from a college or university that is accredited by the regional association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers listed in part 8710.2000; and
 - C. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of elementary education in kindergarten through grade 6 in subpart 3.
 - Subp. 3. **Subject matter standards, elementary education.** A candidate must complete a preparation program for licensure under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to L.
 - A. A teacher of children in kindergarten through grade 6 must:
- 17.19 (1) understand and apply the research base for and the best practices of kindergarten and elementary level education;
 - (2) understand and apply educational principles relevant to physical, social, emotional, moral, and cognitive development of young children;
 - (3) understand and apply the concepts of "belonging" and "family connectedness" as crucial to the development of young children;

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

18.18

18.19

18.20

18.21

18.22

18.23

18.24

18.25

	09/01/09			REVISOR	J	FK/DI	AR383
18.1	(4)	understand a	and apply th	he process and	necessity o	f collaboration	n with
18.2	families and c	other adults in	support of	f the learning of	f young chi	ldren;	
18.3	(5)	understand l	now to inte	grate curriculu	m across su	ıbject areas in	1
18.4	developmenta	lly appropria	te ways;				
18.5	(6)	apply the sta	andards of	effective practi	ce in teach	ing students in	n
18.6	kindergarten t	hrough grade	6 through	a variety of ear	ly and ongo	oing clinical e	xperiences
18.7	with kinderga	rten, primary	, and interr	nediate students	s within a r	ange of educa	ıtional
18.8	programming	models; and					
18.9	(7)	apply the sta	andards of	effective practi	ce in teach	ing students in	n
18.10	kindergarten t	hrough grade	e 6 through	a minimum of	ten weeks	of full-time st	udent
18.11	teaching.						
18.12	B. At	eacher of chi	ldren in kii	ndergarten thro	ugh grade 6	must demon	strate
18.13	the knowledge	e of fundame	ntal concep	ots of communic	cation arts	and literature	and the
18.14	connections b	etween them.	The teach	er must:			
18.15	(1)	develop the	skills and u	inderstanding to	teach reac	ling, writing,	speaking,
18.16	listening, med	lia literacy, ar	nd literatur	e;			
18.17	(2)	understand a	and apply to	eaching method	ls related to	the developm	nental

- (2) understand and apply teaching methods related to the developmental stages of language;
- (3) use a variety of developmentally appropriate techniques for augmenting the listening, speaking, reading, and writing vocabularies of children;
 - (4) know how to integrate the communication arts;
- (5) develop children's use of a process to write competently with confidence, accuracy, and imagination appropriate to the purpose and audience;
- (6) develop children's ability to use written, spoken, and visual language to communicate effectively with a variety of audiences and for different purposes;

8710.3200 18

09/01/09	REVISOR	JFK/DI	AR3834

19.1	(7) know children's and young adolescents' literature representing a variety
19.2	of genre; and
19.3	(8) know how to use books and other printed sources to develop children's
19.4	personal growth and lifelong learning.
19.5	C. A teacher of young children in the primary grades kindergarten through
19.6	grade 6 must have knowledge of the foundations of reading processes, development,
19.7	and instruction, including:
19.8	(1) oral and written language development, including:
19.9	(a) relationships among reading, writing, and oral language and the
19.10	interdependent nature of reading, writing, listening, and speaking to promote reading
19.11	proficiency;
19.12	(b) the use of formal and informal oral language and writing
19.13	opportunities across the curriculum to help students make connections between oral
19.14	language and reading and writing, particularly English language learners; and
19.15	(c) the interrelated elements of language arts instruction that support
19.16	the reading development of English language learners, including ways in which the
19.17	writing systems of other languages may differ from English and factors and processes
19.18	involved in transferring literacy competencies from one language to another.
19.19	(2) phonological and phonemic awareness, including:
19.20	(a) the phonemes that make up the English language;
19.21	(b) the ways in which reading achievement is related to phonological
19.22	and phonemic awareness, including the ability to recognize word boundaries, to rhyme
19.23	and to blend, segment, substitute, and delete sounds in words; and
19.24	(c) the instructional progression of phonological awareness, for
19.25	example, words, syllables, onsets and rimes, and phonemes;

09/01/09	REVISOR	IFK/DI	AR3834

20.1	(3) concepts about print, including:
20.2	(a) knowledge about how letters, words, and sentences are represented
20.3	in written English;
20.4	(b) the importance of teaching uppercase and lowercase letter
20.5	recognition and formation; and
20.6	(c) the instructional progression of the alphabetic principle;
20.7	(4) phonics and other word identification strategies and fluency, including:
20.8	(a) systematic, explicit phonics instruction that is sequenced according
20.9	to the increasing complexity of linguistic units;
20.10	(b) word identification strategies and common, irregular sight words;
20.11	(c) the stages of spelling development and systematic planning for
20.12	spelling instruction related to the stages of spelling development;
20.13	(d) how the etymology and morphology of words relate to orthographic
20.14	patterns in English; and
20.15	(e) the development of reading fluency;
20.16	(5) knowledge of how to develop vocabulary knowledge, including:
20.17	(a) understanding the critical role vocabulary knowledge plays in
20.18	reading;
20.19	(b) how to provide explicit instruction in vocabulary development and
20.20	in determining the meaning and accurate use of unfamiliar words encountered through
20.21	listening and reading; and
20.22	(c) how to provide opportunities for students to engage in early
20.23	and continual language experiences to increase vocabulary by modeling and explicitly
20.24	teaching students a variety of strategies for gaining meaning from unfamiliar words;

09/01/09	REVISOR	JFK/DI	AR3834

21.1	(6) comprehension processes related to reading, including:
21.2	(a) knowledge of how proficient readers read, how to facilitate
21.3	listening comprehension, and how to develop comprehension of print material;
21.4	(b) the levels of comprehension, how to explicitly teach and provide
21.5	guided practice in comprehension skills and strategies; and
21.6	(c) how to facilitate comprehension at various stages of reading
21.7	development by selecting and using a range of texts, activities, and strategies before,
21.8	during, and after reading;
21.9	(7) content-area literacy, including:
21.10	(a) knowledge of reading comprehension processes necessary to
21.11	comprehend different types of informational materials and content-area texts; and
21.12	(b) the structures and features of expository (informational) texts and
21.13	effective reading strategies to address different text structures and purposes for reading;
21.14	(8) literary response and analysis, including:
21.15	(a) knowledge of how to provide frequent opportunities to listen to
21.16	and read high-quality literature for different purposes;
21.17	(b) knowledge of how to select, evaluate, and respond to literature
21.18	from a range of genres, eras, perspectives, and cultures; and
21.19	(c) knowledge of how to analyze and teach literary text structures and
21.20	elements and criticism, drawing upon literature and instructional needs and interests;
21.21	(9) structure of the English language, including:
21.22	(a) basic knowledge of English conventions and the structure of the
21.23	English language (sentence structure, grammar, punctuation, capitalization, spelling,
21.24	syntax, and semantics);

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

22.1	(b) knowledge of how to enhance literacy skills including helping
22.2	students understand similarities and differences between language structures used in
22.3	spoken and written English;
22.4	(c) basic knowledge of English syntax and semantics and the ability
22.5	to use this knowledge to improve reading competence, including how to help students
22.6	interpret and apply English grammar and language conventions in authentic reading,
22.7	writing, listening, and speaking contexts; and
22.8	(d) knowledge of how to help students consolidate knowledge of
22.9	English grammar and improve reading fluency and comprehension by providing frequent
22.10	opportunities to listen to, read, and reread materials.
22.11	D. A candidate for licensure as a teacher of elementary education children in
22.12	kindergarten through grade 6 must have knowledge of and ability to use a wide range of
	
22.13	instructional practices, approaches, methods, and curriculum materials to support reading
22.14	instruction, including:
22.15	(1) appropriate, motivating instruction, both explicit and implicit, in:
22.16	(a) oral language development;
22.17	(2) (b) appropriate, motivating instruction, both explicit and implicit, in
22.18	auditory awareness, discrimination of sounds, phonemic awareness, and word awareness;
22.19	(3) -selection, design, and use of engaging instructional strategies, activities,
22.20	and materials, including multisensory techniques, to ensure that students learn concepts
22.21	about print, including how to recognize and write letters;
22.22	(4) (c) appropriate, motivating instruction, both explicit and implicit, in
22.23	the teaching of phonics, sight words, spelling, and fluency, including the selection, design
12.23	the teaching of phomes, sight words, spennig, and fluency, including the selection, design

22.24

and use of instructional programs, materials, texts, and activities; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

23.1	(d) applying a variety of reading comprehension strategies to different
23.2	types of informational materials and content-area texts including teaching the structures
23.3	and features of expository texts;
22.4	(2) salaation design and use of appropriate and approximational
23.4	(2) selection, design, and use of appropriate and engaging instructional
23.5	strategies, activities, and materials, including:
23.6	(a) multisensory techniques to ensure that students learn concepts
23.7	about print including how to recognize and write letters;
23.8	(5) (b) selection, design, and use of appropriate and engaging instructional
23.9	materials to teach teaching vocabulary, using a range of instructional activities to extend
23.10	students' understanding of words; and
23.11	(6) (c) selection, design, and use of appropriate and motivating instruction,
23.12	both explicit and implicit, in the teaching of comprehension skills and strategies, including
23.13	opportunities for guided and independent work;
23.14	(7) -appropriate, motivating instruction, both explicit and implicit, in
23.15	applying a variety of reading comprehension strategies to different types of informational
23.16	materials and content-area texts, including teaching the structures and features of
23.17	expository texts;
23.18	(8) (3) selection and appropriate use of a wide range of engaging texts
23.19	representing various genres and cultures when designing reading lessons; the ability to
23.20	facilitate and develop <u>students'</u> responses to literature and critical reading abilities through
23.21	high level, interactive discussions about texts;
23.22	(9) (4) selection and appropriate explicit instruction and guided practice to
23.23	teach written-language structures using a range of approaches and activities to develop
23.24	students' facility in comprehending and using academic language;

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	JI IX/DI	TINGUUT

24.1	(10) (5) development of a literacy framework to coherently organize
24.2	reading programs and effectively implement lessons, including a variety of grouping
24.3	strategies, guided practice, and independent work; and
24.4	(11) (6) the ability to design purposeful lessons and tasks based on the
24.5	qualities, structures, and difficulty of texts and the reading needs of individuals, including
24.6	the selection and use of supplementary materials to support the reading development
24.7	of struggling and gifted readers.
24.8	E. A candidate for licensure as a teacher of elementary education children in
24.9	kindergarten through grade 6 must have knowledge of and ability to use a variety of
24.10	assessment tools and practices to plan and evaluate effective reading instruction, including
24.11	(1) formal and informal tools to assess students':
24.12	(a) oral and written language development;
24.13	(2) (b) formal and informal tools to assess auditory awareness,
24.14	discrimination of sounds, and phonological and phonemic awareness;
24.15	(3) (c) formal and informal tools to assess understanding of concepts
24.16	about print and the alphabetic principle;
24.17	(4) (d) formal and informal tools to assess knowledge of and skills in
24.18	applying phonics and other word identification strategies, spelling strategies, and fluency;
24.19	(5) (e) formal and informal tools to assess vocabulary knowledge in
24.20	relation to specific reading needs and texts;
24.21	(6) (f) formal and informal tools to assess comprehension of narrative
24.22	and expository texts and the use of comprehension strategies, including determining
24.23	independent, instructional, and frustration reading levels;
24.24	(7) (g) formal and informal tools to assess comprehension in content
24.25	area reading;

09/01/09	REVISOR	JFK/DI	AR3834

25.1	(8) (h) formal and informal tools to assess the ability to evaluate and
25.2	respond to a range of literature and analyze text structures and elements; and
25.3	(9) (i) formal and informal tools to assess oral and written language to
25.4	determine understanding and use of English language structures and conventions;
25.5	(10) (2) formal and informal tools to:
25.6	(a) plan, evaluate, and differentiate instruction to meet the needs of
25.7	students from various cognitive, linguistic, and cultural backgrounds; and
25.8	(11) (b) formal and informal tools to design and implement appropriate
25.9	classroom interventions for struggling readers and enrichment programs for gifted readers;
25.10	(12) (3) the ability to work with reading specialists, gifted and talented
25.11	specialists, and other staff on advanced intervention and enrichment programs;
25.12	(13) (4) the ability to communicate results of assessments to specific
25.13	individuals in accurate and coherent ways that indicate how the results might impact
25.14	student achievement;
25.15	(14) (5) the ability to administer selected assessments and analyze and
25.16	use data to plan instruction through a structured clinical experience linked to university
25.17	reading course work; and
25.18	(15) (6) the ability to understand the appropriate uses of each kind of
25.19	assessment and the concepts of validity and reliability.
25.20	F. A eandidate for licensure as a teacher of elementary education children in
25.21	kindergarten through grade 6 must have the ability to create a literate and motivating
25.22	environment that fosters reading by integrating foundational knowledge, use of
25.23	instructional practices, approaches and methods, curriculum materials, and the appropriate
25.24	use of assessments, including:

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

(1) knowledge of how to use interests, reading abilities, and backgrounds as foundations for the reading program and provide authentic reasons to read and write;

26.1

26.2

26.3

26.4

26.5

26.6

26.7

26.8

26.9

26.10

26.11

26.12

26.13

26.14

26.15

26.16

26.17

26.18

26.19

26.20

26.21

26.22

26.23

26.24

- (2) the ability to support students and colleagues in the selection or design of materials that match reading levels, interests, cultural, and linguistic backgrounds;
- (3) the development and implementation of classroom and schoolwide organizational structures that include explicit instruction, guided practice, independent reading, interactive talk, opportunities for response, and reading and writing across the curriculum;
- (4) the ability to create and maintain a motivating classroom and school environment and teacher and student interactions that promote ongoing student engagement and literacy for students;
 - (5) the ability to foster independence and self-efficacy in readers;
- (6) the development of independent reading by encouraging and guiding students in selecting independent reading materials, promoting extensive independent reading by providing daily opportunities for self-selected reading and frequent opportunities for sharing what is read; and motivating students to read independently by regularly reading aloud and providing access to a variety of reading materials; and
- (7) the use of a variety of strategies to motivate students to read at home; encourage and provide support for parents or guardians to read to their children, in English or in the primary languages of English language learners; and to use additional strategies to promote literacy in the home.
- G. A candidate for licensure as a teacher of elementary education children in kindergarten through grade 6 must demonstrate a view of professional development as a career-long effort and responsibility. The candidate must:

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

(1) exhibit a particular stance towards professional development. A beginning teacher must view learning about reading processes and student reading development, and becoming more proficient as a teacher of reading, as a career-long effort and responsibility;

27.1

27.2

27.3

27.4

27.5

27.6

27.7

27.8

27.9

27.10

27.11

27.12

27.13

27.14

27.15

27.16

27.17

27.18

27.19

27.20

27.21

27.22

27.23

27.24

27.25

- (2) display positive dispositions toward the act of reading and the teaching of reading, including a belief that students can learn to read regardless of cognitive, cultural, or linguistic backgrounds;
- (3) provide support for reading development by communicating regularly with parents or caregivers and eliciting their support in a student's reading development;
- (4) understand how to provide instructions for paraprofessionals and volunteers working in the classroom to ensure that these individuals provide effective supplementary reading instruction;
- (5) engage in personal learning as a daily and long-term goal to inform instructional practices, including reflection on practices to improve daily instructional decisions and interactions with students; and
 - (6) collaborate with other professionals on literacy learning initiatives.
- H. A teacher of children in kindergarten through grade 6 must demonstrate knowledge of fundamental concepts of mathematics and the connections between them. The teacher must know and apply:
- (1) concepts of mathematical patterns, relations, and functions, including the importance of number and geometric patterns in mathematics and the importance of the educational link between primary school activities with patterns and the later conceptual development of important ideas related to functions and be able to:
 - (a) identify and justify observed patterns;
 - (b) generate patterns to demonstrate a variety of relationships; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

28.1	(c) relate patterns in one strand of mathematics to patterns across
28.2	the discipline;
28.3	(2) concepts and techniques of discrete mathematics and how to use them
28.4	to solve problems from areas including graph theory, combinatorics, and recursion and
28.5	know how to:
28.6	(a) help students investigate situations that involve counting finite
28.7	sets, calculating probabilities, tracing paths in network graphs, and analyzing iterative
28.8	procedures; and
28.9	(b) apply these ideas and methods in settings as diverse as the
28.10	mathematics of finance, population dynamics, and optimal planning;
28.11	(3) concepts of numerical literacy:
28.12	(a) possess number sense and be able to use numbers to quantify
28.13	concepts in the students' world;
28.14	(b) understand a variety of computational procedures and how to use
28.15	them in examining the reasonableness of the students' answers;
28.16	(c) understand the concepts of number theory including divisibility,
28.17	factors, multiples, and prime numbers, and know how to provide a basis for exploring
28.18	number relationships; and
28.19	(d) understand the relationships of integers and their properties that
28.20	can be explored and generalized to other mathematical domains;
28.21	(4) concepts of space and shape:
28.22	(a) understand the properties and relationships of geometric figures;
28.23	(b) understand geometry and measurement from both abstract and
28.24	concrete perspectives and identify real world applications; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

