

CHAPTER 8710
BOARD OF TEACHING
TEACHER AND OTHER SCHOOL PROFESSIONAL
LICENSING

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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 management and budget, as provided by law, and report each month to the commissioner of management and budget 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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

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.

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:

[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;

F. design teaching strategies and materials to achieve different instructional purposes and to meet student needs including developmental stages, prior knowledge, learning styles, and interests;

G. use multiple teaching and learning strategies to engage students in active learning opportunities that promote the development of critical thinking, problem solving, and performance capabilities and that help students assume responsibility for identifying and using learning resources;

H. monitor and adjust strategies in response to learner feedback;

I. vary the instructional process to address the content and purposes of instruction and the needs of students;

J. develop a variety of clear, accurate presentations and representations of concepts, using alternative explanations to assist students' understanding and present varied perspectives to encourage critical thinking;

K. use educational technology to broaden student knowledge about technology, to deliver instruction to students at different levels and paces, and to stimulate advanced levels of learning; and

L. develop, implement, and evaluate lesson plans that include methods and strategies to maximize learning that incorporate a wide variety of materials and technology resources.

[For text of subp 6, see M.R.]

Subp. 7. **Standard 6, communication.** A teacher must be able to use knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom. The teacher must:

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

K. use a variety of media and educational technology to enrich learning opportunities.

Subp. 8. **Standard 7, planning instruction.** A teacher must be able to plan and manage instruction based upon knowledge of subject matter, students, the community, and curriculum goals. The teacher must:

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

E. design lessons and activities that operate at multiple levels to meet the developmental and individual needs of students and to help all progress;

F. implement learning experiences that are appropriate for curriculum goals, relevant to learners, and based on principles of effective instruction including activating student prior knowledge, anticipating preconceptions, encouraging exploration and problem solving, and building new skills on those previously acquired;

G. evaluate plans in relation to short-range and long-range goals, and systematically adjust plans to meet student needs and enhance learning; and

H. plan for the management of technology resources within the context of learning activities and develop strategies to manage student learning in a technology-integrated environment.

Subp. 9. **Standard 8, assessment.** A teacher must understand and be able to use formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the student. The teacher must:

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

E. select, construct, and use assessment strategies, instruments, and technologies appropriate to the learning outcomes being evaluated and to other diagnostic purposes;

[For text of items F to K, see M.R.]

L. establish and maintain student records of work and performance;

M. responsibly communicate student progress based on appropriate indicators to students, parents or guardians, and other colleagues; and

N. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.

Subp. 10. **Standard 9, reflection and professional development.** A teacher must be a reflective practitioner who continually evaluates the effects of choices and actions on others, including students, parents, and other professionals in the learning community, and who actively seeks out opportunities for professional growth. The teacher must:

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

K. understand standards of professional conduct in the Code of Ethics for Minnesota Teachers in part 8700.7500;

L. understand the responsibility for obtaining and maintaining licensure, the role of the teacher as a public employee, and the purpose and contributions of educational organizations; and

M. understand the role of continuous development in technology knowledge and skills representative of technology applications for education.

Subp. 11. **Standard 10, collaboration, ethics, and relationships.** A teacher must be able to communicate and interact with parents or guardians, families, school colleagues, and the community to support student learning and well-being. The teacher must:

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

K. establish productive relationships with parents and guardians in support of student learning and well-being;

L. understand mandatory reporting laws and rules; and

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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3000 TEACHERS OF EARLY CHILDHOOD EDUCATION.

[For text of subs 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

(d) communicate with adult caregivers of primary-aged children about concepts of language and literacy development and age-appropriate learning materials;

[For text of subitems (5) to (9), see M.R.]

E. A teacher of young children in the primary grades must have knowledge of the foundations of reading processes, development, and instruction, including:

(1) oral and written language development, including:

(a) relationships among reading, writing, and oral language and the interdependent nature of reading, writing, listening, and speaking to promote reading proficiency;

(b) the use of formal and informal oral language and writing opportunities across the curriculum to help students make connections between their oral language and reading and writing, particularly English language learners; and

(c) the interrelated elements of language arts instruction that support the reading development of English language learners, including ways in which the writing systems of other languages may differ from English and factors and processes involved in transferring literacy competencies from one language to another;

(2) phonological and phonemic awareness, including:

(a) the phonemes that make up the English language;

(b) the ways in which reading achievement is related to phonological and phonemic awareness, including the ability to recognize word boundaries; to rhyme; and to blend, segment, substitute, and delete sounds in words; and

(c) the instructional progression of phonological awareness, for example, words, syllables, onsets and rimes, and phonemes;

(3) concepts about print, including:

(a) knowledge about how letters, words, and sentences are represented in written English;

- (b) the importance of teaching uppercase and lowercase letter recognition and formation; and
- (c) the instructional progression of the alphabetic principle;
- (4) phonics and other word identification strategies and fluency, including:
 - (a) systematic, explicit phonics instruction that is sequenced according to the increasing complexity of linguistic units;
 - (b) word identification strategies and common, irregular sight words;
 - (c) the stages of spelling development and systematic planning for spelling instruction related to the stages of spelling development;
 - (d) how the etymology and morphology of words relate to orthographic patterns in English; and
 - (e) the development of reading fluency;
- (5) knowledge of how to develop vocabulary knowledge, including:
 - (a) understanding the critical role vocabulary knowledge plays in reading;
 - (b) how to provide explicit instruction in vocabulary development and how to determine the meaning and accurate use of unfamiliar words encountered through listening and reading; and
 - (c) how to provide opportunities to engage in early and continual language experiences to increase vocabulary by modeling and explicitly teaching students a variety of strategies for gaining meaning from unfamiliar words;
- (6) comprehension processes related to reading, including:
 - (a) knowledge of how proficient readers read, how to facilitate listening comprehension, and how to develop comprehension of print material;
 - (b) the levels of comprehension, how to explicitly teach and provide guided practice in comprehension skills and strategies; and
 - (c) how to facilitate comprehension at various stages of reading development by selecting and using a range of texts, activities, and strategies before, during, and after reading;
- (7) content-area literacy, including:
 - (a) knowledge of reading comprehension processes necessary to comprehend different types of informational materials and content-area texts; and
 - (b) the structures and features of expository (informational) texts and effective reading strategies to address different text structures and purposes for reading;
- (8) literary response and analysis, including:
 - (a) knowledge of how to provide frequent opportunities to listen to and read high-quality literature for different purposes;
 - (b) knowledge of how to select, evaluate, and respond to literature from a range of genres, eras, perspectives, and cultures; and
 - (c) knowledge of how to analyze and teach literary text structures and elements and criticism drawing upon literature and instructional needs and interests; and
- (9) structure of the English language, including:
 - (a) basic knowledge of English conventions and the structure of the English language (sentence structure, grammar, punctuation, capitalization, spelling, syntax, and semantics);
 - (b) knowledge of how to enhance literacy skills including helping students understand similarities and differences between language structures used in spoken and written English;

(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;

(b) auditory awareness, discrimination of sounds, phonemic awareness, and word awareness;

(c) the teaching of phonics, sight words, spelling, and fluency, including the selection, design, and use of instructional programs, materials, texts, and activities; and

(d) applying a variety of reading comprehension strategies to different types of informational materials and content-area texts including teaching the structures and features of expository texts;

(2) selection, design, and use of appropriate and engaging instructional strategies, activities, and materials, including:

(a) multisensory techniques to ensure that students learn concepts about print including how to recognize and write letters;

(b) teaching vocabulary using a range of instructional activities to extend students' understanding of words;

(c) teaching comprehension skills and strategies, including opportunities for guided and independent work;

(3) selection and appropriate use of a wide range of engaging texts representing various genres and cultures when designing reading lessons; the ability to facilitate and develop students' responses to literature and critical reading abilities through high level, interactive discussions about texts;

(4) selection and appropriate explicit instruction and guided practice to teach written-language structures using a range of approaches and activities to develop the students' facility to comprehend and use academic language;

(5) development of a literacy framework to coherently organize reading programs and effectively implement lessons, including a variety of grouping strategies, guided practice, and independent work; and

(6) the ability to design purposeful lessons and tasks based on the qualities, structures, and difficulty of texts and the reading needs of individual students, including the selection and use of supplementary materials to support the reading development of struggling and gifted readers.