29.1	(c) know how to use geometric learning tools such as geoboards,
29.2	compass and straight edge, ruler and protractor, patty paper, reflection tools, spheres,
29.3	and platonic solids;
29.4	(5) data investigations:
29.5	(a) use a variety of conceptual and procedural tools for collecting,
29.6	organizing, and reasoning about data;
29.7	(b) apply numerical and graphical techniques for representing and
29.8	summarizing data;
29.9	(c) interpret and draw inferences from data and make decisions in a
29.10	wide range of applied problem situations; and
29.11	(d) help students understand quantitative and qualitative approaches to
29.12	answering questions and develop students' abilities to communicate mathematically;
29.13	(6) concepts of randomness and uncertainty:
29.14	(a) probability as a way of describing chance in simple and compound
29.15	events; and
29.16	(b) the role of randomness and sampling in experimental studies;
29.17	(7) mathematical processes:
29.18	(a) know how to reason mathematically, solve problems, and
29.19	communicate mathematics effectively at different levels of formality;
29.20	(b) understand the connections among mathematical concepts and
29.21	procedures, as well as their application to the real world;
29.22	(c) understand the relationship between mathematics and other fields;
29.23	and

09/01/09	REVISOR	JFK/DI	AR3834

30.1	(d) understand and apply problem solving, reasoning, communication,
30.2	and connections; and
30.3	(8) mathematical perspectives:
30.4	(a) understand the history of mathematics and the interaction between
30.5	different cultures and mathematics; and
30.6	(b) know how to integrate technological and nontechnological tools
30.7	with mathematics.
30.8	I. A teacher of children in kindergarten through grade 6 must demonstrate
30.9	knowledge of fundamental social studies concepts and the connections among them.
30.10	The teacher must know and apply:
30.11	(1) tools of inquiry and problem solving;
30.12	(2) concepts of:
30.13	(a) culture and cultural diversity;
30.14	(b) the ways human beings view themselves in and over time;
30.15	(c) the interaction between people, places, and environments;
30.16	(d) individual development and identity;
30.17	(e) interactions among individuals, groups, and institutions;
30.18	(f) how people create and change structures of power and authority
30.19	and of governance;
30.20	(g) how people organize for the production, distribution, and
30.21	consumption of goods and services and how those choices impact the environment;
30.22	(h) the relationships among science, technology, and society;
30.23	(i) global connections and independence; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

31.1	(j) the ideals, principles, and practices that promote productive
31.2	community involvement;
31.3	(3) history, government, and culture of Minnesota-based American Indian
31.4	tribes as integrating concepts throughout the elementary curriculum; and
31.5	(4) the environment as an integrating concept through understanding of
31.6	how to use the sciences, social sciences, mathematics, arts, and communications in the
31.7	exploration of environmental issues and topics.
31.8	J. A teacher of children in kindergarten through grade 6 must demonstrate
31.9	a fundamental knowledge of scientific perspectives, scientific connections, science in
31.10	personal and social perspectives, the domains of science, and the methods and materials
31.11	for teaching science and scientific inquiry. The teacher must:
31.12	(1) understand science as a human endeavor, the nature of scientific
31.13	knowledge, and the historical perspective of science;
31.14	(2) know and apply the understandings and abilities of scientific inquiry
31.15	including the ability to:
31.16	(a) identify questions and concepts that can be explored through
31.17	scientific inquiry;
31.18	(b) design and conduct scientific investigations;
31.19	(c) use appropriate scientific instrumentation and equipment and
31.20	mathematics as tools to improve scientific investigations and communications;
31.21	(d) compare the use of multiple types of inquiry for answering
31.22	questions;
31.23	(e) evaluate alternative explanations and models based on evidence,
31.24	current scientific understanding, and logic; and

09/01/09	REVISOR	JFK/DI	AR3834

(f)	communicate	and	defend	ล	scientific	aroument.
111	Communicate	anu	uciciiu	а	SCICITUITC	argument.

32.1

32.2

32.3

32.4

32.5

32.6

32.7

32.8

32.9

32.10

32.11

32.12

32.13

32.14

32.15

32.16

32.17

32.18

32.19

32.20

32.21

32.22

32.23

32.24

- (3) know how to make connections across the domains of science, between science and technology, and between science and other school subjects;
- (4) use scientific understandings and abilities when making decisions about personal and societal issues;
- (5) know and apply the fundamental concepts and principles of physical science concerning properties of and changes in matter; position, motion, and force; light, heat, electricity, and magnetism; and kinds of and ways to transfer energy;
- (6) know and apply the fundamental concepts and principles of life science concerning the characteristics of organisms, the life cycle of organisms, the interrelationships of organisms and environments, structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems and their interrelationships, and diversity and adaptations of organisms;
- (7) know and apply the fundamental concepts and principles of earth and space science concerning properties of earth materials; objects in the sky; changes in earth and sky; structure of the earth system, including hydrosphere, biosphere, atmosphere, and lithosphere; history of the earth; and earth in the solar system; and
- (8) know and apply pedagogy and classroom management in science and scientific inquiry including understanding:
- (a) content standards under chapter 3501 for recommendations regarding curriculum, instruction, assessment, professional development, and program development;
- (b) how to teach scientific inquiry in a developmentally appropriate manner;

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

33.1	(c) common student misconceptions in science and developmentally
33.2	appropriate strategies to elicit students' misconceptions and help them move to accepted
33.3	scientific understandings; and
33.4	(d) how to implement safe environments for learning science through
33.5	knowing:
33.6	i. state and national legal responsibilities and safety guidelines
33.7	for teaching science;
33.8	ii. how to establish and enforce recognized safety procedures
33.9	during the science learning experience;
33.10	iii. how to use required safety equipment for classroom, field,
33.11	and laboratory settings including goggles, fire extinguisher, fire blanket, eye wash, and
33.12	chemical shower;
33.13	iv. how to manage, maintain, and utilize science supplies and
33.14	equipment;
33.15	v. state and national guidelines and plan for the care, storage, use,
33.16	and disposal of chemicals and equipment used to teach science;
33.17	vi. the ethics of and restrictions on making and maintaining
33.18	collections of scientific specimens and data; and
33.19	vii. the ethics of and restrictions on the use of live organisms, and
33.20	how to acquire, care, handle, and dispose of organisms.
33.21	K. A teacher of children in kindergarten through grade 6 must demonstrate
33.22	knowledge of fundamental physical education and health concepts and the connections
33.23	among them. The teacher must:

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

34.1	(1) understand the knowledge needed for providing learning experiences
34.2	that encourage personal and community health promotion, disease prevention and safety,
34.3	and proper nutritional choices;
34.4	(2) understand strategies for reducing and preventing accidents; drug,
34.5	alcohol, and tobacco use; and high-risk situations and relationships;
34.6	(3) understand and apply movement concepts and principles to the learning
34.7	and development of motor skills; and
34.8	(4) understand the knowledge needed for providing learning experiences
34.9	that develop a health-enhancing level of physical fitness.
34.10	L. A teacher of children in kindergarten through grade 6 must demonstrate
34.11	knowledge of fundamental visual and performing arts, including music, dance, and theater
34.12	concepts and the connections among them. The teacher must:
34.13	(1) understand the basic structural elements, principles, and vocabulary of
34.14	the visual and performing arts;
34.15	(2) be able to perform and create using the basic elements and processes of
34.16	visual and performing arts;
34.17	(3) know and apply within the elementary curriculum strategies for
34.18	nurturing artistic modes of expression and thinking;
34.19	(4) understand the role of visual and performing arts in culture; and
34.20	(5) know the characteristics of children's developmental stages in the
34.21	visual and performing arts.
34.22	Subp. 4. [See repealer.]
34.23	Subp. 5. Continuing licensure. A continuing license shall be issued and renewed

according to the rules of the Board of Teaching governing continuing licensure.

8710.3200 34

34.24

09/01/09	REVISOR	JFK/DI	AR3834

Subp. 6. **Effective date.** The requirements of this part for licensure as a teacher of elementary education with a specialty are effective on September 1, 2010, and thereafter.

35.1

35.2

353

35.4

35.5

35.6

35.7

35.8

35.9

35.10

35.11

35.12

35.13

35.14

35.15

35.16

35.17

35 18

35.19

35.20

35.21

35.22

35.23

35.24

35.25

8710.3310 MIDDLE LEVEL ENDORSEMENT LICENSE FOR TEACHERS OF COMMUNICATION ARTS AND LITERATURE.

- Subpart 1. **Scope of practice.** A teacher of communication arts and literature with a middle level endorsement license is authorized to teach students in grades 5 through 8 in any school organizational pattern.
- Subp. 2. **Licensure requirements.** A candidate for licensure as a middle level teacher of communication arts and literature shall:
- A. hold one or more of the following classroom teaching licenses granted by the Board of Teaching: a life license; a current nonvocational entrance, nonrenewable, or professional license; or a current entrance or continuing secondary vocational license based on a degree program in agriculture education, business education, consumer homemaking and family life education, industrial education, or marketing education;
- B. show verification of completing a preparation program approved under part 8700.7600 leading to licensure in middle level teaching of communication arts and literature for grades 5 through 8 in subpart 3; and
- C. demonstrate completion of the equivalent of a college minor in communication arts and literature.
- Subp. 3. **Subject matter standards.** A candidate for licensure as a middle level teacher of communication arts and literature must complete a preparation program under subpart 2, items B and C, that includes the candidate's demonstration of the knowledge and skills in items A to D.
- A. A teacher of middle level students understands the nature of early adolescence and the needs of young adolescents. The teacher must understand and apply:

8710.3310 35

09/01/09	REVISOR	IFK/DI	AR3834

36.1	(1) the research base for and best practices of middle level education;
36.2	(2) the educational principles relevant to the physical, social, emotional,
36.3	moral, and cognitive development of young adolescents;
36.4	(3) the concepts of "belonging" and "family connectedness" as crucial to
36.5	the development of young adolescents; and
36.6	(4) the process and necessity of collaboration with families and other adults
36.7	in support of the learning of young adolescents.
36.8	B. A teacher of middle level students understands the teaching of an academic
36.9	subject area that integrates understanding of the academic content with the teacher's
36.10	understanding of pedagogy, students, learning, classroom management, and professional
36.11	development. The teacher of middle level students in grades 5 through 8 must:
36.12	(1) develop curriculum goals and purposes based on the central concepts of
36.13	the academic specialty and know how to apply instructional strategies and materials that
36.14	are appropriate for middle level students and are specific to the academic content area;
36.15	(2) understand how to integrate curriculum across subject areas in
36.16	developmentally appropriate ways;
36.17	(3) understand the role and alignment of district, school, and department
36.18	mission and goals in program planning;
36.19	(4) understand the need for and how to connect student's schooling
36.20	experiences with everyday life, the workplace, and further educational opportunities;
36.21	(5) know how to involve representatives of business, industry, and
36.22	community organizations as active partners in creating educational opportunities;

(6) understand the role and purpose of cocurricular and extracurricular

8710.3310 36

activities in the teaching and learning process;

36.23

36.24

09/01/09 REVISOR JFK/DI AR3834

(7) understand the impact of reading ability on student achievement in the academic specialty, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read the academic specialty content more effectively; and

37.1

37.2

37.3

37.4

37.5

37.6

37.7

37.8

37.9

37.10

37.11

37.12

37.13

37.14

37.15

37.16

37.17

37.18

37.19

37.20

37.21

37.22

37.23

37.24

- (8) apply the standards of effective practice in teaching students in this academic subject through a variety of early and ongoing clinical experiences with middle level students within a range of educational programming models and by completing a minimum of a four-week student teaching experience. Candidates for licensure who hold a license at the elementary level must complete the student teaching experience with students in grade 7 or 8. Candidates for licensure who hold a license at the secondary level must complete the student teaching experience with students in grade 5 or 6.
- C. A teacher with a middle level endorsement for teaching communication arts and literature in grades 5 through 8 must demonstrate knowledge of fundamental concepts of communication arts and literature and the connections among them. The teacher must:
- (1) understand the literacy needs of young adolescents encompassing the need to comprehend narrative and technical writing; the need to successfully access available databases; the need to write at an interactive level, including a variety of personal formats; and the ability to interact on all cognitive levels through writing;
- (2) understand the importance of building student schema and metacognition in comprehending new information at higher levels of thinking;
- (3) possess the strategies and skills necessary to teach young adolescents how to use content area text structure as an aid to comprehension;
- (4) possess the ability to use authentic assessment practices for the evaluation of young adolescents' development in literacy skills;

8710.3310 37

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

38.1	(5) possess the strategies and skills necessary to expand the vocabulary
38.2	acquisition strategies of young adolescents as they grow in their literacy behaviors; and
38.3	(6) possess the strategies and skills necessary to develop the reading and
38.4	writing behaviors of young adolescents across a breadth of content areas.
38.5	D. A teacher with a middle level endorsement for teaching communication arts
38.6	and literature in grades 5 through 8 must demonstrate understanding and skills essential
38.7	to the teaching and learning of reading, writing, speaking, listening, media literacy, and
38.8	literature. The teacher must demonstrate the:
38.9	(1) knowledge of reading processes and instruction, including:
38.10	(a) orthographic knowledge and morphological relationships within
38.11	words;
38.12	(b) the relation between word recognition and vocabulary knowledge,
38.13	fluency, and comprehension in understanding text and content materials;
38.14	(c) the importance of direct and indirect vocabulary instruction that
38.15	leads to enhanced general and domain-specific domain-specific word knowledge;
38.16	(d) the relationships between and among comprehension processes
38.17	related to print processing abilities, motivation, reader's interest, background knowledge,
38.18	cognitive abilities, knowledge of academic discourse, and print and digital text; and
38.19	(e) the development of academic language and its impact on learning
38.20	and school success;
38.21	(2) ability to use a wide range of instructional practices, approaches,
38.22	methods, and curriculum materials to support reading instruction, including:
38.23	(a) the appropriate applications of a variety of instructional
38.24	frameworks that are effective in meeting the needs of readers of varying proficiency levels

8710.3310 38

and linguistic backgrounds in secondary settings;

09/01/09	REVISOR	JFK/DI	AR3834

39.1	(b) the ability to scaffold instruction for students who experience
39.2	comprehension difficulties;
39.3	(c) the ability to develop and implement effective vocabulary strategies
39.4	that help students understand words, including domain-specific content words;
39.5	(d) the ability to identify instructional practices, approaches, and
39.6	methods, and match materials, print and digital, to the cognitive levels of readers, guided
39.7	by an evidence-based rationale, which support the developmental, cultural, and linguistic
39.8	differences of readers;
39.9	(e) implementation of a variety of grouping strategies that include
39.10	individual, small group, and whole group reading experiences that promote enhanced
39.11	comprehension of text; and
39.12	(f) the ability to plan instruction and select strategies that help students
39.13	read and understand language, arts, and texts, and spur student interest in more complex
39.14	reading materials, including the ability to help students:
39.15	i. distinguish fact from opinion and the words that signal opinions
39.16	and judgments in persuasive texts;
39.17	ii. think critically: draw inferences or conclusions from facts,
39.18	analyze author's purpose and point of view, evaluate author's argument and evidence, and
39.19	synthesize information from more than one text; and
39.20	iii. use aids such as glossaries and appendixes that pertain to
39.21	reading, writing, and English language conventions;
39.22	(3) use of a variety of assessment practices to evaluate effective reading:
39.23	(a) understand the measurement systems and proper interpretation of
39.24	assessment tools that determine individual student's reading level, fluency, comprehension

8710.3310 39

abilities, and reading interests;

09/01/09	REVISOR	JFK/DI	AR3834

40.1	(b) use of data to set goals and objectives, make effective instructional
40.2	decisions, and demonstrate responsiveness to student needs; and
40.3	(c) the ability to communicate results of assessments to specific
40.4	individuals in accurate and coherent ways that indicate how the results might impact
40.5	student achievement.
40.6	Subp. 4. Professional license. A professional license shall be issued and renewed
40.7	according to this chapter.
40.8	Subp. 5. Effective date. The requirements of this part for licensure as a teacher
40.9	of communication arts and literature to middle level students in grades 5 through 8 are
40.10	effective on September 1, 2010, and thereafter.
40.11 40.12	8710.3320 MIDDLE LEVEL ENDORSEMENT LICENSE FOR TEACHERS OF MATHEMATICS.
40.13	Subpart 1. Scope of practice. A teacher of mathematics with a middle level
40.14	endorsement license is authorized to teach students in grades 5 through 8 in any school
40.15	organizational pattern.
40.16	Subp. 2. Licensure requirements. A candidate for licensure as a middle level
40.17	teacher of mathematics shall:
40.18	A. hold one or more of the following classroom teaching licenses granted by
40.19	the Board of Teaching: a life license; a current nonvocational entrance, nonrenewable,
40.20	or professional license; or a current entrance or continuing secondary vocational license
40.21	based on a degree program in agriculture education, business education, consumer
40.22	homemaking and family life education, industrial education, or marketing education;
40.23	B. show verification of completing a preparation program approved under
40.24	part 8700.7600 leading to licensure in middle level teaching of communication arts and

literature for grades 5 through 8 in subpart 3; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

C. demonstrate completion of the equivalent of a college minor in mathematics.

41.1

41.2

41.3

41.4

41.5

41.6

41.7

41.8

41.9

41.10

41.11

41.12

41.13

41.14

41.15

41.16

41.17

41.18

41.19

41.20

41.21

41.22

41.23

41.24

- Subp. 3. **Subject matter standards.** A candidate for licensure as a middle level teacher of mathematics must complete a preparation program under subpart 2, items B and C, that includes the candidate's demonstration of the knowledge and skills in items A to D.
- A. A teacher of middle level students understands the nature of early adolescence and the needs of young adolescents. The teacher must understand and apply:
 - (1) the research base for and best practices of middle level education;
- (2) the educational principles relevant to the physical, social, emotional, moral, and cognitive development of young adolescents;
- (3) the concepts of "belonging" and "family connectedness" as crucial to the development of young adolescents; and
- (4) the process and necessity of collaboration with families and other adults in support of the learning of young adolescents.
- B. A teacher of middle level students understands the teaching of an academic subject area that integrates understanding of the academic content with the teacher's understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of middle level students in grades 5 through 8 must:
- (1) develop curriculum goals and purposes based on the central concepts of the academic specialty and know how to apply instructional strategies and materials that are appropriate for middle level students and are specific to the academic content area;
- (2) understand how to integrate curriculum across subject areas in developmentally appropriate ways;
- (3) understand the role and alignment of district, school, and department mission and goals in program planning;

09/01/09	REVISOR	JFK/DI	AR3834

(4)	understand the need for and how to connect schooling experiences with
everyday life,	the workplace, and further educational opportunities;

42.1

42.2

42.3

42.4

42.5

42.6

42.7

42.8

42.9

42.10

42.11

42.12

42.13

42.14

42.15

42.16

42.17

42.18

42.19

42.20

42.21

42.22

42.23

- (5) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (6) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;
- (7) understand the impact of reading ability on achievement in the academic specialty, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read the academic specialty content more effectively; and
- (8) apply the standards of effective practice in teaching in this academic subject through a variety of early and ongoing clinical experiences with middle level students within a range of educational programming models and by completing a minimum of a four-week student teaching experience. Candidates for licensure who hold a license at the elementary level must complete the student teaching experience with students in grade 7 or 8. Candidates for licensure who hold a license at the secondary level must complete the student teaching experience with students in grade 5 or 6.
- C. A teacher with a middle level endorsement for teaching mathematics in grades 5 through 8 must demonstrate knowledge of fundamental concepts of mathematics and the connections among them. The teacher must know and apply:
 - (1) concepts of patterns, relations, and functions:
- (a) recognize, describe, and generalize patterns and build mathematical models to describe situations, solve problems, and make predictions;

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	J1 IX/ D1	TINGUUT

43.1	(b) analyze the interaction within and among quantities and variables
43.2	to model patterns of change and use appropriate representations, including tables, graphs,
43.3	matrices, words, algebraic expressions, and equations;
43.4	(c) represent and solve problem situations that involve variable
43.5	quantities and be able to use appropriate technology;
43.6	(d) understand patterns present in number systems and apply these
43.7	patterns to further investigations;
43.8	(e) apply properties of boundedness and limits to investigate problems
13.9	involving sequences and series; and
43.10	(f) apply concepts of derivatives to investigate problems involving
43.11	rates of change;
43.12	(2) concepts of discrete mathematics:
43.13	(a) application of discrete models to problem situations using
43.14	appropriate representations, including sequences, finite graphs and trees, matrices, and
43.15	arrays;
43.16	(b) application of systematic counting techniques in problem situations
43.17	to include determining the existence of a solution, the number of possible solutions, and
43.18	the optimal solution;
43.19	(c) application of discrete mathematics strategies including pattern
43.20	searching; organization of information; sorting; case-by-case analysis; iteration and
43.21	recursion; and mathematical induction to investigate, solve, and extend problems; and
43.22	(d) exploration, development, analysis, and comparison of algorithms
43.23	designed to accomplish a task or solve a problem;
43.24	(3) concepts of number sense:

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

44.1	(a) understand number systems; their properties; and relations,
44.2	including whole numbers, integers, rational numbers, real numbers, and complex numbers;
44.3	(b) possess an intuitive sense of numbers including a sense of
44.4	magnitude, mental mathematics, estimation, place value, and a sense of reasonableness
44.5	of results;
44.6	(c) possess a sense for operations, application of properties of
44.7	operations, and the estimation of results;
44.8	(d) be able to translate among equivalent forms of numbers to facilitate
44.9	problem solving; and
44.10	(e) be able to estimate quantities and evaluate the reasonableness of
44.11	estimates;
44.12	(4) concepts of shape and space:
44.13	(a) shapes and the ways in which shape and space can be derived and
44.14	described in terms of dimension, direction, orientation, perspective, and relationships
44.15	among these properties;
44.16	(b) spatial sense and the ways in which shapes can be visualized,
44.17	combined, subdivided, and changed to illustrate concepts, properties, and relationships;
44.18	(c) spatial reasoning and the use of geometric models to represent,
44.19	visualize, and solve problems;
44.20	(d) motion and the ways in which rotation, reflection, and translation
44.21	of shapes can illustrate concepts, properties, and relationships;
44.22	(e) formal and informal argument, including the processes of making
44.23	assumptions; formulating, testing, and reformulating conjectures; justifying arguments
44 24	based on geometric figures: and evaluating the arguments of others:

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

45.1	(f) plane, solid, and coordinate geometry systems, including relations
45.2	between coordinate and synthetic geometry and generalizing geometric principles from a
45.3	two-dimensional system to a three-dimensional system;
15.4	(g) attributes of shapes and objects that can be measured, including
45.5	length, area, volume, capacity, size of angles, weight, and mass;
45.6	(h) the structure of systems of measurement, including the
45.7	development and use of measurement systems and the relationships among different
45.8	systems; and
45.9	(i) measuring, estimating, and using measurements to describe and
45.10	compare geometric phenomena;
45.11	(5) concepts of data investigations:
45.12	(a) data and its power as a way to explore questions and issues;
45.13	(b) investigation through data, including formulating a problem;
45.14	devising a plan to collect data; and systematically collecting, recording, and organizing
45.15	data;
45.16	(c) data representation to describe data distributions, central tendency,
45.17	and variance through appropriate use of graphs, tables, and summary statistics; and
45.18	(d) analysis and interpretation of data, including summarizing data;
45.19	and making or evaluating arguments, predictions, recommendations, or decisions based
45.20	on an analysis of the data; and
45.21	(6) concepts of randomness and uncertainty:
45.22	(a) inference and the role of randomness and sampling in statistical
45.23	claims about populations;

09/01/09	REVISOR	JFK/DI	AR3834

46.1	(b) probability as a way to describe chance or risk in simple and
46.2	compound events;
46.3	(c) predicting outcomes based on exploration of probability through
46.4	data collection, experiments, and simulations; and
46.5	(d) predicting outcomes based on theoretical probabilities and
46.6	comparing mathematical expectations with experimental results.
46.7	D. A teacher with a middle level endorsement for teaching mathematics in
46.8	grades 5 through 8 must understand the content and methods for teaching reading,
46.9	including:
46.10	(1) knowledge of reading processes and instruction, including:
46.11	(a) orthographic knowledge and morphological relationships within
46.12	words;
46.13	(b) the relation between word recognition and vocabulary knowledge,
46.14	fluency, and comprehension in understanding text and content materials;
46.15	(c) the importance of direct and indirect vocabulary instruction that
46.16	leads to enhanced general and domain-specific word knowledge;
46.17	(d) the relationships between and among comprehension processes
46.18	related to print processing abilities, motivation, reader's interest, background knowledge
46.19	cognitive abilities, knowledge of academic discourse, and print and digital text; and
46.20	(e) the development of academic language and its impact on learning
46.21	and school success;
46.22	(2) ability to use a wide range of instructional practices, approaches,
46.23	methods, and curriculum materials to support reading instruction, including:

8710.3320 46

09/01/09	REVISOR	JFK/DI	AR3834

47.1	(a) the appropriate applications of a variety of instructional
47.2	frameworks that are effective in meeting the needs of readers of varying proficiency levels
47.3	and linguistic backgrounds in secondary settings;
47.4	(b) the ability to scaffold instruction for students who experience
47.5	comprehension difficulties;
47.6	(c) selection and implementation of a wide variety of before, during,
47.7	and after reading comprehension strategies that develop reading and metacognitive
47.8	abilities;
47.9	(d) the ability to develop and implement effective vocabulary
47.10	strategies that help students understand words including domain-specific content words;
47.11	(e) the ability to plan instruction and select strategies that help students
47.12	read and understand math texts and spur interest in more complex reading materials,
47.13	including:
47.14	i. the density of ideas;
47.15	ii. concepts that build within a chapter or across chapters;
47.16	iii. use of equations to model life situations; asking students to
47.17	create or restate, in words or sentences, the relations between symbols; and the situation
47.18	being modeled;
47.19	iv. text with diagrams and graphs; and
47.20	v. use of different representations to aid in understanding the
47.21	underlying mathematical concept, matching each representation to the learning styles of
47.22	different individuals; and
47.23	(f) model strategies for representing mathematical ideas in a variety
47.24	of modes (literal, symbolic, graphic, digital), which includes asking students to restate
47.25	symbolic representations (numerals, equations, and graphs), in words or sentences.

09/01/09	REVISOR	JFK/DI	AR3834

Subp. 4. **Professional license.** A professional license shall be issued and renewed according to this chapter.

48.1

48.2

48.3

48.4

48.5

48.6

48.7

48.8

48.9

48.10

48.13

48.14

48.15

48.16

48.17

48.18

48.19

48.20

48.21

Subp. 5. **Effective date.** The requirements of this part for licensure as a teacher of mathematics to middle level students in grades 5 through 8 are effective on September 1, 2010, and thereafter.

8710.3330 MIDDLE LEVEL ENDORSEMENT LICENSE FOR TEACHERS OF SOCIAL STUDIES.

- Subpart 1. **Scope of practice.** A teacher of social studies with a middle level endorsement license is authorized to teach students in grades 5 through 8 in any school organizational pattern.
- Subp. 2. **Licensure requirements.** A candidate for licensure as a middle level teacher of social studies shall:
 - A. hold one or more of the following classroom teaching licenses granted by the Board of Teaching: a life license; a current nonvocational entrance, nonrenewable, or professional license; or a current entrance or continuing secondary vocational license based on a degree program in agriculture education, business education, consumer homemaking and family life education, industrial education, or marketing education;
 - B. show verification of completing a preparation program approved under part 8700.7600 leading to licensure in middle level teaching of social studies for grades 5 through 8 in subpart 3; and
 - C. demonstrate completion of the equivalent of a college minor in social studies.
- Subp. 3. **Subject matter standards.** A candidate for licensure as a middle level teacher of social studies must complete a preparation program under subpart 2, items B and C, that includes the candidate's demonstration of the knowledge and skills in items A to D.

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

49.1	A. A teacher of middle level students understands the nature of early
49.2	adolescence and the needs of young adolescents. The teacher must understand and apply
49.3	(1) the research base for and best practices of middle level education;
49.4	(2) the educational principles relevant to the physical, social, emotional,
49.5	moral, and cognitive development of young adolescents;
49.6	(3) the concepts of "belonging" and "family connectedness" as crucial to
49.7	the development of young adolescents; and
49.8	(4) the process and necessity of collaboration with families and other adults
49.9	in support of the learning of young adolescents.
49.10	B. A teacher of middle level students understands the teaching of an academic
49.11	subject area that integrates understanding of the academic content with the teacher's
49.12	understanding of pedagogy, students, learning, classroom management, and professional
49.13	development. The teacher of middle level students in grades 5 through 8 must:
49.14	(1) develop curriculum goals and purposes based on the central concepts of
49.15	the academic specialty and know how to apply instructional strategies and materials that
49.16	are appropriate for middle level students and are specific to the academic content area;
49.17	(2) understand how to integrate curriculum across subject areas in
49.18	developmentally appropriate ways;
49.19	(3) understand the role and alignment of district, school, and department
49.20	mission and goals in program planning;
49.21	(4) understand the need for and how to connect schooling experiences with
49.22	everyday life, the workplace, and further educational opportunities;

(5) know how to involve representatives of business, industry, and

community organizations as active partners in creating educational opportunities;

8710.3330 49

49.23

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	J1 IX/ D1	TINGUUT

(6)	understand the role and purpose of cocurricular and extracurricular
activities in th	ne teaching and learning process;

50.1

50.2

50.3

50.4

50.5

50.6

50.7

50.8

50.9

50.10

50.11

50.12

50.13

50.14

50.15

50.16

50.17

50.18

50.19

50.20

50.21

50.22

50.23

50.24

50.25

- (7) understand the impact of reading ability on student achievement in the academic specialty, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read the academic specialty content more effectively; and
- (8) apply the standards of effective practice in teaching in this academic subject through a variety of early and ongoing clinical experiences with middle level students within a range of educational programming models and by completing a minimum of a four-week student teaching experience. Candidates for licensure who hold a license at the elementary level must complete the student teaching experience with students in grade 7 or 8. Candidates for licensure who hold a license at the secondary level must complete the student teaching experience with students in grade 5 or 6.
- C. A teacher with a middle level endorsement for teaching social studies in grades 5 through 8 must demonstrate knowledge of fundamental concepts of the social studies disciplines and the connections among them. The teacher must know and apply:
 - (1) concepts of the ways human beings view themselves in and over time:
- (a) that different historians may describe the same event or situation in different ways;
- (b) key concepts including chronology, causality, change, conflict, and complexity to explain, analyze, and show connections among patterns of historical change and continuity;
 - (c) processes important to reconstructing and reinterpreting the past;
- (d) that historical perspectives are influenced by individual experiences, societal values, and critical traditions; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

51.1	(e) how to use knowledge of facts and concepts drawn from history,
51.2	along with methods of historical inquiry, to inform and evaluate actions concerning public
51.3	policy issues;
51.4	(2) concepts of people, places, and environments;
51.5	(a) how to map information in a spatial context and interpret the maps;
51.6	(b) land forms and geographic features;
51.7	(c) physical system changes, including seasons, climate and weather,
51.8	and the water cycle, and identify geographic patterns associated with them;
51.9	(d) physical and cultural patterns and their interactions, including
51.10	land use, settlement patterns, cultural transmission of customs and ideas, and ecosystem
51.11	changes; and
51.12	(e) how historical events have been influenced by, and have influenced,
51.13	physical and human geographic factors in local, regional, national, and global settings;
51.14	(3) concepts of how people organize for the production, distribution, and
51.15	consumption of goods and services:
51.16	(a) how economic systems structure the production and distribution of
51.17	goods and services;
51.18	(b) the costs and benefits to society of allocating goods and services
51.19	through private and public sectors;
51.20	(c) a range of various institutions that make up economic systems, for
51.21	example households, business firms, banks, and corporations;
51.22	(d) how values and beliefs influence different economic decisions; and
51.23	(e) how to use economic reasoning to compare different proposals for
51.24	dealing with contemporary social issues;

09/01/09	REVISOR	JFK/DI	AR3834

52.1	(4) concepts of ideals, principles, and practices of citizenship in a
52.2	democratic republic:
52.3	(a) the purpose of government and how its powers are acquired, used,
52.4	and justified;
52.5	(b) the basic features of the political system in the United States;
52.6	(c) the key ideals of the democratic republican form of government;
52.7	(d) the process for becoming a citizen and the rights and
52.8	responsibilities of citizenship;
52.9	(e) how to locate, access, analyze, organize, and apply information
52.10	about selected public issues;
52.11	(f) diverse forms of public opinion and the influence that various forms
52.12	of citizen action have on public policy development and decision making; and
52.13	(g) how various forms of citizen action can strengthen the common
52.14	good; and
52.15	(5) relationships among science, technology, and society:
52.16	(a) how science and technology have changed people's perceptions
52.17	of the social and natural world;
52.18	(b) ways in which values, beliefs, and attitudes are influenced by new
52.19	scientific and technological knowledge;
52.20	(c) the need for laws and policies to govern scientific and technological
52.21	applications; and
52.22	(d) the need to seek reasonable and ethical solutions to problems that
52.23	arise when scientific advancements and social norms or values come into conflict.