G. A teacher of young children in the primary grades must have knowledge of and ability to use a variety of assessment tools and practices to plan and evaluate effective reading instruction, including:

(1) formal and informal tools to assess students':

(a) oral and written language development;

(b) auditory awareness, discrimination of sounds, and phonological and phonemic awareness;

(c) understanding of concepts about print and the alphabetic principle;

(d) knowledge of and skills in applying phonics and other word identification strategies, spelling strategies, and fluency;

(e) vocabulary knowledge in relation to specific reading needs and texts;

(f) comprehension of narrative and expository texts and the use of comprehension strategies, including determining independent, instructional, and frustration reading levels;

(g) comprehension in content-area reading;

(h) the ability to evaluate and respond to a range of literature and analyze text structures and elements; and

(i) oral and written language to determine the understanding and use of English language structures and conventions;

(2) formal and informal tools to:

(a) plan, evaluate, and differentiate instruction to meet the needs of students from various cognitive, linguistic, and cultural backgrounds; and

(b) design and implement appropriate classroom interventions for struggling readers and enrichment programs for gifted readers;

(3) the ability to work with reading specialists, gifted and talented specialists, and other staff on advanced intervention and enrichment programs;

(4) the ability to communicate results of assessments to specific individuals in accurate and coherent ways that indicate how the results might impact student achievement;

(5) the ability to administer selected assessments and analyze and use data to plan instruction through a structured clinical experience linked to university reading course work; and

(6) the ability to understand the appropriate uses of each kind of assessment and the concepts of validity and reliability.

H. A teacher of young children in the primary grades must have the ability to create a literate and motivating 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) knowledge of how to use interests, reading abilities, and backgrounds as foundations for the reading program and provide authentic reasons to read and write;

(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 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;

(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;

(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.

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:

(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.

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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3200 TEACHERS OF ELEMENTARY EDUCATION.

Subpart 1. **Scope of practice.** The teacher of elementary education is authorized to teach all subjects to children in kindergarten through grade 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:

(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;

(4) understand and apply the process and necessity of collaboration with families and other adults in support of the learning of young children;

(5) understand how to integrate curriculum across subject areas in developmentally appropriate ways;

(6) apply the standards of effective practice in teaching students in kindergarten through grade 6 through a variety of early and ongoing clinical experiences with kindergarten, primary, and intermediate students within a range of educational programming models; and

(7) apply the standards of effective practice in teaching students in kindergarten through grade 6 through a minimum of ten weeks of full-time student teaching.

B. A teacher of children in kindergarten through grade 6 must demonstrate the knowledge of fundamental concepts of communication arts and literature and the connections between them. The teacher must:

(1) develop the skills and understanding to teach reading, writing, speaking, listening, media literacy, and literature;

(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;

(7) know children's and young adolescents' literature representing a variety of genre; and

(8) know how to use books and other printed sources to develop children's personal growth and lifelong learning.

C. A teacher of children in kindergarten through grade 6 must have knowledge of the foundations of reading processes, development, and instruction, including:

(1) oral and written language development, including:

(a) relationships among reading, writing, and oral language and the interdependent nature of reading, writing, listening, and speaking to promote reading proficiency;

(b) the use of formal and informal oral language and writing opportunities across the curriculum to help students make connections between oral language and reading and writing, particularly English language learners; and

(c) the interrelated elements of language arts instruction that support the reading development of English language learners, including ways in which the writing systems of other languages may differ from English and factors and processes involved in transferring literacy competencies from one language to another.

(2) phonological and phonemic awareness, including:

(a) the phonemes that make up the English language;

(b) the ways in which reading achievement is related to phonological and phonemic awareness, including the ability to recognize word boundaries, to rhyme, and to blend, segment, substitute, and delete sounds in words; and

(c) the instructional progression of phonological awareness, for example, words, syllables, onsets and rimes, and phonemes;

(3) concepts about print, including:

(a) knowledge about how letters, words, and sentences are represented in written English;

(b) the importance of teaching uppercase and lowercase letter recognition and formation; and

(c) the instructional progression of the alphabetic principle;

(4) phonics and other word identification strategies and fluency, including:

(a) systematic, explicit phonics instruction that is sequenced according to the increasing complexity of linguistic units;

(b) word identification strategies and common, irregular sight words;

(c) the stages of spelling development and systematic planning for spelling instruction related to the stages of spelling development;

(d) how the etymology and morphology of words relate to orthographic patterns in English; and

(e) the development of reading fluency;

- (5) knowledge of how to develop vocabulary knowledge, including:
 - (a) understanding the critical role vocabulary knowledge plays in reading;
 - (b) how to provide explicit instruction in vocabulary development and in determining the meaning and accurate use of unfamiliar words encountered through listening and reading; and
 - (c) how to provide opportunities for students to engage in early and continual language experiences to increase vocabulary by modeling and explicitly teaching students a variety of strategies for gaining meaning from unfamiliar words;
- (6) comprehension processes related to reading, including:
 - (a) knowledge of how proficient readers read, how to facilitate listening comprehension, and how to develop comprehension of print material;
 - (b) the levels of comprehension, how to explicitly teach and provide guided practice in comprehension skills and strategies; and
 - (c) how to facilitate comprehension at various stages of reading development by selecting and using a range of texts, activities, and strategies before, during, and after reading;
- (7) content-area literacy, including:
 - (a) knowledge of reading comprehension processes necessary to comprehend different types of informational materials and content-area texts; and
 - (b) the structures and features of expository (informational) texts and effective reading strategies to address different text structures and purposes for reading;
- (8) literary response and analysis, including:
 - (a) knowledge of how to provide frequent opportunities to listen to and read high-quality literature for different purposes;
 - (b) knowledge of how to select, evaluate, and respond to literature from a range of genres, eras, perspectives, and cultures; and
 - (c) knowledge of how to analyze and teach literary text structures and elements and criticism, drawing upon literature and instructional needs and interests;
- (9) structure of the English language, including:
 - (a) basic knowledge of English conventions and the structure of the English language (sentence structure, grammar, punctuation, capitalization, spelling, syntax, and semantics);
 - (b) knowledge of how to enhance literacy skills including helping students understand similarities and differences between language structures used in spoken and written English;
 - (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.

D. A teacher of children in kindergarten through grade 6 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;

(b) auditory awareness, discrimination of sounds, phonemic awareness, and word awareness;

(c) the teaching of phonics, sight words, spelling, and fluency, including the selection, design, and use of instructional programs, materials, texts, and activities; and

(d) applying a variety of reading comprehension strategies to different types of informational materials and content-area texts including teaching the structures and features of expository texts;

(2) selection, design, and use of appropriate and engaging instructional strategies, activities, and materials, including:

(a) multisensory techniques to ensure that students learn concepts about print including how to recognize and write letters;

(b) teaching vocabulary using a range of instructional activities to extend students' understanding of words; and

(c) teaching comprehension skills and strategies, including opportunities for guided and independent work;

(3) selection and appropriate use of a wide range of engaging texts representing various genres and cultures when designing reading lessons; the ability to facilitate and develop students' responses to literature and critical reading abilities through high level, interactive discussions about texts;

(4) selection and appropriate explicit instruction and guided practice to teach written-language structures using a range of approaches and activities to develop students' facility in comprehending and using academic language;

(5) development of a literacy framework to coherently organize reading programs and effectively implement lessons, including a variety of grouping strategies, guided practice, and independent work; and

(6) the ability to design purposeful lessons and tasks based on the qualities, structures, and difficulty of texts and the reading needs of individuals, including the selection and use of supplementary materials to support the reading development of struggling and gifted readers.