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

53.1	D. A teacher with a middle level endorsement for teaching social studies
53.2	in grades 5 through 8 must understand the content and methods for teaching reading,
53.3	including:
53.4	(1) knowledge of reading processes and instruction, including:
53.5	(a) orthographic knowledge and morphological relationships within
53.6	words;
53.7	(b) the relation between word recognition and vocabulary knowledge,
53.8	fluency, and comprehension in understanding text and content materials;
53.9	(c) the importance of direct and indirect vocabulary instruction that
53.10	leads to enhanced general and domain-specific word knowledge;
53.11	(d) the relationships between and among comprehension processes
53.12	related to print processing abilities, motivation, reader's interest, background knowledge,
53.13	cognitive abilities, knowledge of academic discourse, and print and digital text; and
53.14	(e) the development of academic language and its impact on learning
53.15	and school success; and
53.16	(2) ability to use a wide range of instructional practices, approaches,
53.17	methods, and curriculum materials to support reading instruction, including:
53.18	(a) the appropriate applications of a variety of instructional
53.19	frameworks that are effective in meeting the needs of readers of varying proficiency levels
53.20	and linguistic backgrounds in secondary settings;
53.21	(b) the ability to scaffold instruction for students who experience
53.22	comprehension difficulties;
53.23	(c) selection and implementation of a wide variety of before, during,
53.24	and after reading comprehension strategies that develop reading and metacognitive
53.25	abilities;

09/01/09	REVISOR	JFK/DI	AR3834

54.1	(d) the ability to develop and implement effective vocabulary
54.2	strategies that help students understand words including domain-specific content words;
54.3	(e) the ability to develop critical literacy skills by encouraging students
54.4	to question texts and analyze texts from multiple viewpoints or perspectives;
54.5	(f) the ability to identify instructional practices, approaches, and
54.6	methods to match materials, print and digital, to the cognitive levels of all readers, guided
54.7	by an evidence-based rationale, which support the developmental, cultural, and linguistic
54.8	differences of readers;
54.9	(g) the appropriate applications of a wide variety of instructional
54.10	frameworks that are effective in meeting the needs of readers in secondary school settings
54.11	across developmental levels, proficiency, and linguistic backgrounds; and
54.12	(h) the ability to plan instruction and select strategies that help students
54.13	read and understand social studies texts and spur interest in more complex reading
54.14	materials, including the ability to help students:
54.15	i. recognize fact and opinion and the words that signal opinions
54.16	and judgments;
54.17	ii. distinguish between primary and secondary sources, for
54.18	example, historical record versus textbook;
54.19	iii. think critically, for example, draw inferences or conclusions
54.20	from facts, analyze author's purpose and point of view, discern cause and effect
54.21	relationships, detect bias, and evaluate evidence;
54.22	iv. use and interpret maps, globes, and other nonlinguistic or
54.23	graphic tools such as timelines, photographs, charts, statistical tables, digital tools, and
54 24	nolitical cartoons: and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

v. use other texts features such as glossaries, indexes, detailed 55.1 databases about countries, and appendixes of documents or maps. 55.2 Subp. 4. **Professional license.** A professional license shall be issued and renewed 55.3 according to this chapter. 55.4 Subp. 5. **Effective date.** The requirements of this part for licensure as a teacher of 55.5 social studies to middle level students in grades 5 through 8 are effective on September 55.6 1, 2010, and thereafter. 55.7 8710.3340 MIDDLE LEVEL ENDORSEMENT LICENSE FOR TEACHERS OF 55.8 GENERAL SCIENCE. 55.9 Subpart 1. Scope of practice. A teacher of general science with a middle level 55.10 55.11 endorsement license is authorized to teach students in grades 5 through 8 in any school organizational pattern. 55.12 Subp. 2. Licensure requirements. A candidate for licensure as a middle level 55.13 teacher of science shall: 55.14 A. hold one or more of the following classroom teaching licenses granted by 55.15 55.16 the Board of Teaching: a life license; a current nonvocational entrance, nonrenewable, or professional license; or a current entrance or continuing secondary vocational license 55.17 55.18 based on a degree program in agriculture education, business education, consumer homemaking and family life education, industrial education, or marketing education; 55.19 B. show verification of completing a preparation program approved under part 55.20 8700.7600 leading to licensure in middle level teaching of science for grades 5 through 55.21 8 in subpart 3; and 55.22

C. demonstrate completion of the equivalent of a college minor in science.

8710.3340 55

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

Subp. 3. **Subject matter standard.** A candidate for licensure as a middle level teacher of science must complete a preparation program under subpart 2, items B and C, that includes the candidate's demonstration of the knowledge and skills in items A to D.

56.1

56.2

56.3

56.4

56.5

56.6

56.7

56.8

56.9

56.10

56.11

56.12

56.13

56.14

56.15

56.16

56.17

56.18

56.19

56.20

56.21

56.22

56.23

56.24

56.25

- A. A teacher of middle level students understands the nature of early adolescence and the needs of young adolescents. The teacher must understand and apply:
 - (1) the research base for and best practices of middle level education;
- (2) the educational principles relevant to the physical, social, emotional, moral, and cognitive development of young adolescents;
- (3) the concepts of "belonging" and "family connectedness" as crucial to the development of young adolescents; and
- (4) the process and necessity of collaboration with families and other adults in support of the learning of young adolescents.
- B. A teacher of middle level students understands the teaching of an academic subject area that integrates understanding of the academic content with the teacher's understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of middle level students in grades 5 through 8 must:
- (1) develop curriculum goals and purposes based on the central concepts of the academic specialty and know how to apply instructional strategies and materials that are appropriate for middle level students and are specific to the academic content area;
- (2) understand how to integrate curriculum across subject areas in developmentally appropriate ways;
- (3) understand the role and alignment of district, school, and department mission and goals in program planning;
- (4) understand the need for and how to connect schooling experiences with everyday life, the workplace, and further educational opportunities;

8710.3340 56

09/01/09	REVISOR	JFK/DI	AR3834

(5)	know how to	involve	represe	ntatives o	of business,	industr	y, and
community or	ganizations as	active p	oartners i	n creating	g education	al oppoi	rtunities

57.1

57.2

57.3

57.4

57.5

57.6

57.7

57.8

57.9

57.10

57.11

57.12

57.13

57.14

57.15

57.16

57.17

57.18

57.19

57.20

57.21

57.22

57.23

57.24

- (6) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;
- (7) understand the impact of reading ability on achievement in the academic specialty, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read the academic specialty content more effectively; and
- (8) apply the standards of effective practice in teaching general science through a variety of early and ongoing clinical experiences with middle level students within a range of educational programming models and by completing a minimum of a four-week student teaching experience. Candidates for licensure who hold a license at the elementary level must complete the student teaching experience with students in grade 7 or 8. Candidates for licensure who hold a license at the secondary level must complete the student teaching experience with students in grade 5 or 6.
- C. A teacher with a middle level endorsement for teaching science in grades 5 through 8 must meet the standards in part 8710.4750, subpart 3, items A to F.
- D. A teacher with a middle level endorsement for teaching science in grades 5 through 8 must understand the content and methods for teaching reading, including:
 - (1) knowledge of reading processes and instruction, including:
- (a) orthographic knowledge and morphological relationships within words;
 - (b) the relation between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

8710.3340 57

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

58.1	(c) the importance of direct and indirect vocabulary instruction that
58.2	leads to enhanced general and domain-specific word knowledge;
58.3	(d) the relationships between and among comprehension processes
58.4	related to print processing abilities, motivation, reader's interest, background knowledge,
58.5	cognitive abilities, knowledge of academic discourse, and print and digital text; and
58.6	(e) the development of academic language and its impact on learning
58.7	and school success; and
58.8	(2) ability to use a wide range of instructional practices, approaches,
58.9	methods, and curriculum materials to support reading instruction, including:
58.10	(a) the appropriate applications of a variety of instructional
58.11	frameworks that are effective in meeting the needs of readers of varying proficiency levels
58.12	and linguistic backgrounds in secondary settings;
58.13	(b) the ability to scaffold instruction for students who experience
58.14	comprehension difficulties;
58.15	(c) selection and implementation of a wide variety of before, during,
58.16	and after reading comprehension strategies that develop reading and metacognitive
58.17	abilities;
58.18	(d) the ability to develop and implement effective vocabulary
58.19	strategies that help students understand words including domain-specific content words;
58.20	(e) the ability to develop critical literacy skills by encouraging students
58.21	to question texts and analyze texts from multiple viewpoints or perspectives; and
58.22	(f) the ability to identify instructional practices, approaches, and
58.23	methods to match materials, print and digital, to the cognitive levels of all readers, guided
58.24	by an evidence-based rationale, which support the developmental, cultural, and linguistic
58.25	differences of readers; and

8710.3340 58

09/01/09	REVISOR	JFK/DI	AR3834

59.1	(g) the ability to plan instruction and select strategies that help students
59.2	read and understand science texts, including the ability to:
59.3	i. distinguish between facts based on empirical/scientific findings
59.4	from opinion;
59.5	ii. relate what is read to relevant prior knowledge;
59.6	iii. use scientific knowledge to draw inferences or conclusions
59.7	from facts, discern cause and effect relationships, detect fallacies in author's evidence, and
59.8	support own claims with evidence;
59.9	iv. follow instructions to perform laboratory activities step-by-step
59.10	in a disciplined fashion;
59.11	v. explain diagrams and graphs in terms of scientific content
59.12	and meaning; and
59.13	vi. explain meaning of abbreviations and symbols.
59.14	Subp. 4. Professional license. A professional license shall be issued and renewed
59.15	according to this chapter.
59.16	Subp. 5. Effective date. The requirements of this part for licensure as a teacher
59.17	of science to middle level students in grades 5 through 8 are effective on September
59.18	1, 2010, and thereafter.
59.19	8710.3350 PREPRIMARY ENDORSEMENT LICENSE.
59.20	Subpart 1. Scope of practice. A teacher with a preprimary endorsement license is
59.21	authorized to teach preprimary students ages age three through five prekindergarten.
59.22	Subp. 2. Licensure requirements. A candidate for licensure to teach preprimary
59 23	students shall.

8710.3350 59

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

60.1	A. hold a baccalaureate degree from a college or university that is accredited by
60.2	the regional association for the accreditation of colleges and secondary schools;
60.3	B. demonstrate the standards for effective practice for beginning teachers under
60.4	part 8710.2000; and
60.5	C. hold or qualify for licensure in elementary education for kindergarten
60.6	through grade six under part 8710.3200.
60.7	Subp. 3. Subject matter standards. A teacher of preprimary education valid for
60.8	teaching preprimary students ages age three through five prekindergarten must meet the
60.9	standards in part 8710.3000, subpart 3, items A (preprimary only), C, E J, F K, G L, and
60.10	H <u>M</u> (preprimary only).
60.11	Subp. 4. Professional license. A professional license shall be issued and renewed
60.12	according to this chapter.
60.13	Subp. 5. Effective date. The requirements of this part for licensure as a teacher of
60.14	preprimary education for ages age three through five prekindergarten are effective on
60.15	September 1, 2010, and thereafter.
60.16 60.17	8710.3360 KINDERGARTEN THROUGH GRADE 8 WORLD LANGUAGE AND CULTURE ENDORSEMENT LICENSE.
60.18	Subpart 1. Scope of practice. A teacher with a world language and culture
60.19	endorsement license is authorized to teach students in kindergarten through grade 8.
60.20	Subp. 2. Licensure requirements. A candidate for licensure in kindergarten through
60.21	grade 8 world language and culture shall:
60.22	A. hold a baccalaureate degree from a college or university that is accredited by
60.23	the regional association for the accreditation of colleges and secondary schools;
60.24	B. demonstrate the standards for effective practice for beginning teachers under
60.25	part 8710.2000; and

8710.3360 60

09/01/09	REVISOR	IFK/DI	AR3834

61.1	C. hold or apply and qualify for licensure in elementary education for
61.2	kindergarten through grade 6 under part 8710.3200.
61.3	Subp. 3. Subject matter standards. A teacher of world language and culture in
61.4	kindergarten through grade 8 must meet the standards for licensure of teachers of world
61.5	languages and cultures in part 8710.4950, subparts 3 and 6, 4 and 6, or 5 and 6.
61.6	Subp. 4. Professional license. A professional license shall be issued and renewed
61.7	according to this chapter.
61.8	Subp. 5. Effective date. The requirements of this part for licensure as a teacher of
61.9	world language and culture in kindergarten through grade 8 are effective on September
61.10	1, 2010, and thereafter.
61.11	8710.4000 TEACHERS OF ADULT BASIC EDUCATION.
61.12	[For text of subps 1 and 2, see M.R.]
61.13	Subp. 3. Subject matter standard. A candidate for licensure as a teacher of adult
61.14	basic education must complete a preparation program under subpart 2, item C, that
61.15	includes the candidate's demonstration of the knowledge and skills in items A to I.
61.16	[For text of items A and B, see M.R.]
61.17	C. A teacher of adult education must understand the content and methods for
61.18	teaching reading including:
61.19	(1) knowledge of reading processes and instruction including:
61.20	(a) orthographic knowledge and morphological relationships within
61.21	words;
61.22	(b) the relationship between word recognition and vocabulary
61.23	knowledge, fluency, and comprehension in understanding text and content materials;

8710.4000 61

09/01/09	REVISOR	JFK/DI	AR3834

52.1	(c) the importance of direct and indirect vocabulary instruction that
62.2	leads to enhanced general and domain-specific word knowledge;
62.3	(d) the relationships between and among comprehension processes
62.4	related to print processing abilities, motivation, reader's interest, background knowledge,
62.5	cognitive abilities, knowledge of academic discourse, and print and digital text; and
62.6	(e) the development of academic language and its impact on learning
52.7	and school success; and
62.8	(2) the ability to use a wide range of instructional practices, approaches,
52.9	methods, and curriculum materials to support reading instruction including:
62.10	(a) the appropriate applications of a variety of instructional
52.11	frameworks that are effective in meeting the needs of readers of varying proficiency levels
52.12	and linguistic backgrounds in secondary settings;
62.13	(b) the ability to scaffold instruction for students who experience
52.14	comprehension difficulties;
62.15	(c) selection and implementation of a wide variety of before, during,
62.16	and after reading comprehension strategies that develop reading and metacognitive
62.17	abilities;
62.18	(d) the ability to develop and implement effective vocabulary
62.19	strategies that help students understand words including domain-specific content words;
62.20	(e) the ability to develop critical literacy skills by encouraging students
62.21	to question texts and analyze texts from multiple viewpoints or perspectives; and
52.22	(f) the ability to identify instructional practices, approaches, and
52.23	methods to match materials, print and digital, to the cognitive levels of all readers, guided
52.24	by an evidence-based rationale, which support the developmental, cultural, and linguistic
52.25	differences of readers.

8710.4000 62

	09/01/09	REVISOR	JFK/DI	AR3834
63.1	[For	text of items D to I, see M	И.R.]	
63.2	[1]	For text of subp 4, see M.F.	R.]	
63.3	Subp. 5. Effective date. Th	ne requirements in this part	for licensure as a	teacher of
63.4	adult basic education are effects	ive on September 1, 2010,	and thereafter.	
63.5	8710.4050 TEACHERS OF A	AGRICULTURAL EDUC	CATION.	
63.6	[For	text of subps 1 and 2, see	M.R.]	
63.7	Subp. 3. Subject matter st	andard. A candidate for l	icensure as a teach	ner of
63.8	agricultural education must con	nplete a preparation progra	m under subpart 2,	item C, that
63.9	includes the candidate's demons	stration of the knowledge a	and skills in items A	A to M.
63.10	[For	text of items A to K, see I	M.R.]	
63.11	L. A teacher of agricult	ural education must demor	nstrate an understa	nding of
63.12	the teaching of agriculture that	integrates agriculture with	pedagogy, students	s, learning,
63.13	classroom management, and pro	ofessional development to		
63.14	[For tex	ext of subitems (1) to (6), see	ee M.R.]	
63.15	(7) understand the ro	ole and purpose of cocurri	cular and extracurr	icular
63.16	activities in the teaching and le	arning process; and		
63.17	(8) apply the standar	rds of effective practice in	teaching students	through
63.18	a variety of early and ongoing e	experiences with middle le	vel and high schoo	l students
63.19	within a range of educational p	rogramming models.		
63.20	M. A teacher of agricult	tural education must under	stand the content a	nd methods
63.21	for teaching reading including:			
63.22	(1) knowledge of rea	ading processes and instruc	etion including:	
63.23	(a) orthographic	knowledge and morpholog	gical relationships	within
63.24	words;			

8710.4050 63

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

64.1	(b) the relationship between word recognition and vocabulary
64.2	knowledge, fluency, and comprehension in understanding text and content materials;
64.3	(c) the importance of direct and indirect vocabulary instruction that
64.4	leads to enhanced general and domain-specific word knowledge; and
64.5	(d) the development of academic language and its impact on learning
64.6	and school success;
64.7	(2) the ability to use a wide range of instructional practices, approaches,
64.8	methods, and curriculum materials to support reading instruction, including:
64.9	(a) the appropriate applications of a variety of instructional
64.10	frameworks that are effective in meeting the needs of readers of varying proficiency levels
64.11	and linguistic backgrounds in secondary settings;
64.12	(b) the ability to scaffold instruction for students who experience
64.13	comprehension difficulties;
64.14	(c) selection and implementation of a wide variety of before, during,
64.15	and after reading comprehension strategies that develop reading and metacognitive
64.16	abilities;
64.17	(d) the ability to develop and implement effective vocabulary
64.18	strategies that help students understand words, including domain-specific content words;
64.19	(e) the ability to identify instructional practices, approaches, and
64.20	methods and match materials, print and digital, to the cognitive levels of all readers,
64.21	guided by an evidence-based rationale, which support the developmental, cultural, and
64.22	linguistic differences of readers; and
64.23	(f) the complexities involved in the development of academic language
64.24	and the impact of that development in school success; and

8710.4050 64

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

methods, and curriculum materials to support reading and writing instruction including:
(a) selection and implementation of a wide variety of before, during,
and after reading comprehension strategies that develop reading and metacognitive
abilities;
(b) the ability to develop and implement effective vocabulary strategies
that help students understand words including domain-specific content words; and
(c) the ability to identify instructional practices, approaches, and
methods and match materials, print and digital, to the cognitive levels of all readers,
guided by an evidence-based rationale, which support the developmental, cultural, and
linguistic differences of readers.
[For text of subp 4, see M.R.]
Subp. 5. Effective date. The requirements in this part for licensure as a teacher of
agricultural education are effective on September 1, 2010, and thereafter.
8710.4200 TEACHERS OF BUSINESS.
[For text of subps 1 and 2, see M.R.]
Subp. 3. Subject matter standard. A candidate for licensure as a teacher of
business must complete a preparation program under subpart 2, item C, that must include
the candidate's demonstration of the knowledge and skills in items A to F.
[For text of items A to D, see M.R.]
E. A teacher of business must be able to integrate understanding business
with the understanding of pedagogy, students, learning environments, and professional
development. The teacher of business to preadolescent and adolescent students must:

8710.4200 65

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

66.1	(12) know how to develop and apply evaluative criteria for a business
66.2	curriculum and a plan for continuous improvement; and
56.3	(13) apply the standards of effective practice in teaching students through
56.4	a variety of early and ongoing clinical experiences with middle level and high school
56.5	students within a range of educational programming models.
30.3	stadents within a range of educational programming models.
66.6	F. A teacher of business must understand the content and methods for teaching
56.7	reading including:
66.8	(1) knowledge of reading processes and instruction including:
66.9	(a) the relationships between and among print and digital content
66.10	processing abilities, motivation, background, and discourse knowledge, cognitive abilities,
66.11	and reader's interest and how those relationships impact comprehension; and
56.12	(b) the complexities involved in the development of academic
66.13	language and the impact of that development in school success; and
30.13	anguage and the impact of that development in sensor success, and
56.14	(2) the ability to use a wide range of instructional practices, approaches,
66.15	methods, and curriculum materials to support reading and writing instruction including:
66.16	(a) selection and implementation of a wide variety of before, during,
66.17	and after reading comprehension strategies that develop reading and metacognitive
66.18	abilities;
cc 10	(h) the shillife to identify instructional marking any angles and
56.19	(b) the ability to identify instructional practices, approaches, and
56.20	methods and match materials to the cognitive levels of all readers, guided by an
56.21	evidence-based rationale, which support the developmental, cultural, and linguistic
56.22	differences of readers;

(c) the ability to understand a variety of purposes for reading texts:

8710.4200 66

process, information, and aesthetic; and

66.23

09/01/09	REVISOR	JFK/DI	AR3834

67.1	(d) the ability to develop and implement effective vocabulary
67.2	strategies that help students understand words including domain-specific content words.
67.3	[For text of subp 4, see M.R.]
67.4	Subp. 5. Effective date. Requirements in this part for licensure as a teacher of
67.5	business are effective on September 1, 2010, and thereafter.
67.6	8710.4250 TEACHERS OF COMMUNICATION ARTS AND LITERATURE.
67.7	[For text of subps 1 and 2, see M.R.]
67.8	Subp. 3. Subject matter standard. A candidate for licensure as a teacher of
67.9	communication arts and literature must complete a preparation program under subpart 2,
67.10	item C, that must include the candidate's demonstration of the knowledge and skills in
67.11	items A to C.
67.12	[For text of item A, see M.R.]
67.13	B. A teacher of communication arts and literature demonstrates understanding
67.14	and skills essential to the teaching and learning of reading, writing, speaking, listening,
67.15	media literacy, and literature. The teacher must demonstrate the:
67.16	(1) knowledge of reading processes and instruction including:
67.17	(a) orthographic knowledge and morphological relationships within
67.18	words;
67.19	(b) the relationship between word recognition and vocabulary
67.20	knowledge, fluency, and comprehension in understanding text and content materials;
67.21	(c) the importance of direct and indirect vocabulary instruction that
67.22	leads to enhanced general and domain-specific word knowledge;

8710.4250 67

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

68.1	(d) the relationships between and among comprehension processes
58.2	related to print processing abilities, motivation, reader's interest, background knowledge,
68.3	cognitive abilities, knowledge of academic discourse, and print and digital text; and
58.4	(e) the development of academic language and its impact on learning
58.5	and school success;
68.6	(2) the ability to use a wide range of instructional practices, approaches,
58.7	methods, and curriculum materials to support reading instruction including:
58.8	(a) the appropriate applications of a variety of instructional
58.9	frameworks that are effective in meeting the needs of readers of varying proficiency levels
68.10	and linguistic backgrounds in secondary settings;
68.11	(b) the ability to scaffold instruction for students who experience
68.12	comprehension difficulties;
68.13	(c) the ability to develop and implement effective vocabulary strategies
58.14	that help students understand words including domain-specific content words;
68.15	(d) the ability to identify instructional practices, approaches, and
58.16	methods and match materials, print and digital, to the cognitive levels of all readers,
58.17	guided by an evidence-based rationale, which support the developmental, cultural, and
68.18	linguistic differences of readers;
68.19	(e) implementation of a variety of grouping strategies that include
58.20	individual, small group, and whole group reading experiences that promote enhanced
68.21	comprehension of text; and
68.22	(f) the ability to plan instruction and select strategies that help students
58 23	read and understand language arts texts and spur student interest in more complex reading

8710.4250 68

materials, including the ability to help students:

09/01/09	REVISOR	JFK/DI	AR3834
N9/N1/N9	REVISOR	IHK /I II	Δ R 3 X 3/I
07/01/07		J1 IX/ D1	π

69.1	1. distinguish fact from opinion and the words that signal opinions
69.2	and judgments in persuasive texts;
69.3	ii. think critically, draw inferences or conclusions from facts,
69.4	analyze author's purpose and point of view, evaluate author's argument and evidence, and
69.5	synthesize information from more than one text; and
69.6	iii. use aids such as glossaries and appendices that pertain to
69.7	reading, writing, and English language conventions;
69.8	(3) use of a variety of assessment practices to place and evaluate effective
69.9	reading including:
69.10	(a) understanding the measurement systems and proper interpretation
69.11	of assessment tools that determine individual student's reading level, fluency,
69.12	comprehension abilities, and reading interests;
69.13	(b) using data to set goals and objectives, make effective instructional
69.14	decisions, and demonstrate responsiveness to students' needs; and
69.15	(c) the ability to communicate results of assessments to specific
69.16	individuals in accurate and coherent ways that indicate how the results might impact
69.17	students' achievement;
69.18	(4) knowledge, skills, and ability to teach writing including:
69.19	[For text of units (a) to (d), see M.R.]
69.20	(5) knowledge, skills, and ability to teach speaking including:
69.21	[For text of units (a) to (d), see M.R.]
69.22	(6) knowledge, skills, and ability to teach listening including:
69.23	[For text of units (a) to (d), see M.R.]
69.24	(7) knowledge, skills, and ability to teach media literacy including:

8710.4250 69

	09/01/09	REVISOR	JFK/DI	AR3834
70.1	[For text of units (a) to (c), see M.R.]			
70.2	(d) functional,	aesthetic, and ethical values	s of media commun	ication;
70.3	and			
70.4	(8) knowledge, ski	ills, and ability to teach liter	rature including:	
70.5	[Fo	or text of units (a) to (h), see	e M.R.]	
70.6	C. A teacher of comm	nunication arts and literatur	re demonstrates an	
70.7	understanding of the teaching	g of communication arts and	l literature that integ	grates
70.8	understanding of communication	tion arts and literature with	their understanding	of pedagogy,
70.9	students, learning, classroom	management, and professio	nal development. T	he teacher
70.10	of communication arts and lit	erature to preadolescent and	d adolescent student	s in grades
70.11	5 through 12 shall:			
70.12	[For t	text of subitems (1) to (6), s	ee M.R.]	
70.13	(7) understand the	role and purpose of cocurr	icular and extracurr	icular
70.14	activities in the teaching and	learning process; and		
70.15	(8) apply the stand	lards of effective practice in	teaching students t	hrough
70.16	a variety of early and ongoing	g clinical experiences with 1	middle level and hig	h school
70.17	students within a range of edu	ucational programming mod	lels.	
70.18		[For text of subp 4, see M.	R.]	
70.19	Subp. 5. Effective date.	The requirements of this part	rt for licensure as a	teacher of
70.20	communication arts and litera	ature are effective on Septen	nber 1, 2010, and the	ereafter.
70.21	8710.4450 TEACHERS OF	FAMILY AND CONSUM	IER SCIENCES.	
70.22	[Fo	or text of subps 1 and 2, see	M.R.]	

8710.4450 70

09/01/09	REVISOR	JFK/DI	1 D 2 C 2 1
NO/N I /NO			AR3834
(17/(11/(17	18 17 8 16 30 718	11.18/171	A I 10 14

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of family and consumer sciences must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to E.

71.1

71.2

71.3

71.4

71.5

71.6

71.7

71.8

71.9

71.10

71.11

71.12

71.13

71.14

71.15

71.16

71.17

71.18

71.19

71.20

71.21

71.22

[For text of items A to C, see M.R.]

D. A teacher of family and consumer sciences understands the teaching of family and consumer sciences that integrates understanding of family and consumer sciences with the teacher's understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of family and consumer sciences to preadolescent and adolescent students must:

[For text of subitems (1) to (7), see M.R.]

- (8) understand laboratory management practices and procedures;
- (9) understand the impact of public policy on curriculum;
- (10) know fiscal, budgetary, and purchasing practices for operating a comprehensive family and consumer sciences educational program;
- (11) know marketing techniques for student recruitment and retention in family and consumer sciences programs; and
- (12) apply the standards of effective practice in teaching students through a variety of early and ongoing clinical experiences with middle level and high school students within a range of educational programming models.
- E. A teacher of family and consumer sciences must understand the content and methods for teaching reading including:
 - (1) knowledge of reading processes and instruction including:

8710.4450 71

09/01/09	REVISOR	JFK/DI	AR3834

72.1	(a) the relationships between and among print processing abilities and
72.2	digital content, motivation, background, and discourse knowledge, cognitive abilities, and
72.3	reader's interest and how those relationships impact comprehension; and
72.4	(b) the complexities involved in the development of academic
72.5	language and the impact of that development in school success; and
72.6	(2) the ability to use a wide range of instructional practices, approaches,
72.7	methods, and curriculum materials to support reading and writing instruction including:
72.8	(a) selection and implementation of a wide variety of before, during,
72.9	and after reading comprehension strategies that develop reading and metacognitive
72.10	abilities;
72.11	(b) the ability to develop and implement effective vocabulary strategies
72.12	that help students understand words including domain-specific content words; and
72.13	(c) the ability to identify instructional practices, approaches, and
72.14	methods and match materials to the cognitive levels of all readers, guided by an
72.15	evidence-based rationale, which support the developmental, cultural, and linguistic
72.16	differences of readers; and
72.17	(d) the ability to plan instruction and select strategies that help
72.18	students read and understand family and consumer science texts, and electronic resources
72.19	including the ability to:
72.20	i. relate what is read to relevant prior knowledge;
72.21	ii. follow instructions to perform laboratory activities step by step
72.22	in a disciplined fashion;
72.23	iii. explain diagrams and graphs in terms of scientific content
72.24	and meaning; and
72.25	iv. explain meaning of abbreviations and symbols.

8710.4450 72

	00/01/00	DEVICOD	IEW/DI	A D 2024
	09/01/09	REVISOR	JFK/DI	AR3834
73.1	[For	text of subp 4, see M.R	[.]	
73.2	Subp. 5. Effective date. The re	equirements of this part	for licensure as a	teacher of
73.3	family and consumer sciences are e	effective on September	1, 2010, and there	after.
73.4	8710.4500 TEACHERS OF HEA	ALTH.		
73.5	[For text	t of subps 1 and 2, see I	M.R.]	
73.6	Subp. 3. Subject matter stand	lard. A candidate for lie	censure as a teach	er of health
73.7	must complete a preparation progra	am under subpart 2, iter	m C, that must inc	clude the
73.8	candidate's demonstration of the kr	nowledge and skills in i	tems A to I.	
73.9	[For tex	t of items A to G, see M	M.R.]	
73.10	H. A teacher of health dem	onstrates an understand	ing of the teaching	g of health
73.11	that integrates understanding of he	alth with the understand	ding of pedagogy,	students,
73.12	learning, classroom management, a	and professional develop	pment. The teache	er of health to
73.13	preadolescent and adolescent stude	ents must:		
73.14	[For text o	f subitems (1) to (6), se	e M.R.]	
73.15	(7) understand the role	and purpose of cocurric	cular and extracur	ricular
73.16	activities in the teaching and learning	ing process; and		
73.17	(8) apply the standards	of effective practice in	teaching students	through
73.18	a variety of early and ongoing clin	-	_	_
73.19	students within a range of education	•		-
73.20	I. A teacher of health must	understand the content	and methods for	teaching

(1) knowledge of reading processes and instruction including:

8710.4500 73

reading including:

73.21

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

74.1	(a) the relationships between and among print processing abilities and
74.2	digital content, motivation, background, and discourse knowledge, cognitive abilities, and
74.3	reader's interest and how those relationships impact comprehension; and
74.4	(b) the complexities involved in the development of academic
74.5	language and the impact of that development in school success; and
74.6	(2) the ability to use a wide range of instructional practices, approaches,
74.7	methods, and curriculum materials to support reading instruction including:
74.8	(a) selection and implementation of a wide variety of before, during,
74.9	and after reading strategies that develop reading and metacognitive abilities;
74.10	(b) the ability to develop and implement effective vocabulary
74.11	strategies that help students understand words including domain-specific content words;
74.12	(c) the ability to develop critical literacy skills by encouraging students
74.13	to question texts and analyze texts from multiple viewpoints or perspectives; and
74.14	(d) the ability to identify instructional practices, approaches, and
74.15	methods and match materials, both print and digital, to the cognitive levels of all readers,
74.16	guided by an evidence-based rationale, which support the developmental, cultural, and
74.17	linguistic differences of readers.
74.18	[For text of subp 4, see M.R.]
74.19	Subp. 5. Effective date. The requirements in this part for licensure as a teacher of
74.20	health are effective on September 1, 2001 2010, and thereafter.
74.21 74.22	8710.4525 TEACHERS OF COMPUTER, KEYBOARDING, AND RELATED TECHNOLOGY APPLICATIONS.
74.23	Subpart 1. Scope of practice. A teacher of computer, keyboarding, and related
74.24	technology applications is authorized to provide to students in grades kindergarten
74.25	through 12 instruction that is designed to teach computer applications, including general

09/01/09 REVISOR JFK/DI AR3834

75.1

75.2

75.3

75.4

75.5

75.6

75.7

75.8

75.9

75.10

75.11

75.12

75.13

75.14

75.15

75.16

75.17

75.18

75.19

75.20

75.21

75.22

75.23

75.24

75.25

75.26

productivity applications, graphics, imaging, multimedia, video and animation, audio, and digital communications including, but not limited to, the Internet and electronic communications and computer keyboarding. This teacher is authorized to lead, collaborate, and consult with other classroom teachers for the purpose of integrating technology learning into content area curriculum. Nothing in this part prevents a teacher of elementary education from teaching keyboarding to the teacher's own classroom, nor any teacher from teaching computer applications and integrating technology into the teacher's curriculum, or a teacher of business education from teaching keyboarding and computer applications at the grade levels for which the teacher is licensed as a teacher of business education.