E. A teacher of children in kindergarten through grade 6 must have knowledge of and ability to use a variety of assessment tools and practices to plan and evaluate effective reading instruction, including:

(1) formal and informal tools to assess students':

(a) oral and written language development;

(b) auditory awareness, discrimination of sounds, and phonological and phonemic awareness;

(c) understanding of concepts about print and the alphabetic principle;

(d) knowledge of and skills in applying phonics and other word identification strategies, spelling strategies, and fluency;

(e) vocabulary knowledge in relation to specific reading needs and texts;

(f) comprehension of narrative and expository texts and the use of comprehension strategies, including determining independent, instructional, and frustration reading levels;

(g) comprehension in content area reading;

(h) ability to evaluate and respond to a range of literature and analyze text structures and elements; and

(i) oral and written language to determine understanding and use of English language structures and conventions;

- (2) formal and informal tools to:
 - (a) plan, evaluate, and differentiate instruction to meet the needs of students from various cognitive, linguistic, and cultural backgrounds; and
 - (b) design and implement appropriate classroom interventions for struggling readers and enrichment programs for gifted readers;
- (3) the ability to work with reading specialists, gifted and talented specialists, and other staff on advanced intervention and enrichment programs;
- (4) the ability to communicate results of assessments to specific individuals in accurate and coherent ways that indicate how the results might impact student achievement;
- (5) the ability to administer selected assessments and analyze and use data to plan instruction through a structured clinical experience linked to university reading course work; and
- (6) the ability to understand the appropriate uses of each kind of assessment and the concepts of validity and reliability.

F. A teacher of children in kindergarten through grade 6 must have the ability to create a literate and motivating 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) knowledge of how to use interests, reading abilities, and backgrounds as foundations for the reading program and provide authentic reasons to read and write;
- (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 teacher of children in kindergarten through grade 6 must demonstrate a view of professional development as a career-long effort and responsibility. The teacher must:

- (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;
- (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
- (c) relate patterns in one strand of mathematics to patterns across the discipline;

(2) concepts and techniques of discrete mathematics and how to use them to solve problems from areas including graph theory, combinatorics, and recursion and know how to:

(a) help students investigate situations that involve counting finite sets, calculating probabilities, tracing paths in network graphs, and analyzing iterative procedures; and

(b) apply these ideas and methods in settings as diverse as the mathematics of finance, population dynamics, and optimal planning;

(3) concepts of numerical literacy:

(a) possess number sense and be able to use numbers to quantify concepts in the students' world;

(b) understand a variety of computational procedures and how to use them in examining the reasonableness of the students' answers;

(c) understand the concepts of number theory including divisibility, factors, multiples, and prime numbers, and know how to provide a basis for exploring number relationships; and

(d) understand the relationships of integers and their properties that can be explored and generalized to other mathematical domains;

(4) concepts of space and shape:

(a) understand the properties and relationships of geometric figures;

(b) understand geometry and measurement from both abstract and concrete perspectives and identify real world applications; and

(c) know how to use geometric learning tools such as geoboards, compass and straight edge, ruler and protractor, patty paper, reflection tools, spheres, and platonic solids;

(5) data investigations:

(a) use a variety of conceptual and procedural tools for collecting, organizing, and reasoning about data;

(b) apply numerical and graphical techniques for representing and summarizing data;

(c) interpret and draw inferences from data and make decisions in a wide range of applied problem situations; and

(d) help students understand quantitative and qualitative approaches to answering questions and develop students' abilities to communicate mathematically;

(6) concepts of randomness and uncertainty:

(a) probability as a way of describing chance in simple and compound events; and

(b) the role of randomness and sampling in experimental studies;

(7) mathematical processes:

(a) know how to reason mathematically, solve problems, and communicate mathematics effectively at different levels of formality;

(b) understand the connections among mathematical concepts and procedures, as well as their application to the real world;

(c) understand the relationship between mathematics and other fields; and

(d) understand and apply problem solving, reasoning, communication, and connections; and

(8) mathematical perspectives:

(a) understand the history of mathematics and the interaction between different cultures and mathematics; and

(b) know how to integrate technological and nontechnological tools with mathematics.

I. A teacher of children in kindergarten through grade 6 must demonstrate knowledge of fundamental social studies concepts and the connections among them. The teacher must know and apply:

(1) tools of inquiry and problem solving;

(2) concepts of:

(a) culture and cultural diversity;

(b) the ways human beings view themselves in and over time;

(c) the interaction between people, places, and environments;

(d) individual development and identity;

(e) interactions among individuals, groups, and institutions;

(f) how people create and change structures of power and authority and of governance;

(g) how people organize for the production, distribution, and consumption of goods and services and how those choices impact the environment;

(h) the relationships among science, technology, and society;

(i) global connections and independence; and

(j) the ideals, principles, and practices that promote productive community involvement;

(3) history, government, and culture of Minnesota-based American Indian tribes as integrating concepts throughout the elementary curriculum; and

(4) the environment as an integrating concept through understanding of how to use the sciences, social sciences, mathematics, arts, and communications in the exploration of environmental issues and topics.

J. A teacher of children in kindergarten through grade 6 must demonstrate a fundamental knowledge of scientific perspectives, scientific connections, science in personal

and social perspectives, the domains of science, and the methods and materials for teaching science and scientific inquiry. The teacher must:

(1) understand science as a human endeavor, the nature of scientific knowledge, and the historical perspective of science;

(2) know and apply the understandings and abilities of scientific inquiry including the ability to:

(a) identify questions and concepts that can be explored through scientific inquiry;

(b) design and conduct scientific investigations;

(c) use appropriate scientific instrumentation and equipment and mathematics as tools to improve scientific investigations and communications;

(d) compare the use of multiple types of inquiry for answering questions;

(e) evaluate alternative explanations and models based on evidence, current scientific understanding, and logic; and

(f) communicate and defend a scientific argument;

(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;

(c) common student misconceptions in science and developmentally appropriate strategies to elicit students' misconceptions and help them move to accepted scientific understandings; and

(d) how to implement safe environments for learning science through knowing:

i. state and national legal responsibilities and safety guidelines for teaching science;

ii. how to establish and enforce recognized safety procedures during the science learning experience;

iii. how to use required safety equipment for classroom, field, and laboratory settings including goggles, fire extinguisher, fire blanket, eye wash, and chemical shower;

iv. how to manage, maintain, and utilize science supplies and equipment;

v. state and national guidelines and plan for the care, storage, use, and disposal of chemicals and equipment used to teach science;

vi. the ethics of and restrictions on making and maintaining collections of scientific specimens and data; and

vii. the ethics of and restrictions on the use of live organisms, and how to acquire, care, handle, and dispose of organisms.

K. A teacher of children in kindergarten through grade 6 must demonstrate knowledge of fundamental physical education and health concepts and the connections among them. The teacher must:

(1) understand the knowledge needed for providing learning experiences that encourage personal and community health promotion, disease prevention and safety, and proper nutritional choices;

(2) understand strategies for reducing and preventing accidents; drug, alcohol, and tobacco use; and high-risk situations and relationships;

(3) understand and apply movement concepts and principles to the learning and development of motor skills; and

(4) understand the knowledge needed for providing learning experiences that develop a health-enhancing level of physical fitness.

L. A teacher of children in kindergarten through grade 6 must demonstrate knowledge of fundamental visual and performing arts, including music, dance, and theater, concepts and the connections among them. The teacher must:

(1) understand the basic structural elements, principles, and vocabulary of the visual and performing arts;

(2) be able to perform and create using the basic elements and processes of visual and performing arts;

(3) know and apply within the elementary curriculum strategies for nurturing artistic modes of expression and thinking;

(4) understand the role of visual and performing arts in culture; and

(5) know the characteristics of children's developmental stages in the visual and performing arts.