- Subp. 2. Licensure requirements. A candidate for licensure endorsement to teach computer, keyboarding, and related technology applications to students in grades kindergarten through 12 shall hold or qualify for a valid Minnesota classroom teaching license and must have successfully completed a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure endorsement as a teacher of computer, keyboarding, and related technology applications under this part. A teacher of computer, keyboarding, and related technology applications is limited to teaching in the scope of the teacher's base license.
- Subp. 3. **Subject matter standard.** A candidate for licensure endorsement as a teacher of computer, keyboarding, and related technology applications in grades kindergarten through 12 must successfully complete a preparation program under subpart 2 that includes the candidate's demonstration of the knowledge and skills in items A to C.
- A. A teacher of computer, keyboarding, and related technology applications understands and applies:
- (1) knowledge of computers and related technology and peripherals, including hardware, software, file management, care of equipment, and security;

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	J1 IX/ D1	TINGUUT

(2) knowledge about the legal context, ethics, and online safety issues in	
the use of technology in education, including the changeable nature of these technolog	ies
as their applications continue to evolve;	

(3) knowledge about digital equity and meeting the needs of diverse learners;

76.1

76.2

76.3

76.4

76.5

76.6

76.7

76.8

76.9

76.10

76.11

76.12

76.13

76.14

76.15

76.16

76.17

76.18

76.22

76.23

76.24

76.25

- (4) knowledge of keyboarding and other input devices, including terminology, techniques, ergonomics, appropriate fingering, skill development, and application to word processing and other applications;
- (5) knowledge of computer applications, including general productivity applications, graphics, multimedia, and digital communications including, but not limited to, the Internet and electronic communications;
- (6) knowledge of emerging technologies and the changing nature of technology in education;
- (7) methods to manage technology, resources, user access, and applications in the education setting;
- (8) strategies to evaluate, select, and apply appropriate hardware, software, and online resources; and
 - (9) the knowledge necessary to develop computer technology curriculum.
- B. A teacher of computer, keyboarding, and related technology applications provides leadership in the area of technology for a school community. The teacher must be able to:
 - (1) model and provide professional development in the use of technology for the enhancement of productivity;
 - (2) provide professional development, leadership, and communication related to technology applications;

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

(3	3) p	articip	ate ii	n tec	hnol	ogy p	olanni	ng a	and pro	vide su	pport fo	or integ	gration
of technolo	gy le	arning	g in c	onte	nt ar	ea cu	ırricul	um;					
	45	,	, .	.1	1	1		C	1			C	

(4) participate in the development of policies and procedures for technology; and

77.1

77.2

77.3

77.4

77.5

77.6

77.7

77.8

77.9

77.10

77.11

77.12

77.13

77.14

77.15

77.16

77.17

77.18

77.19

77.20

77.21

77.22

77.23

77.24

- (5) assist in the design, development, and organization of learning spaces for the application of integrated technology learning.
- C. A teacher of computer, keyboarding, and related technology applications integrates knowledge of computers, keyboarding, and computer applications with understanding of pedagogy, students, learning, methods, processes of evaluation, classroom management, and professional development. The teacher must:
- (1) understand the physical, social, emotional, moral, and cognitive development of students in grades kindergarten through 12;
- (2) understand and apply best practices of teaching computer and related technology applications to students in grades kindergarten through 12;
- (3) understand the relationship between higher order thinking skills and creativity to the effective application of technology to learning;
- (4) develop curriculum goals and purposes based on the central concepts of teaching computer and related technology applications and know how to apply instructional strategies and materials for achieving student understanding of this discipline;
- (5) create and apply teaching and learning strategies for many types of technology environments including, but not limited to, lab, mobile, classroom, integrated, and online;
- (6) support the use of technology for formative and summative assessment of student learning including, but not limited to, online testing; and

20/01/00	DELUCOD	IDIZ/DI	1 D 2 O 2 /
10/111/110			V D 1 A 1 A 1
09/01/09	REVISOR	JFK/DI	AR3834

(7) apply the standards under part 8710.2000 to teaching keyboarding and computer applications to students in grades kindergarten through 12 in a variety of clinical experiences.

[For text of subp 4, see M.R.]

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of computer, keyboarding, and related technology applications are effective on September 1, 2010, and thereafter.

8710.4550 LIBRARY MEDIA SPECIALISTS.

78.1

78.2

78.3

78.4

78.5

78.6

78.7

78.8

78.9

78.10

78.11

78.12

78.13

78.14

78.15

78.16

78.17

78.18

78.19

78.20

78.21

78.22

78.23

78.24

78.25

Subpart 1. **Scope of practice.** A library media specialist is authorized to provide to students in kindergarten through grade 12 instruction that is designed to provide information and technology literacy skills instruction, to lead, collaborate, and consult with other classroom teachers for the purpose of integrating information and technology literacy skills with content teaching, and to administer media center operations, programming, and resources.

[For text of subp 2, see M.R.]

- Subp. 3. **Subject matter standard.** A candidate for licensure as a library media specialist must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to F.
- A. A library media specialist develops and implements an information media program that reflects the vision, mission, and goals of the school. The specialist must:
 - (1) identify and apply current educational research, theory, and practice;
- (2) use a research and knowledge base to determine the role of information and technology tools for communication;
- (3) collaborate in developing short-range and long-range plans for the information media program;

8710.4550 78

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

79.1	(4) demonstrate basic knowledge of computers and related technology
79.2	and peripherals, including hardware, software, file management, care of equipment, and
79.3	security;
79.4	(5) demonstrate basic knowledge of computer-based productivity
79.5	applications;
70.6	
79.6	(6) demonstrate basic knowledge of digital communications applications,
79.7	which can include graphics and multimedia production;
79.8	(7) demonstrate basic knowledge of methods to manage technology,
79.9	information resources, user access, and applications in an education setting;
79.10	(8) demonstrate ability to evaluate, select, and apply appropriate hardware,
79.11	software, and other resources; and
79.12	(9) demonstrate the knowledge needed to develop information and
79.13	technology literacy curriculum.
79.14	B. A library media specialist develops and implements an information and
79.15	technology literacy program that is an integral part of the total curriculum. The specialist
79.16	must:
79.17	(1) participate in curriculum development with teachers across grade levels
79.18	and disciplines;
79.19	(2) plan and conduct a sequential integrated program of instruction in the
79.20	use of information and technology tools for research and communication;
79.20	use of information and technology tools for research and communication,
79.21	[For text of subitems (3) to (8), see M.R.]
79.22	(9) formulate and conduct student learning activities that integrate the
79.23	use of information and technology tools, including the legal context, ethics, and online
79.24	safety issues inherent in the use of technology for learning and communication and the

8710.4550 79

changeable nature of these technologies.

20/01/00	DELUCOD	IDIZ/DI	1 D 2 O 2 /
10/111/110			V D 1 A 1 A 1
09/01/09	REVISOR	JFK/DI	AR3834

C. A library media specialist develops and implements information media program policies and procedures consistent with principles of professional practice and appropriate to the mission and goals of the school and district. The specialist must:

[For text of subitems (1) to (7), see M.R.]

(8) consult and participate in the design of school facilities so that information and technology tools can be used;

80.1

80.2

80.3

80.4

80.5

80.6

80.7

80.8

80.9

80.10

80.11

80.12

80.13

80.14

80.15

80.16

80.17

80.18

80.19

80.20

80.21

80.22

80.23

80.24

[For text of subitems (9) to (11), see M.R.]

- D. A library media specialist initiates and maintains motivating environments that foster the continued professional growth of the learning community. The specialist must:
- (1) model and teach responsible and ethical access to and use of information;
 - (2) interpret and promote the information and technology literacy program;

[For text of subitems (3) and (4), see M.R.]

E. A library media specialist must demonstrate an understanding of the teaching of information and technology literacy that integrates understanding of information media with the understanding of pedagogy, students, learning, classroom management, and professional development. The library media specialist for children, preadolescents, and adolescents shall:

[For text of subitems (1) and (2), see M.R.]

(3) develop curriculum goals and purposes based on the central concepts of information and technology literacy and know how to apply instructional strategies and materials for achieving student understanding of this discipline;

[For text of subitems (4) to (6), see M.R.]

8710.4550 80

09/01/09	REVISOR	JFK/DI	AR3834

81.1	(7) understand the role and purpose of cocurricular and extracurricular
81.2	activities in the teaching and learning process; and
81.3	(8) apply the standards of effective practice in teaching students through
81.4	a variety of early and ongoing clinical experiences with kindergarten and primary,
81.5	intermediate, middle level, and high school students within a range of educational
81.6	programming models.
81.7	F. A library media specialist must understand the content and methods for
81.8	teaching reading including:
81.9	(1) knowledge of reading processes and instruction including:
81.10	(a) foundational theories related to practices and materials used in
81.11	the classroom;
81.12	(b) the relationships between and among print processing abilities,
81.13	motivation, background, and discourse knowledge, cognitive abilities, and reader's
81.14	interest, digital literacy, and how those relationships impact comprehension;
81.15	(c) the complexities involved in the development of academic
81.16	language and the impact of that development in school success; and
81.17	(d) the role and rationale in using literature and other texts including
81.18	electronic texts and nonprint materials across the curriculum;
81.19	(2) the ability to use a wide range of instructional practices, approaches,
81.20	methods, and curriculum materials to support reading and writing instruction including:
81.21	(a) the appropriate applications of a wide variety of instructional
81.22	frameworks that are effective in meeting the needs of readers in intermediate, middle
81.23	school, and high school settings across developmental levels, proficiency, and linguistic
81.24	backgrounds;

8710.4550 81

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

82.1	(b) the ability to plan instruction and select strategies that help students
82.2	read and understand content area texts and digital content and spur student interest in more
82.3	complex reading materials; and
82.4	(c) the ability to develop critical literacy skills by encouraging students
82.5	to question texts and analyze texts from multiple viewpoints or perspectives;
82.6	(3) the ability to create a literate environment that fosters reading by
82.7	integrating foundational knowledge; use of instructional practices, approaches, and
82.8	methods; curriculum materials; and the appropriate use of assessments, including:
82.9	(a) understanding how to create a literacy rich environment that
82.10	includes a variety of texts, print and digital, student artifacts, literacy instructional
82.11	supports, and a physical arrangement that promotes literacy learning;
82.12	(b) the ability to create and maintain a motivating classroom and school
82.13	environment that promotes ongoing student engagement and literacy for all students; and
82.14	(c) the ability to model and reinforce reading and writing as valued
82.15	and purposeful lifelong activities; and
82.16	(4) a view of professional development as a career-long effort and
82.17	responsibility including:
82.18	(a) displaying positive dispositions toward the act of reading and the
82.19	teaching of reading, including a belief that all students can learn to read regardless of their
82.20	cognitive, cultural, or linguistic backgrounds;
82.21	(b) seeking to be well informed and up-to-date in knowledge of
82.22	content area literacies;
82.23	(c) actively seeking opportunities to participate in learning

8710.4550 82

communities and professional organizations; and

09/01/09	REVISOR	JFK/DI	AR3834

(d) developing and maintaining collegial relations to support literacy initiatives across various communities within a district or school and maximize student learning.

[For text of subp 4, see M.R.]

Subp. 5. **Effective date.** Requirements in this part for licensure as a library media specialist are effective on September 1, 2010, and thereafter.

8710.4600 TEACHERS OF MATHEMATICS.

83.1

83.2

83.3

83.4

83.5

83.6

83.7

83.8

83.9

83.10

83.11

83.12

83.13

83.14

83.15

83.16

83.17

83.18

83.19

83 20

83.21

83.22

83.23

83.24

[For text of subps 1 and 2, see M.R.]

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of mathematics must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to J.

[For text of items A to H, see M.R.]

I. A teacher of mathematics must demonstrate an understanding of the teaching of mathematics that integrates understanding of mathematics with the understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of mathematics to preadolescent and adolescent students shall:

[For text of subitems (1) to (6), see M.R.]

- (7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process; and
- (8) apply the standards of effective practice in teaching students through a variety of early and ongoing clinical experiences with middle level and high school students within a range of educational programming models.
- J. A teacher of mathematics must understand the content and methods for teaching reading including:

8710.4600 83

09/01/09	REVISOR	IFK/DI	AR3834

34.1	(1) knowledge of feating processes and instruction including.
84.2	(a) orthographic knowledge and morphological relationships within
34.3	words;
84.4	(b) the relationship between word recognition and vocabulary
84.5	knowledge, fluency, and comprehension in understanding text and content materials;
84.6	(c) the importance of direct and indirect vocabulary instruction that
84.7	leads to enhanced general and domain-specific word knowledge;
84.8	(d) the relationships between and among comprehension processes
84.9	related to print processing abilities, motivation, reader's interest, background knowledge,
84.10	cognitive abilities, knowledge of academic discourse, and print and digital text; and
84.11	(e) the development of academic language and its impact on learning
84.12	and school success; and
84.13	(2) the ability to use a wide range of instructional practices, approaches,
84.14	methods, and curriculum materials to support reading instruction including:
84.15	(a) the appropriate applications of a variety of instructional
84.16	frameworks that are effective in meeting the needs of readers of varying proficiency levels
84.17	and linguistic backgrounds in secondary settings;
84.18	(b) the ability to scaffold instruction for students who experience
84.19	comprehension difficulties;
84.20	(c) selection and implementation of a wide variety of before, during,
34.21	and after reading comprehension strategies that develop reading and metacognitive
84.22	abilities;
	(d) the ability to develop and implement effective vocabulary
34.23	(d) the ability to develop and implement effective vocabulary

8710.4600 84

09/01/09	REVISOR	JFK/DI	AR3834

85.1	(e) the ability to plan instruction and select strategies that help
85.2	students read and understand math texts and spur student interest in more complex reading
85.3	materials, including:
85.4	i. the density of ideas;
85.5	ii. concepts that build within a chapter or across chapters;
85.6	iii. use of equations to model life situations, asking students to
85.7	create or restate in words or sentences the relationship between symbols and the situation
85.8	being modeled;
85.9	iv. text with diagrams and graphs; and
85.10	v. use of different representations to aid students in understanding
85.11	the underlying mathematical concept, matching each representation to the learning styles
85.12	of different individuals; and
85.13	(f) model strategies for representing mathematical ideas in a variety of
85.14	modes (literal, symbolic, graphic, and digital), which includes asking students to restate
85.15	symbolic representations (numerals, equations, and graphs) in words or sentences.
85.16	[For text of subp 4, see M.R.]
85.17	Subp. 5. Effective date. Requirements in this part for licensure as a teacher of
85.18	mathematics are effective on September 1, 2010, and thereafter.
85.19	8710.4650 TEACHERS OF VOCAL MUSIC AND OF INSTRUMENTAL MUSIC.
85.20	[For text of subps 1 and 2, see M.R.]
85.21	Subp. 3. Subject matter standard. A candidate for licensure as a teacher of vocal
85.22	music or instrumental music must complete a program under subpart 2, item C, that must
85.23	include the candidate's demonstration of the knowledge and skills in items A, B, D, and E,
85.24	or A, C, D, and E.

8710.4650 85

09/01/09 REVISOR JFK/DI AR3834

[For text of items A to C, see M.R.]

D. All teachers of music must demonstrate an understanding of the teaching of music that integrates understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of music shall:

86.1

86.2

86.3

86.4

86.5

86.6

86.7

86.8

86.9

86.10

86.11

86.12

86.13

86.14

86.15

86.16

86.17

86.18

86.19

86.20

86.21

86.22

86.23

86.24

[For text of subitems (1) to (6), see M.R.]

- (7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process; and
- (8) apply the standards of effective practice in teaching students through a variety of early and ongoing clinical experiences with kindergarten or primary, intermediate, middle level, and high school students within a range of educational programming models.
- E. All teachers of music must understand the content and methods for teaching reading including:
- (1) knowledge of reading processes and instruction including the relationships between and among print processing abilities, motivation, background, and discourse knowledge, cognitive abilities, and reader's interest and how those relationships impact comprehension; and
- (2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading and writing instruction including the ability to develop and implement effective vocabulary strategies that help students understand words including domain-specific words.

[For text of subp 4, see M.R.]

Subp. 5. **Effective date.** The requirements of this part for licensure as a teacher of vocal music or of instrumental music are effective on September 1, 2010, and thereafter.

8710.4650 86

09/01/09	REVISOR	JFK/DI	AR3834

8710.4700 TEACHERS OF PHYSICAL EDUCATION.

[For text of subps 1 and 2, see M.R.]

86.25

87.2

87.3

87.4

87.5

87.6

87.7

87.8

87.9

87.10

87.11

87.12

87.13

87.14

87.15

87.16

87.17

87.18

87.19

87.20

87.21

87.22

87.23

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of physical education must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to D.

[For text of items A and B, see M.R.]

C. A teacher of physical education must demonstrate an understanding of the teaching of physical education that integrates understanding of physical education with the understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of physical education to children, preadolescents, and adolescents must:

[For text of subitems (1) to (7), see M.R.]

- (8) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process; and
- (9) apply the standards of effective practice in teaching students through a variety of early and ongoing clinical experiences with kindergarten and primary, intermediate, middle level, and high school students within a range of educational programming models.
- D. A teacher of physical education must understand the content and methods for teaching reading including the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials including electronic resources to support reading and writing instruction including:
- (1) selection and implementation of a wide variety of before, during, and after reading comprehension strategies that develop reading and metacognitive abilities;

8710.4700 87

09/01/09	REVISOR	JFK/DI	AR3834

(2)	the ability to develop and implement effective vocabulary strategies
that help stud	ents understand words including domain-specific words; and

(3) the ability to identify instructional practices, approaches, methods, and match materials to the cognitive levels of all readers, guided by an evidence-based rationale, which support the developmental, cultural, and linguistic differences of readers.