Subp. 4. [Repealed, 34 SR 595]

Subp. 5. **Continuing licensure.** A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3300 [Repealed, 34 SR 595]

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:

- (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 student's schooling experiences with 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;
- (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 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 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;

(5) possess the strategies and skills necessary to expand the vocabulary acquisition strategies of young adolescents as they grow in their literacy behaviors; and

(6) possess the strategies and skills necessary to develop the reading and writing behaviors of young adolescents across a breadth of content areas.

D. A teacher with a middle level endorsement for teaching communication arts and literature in grades 5 through 8 must demonstrate understanding and skills essential to the teaching and learning of reading, writing, speaking, listening, media literacy, and literature. The teacher must demonstrate the:

(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;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

(d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

(e) the development of academic language and its impact on learning and school success;

(2) ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction, including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(c) the ability to develop and implement effective vocabulary strategies that help students understand words, including domain-specific content words;

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

(e) implementation of a variety of grouping strategies that include individual, small group, and whole group reading experiences that promote enhanced comprehension of text; and

(f) the ability to plan instruction and select strategies that help students read and understand language, arts, and texts, and spur student interest in more complex reading materials, including the ability to help students:

i. distinguish fact from opinion and the words that signal opinions and judgments in persuasive texts;

ii. think critically: draw inferences or conclusions from facts, analyze author's purpose and point of view, evaluate author's argument and evidence, and synthesize information from more than one text; and

iii. use aids such as glossaries and appendixes that pertain to reading, writing, and English language conventions;

(3) use of a variety of assessment practices to evaluate effective reading:

(a) understand the measurement systems and proper interpretation of assessment tools that determine individual student's reading level, fluency, comprehension abilities, and reading interests;

(b) use of data to set goals and objectives, make effective instructional decisions, and demonstrate responsiveness to student needs; and

(c) the ability to communicate results of assessments to specific individuals in accurate and coherent ways that indicate how the results might impact student achievement.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3320 MIDDLE LEVEL ENDORSEMENT LICENSE FOR TEACHERS OF MATHEMATICS.

Subpart 1. **Scope of practice.** A teacher of mathematics 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 mathematics 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 mathematics for grades 5 through 8 in subpart 3; and

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

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;
- (4) understand the need for and how to connect schooling experiences with 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;
- (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;
 - (b) analyze the interaction within and among quantities and variables to model patterns of change and use appropriate representations, including tables, graphs, matrices, words, algebraic expressions, and equations;

(c) represent and solve problem situations that involve variable quantities and be able to use appropriate technology;

(d) understand patterns present in number systems and apply these patterns to further investigations;

(e) apply properties of boundedness and limits to investigate problems involving sequences and series; and

(f) apply concepts of derivatives to investigate problems involving rates of change;

(2) concepts of discrete mathematics:

(a) application of discrete models to problem situations using appropriate representations, including sequences, finite graphs and trees, matrices, and arrays;

(b) application of systematic counting techniques in problem situations to include determining the existence of a solution, the number of possible solutions, and the optimal solution;

(c) application of discrete mathematics strategies including pattern searching; organization of information; sorting; case-by-case analysis; iteration and recursion; and mathematical induction to investigate, solve, and extend problems; and

(d) exploration, development, analysis, and comparison of algorithms designed to accomplish a task or solve a problem;

(3) concepts of number sense:

(a) understand number systems; their properties; and relations, including whole numbers, integers, rational numbers, real numbers, and complex numbers;

(b) possess an intuitive sense of numbers including a sense of magnitude, mental mathematics, estimation, place value, and a sense of reasonableness of results;

(c) possess a sense for operations, application of properties of operations, and the estimation of results;

(d) be able to translate among equivalent forms of numbers to facilitate problem solving; and

(e) be able to estimate quantities and evaluate the reasonableness of estimates;

(4) concepts of shape and space:

(a) shapes and the ways in which shape and space can be derived and described in terms of dimension, direction, orientation, perspective, and relationships among these properties;

(b) spatial sense and the ways in which shapes can be visualized, combined, subdivided, and changed to illustrate concepts, properties, and relationships;

(c) spatial reasoning and the use of geometric models to represent, visualize, and solve problems;

(d) motion and the ways in which rotation, reflection, and translation of shapes can illustrate concepts, properties, and relationships;

(e) formal and informal argument, including the processes of making assumptions; formulating, testing, and reformulating conjectures; justifying arguments based on geometric figures; and evaluating the arguments of others;

(f) plane, solid, and coordinate geometry systems, including relations between coordinate and synthetic geometry and generalizing geometric principles from a two-dimensional system to a three-dimensional system;

(g) attributes of shapes and objects that can be measured, including length, area, volume, capacity, size of angles, weight, and mass;

(h) the structure of systems of measurement, including the development and use of measurement systems and the relationships among different systems; and

(i) measuring, estimating, and using measurements to describe and compare geometric phenomena;

(5) concepts of data investigations:

(a) data and its power as a way to explore questions and issues;

(b) investigation through data, including formulating a problem; devising a plan to collect data; and systematically collecting, recording, and organizing data;

(c) data representation to describe data distributions, central tendency, and variance through appropriate use of graphs, tables, and summary statistics; and

(d) analysis and interpretation of data, including summarizing data; and making or evaluating arguments, predictions, recommendations, or decisions based on an analysis of the data; and

(6) concepts of randomness and uncertainty:

(a) inference and the role of randomness and sampling in statistical claims about populations;

(b) probability as a way to describe chance or risk in simple and compound events;

(c) predicting outcomes based on exploration of probability through data collection, experiments, and simulations; and

(d) predicting outcomes based on theoretical probabilities and comparing mathematical expectations with experimental results.

D. A teacher with a middle level endorsement for teaching mathematics 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;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

(d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

(e) the development of academic language and its impact on learning and school success;

(2) ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction, including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(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 plan instruction and select strategies that help students read and understand math texts and spur interest in more complex reading materials, including:

- i. the density of ideas;
- ii. concepts that build within a chapter or across chapters;
- iii. use of equations to model life situations; asking students to create or restate, in words or sentences, the relations between symbols; and the situation being modeled;
- iv. text with diagrams and graphs; and
- v. use of different representations to aid in understanding the underlying mathematical concept, matching each representation to the learning styles of different individuals; and

(f) model strategies for representing mathematical ideas in a variety of modes (literal, symbolic, graphic, digital), which includes asking students to restate symbolic representations (numerals, equations, and graphs), in words or sentences.

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

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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

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.

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;

(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 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

(e) how to use knowledge of facts and concepts drawn from history, along with methods of historical inquiry, to inform and evaluate actions concerning public policy issues;

(2) concepts of people, places, and environments;

(a) how to map information in a spatial context and interpret the maps;

(b) land forms and geographic features;

(c) physical system changes, including seasons, climate and weather, and the water cycle, and identify geographic patterns associated with them;

(d) physical and cultural patterns and their interactions, including land use, settlement patterns, cultural transmission of customs and ideas, and ecosystem changes; and

(e) how historical events have been influenced by, and have influenced, physical and human geographic factors in local, regional, national, and global settings;

(3) concepts of how people organize for the production, distribution, and consumption of goods and services:

(a) how economic systems structure the production and distribution of goods and services;

(b) the costs and benefits to society of allocating goods and services through private and public sectors;

(c) a range of various institutions that make up economic systems, for example households, business firms, banks, and corporations;

(d) how values and beliefs influence different economic decisions; and

(e) how to use economic reasoning to compare different proposals for dealing with contemporary social issues;

(4) concepts of ideals, principles, and practices of citizenship in a democratic republic:

(a) the purpose of government and how its powers are acquired, used, and justified;

(b) the basic features of the political system in the United States;

(c) the key ideals of the democratic republican form of government;

(d) the process for becoming a citizen and the rights and responsibilities of citizenship;

(e) how to locate, access, analyze, organize, and apply information about selected public issues;

(f) diverse forms of public opinion and the influence that various forms of citizen action have on public policy development and decision making; and

(g) how various forms of citizen action can strengthen the common good; and

(5) relationships among science, technology, and society:

(a) how science and technology have changed people's perceptions of the social and natural world;

(b) ways in which values, beliefs, and attitudes are influenced by new scientific and technological knowledge;

(c) the need for laws and policies to govern scientific and technological applications; and

(d) the need to seek reasonable and ethical solutions to problems that arise when scientific advancements and social norms or values come into conflict.

D. A teacher with a middle level endorsement for teaching social studies 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;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

(d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

(e) the development of academic language and its impact on learning and school success; and

(2) ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction, including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(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 to 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 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;

iii. think critically, for example, draw inferences or conclusions from facts, analyze author's purpose and point of view, discern cause and effect relationships, detect bias, and evaluate evidence;

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

v. use other texts features such as glossaries, indexes, detailed databases about countries, and appendixes of documents or maps.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3340 MIDDLE LEVEL ENDORSEMENT LICENSE FOR TEACHERS OF GENERAL SCIENCE.

Subpart 1. **Scope of practice.** A teacher of general science 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 science 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 science for grades 5 through 8 in subpart 3; and

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

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.

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;
- (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 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;
 - (c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;
 - (d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and
 - (e) the development of academic language and its impact on learning and school success; and
- (2) ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction, including:
 - (a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;
 - (b) the ability to scaffold instruction for students who experience comprehension difficulties;
 - (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; and
 - (f) the ability to identify instructional practices, approaches, and methods to 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
 - (g) the ability to plan instruction and select strategies that help students read and understand science texts, including the ability to:
 - i. distinguish between facts based on empirical/scientific findings from opinion;
 - ii. relate what is read to relevant prior knowledge;
 - iii. use scientific knowledge to draw inferences or conclusions from facts, discern cause and effect relationships, detect fallacies in author's evidence, and support own claims with evidence;
 - iv. follow instructions to perform laboratory activities step-by-step in a disciplined fashion;

v. explain diagrams and graphs in terms of scientific content and meaning; and

vi. explain meaning of abbreviations and symbols.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3350 PREPRIMARY ENDORSEMENT LICENSE.

Subpart 1. **Scope of practice.** A teacher with a preprimary endorsement license is authorized to teach preprimary students age three through prekindergarten.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach preprimary students 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 beginning teachers under part 8710.2000; and

C. hold or qualify for licensure in elementary education for kindergarten through grade six under part 8710.3200.

Subp. 3. **Subject matter standards.** A teacher of preprimary education valid for teaching preprimary students age three through prekindergarten must meet the standards in part 8710.3000, subpart 3, items A (preprimary only), C, J, K, L, and M (preprimary only).

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

Subp. 5. **Effective date.** The requirements of this part for licensure as a teacher of preprimary education for age three through prekindergarten are effective on September 1, 2010, and thereafter.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.3360 KINDERGARTEN THROUGH GRADE 8 WORLD LANGUAGE AND CULTURE ENDORSEMENT LICENSE.

Subpart 1. **Scope of practice.** A teacher with a world language and culture endorsement license is authorized to teach students in kindergarten through grade 8.

Subp. 2. **Licensure requirements.** A candidate for licensure in kindergarten through grade 8 world language and culture 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 beginning teachers under part 8710.2000; and

C. hold or apply and qualify for licensure in elementary education for kindergarten through grade 6 under part 8710.3200.

Subp. 3. **Subject matter standards.** A teacher of world language and culture in kindergarten through grade 8 must meet the standards for licensure of teachers of world languages and cultures in part 8710.4950, subparts 3 and 6, 4 and 6, or 5 and 6.

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

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Subp. 5. **Effective date.** The requirements of this part for licensure as a teacher of world language and culture in kindergarten through grade 8 are effective on September 1, 2010, and thereafter.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4000 TEACHERS OF ADULT BASIC EDUCATION.

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

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

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

C. A teacher of adult education 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 relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;
 - (c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;
 - (d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and
 - (e) the development of academic language and its impact on learning and school success; and
- (2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:
 - (a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;
 - (b) the ability to scaffold instruction for students who experience comprehension difficulties;
 - (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; and
 - (f) the ability to identify instructional practices, approaches, and methods to 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 items D to I, see M.R.]

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4050 TEACHERS OF AGRICULTURAL EDUCATION.

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

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

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

L. A teacher of agricultural education must demonstrate an understanding of the teaching of agriculture that integrates agriculture with pedagogy, students, learning, classroom management, and professional development to:

[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 experiences with middle level and high school students within a range of educational programming models.

M. A teacher of agricultural education 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 relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge; and

(d) the development of academic language and its impact on learning and school success;

(2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction, including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(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 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

(f) the complexities involved in the development of academic language and the impact of that development in school success; and

(3) the ability to use a wide range of instructional practices, approaches, 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

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(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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

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:

[For text of subitems (1) to (11), see M.R.]

(12) know how to develop and apply evaluative criteria for a business curriculum and a plan for continuous improvement; and

(13) 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.

F. A teacher of business must understand the content and methods for teaching reading including:

(1) knowledge of reading processes and instruction including:

(a) 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

(b) the complexities involved in the development of academic language and the impact of that development in school success; and

(2) the ability to use a wide range of instructional practices, approaches, 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 identify instructional practices, approaches, and 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;

(c) the ability to understand a variety of purposes for reading texts: process, information, and aesthetic; and

(d) the ability to develop and implement effective vocabulary strategies that help students understand words including domain-specific content words.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4250 TEACHERS OF COMMUNICATION ARTS AND LITERATURE.

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

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of communication arts and literature 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.

[For text of item A, see M.R.]

B. A teacher of communication arts and literature demonstrates understanding and skills essential to the teaching and learning of reading, writing, speaking, listening, media literacy, and literature. The teacher must demonstrate the:

- (1) knowledge of reading processes and instruction including:
 - (a) orthographic knowledge and morphological relationships within words;
 - (b) the relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;
 - (c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;
 - (d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and
 - (e) the development of academic language and its impact on learning and school success;
- (2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:
 - (a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;
 - (b) the ability to scaffold instruction for students who experience comprehension difficulties;
 - (c) the ability to develop and implement effective vocabulary strategies that help students understand words including domain-specific content words;
 - (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;
 - (e) implementation of a variety of grouping strategies that include individual, small group, and whole group reading experiences that promote enhanced comprehension of text; and
 - (f) the ability to plan instruction and select strategies that help students read and understand language arts texts and spur student interest in more complex reading materials, including the ability to help students:
 - i. distinguish fact from opinion and the words that signal opinions and judgments in persuasive texts;
 - ii. think critically, draw inferences or conclusions from facts, analyze author's purpose and point of view, evaluate author's argument and evidence, and synthesize information from more than one text; and
 - iii. use aids such as glossaries and appendices that pertain to reading, writing, and English language conventions;

(3) use of a variety of assessment practices to place and evaluate effective reading including:

(a) understanding the measurement systems and proper interpretation of assessment tools that determine individual student's reading level, fluency, comprehension abilities, and reading interests;

(b) using data to set goals and objectives, make effective instructional decisions, and demonstrate responsiveness to students' needs; and

(c) the ability to communicate results of assessments to specific individuals in accurate and coherent ways that indicate how the results might impact students' achievement;

(4) knowledge, skills, and ability to teach writing including:

[For text of units (a) to (d), see M.R.]

(5) knowledge, skills, and ability to teach speaking including:

[For text of units (a) to (d), see M.R.]