[For text of subp 4, see M.R.]

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of physical education are effective on September 1, 2010, and thereafter.

8710.4725 TEACHERS OF READING.

87.24

87.25

88.1

88.2

88.3

88.4

88.5

88.6

88.7

88.8

88.9

88.10

88.11

88.12

88.13

88.14

88.15

88.16

88.17

88.18

88.22

- Subpart 1. **Scope of practice.** A teacher of reading is authorized to facilitate and provide for kindergarten through grade 12 students instruction that is designed to develop reading skills, strategies, and comprehension. The teacher of reading is also authorized to provide assistance to teachers who have responsibility for providing reading instruction. Nothing in this part restricts teachers of elementary education, teachers of English as a second language, or teachers of special education from providing reading instruction to students they are licensed to teach nor restricts any other teacher from providing instruction in reading in their content areas.
- Subp. 2. **Licensure requirements.** A candidate for licensure to teach reading to students in kindergarten through grade 12 shall:
- A. hold or qualify for a full professional license valid for:

[For text of subitem (1), see M.R.]

- 88.20 (2) kindergarten through grade 12 special education teaching under parts 8710.5000 to 8710.5800;
 - (3) English as a second language teaching under part 8710.4400; or

09/01/09	REVISOR	IFK/DI	AR3834

(4)	adult basic	e education	teaching	under na	rt 8710	4000·	and
T /	auun vasii	. cuucanon	. icaciiiig	unuci pa	110/10.	TUUU.	anu

- B. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of reading including standards under subpart 3a.
- Subp. 3. [See repealer.]

89.1

89.2

89.3

89.4

89.5

89.6

89.7

89.8

89.9

89.10

89.11

89.12

89.13

89.14

89.15

89.16

89.17

89.18

89.19

89.20

89.21

89.22

89.23

- Subp. 3a. **Subject matter standard.** A candidate for licensure as a teacher of reading must complete a preparation program under subpart 2, item B, that must include the candidate's demonstration of the knowledge and skills in items A to E.
- A. A teacher of reading must have knowledge of the foundations of reading processes and instruction:
- (1) demonstrate the ability to support a philosophy of literacy instruction with theory and research;
- (2) indicate knowledge of reading theories and how these translate into effective practices;
- (3) apply reading research studies and articulate how these studies impact reading instruction at the elementary, middle, and high school levels;
- (4) understand the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents as it pertains to reading instruction;
- (5) understand the progression of reading development (emergent, beginning, transitional, intermediate, and advanced) and the variations related to cultural and linguistic diversity with a heightened awareness to the needs of struggling readers;
- (6) describe developmental progress in oral language and its relationship to reading;

09/01/09	REVISOR	JFK/DI	AR3834

	07/01/07		RE VISOR	J110/D1 11	.1(303
89.24	(7)	teach and foster emergent	reading skills such as	phonemic awareness	,
89.25	alphabet reco	gnition, and understanding	that printed words con	ivey meaning;	
90.1	(8)	teach and foster word reco	ognition skills includi	ng phonics, structural	
90.2	analysis, and	contextual analysis;			
90.3	(9)	foster the development of	an initial sight vocabu	ılary and an increasin	gly
90.4	larger and mo	re complex vocabulary, ma	stering word-learning	strategies such as the	use
90.5	of context and	d structural analysis, and de	veloping word consci	ousness;	
90.6	(10)	teach and foster fluency	and automaticity in b	oth oral and silent	
90.7	reading;				
90.8	(11)	teach and foster compreh	ension and appreciati	on of a wide range of	f
90.9	children's and	adolescent literature;			
90.10	(12)	teach comprehension stra	ategies such as adjusti	ng reading approach,	
90.11	activating bac	ekground knowledge, summ	narizing, generating q	uestions, constructing	, ,
90.12	mental repres	entations, and self-monitori	ing;		

- (13) teach and foster critical thinking skills and behaviors such as thinking independently, withholding judgment, recognizing point of view and bias, and considering multiple solutions; and
 - (14) teach writing to advance reading development and learning from text.
- B. A teacher of reading must be able to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction:
- (1) organize and manage effective reading instruction appropriate across developmental levels, proficiency, and linguistic backgrounds;
- (2) implement a variety of appropriate grouping strategies including individual, small group, and whole group reading instruction;

8710.4725 90

90.13

90.14

90.15

90.16

90.17

90.18

90.19

90.20

90.21

09/01/09	REVISOR	JFK/DI	AR3834
09/01/09	REVISOR	IHK/IJI	Δ R 3 X 3 Δ

- (3) implement and reflect on the use of instructional practices, approaches, and methods, which support the cognitive, cultural, and linguistic differences of readers;
- (4) understand and apply instructional and informational technologies, digital literacy, and electronic resources to support literacy;

90.24

91.1

91.2

91.3

91.4

91.5

91.6

91.7

91.8

91.9

91.10

91.11

91.12

91.13

91.14

91.15

91.16

91.17

91.18

91.19

91.20

91.21

91.22

91.23

- (5) identify, secure, and use high-quality literature, which meets the interest and reading needs of all readers and represents various cultures and genres;
- (6) understand the rationale for using a wide range of texts and show evidence of using multiple texts within instruction, including informational texts, content area texts, electronic texts, and nonprint materials;
- (7) understand the structures of texts, both print and electronic, and the challenges presented by these materials, and use this knowledge in lesson design to match materials to the cognitive levels of all readers and across the curriculum; and
- (8) demonstrate competency through a variety of clinical experiences with elementary, middle, and high school students.
- C. A teacher of reading must be able to use a variety of assessment tools and practices to plan and evaluate effective reading instruction:
- (1) understand the principles surrounding a wide variety of instruments, their purposes, strengths, and limitations;
- (2) select appropriate tools for specific situations that includes assessment for diagnosis and progress monitoring;
- (3) demonstrate expertise in the administration and interpretation of a wide variety of measures that track student progress by individual, class, cohort, and school;
- (4) demonstrate expertise in using assessment information to plan differentiated classroom instruction for students, including those at different cognitive and developmental stages, and those from different cultural and linguistic backgrounds;

8710.4725 91

09/01/09	REVISOR	IFK/DI	AR3834

(5)	use assessment data t	o develop	interventions	that address	specific
student needs;					

91.25

92.1

92.2

92.3

92.4

92.5

92.6

92.7

92.8

92.9

92.10

92.11

92.12

92.13

92.14

92.15

92.16

92.17

92.18

92.19

92.20

92.21

92.22

- (6) select materials, identify appropriate instructional strategies, and allocate resources needed to implement interventions and remediations; and
- (7) communicate results of assessments, students, parents, caregivers, colleagues, and administrators.
- D. A teacher of reading must be able to create a literate environment that fosters reading by integrating foundational knowledge, use of instructional practices, approaches and methods, curriculum materials, and the appropriate use of assessments including:
- (1) use students' interests, reading abilities, and backgrounds as foundations for the reading program and provide authentic reasons to read and write;
- (2) support students and colleagues in the selection of materials, print and electronic, that match students' reading levels, interests, cultural, and linguistic backgrounds;
- (3) develop and implement classroom and schoolwide organizational structures that include explicit instruction, guided practice, independent reading, interactive talk, opportunities for response, and reading and writing across the curriculum;
- (4) integrate technology into reading instruction to create and maintain an environment that includes conventional and new literacies and ensures equity of access to technology;
- (5) create and maintain a motivating classroom and school environment that promotes ongoing student engagement and literacy for all students;
- (6) promote a shared vision that all students can learn literacy regardless of their cognitive, cultural, or linguistic backgrounds;

8710.4725 92

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

92.23	(7) use literature to engage students in dialogue, critical thinking, and
92.24	reflection around issues of social justice;
93.1	(8) promote critical literacy by encouraging student to question what they
93.2	are reading while analyzing texts from multiple viewpoints or perspectives; and
93.3	(9) understand the importance of and facilitate home school connections.
93.4	E. A teacher of reading must view professional development as a career-long
93.5	effort and responsibility including:
93.6	(1) serve as a role model and display positive attitudes toward literacy in
93.7	the district/building by engaging in reading and writing practices;
93.8	(2) promote and facilitate ongoing self-reflection related to teaching and
93.9	student learning;
93.10	(3) seek to be well informed and share up-to-date knowledge of literacy
93.11	learning with colleagues;
93.12	(4) apply aspects of coaching feedback to instructional practice;
93.13	(5) actively seek opportunities to participate in learning communities
93.14	and professional organizations;
93.15	(6) collaborate with and provide guidance for colleagues who seek
93.16	classroom instruction support in reading;
93.17	(7) engage in, initiate, implement, and evaluate professional development
93.18	programs; and
93.19	(8) understand current state and federal legislation as it relates to reading.
93.20	[For text of subp 4, see M.R.]
93.21	Subp. 5. Effective date. The requirements in this part for licensure as a teacher of
22 22	social studies are effective on Sentember 1, 2010, and thereafter

8710.4725 93

09/01/09	REVISOR	JFK/DI	AR3834

8710.4750	TEA	CHERS	\mathbf{OE}	SCIENCE
() / () - () ()			\ /\/	171 11111111111111111111111111111111111

94.20

94.21

[For text of subps 1 to 2a, see M.R.] 93.24 94.1 Subp. 3. Subject matter standards for science in grades 5 through 8. A candidate for licensure as a teacher of science in grades 5 through 8 must complete a preparation 94.2 program under subpart 2, item C, that must include the candidate's demonstration of 94.3 the knowledge and skills in items A to F. 94.4 [For text of items A to D, see M.R.] 94.5 E. A teacher of science must have a broad-based knowledge of teaching science 94.6 that integrates knowledge of science with knowledge of pedagogy, students, learning 94.7 environments, and professional development. A teacher of science must understand: 94.8 94.9 [For text of subitems (1) to (8), see M.R.] (9) the role and purpose of cocurricular and extracurricular activities in the 94.10 teaching and learning process; and 94.11 (10) how to apply the standards of effective practice in teaching through 94.12 94.13 a variety of early and ongoing clinical experiences with middle level and high school students within a range of educational programming models. 94.14 F. A teacher of science must understand the content and methods for teaching 94.15 94.16 reading including: (1) knowledge of reading processes and instruction including: 94.17 (a) orthographic knowledge and morphological relationships within 94.18 words; 94.19

(b) the relationship between word recognition and vocabulary

knowledge, fluency, and comprehension in understanding text and content materials;

8710.4750 94

09/01/09	REVISOR	JFK/DI	AR3834

94.22	(c) the importance of direct and indirect vocabulary instruction that
94.23	leads to enhanced general and domain-specific word knowledge;
95.1	(d) the relationships between and among comprehension processes
05.2	related to print processing abilities, motivation, reader's interest, background knowledge,
95.3	cognitive abilities, knowledge of academic discourse, and print and digital text; and
95.4	(e) the development of academic language and its impact on learning
95.5	and school success; and
95.6	(2) the ability to use a wide range of instructional practices, approaches,
95.7	methods, and curriculum materials to support reading instruction including:
95.8	(a) the appropriate applications of a variety of instructional
95.9	frameworks that are effective in meeting the needs of readers of varying proficiency levels
95.10	and linguistic backgrounds in secondary settings;
95.11	(b) the ability to scaffold instruction for students who experience
95.12	comprehension difficulties;
95.13	(c) selection and implementation of a wide variety of before, during,
05.14	and after reading comprehension strategies that develop reading and metacognitive
95.15	abilities;
95.16	(d) the ability to develop and implement effective vocabulary
95.17	strategies that help students understand words including domain-specific content words;
95.18	(e) the ability to develop critical literacy skills by encouraging students
95.19	to question texts and analyze texts from multiple viewpoints or perspectives;
95.20	(f) the ability to identify instructional practices, approaches and
05.21	methods and match materials, print and digital, to the cognitive levels of all readers,
05.22	guided by an evidence-based rationale, which support the developmental, cultural, and

linguistic differences of readers;

95.22

	09/01/09 REVISOR JFK	/DI AR3834
95.24	(g) the ability to plan instruction and select strategies	s that help students
05.25	read and understand science texts, including the ability to:	
96.1	i. distinguish between facts based on empirical/so	cientific findings
96.2		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
96.3	ii. relate what is read to relevant prior knowledge	•
06.4	iii. use scientific knowledge to draw inferences of	or conclusions
06.5	from facts, discern cause and effect relationships, detect fallacies in	author's evidence, and
96.6	support own claims with evidence;	
06.7	iv. follow instructions to perform laboratory activ	vities step by step
96.8		1 3 1
06.9		itine
96.10	o content/meaning; and	
06.11	vi. explain meaning of abbreviations and symbols	5.
06.12	2 Subp. 4. Subject matter standards for teachers of chemistry	. A candidate for
96.13	licensure as a teacher of chemistry in grades 9 through 12 must cor	nplete a preparation
06.14	4 program under subpart 2, item C, that must include the candidate's	demonstration of the
06.15	knowledge and skills in items A to C, and subpart 3, items E and F	
06.16	6 [For text of items A to C, see M.R.]	
0.10		
06.17	Subp. 5. Subject matter standards for teachers of earth and	space science. A
06.18		_
06.19		
06.20	demonstration of the knowledge and skills in items A to C, and sub	part 3, items E and F.

[For text of items A to C, see M.R.]

8710.4750 96

09/01/09	REVISOR	JFK/DI	AR3834
110/111/110	REVISOR	IHK/IN	V K 4 K 4 V
U2/U1/U2	18.17.8.188.718	J1 18 / 1 / 1	/\ I\)()) +

Subp. 6. **Subject matter standards for teachers of life science.** A candidate for licensure as a teacher of life science in grades 9 through 12 must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to C, and subpart 3, items E and F.

[For text of items A to C, see M.R.]

Subp. 7. **Subject matter standards for teachers of physics.** A candidate for licensure as a teacher of physics in grades 9 through 12 must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to C, and subpart 3, items E and F.

[For text of items A to C, see M.R.]

[For text of subp 8, see M.R.]

Subp. 9. **Effective date.** The requirements of this part for licensure as a teacher of science shall be effective on September 1, 2010, and thereafter.

8710.4800 TEACHERS OF SOCIAL STUDIES.

96.22

96.23

96.24

96.25

97.1

97.2

97.3

97.4

97.5

97.6

97.7

97.8

97.9

97.10

97.11

97.12

97.13

97.14

97.15

97.16

97.17

97.18

97.19

97.20

[For text of subps 1 and 2, see M.R.]

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of social studies must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to L.

[For text of items A to J, see M.R.]

K. A teacher of social studies must demonstrate an understanding of the teaching of social studies that integrates understanding of the social studies disciplines with the understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of social studies to preadolescent and adolescent students shall:

[For text of subitems (1) to (6), see M.R.]

8710.4800 97

09/01/09	REVISOR	JFK/DI	AR3834

97.21	(7) understand the role and purpose of cocurricular and extracurricular
97.22	activities in the teaching and learning process; and
98.1	(8) apply the standards of effective practice in teaching students through
98.2	a variety of early and ongoing clinical experiences with middle level and high school
98.3	students within a range of educational programming models.
98.4	L. A teacher of social studies must understand the content and methods for
98.5	teaching reading including:
98.6	(1) knowledge of reading processes and instruction including:
98.7	(a) orthographic knowledge and morphological relationships within
98.8	words;
98.9	(b) the relationship between word recognition and vocabulary
98.10	knowledge, fluency, and comprehension in understanding text and content materials;
98.11	(c) the importance of direct and indirect vocabulary instruction that
98.12	leads to enhanced general and domain-specific word knowledge;
98.13	(d) the relationships between and among comprehension processes
98.14	related to print processing abilities, motivation, reader's interest, background knowledge,
98.15	cognitive abilities, knowledge of academic discourse, and print and digital text; and
98.16	(e) the development of academic language and its impact on learning
98.17	and school success; and
98.18	(2) the ability to use a wide range of instructional practices, approaches,
98.19	methods, and curriculum materials to support reading instruction including:
98.20	(a) the appropriate applications of a variety of instructional
98.21	frameworks that are effective in meeting the needs of readers of varying proficiency levels

8710.4800 98

and linguistic backgrounds in secondary settings;

09/01/09	REVISOR	IFK/DI	AR3834

(b)	the ability	to scaffold	instructi	on for stuc	lents w	ho expe	rience
comprehension d	ifficulties;						
	1	1 . 1		0 1	• .	01 0	1 .