(6) knowledge, skills, and ability to teach listening including:

[For text of units (a) to (d), see M.R.]

(7) knowledge, skills, and ability to teach media literacy including:

[For text of units (a) to (c), see M.R.]

(d) functional, aesthetic, and ethical values of media communication; and

(8) knowledge, skills, and ability to teach literature including:

[For text of units (a) to (h), see M.R.]

C. A teacher of communication arts and literature demonstrates an understanding of the teaching of communication arts and literature that integrates understanding of communication arts and literature with their understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of communication arts and literature to preadolescent and adolescent students in grades 5 through 12 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.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4450 TEACHERS OF FAMILY AND CONSUMER SCIENCES.

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

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.

[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:
 - (a) the relationships between and among print processing abilities and digital content, motivation, background, and discourse knowledge, cognitive abilities, and reader's interest and how those relationships impact comprehension; and
 - (b) the complexities involved in the development of academic language and the impact of that development in school success; and
- (2) the ability to use a wide range of instructional practices, approaches, 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 to the cognitive levels of all readers, guided by an evidence-based rationale, which support the developmental, cultural, and linguistic differences of readers; and
 - (d) the ability to plan instruction and select strategies that help students read and understand family and consumer science texts, and electronic resources including the ability to:
 - i. relate what is read to relevant prior knowledge;
 - ii. follow instructions to perform laboratory activities step by step in a disciplined fashion;
 - iii. explain diagrams and graphs in terms of scientific content and meaning; and
 - iv. explain meaning of abbreviations and symbols.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4500 TEACHERS OF HEALTH.

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

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of health 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 I.

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

H. A teacher of health demonstrates an understanding of the teaching of health that integrates understanding of health with the understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of health 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

(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.

I. A teacher of health must understand the content and methods for teaching reading including:

(1) knowledge of reading processes and instruction including:

(a) the relationships between and among print processing abilities and digital content, motivation, background, and discourse knowledge, cognitive abilities, and reader's interest and how those relationships impact comprehension; and

(b) the complexities involved in the development of academic language and the impact of that development in school success; and

(2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:

(a) selection and implementation of a wide variety of before, during, and after reading 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;

(c) the ability to develop critical literacy skills by encouraging students to question texts and analyze texts from multiple viewpoints or perspectives; and

(d) the ability to identify instructional practices, approaches, and methods and match materials, both 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 health are effective on September 1, 2010, and thereafter.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4525 TEACHERS OF COMPUTER, KEYBOARDING, AND RELATED TECHNOLOGY APPLICATIONS.

Subpart 1. **Scope of practice.** A teacher of computer, keyboarding, and related technology applications is authorized to provide to students in grades kindergarten through 12 instruction that is designed to teach computer applications, including general 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;
- (2) knowledge about the legal context, ethics, and online safety issues in the use of technology in education, including the changeable nature of these technologies as their applications continue to evolve;
- (3) knowledge about digital equity and meeting the needs of diverse learners;
- (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;
 - (3) participate in technology planning and provide support for integration of technology learning in content area curriculum;
 - (4) participate in the development of policies and procedures for technology;
- and

(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

(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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4550 LIBRARY MEDIA SPECIALISTS.

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;

(4) demonstrate basic knowledge of computers and related technology and peripherals, including hardware, software, file management, care of equipment, and security;

(5) demonstrate basic knowledge of computer-based productivity applications;

(6) demonstrate basic knowledge of digital communications applications, which can include graphics and multimedia production;

(7) demonstrate basic knowledge of methods to manage technology, information resources, user access, and applications in an education setting;

(8) demonstrate ability to evaluate, select, and apply appropriate hardware, software, and other resources; and

(9) demonstrate the knowledge needed to develop information and technology literacy curriculum.

B. A library media specialist develops and implements an information and technology literacy program that is an integral part of the total curriculum. The specialist must:

(1) participate in curriculum development with teachers across grade levels and disciplines;

(2) plan and conduct a sequential integrated program of instruction in the use of information and technology tools for research and communication;

[For text of subitems (3) to (8), see M.R.]

(9) formulate and conduct student learning activities that integrate the use of information and technology tools, including the legal context, ethics, and online safety issues inherent in the use of technology for learning and communication and the changeable nature of these technologies.

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;

[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.]

(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 and primary, intermediate, middle level, and high school students within a range of educational programming models.

F. A library media specialist must understand the content and methods for teaching reading including:

- (1) knowledge of reading processes and instruction including:
 - (a) foundational theories related to practices and materials used in the classroom;
 - (b) the relationships between and among print processing abilities, motivation, background, and discourse knowledge, cognitive abilities, and reader's interest, digital literacy, and how those relationships impact comprehension;
 - (c) the complexities involved in the development of academic language and the impact of that development in school success; and
 - (d) the role and rationale in using literature and other texts including electronic texts and nonprint materials across the curriculum;
- (2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading and writing instruction including:
 - (a) the appropriate applications of a wide variety of instructional frameworks that are effective in meeting the needs of readers in intermediate, middle school, and high school settings across developmental levels, proficiency, and linguistic backgrounds;
 - (b) the ability to plan instruction and select strategies that help students read and understand content area texts and digital content and spur student interest in more complex reading materials; and
 - (c) the ability to develop critical literacy skills by encouraging students to question texts and analyze texts from multiple viewpoints or perspectives;
- (3) the ability 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:
 - (a) understanding how to create a literacy rich environment that includes a variety of texts, print and digital, student artifacts, literacy instructional supports, and a physical arrangement that promotes literacy learning;
 - (b) the ability to create and maintain a motivating classroom and school environment that promotes ongoing student engagement and literacy for all students; and
 - (c) the ability to model and reinforce reading and writing as valued and purposeful lifelong activities; and
- (4) a view of professional development as a career-long effort and responsibility including:
 - (a) 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 their cognitive, cultural, or linguistic backgrounds;
 - (b) seeking to be well informed and up-to-date in knowledge of content area literacies;
 - (c) actively seeking opportunities to participate in learning communities and professional organizations; and
 - (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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4600 TEACHERS OF MATHEMATICS.

[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:

(1) knowledge of reading processes and instruction including:

(a) orthographic knowledge and morphological relationships within words;

(b) the relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

(d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

(e) the development of academic language and its impact on learning and school success; and

(2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(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 plan instruction and select strategies that help students read and understand math texts and spur student interest in more complex reading materials, including:

i. the density of ideas;

ii. concepts that build within a chapter or across chapters;

iii. use of equations to model life situations, asking students to create or restate in words or sentences the relationship between symbols and the situation being modeled;

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iv. text with diagrams and graphs; and

v. use of different representations to aid students in understanding the underlying mathematical concept, matching each representation to the learning styles of different individuals; and

(f) model strategies for representing mathematical ideas in a variety of modes (literal, symbolic, graphic, and digital), which includes asking students to restate symbolic representations (numerals, equations, and graphs) in words or sentences.

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

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4650 TEACHERS OF VOCAL MUSIC AND OF INSTRUMENTAL MUSIC.

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

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

[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:

[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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4700 TEACHERS OF PHYSICAL EDUCATION.

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

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;

(2) the ability to develop and implement effective vocabulary strategies that help students 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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4725 TEACHERS OF READING.

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.]

(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
- (4) adult basic education teaching under part 8710.4000; and

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. [Repealed, 34 SR 595]

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;
- (7) teach and foster emergent reading skills such as phonemic awareness, alphabet recognition, and understanding that printed words convey meaning;
- (8) teach and foster word recognition skills including phonics, structural analysis, and contextual analysis;
- (9) foster the development of an initial sight vocabulary and an increasingly larger and more complex vocabulary, mastering word-learning strategies such as the use of context and structural analysis, and developing word consciousness;
- (10) teach and foster fluency and automaticity in both oral and silent reading;
- (11) teach and foster comprehension and appreciation of a wide range of children's and adolescent literature;
- (12) teach comprehension strategies such as adjusting reading approach, activating background knowledge, summarizing, generating questions, constructing mental representations, and self-monitoring;
- (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;
- (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;

(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;

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

(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;

(7) use literature to engage students in dialogue, critical thinking, and reflection around issues of social justice;

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(8) promote critical literacy by encouraging student to question what they are reading while analyzing texts from multiple viewpoints or perspectives; and

(9) understand the importance of and facilitate home school connections.

E. A teacher of reading must view professional development as a career-long effort and responsibility including:

(1) serve as a role model and display positive attitudes toward literacy in the district/building by engaging in reading and writing practices;

(2) promote and facilitate ongoing self-reflection related to teaching and student learning;

(3) seek to be well informed and share up-to-date knowledge of literacy learning with colleagues;

(4) apply aspects of coaching feedback to instructional practice;

(5) actively seek opportunities to participate in learning communities and professional organizations;

(6) collaborate with and provide guidance for colleagues who seek classroom instruction support in reading;

(7) engage in, initiate, implement, and evaluate professional development programs; and

(8) understand current state and federal legislation as it relates to reading.

[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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4750 TEACHERS OF SCIENCE.

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

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 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 science must have a broad-based knowledge of teaching science that integrates knowledge of science with knowledge of pedagogy, students, learning environments, and professional development. A teacher of science must understand:

[For text of subitems (1) to (8), see M.R.]

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

(10) how to apply the standards of effective practice in teaching through a variety of early and ongoing clinical experiences with middle level and high school students within a range of educational programming models.

F. A teacher of science 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 relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

(d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

(e) the development of academic language and its impact on learning and school success; and

(2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(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 ability to plan instruction and select strategies that help students read and understand science texts, including the ability to:

i. distinguish between facts based on empirical/scientific findings from opinion;

ii. relate what is read to relevant prior knowledge;

iii. use scientific knowledge to draw inferences or conclusions from facts, discern cause and effect relationships, detect fallacies in author's evidence, and support own claims with evidence;

iv. follow instructions to perform laboratory activities step by step in a disciplined fashion;

v. explain diagrams and graphs in terms of scientific content/meaning; and

vi. explain meaning of abbreviations and symbols.

Subp. 4. **Subject matter standards for teachers of chemistry.** A candidate for licensure as a teacher of chemistry 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. 5. **Subject matter standards for teachers of earth and space science.** A candidate for licensure as a teacher of earth and space 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. 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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4800 TEACHERS OF SOCIAL STUDIES.

[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.]

(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.

L. A teacher of social studies 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 relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;

(c) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;

(d) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and

(e) the development of academic language and its impact on learning and school success; and

(2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:

(a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds in secondary settings;

(b) the ability to scaffold instruction for students who experience comprehension difficulties;

(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;

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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4850 TEACHERS OF TECHNOLOGY.

[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

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(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.

D. A teacher of technology must understand the content and methods for teaching reading including:

- (1) knowledge of reading processes and instruction including:
 - (a) the relationship between word recognition and vocabulary knowledge, fluency, and comprehension in understanding text and content materials;
 - (b) the importance of direct and indirect vocabulary instruction that leads to enhanced general and domain-specific word knowledge;
 - (c) the relationships between and among comprehension processes related to print processing abilities, motivation, reader's interest, background knowledge, cognitive abilities, knowledge of academic discourse, and print and digital text; and
 - (d) the development of academic language and its impact on learning and school success;
- (2) the ability to use a wide range of instructional practices, approaches, methods, and curriculum materials to support reading instruction including:
 - (a) the appropriate applications of a variety of instructional frameworks that are effective in meeting the needs of readers of varying proficiency levels and linguistic backgrounds;
 - (b) the ability to scaffold instruction for students who experience comprehension difficulties;
 - (c) the ability to develop and implement effective vocabulary strategies that help students understand words including domain-specific content words;
 - (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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4900 TEACHERS OF VISUAL ARTS.

[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

(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.

[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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.4925 READING LEADER.

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:

A. hold or qualify for a full professional license valid for:

(1) classroom teaching, as defined in part 8710.0300, in one or more of the following student levels: elementary, middle, or secondary;

(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

(4) adult basic education teaching under part 8710.4000;

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 3; and

C. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to licensure as a teacher of reading under part 8710.4725.

Subp. 3. **Subject matter standard.** A candidate for licensure as a reading leader 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 reading leader must have knowledge of the foundations of reading processes and instruction:

(1) promote a school or districtwide philosophy of literacy instruction supported by theory and research;

(2) disseminate knowledge of reading theories and articulate how these findings translate into effective practice;

(3) apply knowledge of research to address identified needs related to reading at the school and district level;

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

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

(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;

(4) provide support and professional development to school and district personnel on the appropriate interpretations of selected assessment tools;

(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;

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

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

(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.

E. A reading leader, in viewing professional development as a career-long effort and responsibility, must:

(1) promote and facilitate teachers' ongoing self-reflection related to teaching and student learning;

(2) seek to be well informed and share up-to-date knowledge of literacy learning with colleagues;

(3) work with colleagues to provide feedback on instructional practice through coaching and feedback sessions;

(4) provide leadership in developing and maintaining learning communities;

(5) seek leadership opportunities in professional organizations;

- (6) understand and support adult learning;
- (7) have the knowledge to create long-term, substantive, coherent professional development;
- (8) engage in ongoing reflection of the professional development process, including planning, implementing, evaluating, and using data to support future professional development;
- (9) knowledge of how to effectively form teams from across the district to work on literacy initiatives;
- (10) strategically secure and place human resources to accomplish literacy initiatives;
- (11) know fiscal, budgetary, and purchasing practices for operating a comprehensive reading program and secure and allocate the funds in appropriate ways that match the literacy vision and goals for the district;
- (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 regarding current state and federal legislation as it relates to reading.

Subp. 4. **Professional license.** A professional license shall be issued and renewed according to the rules of the Board of Teaching governing licensure.

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.

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

8710.7200 CLOCK HOURS; REQUIREMENTS FOR RENEWAL OF PROFESSIONAL LICENSES.

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

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.

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

Statutory Authority: *MS s 122A.09*

History: *34 SR 595*

**8710.9000 VOLUNTARY CREDENTIAL FOR EDUCATION PARAPROFES-
SIONALS.**

Subpart 1. **In general.** The Board of Teaching shall grant a credential, which is not considered a license, to applicants who meet all requirements of this part. An applicant must provide evidence of satisfactory demonstration of the nine core competencies listed in subpart 4. Submission of an application for a paraprofessional credential is voluntary and is not a state requirement for employment as a paraprofessional.

Subp. 2. **Scope of practice.** A paraprofessional holding a credential under this part is recognized by the state of Minnesota as having demonstrated additional training and preparation in competencies consistent with subpart 4 to assist a licensed teacher in providing student instruction for any state and federally funded birth through grade 12 programs including transition programs.

Subp. 3. **Credential requirements.** A candidate for a paraprofessional credential must submit documentation for verification of:

- A. 60 clock hours of training reflecting each of the nine competency areas in subpart 4;
- B. a minimum of two consecutive years of service in the same school district as a paraprofessional; and
- C. passage of a state-approved examination in reading, writing, and mathematics for paraprofessionals.