98.24

99.1

99.2

99.3

99.4

99.5

99.6

99.7

99.8

99.9

99.10

99.11

99.12

99.13

99.14

99.15

99.16

99.17

99.18

99.19

99.20

99.21

- (c) selection and implementation of a wide variety of before, during, and after reading comprehension strategies that develop reading and metacognitive abilities;
- (d) the ability to develop and implement effective vocabulary strategies that help students understand words including domain-specific content words;
- (e) the ability to develop critical literacy skills by encouraging students to question texts and analyze texts from multiple viewpoints or perspectives;
- (f) the ability to identify instructional practices, approaches, and methods and match materials, print and digital, to the cognitive levels of all readers, guided by an evidence-based rationale, which support the developmental, cultural, and linguistic differences of readers;
- (g) the appropriate applications of a wide variety of instructional frameworks that are effective in meeting the needs of readers in secondary school settings across developmental levels, proficiency, and linguistic backgrounds; and
- (h) the ability to plan instruction and select strategies that help students read and understand social studies texts and spur student interest in more complex reading materials, including the ability to help students:
- i. recognize fact and opinion and the words that signal opinions and judgments;
- ii. distinguish between primary and secondary sources, for example, historical record versus textbook;

8710.4800 99

09/01/09	REVISOR	JFK/DI	AR3834
09/01/09	KE VISOK	JI'IX/DI	AICOCH

iii. thinking critically, for example, drawing inferences or conclusions from facts, analyzing author's purpose and point of view, discerning cause and effect relationships, detecting bias, and evaluating evidence;

iv. using and interpreting maps, globes, and other nonlinguistic or graphic tools such as timelines, photographs, charts, statistical tables, digital tools, and political cartoons; and

v. using other text features such as glossaries, indexes, detailed databases about countries, and appendices of documents or maps.

[For text of subp 4, see M.R.]

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of social studies are effective on September 1, 2010, and thereafter.

8710.4850 TEACHERS OF TECHNOLOGY.

99.22

99.23

99.24

100.1

100.2

100.3

100.4

100.5

100.6

100.7

100.8

100.9

100.14

100.15

100.16

100.17

100.18

100.19

100.20

100.21

[For text of subps 1 and 2, see M.R.]

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of technology must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to D.

[For text of items A and B, see M.R.]

C. A teacher of technology must demonstrate an understanding of the teaching of technology that integrates understanding of technology with the understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of technology to preadolescent and adolescent students must:

[For text of subitems (1) to (6), see M.R.]

(7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process; and

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

100.22	(8) apply the standards of effective practice in teaching students through
100.23	a variety of early and ongoing clinical experiences with middle level and high school
100.24	students within a range of educational programming models.
101.1	D. A teacher of technology must understand the content and methods for
101.2	teaching reading including:
101.3	(1) knowledge of reading processes and instruction including:
101.4	(a) the relationship between word recognition and vocabulary
101.5	knowledge, fluency, and comprehension in understanding text and content materials;
101.6	(b) the importance of direct and indirect vocabulary instruction that
101.7	leads to enhanced general and domain-specific word knowledge;
101.8	(c) the relationships between and among comprehension processes
101.9	related to print processing abilities, motivation, reader's interest, background knowledge,
101.10	cognitive abilities, knowledge of academic discourse, and print and digital text; and
101.11	(d) the development of academic language and its impact on learning
101.12	and school success;
101.13	(2) the ability to use a wide range of instructional practices, approaches,
101.14	methods, and curriculum materials to support reading instruction including:
101.15	(a) the appropriate applications of a variety of instructional
101.16	frameworks that are effective in meeting the needs of readers of varying proficiency
101.17	levels and linguistic backgrounds;
101.18	(b) the ability to scaffold instruction for students who experience
101.19	comprehension difficulties;
101.20	(c) the ability to develop and implement effective vocabulary strategies

that help students understand words including domain-specific content words;

8710.4850 101

101.20

20/01/00	DELUCOD	IDIZ/DI	1 D 2 O 2 /
10/111/110			V D 1 A 1 A 1
09/01/09	REVISOR	JFK/DI	AR3834

(d) the ability to identify instructional practices, approaches, and
methods and match materials, print and digital, to the cognitive levels of all readers,
guided by an evidence-based rationale, which support the developmental, cultural, and
linguistic differences of readers; and

(3) the ability to use technology for ongoing assessment, both of learning and for learning, and the evaluation of the use of information and communication technologies and digital resources.

[For text of subp 4, see M.R.]

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of technology are effective on September 1, 2010, and thereafter.

8710.4900 TEACHERS OF VISUAL ARTS.

101.22

101.23

101.24

101.25

102.1

102.2

102.3

102.4

102.5

102.6

102.7

102.9

102.10

102.11

102.13

102.14

102.15

102.16

102.17

102.18

102.19

[For text of subps 1 and 2, see M.R.]

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of visual arts must complete a preparation program under subpart 2, item C, that must include the candidate's demonstration of the knowledge and skills in items A to G.

[For text of items A to E, see M.R.]

F. A teacher of visual arts must demonstrate an understanding of the teaching of visual arts that integrates understanding of visual art with an understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of visual arts to children, preadolescents, and adolescents must:

[For text of subitems (1) to (6), see M.R.]

(7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process; and

8710.4900 102

00/01/00	DEMICOR	ICIZ/DI	A D 2024
09/01/09	REVISOR	JFK/DI	AR3834

- (8) apply the standards of effective practice in teaching students in kindergarten through grade 12 through a variety of early and ongoing clinical experiences with kindergarten and primary, intermediate, middle level, and high school students within a range of educational programming models.
- G. A teacher of visual arts must understand the content and methods for teaching reading including knowledge of reading processes and instruction including:
- (1) the relationships between and among print and digital content processing abilities, motivation, background, and discourse knowledge, cognitive abilities, and reader's interest and how those relationships impact comprehension; and
- (2) the role and rationale in using literature and other texts including electronic texts and nonprint materials across the curriculum.

103.8 [For text of subp 4, see M.R.]

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of visual arts are effective on September 1, 2010, and thereafter.

8710.4925 READING LEADER.

102.20

102.21

102.22

102.23

103.1

103.2

103.3

103.4

103.5

103.6

103.7

103.9

103.10

103.11

103.12

103.13

103.14

103.15

103.16

103.17

103.18

103.19

- Subpart 1. **Scope of practice.** A reading leader is authorized to facilitate and provide site-based or districtwide leadership for kindergarten through grade 12 student instruction that is designed to develop reading skills, strategies, and comprehension. The reading leader is also authorized to provide assistance to teachers who have responsibility for providing reading instruction. Nothing in this part restricts teachers of elementary education, teachers of English as a second language, or teachers of special education from providing reading instruction to students they are licensed to teach or restricts any other teacher from providing instruction in reading in their content areas.
- Subp. 2. **Licensure requirements.** A candidate for licensure to teach reading to students in kindergarten through grade 12 shall:

09/01/09	REVISOR	IFK/DI	AR3834

103.22	A. hold or qualify for a full professional license valid for:
103.23	(1) classroom teaching, as defined in part 8710.0300, in one or more of the
103.24	following student levels: elementary, middle, or secondary;
104.1	(2) kindergarten through grade 12 special education teaching under parts
104.2	8710.5000 to 8710.5800;
104.3	(3) English as a second language teaching under part 8710.4400; or
104.4	(4) adult basic education teaching under part 8710.4000;
104.5	B. show verification of completing a Board of Teaching preparation program
104.6	approved under part 8700.7600 leading to the licensure of teachers of reading including
104.7	standards under subpart 3; and
104.8	C. show verification of completing a Board of Teaching preparation program
104.9	approved under part 8700.7600 leading to licensure as a teacher of reading under part
104.10	8710.4725.
104.11	Subp. 3. Subject matter standard. A candidate for licensure as a reading leader
104.12	must complete a preparation program under subpart 2, item B, that must include the
104.13	candidate's demonstration of the knowledge and skills in items A to E.
104.14	A. A reading leader must have knowledge of the foundations of reading
104.15	processes and instruction:

- (1) promote a school or districtwide philosophy of literacy instruction 104.16 supported by theory and research; 104.17
- (2) disseminate knowledge of reading theories and articulate how these 104.18 findings translate into effective practice; 104.19
- (3) apply knowledge of research to address identified needs related to 104.20 reading at the school and district level; 104.21

09/01/09 REVISOR JFK/DI AR3834

(4)	disseminate information, with supporting dialogue and coaching, on the
developmenta	l progress of oral language and its relationship to reading;

104.22

104.23

105.1

105.2

105.3

105.4

105.5

105.6

105.7

105.8

105.9

105.10

105 11

105.12

105.13

105.14

105.15

105.16

105.17

105.18

105.19

105.20

105.21

105.22

- (5) synthesize and disseminate the research about the major components of reading (phonemic awareness, word identification and phonics, vocabulary and background knowledge, fluency, comprehension strategies, and motivation) and how they are related to instructional practices and materials in the classroom, school, and district.
- (6) support school or districtwide implementation of differentiated reading instruction that supports learners as they progress across the developmental continuum; and
- (7) coach teachers as they identify, monitor, and respond to student progress in relation to developmental benchmarks and with attention to variations related to cultural and linguistic diversity with a heightened awareness to the needs of struggling readers.
- B. A reading leader must use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction:
- (1) provide support and coaching for teachers as they implement literacy frameworks that promote instruction which is appropriate to varying developmental levels, proficiency, and linguistic backgrounds;
- (2) support and coach teachers as they implement a variety of grouping strategies including individual, small group, and whole group reading instruction;
- (3) facilitate the development, selection, implementation, and evaluation of curriculum (e.g. instructional practices, approaches, and methods) consistent with building/district frameworks;
- (4) support and coach teachers in the design of effective reading lessons using various instructional practices, approaches, methods and materials in text and

09/01/09	REVISOR	JFK/DI	AR3834

multimedia formats that promote the development of the major components of reading within the reading classroom and across the content areas;

105.23

105.24

106.1

106.2

106.3

106.4

106.5

106.6

106.7

106.8

106.9

106.10

106 11

106.12

106.13

106.14

106.15

106 16

106.21

106.22

- (5) provide leadership to ensure that district and school curriculum and standards are consistent with Minnesota's Academic Standards in Language Arts/Reading;
- (6) advocate for, support, and coach teacher use of high-quality literature and a wide range of texts, including informational texts, content area texts, electronic texts, and nonprint materials; and
- (7) model lessons highlighting the structures of texts, print and electronic, the challenges presented by these materials, and support teachers as they use this knowledge in lesson design.
- C. A reading leader must use a variety of assessment tools and practices to plan and evaluate effective reading instruction:
- (1) understand the relationship of school, district, state, and national literacy initiatives and their accountability requirements;
- (2) provide leadership and guidance in the development of effective school assessment plans;
- (3) provide professional development on the proper use and interpretation of various assessment tools;
- 106.17 (4) provide support and professional development to school and district personnel on the appropriate interpretations of selected assessment tools;
- 106.19 (5) use multiple measures of data for the purpose of progress monitoring, program evaluation, and instructional effectiveness;
 - (6) provide leadership and guidance in the evaluation of school and districtwide programs;

09/01/09	REVISOR	JFK/DI	AR3834
07/01/07	KL VISOK	J1 IX/ D1	TINGUUT

(7) provide leadership in designing and sustaining effective instructional
assessment models for meeting the needs of those at different cognitive and developmenta
stages and those from different cultural and linguistic backgrounds;

106.24

106.25

107.1

107.2

107.3

107.4

107.5

107 6

107.7

107.8

107.9

107.10

107.11

107.12

107.13

107.14

107.15

107.16

107.17

107.18

107.19

107.20

107.21

- (8) provide professional development in understanding how the structure of written language, including orthography, morphology, phonology, semantics, and syntax, relates to reading instruction for students with special reading needs;
- (9) revise instructional programs based on data to address student needs and proficiencies;
- (10) provide leadership in data-driven, shared decision-making processes on the type and intensity of intervention models;
- (11) know how to locate and employ necessary resources for high-quality instructional support; and
- (12) communicate results of assessments to students, parents, caregivers, colleagues, administrators, policymakers, policy officials, and communities.
- D. A reading leader must create a literate environment that fosters reading by integrating foundational knowledge, instructional practices, approaches, and methods, curriculum materials, and the appropriate use of assessments, in order to:
- (1) support and coach teachers as they select materials, print and electronic, that match students' reading levels, interests, cultural, and linguistic backgrounds;
- (2) create a schoolwide literacy-rich physical environment appropriate for students who represent multiple levels, broad interests, and cultural and linguistic backgrounds;
- (3) support and coach teachers in the development of classroom and schoolwide organizational structures that include explicit instruction, guided practice,

09/01/09	REVISOR	JFK/DI	AR3834

independent reading, interactive talk, opportunities for response, and reading and writing across the curriculum;

107.22

107.23

108.1

108.2

108.3

108.4

108.5

108.6

108.7

108.8

108.9

108.10

108.11

108.12

108.13

- (4) promote a school or districtwide philosophy of literacy that integrates technology to create and maintain a reading environment that includes conventional and new literacies;
- (5) support and coach teachers as they create and maintain a motivating classroom and school environment that promotes ongoing student engagement and literacy for all students;
- (6) promote a shared vision that all students can learn literacy regardless of their cognitive, cultural, or linguistic backgrounds;
- (7) support and coach teachers as they use literature to engage students in dialogue, critical thinking, and reflection around issues of social justice;
 - (8) promote schoolwide critical literacy by encouraging students to question what they are reading while analyzing texts from multiple viewpoints or perspectives; and
 - (9) create a strong advocacy for home school connections.
- 108.14 E. A reading leader, in viewing professional development as a career-long effort and responsibility, must:
- 108.16 (1) promote and facilitate teachers' ongoing self-reflection related to teaching and student learning;
- 108.18 (2) seek to be well informed and share up-to-date knowledge of literacy learning with colleagues;
- 108.20 (3) work with colleagues to provide feedback on instructional practice through coaching and feedback sessions;
- 108.22 (4) provide leadership in developing and maintaining learning communities;

09/01/09	REVISOR	JFK/DI	AR3834

	09/01/09		REVISOR	JFK/DI	AR383
108.23	(5)	seek leadership opportunit	ies in professional org	ganizations;	
108.24	(6)	understand and support ad	ult learning;		
109.1	(7)	have the knowledge to cre	eate long-term, substa	entive, coherent	
109.2	professional c	development;			
109.3	(8)	engage in ongoing reflect	ion of the professiona	l development	
109.4	process, inclu	ding planning, implementing	ng, evaluating, and usi	ing data to support	future
109.5	professional d	levelopment;			
109.6	(9)	knowledge of how to effect	ctively form teams fro	om across the distri	ct to

- work on literacy initiatives;
- (10) strategically secure and place human resources to accomplish literacy 109.8 initiatives; 109.9
- (11) know fiscal, budgetary, and purchasing practices for operating a 109.10 comprehensive reading program and secure and allocate the funds in appropriate ways 109.11 that match the literacy vision and goals for the district; 109.12
 - (12) understand the role and alignment of district, school, and department missions and goals in reading program planning; and
- (13) provide leadership and communicate with colleagues' information 109.15 regarding current state and federal legislation as it relates to reading. 109.16
- Subp. 4. Professional license. A professional license shall be issued and renewed 109.17 according to the rules of the Board of Teaching governing licensure. 109.18
- 109.19 Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of social studies are effective on September 1, 2010, and thereafter. 109.20

109.7

109.13

09/01/09 REVISOR JFK/DI AR3834

8710.7200 CLOCK HOURS; REQUIREMENTS FOR RENEWAL OF PROFESSIONAL LICENSES.

[For text of subp 1, see M.R.]

109.21

109.22

109.24

109.25

110.1

110.2

110.3

110.4

110.5

110.6

110.7

110.8

110.9

110.10

110.11

110.12

110.13

110.14

110.15

110.16

110.17

110.18

110.19

110.20

110.21

110.22

Subp. 2. Renewal clock hours. Verification by the local continuing education/relicensure committee that the applicant has completed 125 approved clock hours is required for renewal. Instruction and professional development activities meet requirements to renew licenses only if they address one or more of the standards in part 8710.2000. Effective for renewal of professional licenses which expire on June 30, 2001, and after, applicants must include in their 125 clock hours instruction or other professional development activities which address positive behavioral intervention strategies and accommodation, modification, and adaptation of curriculum, materials, and instruction to appropriately meet the needs of varied students in achieving graduation standards. Effective for renewal of professional licenses which expire on June 30, 2004, and after, applicants must also include in their 125 clock hours instruction or other professional development activities which evidence further reading preparation, consistent with Minnesota Statutes, section 122A.06, subdivision 4. Effective for renewal of professional licenses which expire on June 30, 2005, and after, applicants must also include in their 125 clock hours instruction or other professional development activities which address further preparation in understanding the key warning signs of early-onset mental illnesses in children and adolescents which may include depressed mood, excessive fears and anxieties, changes in behavior and performance, failure to develop peer relationships, impaired concentration and thinking, suicidal gestures, the potential connection to substance use, and knowledge of steps to be taken if such warning signs are observed. Effective for renewal of professional licenses that expire on June 30, 2012, and thereafter, applicants must also include in their 125-clock hours instruction or other professional development activities that integrate technology effectively with student learning to increase engagement and student achievement.

8710.7200 110

09/01/09 REVISOR JFK/DI AR3834

[For text of subps 3 to 11, see M.R.]

110.24 **REPEALER.** Minnesota Rules, parts 8710.3200, subpart 4; 8710.3300; and 8710.4725,

subpart 3, are repealed.

8710.7200 111