Subp. 4. **Competencies.** A candidate for a paraprofessional credential must provide verification of training to assist and support a licensed teacher in items A to I:

- A. competency 1: philosophical, historical, and legal foundations of education, including:
 - (1) sensitivity to the beliefs, traditions, and values across cultures and how these impact the relationships between children, families, and schooling;
 - (2) awareness of the human and legal rights and responsibilities of parents and children and youth as the rights and responsibilities relate to students;
 - (3) understanding the distinctions between roles and responsibilities of professionals, paraprofessionals, and support personnel;
 - (4) understanding the purposes and goals of education and instruction for all students; and
 - (5) knowledge of relevant laws, rules, regulations, and local district policies and procedures to ensure paraprofessionals work within these parameters;
- B. competency 2: characteristics of students, including:
 - (1) knowledge of the similarities and differences between cognitive, communicative, physical, social, and emotional needs of students and the factors that influence these different needs;
 - (2) awareness of the effects that exceptional conditions have on a student's life, family, school, and community;
 - (3) knowledge of and respect for the diverse backgrounds, such as cultural, linguistic, and environmental backgrounds, of students and how these characteristics affect the student's life and learning;
 - (4) understanding the effects and side effects of medications commonly prescribed for students; and

(5) awareness of the potential implications of various student characteristics on learning and achievement;

C. competency 3: assessment, diagnosis, and evaluation, including:

(1) awareness of the tools used by a district for student assessment, diagnosis, and evaluation; and

(2) the ability to collect and record performance data on students under the direction of a licensed teacher, while respecting student confidentiality and the laws regarding ethical practices of assessment;

D. competency 4: instructional content and practice, including:

(1) the ability to use learning styles theory in supporting instructional practices;

(2) awareness of the challenges and expectations of various learning environments;

(3) the ability to establish and maintain rapport with students;

(4) the ability to draw on knowledge and resources regarding a variety of developmental and age-appropriate instructional methods, techniques, and materials when supporting the instruction of the licensed teacher;

(5) the ability to assist in adapting instructional strategies and materials according to the needs of the student and under the direction of a licensed teacher; and

(6) the ability to follow oral and written direction of licensed teachers, seeking clarification as needed;

E. competency 5: supporting the teaching and learning environment, including:

(1) the ability to assist and reinforce elements that support a safe, healthy, and effective teaching and learning environment;

(2) awareness of the ways in which technology can assist teaching and learning;

(3) understanding strategies for assisting with the inclusion of students in various settings;

(4) the ability to use strategies that promote the student's independence;

(5) awareness of how paraprofessionals can impact the overall learning environment for students and staff; and

(6) the ability to prepare and organize materials to support teaching and learning, as directed by a licensed teacher;

F. competency 6: managing student behavior and social interaction skills, including:

(1) understanding applicable laws, rules, and regulations, and procedural safeguards regarding the management of student behaviors;

(2) understanding ethical considerations inherent in the management of student behaviors;

(3) understanding district and building behavior management plans for students;

(4) awareness of the primary factors that influence student behavior;

(5) the ability to effectively employ a variety of strategies that reinforce positive behavior;

(6) the ability to collect objective and accurate information on student behavior provided to licensed professionals, as appropriate, and directed by a licensed teacher;

(7) awareness of the social skills needed for current and future environments; and

(8) the ability to reinforce the development of student social skills by using appropriate strategies to modify the environment;

G. competency 7: communication and collaboration partnerships, including:

(1) the ability to participate as a member of the educational team when requested to attend conferences with families or primary caregivers, with an understanding of some of the concerns of parents;

(2) the ability to use ethical practices for confidential communication about students;

(3) the ability to be sensitive and respectful in communications regarding all children and families, regardless of differences in cultural heritage, lifestyle, values, and home environment;

(4) awareness of the roles of students, parents, teachers, paraprofessionals, and other school and community personnel in planning an individualized program, when relevant;

(5) the ability to employ constructive communication strategies and approaches in working with and responding to students, students' families, and school and community personnel;

(6) the ability to follow teacher instructions while conferring and collaborating with teachers about student schedules, instructional goals, and performance; and

(7) the ability to understand and use appropriate educational terminology regarding students, roles, and instructional activities;

H. competency 8: professionalism and ethical practices, including:

(1) demonstrating a commitment to assisting students in reaching the students' highest potential, including the modeling of positive behavior;

(2) carrying out responsibilities in a manner that demonstrates knowledge of, and a positive respect for, the distinctions between the roles and responsibilities of paraprofessionals, professionals, and other support personnel;

(3) performing duties within the context of written standards and policies of the school, state, or agency where the candidate is employed;

(4) performing duties in a manner that demonstrates the ability to separate personal issues from the candidate's employment responsibilities;

(5) showing respect for the diversity of students;

(6) demonstrating proficiency in academic skills, including oral and written communication, while knowing how to self-evaluate one's own knowledge of the content being taught; and

(7) showing a willingness to participate in ongoing staff development, self-evaluation, and apply constructive feedback; and

I. competency 9: academic instructional skills in:

(1) mathematics, including:

(a) supporting and reinforcing the instruction of students in mathematics following written and oral lesson plans developed by licensed teachers;

(b) utilizing effective developmental, age-appropriate, and culturally sensitive instructional strategies in mathematics that support the instruction of licensed academic teachers;

(c) accessing and effectively using available resources, including technology, for supporting teacher instruction in the subject of mathematics, such as Internet resources, instructional manuals, tangibles, and colleagues;

(d) supporting a licensed teacher in the gathering and recording of data regarding student performance in the area of mathematics, such as rubric instruments and curriculum-based measurement;

(e) knowing terminology related to the instruction of mathematics; and

(f) understanding how Minnesota Academic Standards and Assessment, including state and local testing, direct the teaching of mathematics;

(2) reading, including:

(a) supporting and reinforcing the instruction of students in reading following written and oral lesson plans developed by licensed teachers;

(b) utilizing effective developmental, age-appropriate, and culturally sensitive instructional strategies in reading that support the instruction of licensed teachers;

(c) accessing and effectively using available resources, including technology, for supporting teacher instruction in the subject of reading, such as Internet resources, instructional manuals, tangibles, and colleagues;

(d) supporting a licensed teacher in the gathering and recording of data regarding student performance in the area of reading, such as rubric instruments and curriculum-based measurement;

(e) knowing terminology related to the instruction of reading; and

(f) understanding how Minnesota Academic Standards and Assessment, including state and local testing, direct the teaching of reading; and

(3) writing, including:

(a) supporting and reinforcing the instruction of students in writing following written and oral lesson plans developed by licensed teachers;

(b) utilizing effective developmental, age-appropriate, and culturally sensitive instructional strategies in writing that support the instruction of licensed teachers;

(c) accessing and effectively using available resources, including technology, for supporting teacher instruction in the subject of writing, such as Internet resources, instructional manuals, tangibles, and colleagues;

(d) supporting a licensed teacher in the gathering and recording of data regarding student performance in the area of writing, such as rubric instruments and curriculum-based measurement;

(e) knowing terminology related to the instruction of writing; and

(f) understanding how Minnesota Academic Standards and Assessment, including state and local testing, direct the teaching of writing.

Subp. 5. **Verification of core competencies.** The Board of Teaching must verify an applicant's completion of training in the nine core competencies under subpart 4; verification must be based on a minimum of 60 clock hours reflecting all of the competency areas and may include multiple types of experiences and information including academic coursework, professional development and training experiences, workshops, work experiences, examinations, and other professional activities. The Board of Teaching may establish policies including submission windows and use of review panels for the verification of competencies.

Subp. 6. **Procedures for state issuance of a paraprofessional credential.** An applicant for a paraprofessional credential must submit to the officials designated by the board to receive such applications:

A. verification by the Board of Teaching of the requirements under subpart 5;

B. verification of a minimum of two consecutive years of service in the same school district as a paraprofessional;

C. verification of passage of a state-approved examination in reading, writing, and mathematics for paraprofessionals; and

D. an application for a credential including an application fee commensurate with the fee established in Minnesota Statutes, section 122A.21, subdivision 1, for the issuance, renewal, or extension of a license to teach, plus any surcharges authorized by law.

Subp. 7. **Paraprofessional credential.** A credential must include the date it was granted. A credential is valid on the date issued by the Department of Education and does not expire.

Statutory Authority: *L 2007 c 146 art 2 s 34*

History: *35 SR 349*