

CHAPTER 8710
BOARD OF TEACHING
TEACHER AND OTHER SCHOOL PROFESSIONAL LICENSING

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8710.0100 SCOPE.

This chapter governs the procedures for licensure and the educational requirements for instructional and support personnel who are required to be licensed by the Board of Teaching. A person required to hold a license shall meet the requirements in this chapter for each licensure field in which the person practices.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928*

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REQUIREMENTS AND PROCEDURES**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; 122A.18; 125.05; 125.08; 125.185; 214.06*

History: *L 1995 1Sp3 art 16 s 13; 20 SR 2702; L 1998 c 397 art 11 s 3; 23 SR 1928; L 2003 c 112 art 2 s 50; L 2003 c 130 s 12; L 2009 c 101 art 2 s 109; 34 SR 595*

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8710.0300 ISSUANCE, RENEWAL, AND VALIDITY OF ALL LICENSES.

Subpart 1. **In general.** Licenses shall be granted by the Board of Teaching to applicants who otherwise meet all requirements of applicable statutes and rules.

An applicant must qualify separately for each licensure area for which application is made and provide evidence of satisfactory completion of a program in the licensure area which has been approved by the Board of Teaching. A license becomes valid on the date issued by the personnel licensing section.

Subp. 1a. **Types of licenses.** The Board of Teaching shall grant the following types of licenses which shall be valid for the period of time specified in this subpart:

A. professional license, which expires five years from the June 30 nearest the date the license is issued;

B. entrance license, which expires two years from the June 30 nearest the date the license is issued;

C. nonrenewable license, which expires no more than three years from the June 30 nearest the date the license is issued;

D. temporary limited license, which expires on June 30 of the school year for which the license is issued, except for a temporary limited license issued under part 8710.0400, subpart 4, which expires one year from the June 30 nearest the date the license is issued;

E. limited intern license, which expires on June 30 of the school year for which the license is issued;

F. five-year short call substitute teacher license, which expires five years from the June 30 nearest the date the license is issued;

G. temporary limited short call substitute teacher license, which expires two years from the June 30 nearest the date the license is issued; and

H. life license, which does not expire.

Effective with licenses issued on or after October 16, 2000, no person may hold a license under item C or D, or any combination of licenses under items C and D, for more than three years.

A license shall bear the date of issue and the date of expiration, and, if renewable, may be renewed on or after January 1 in the year of expiration upon application and meeting renewal requirements. A license shall expire if it is not renewed by July 1 in the year of expiration.

Subp. 2. **First professional license.** The first license which shall be issued in any licensure area to an applicant who meets all requirements of subpart 1 and who completes an approved program leading to licensure in a Minnesota institution which is approved by the Board of Teaching to prepare persons for licensure is a first professional license.

Subp. 2a. **Addition of professional license.** When a licensure area is added to a professional license in effect, the expiration date is that previously established for the professional license in effect.

Subp. 2b. **Multiple expiration dates.** If the licensee has completed and verified the professional license renewal requirements, a licensee may renew a year early for the purpose of correlating the expiration dates of professional licenses held.

Subp. 3. **Renewal of professional license.** A professional license shall be renewed upon application according to this chapter and chapter 8700 governing continuing education.

If an applicant has not been employed in a position requiring Minnesota licensure at any time during the school year immediately preceding the date of expiration, the applicant's professional license shall be renewed if one of the following is submitted:

A. verification by a local continuing education committee that the applicant has met renewal requirements for the professional license during the five-year period immediately preceding the application;

B. evidence that the applicant earned at least 12 quarter or eight semester hours of credit, applicable to the licensure fields, during the five-year period immediately preceding the application; or

C. if neither item A nor B is submitted, a one-year extension of the expired professional license may be granted based on evidence that the applicant has been offered a position contingent upon holding a valid license. This extension expires on June 30 of the school year for which the license is issued and is nonrenewable. In order to qualify for a professional license after the one-year extension, the applicant shall provide evidence that renewal requirements for the professional license have been met under item A.

Subp. 4. [Repealed, 25 SR 805]

Subp. 5. **Classroom teaching license.** For purposes of licensure rules that require holding a valid classroom teaching license as a prerequisite for issuance of an additional field of licensure, the definition of a "classroom teaching license" is a nonvocational license valid to teach elementary school, secondary school subjects, or kindergarten to grade 12 subjects, or a secondary vocational license based on degree requirements in home economics education, industrial education, agriculture education, business education, or marketing education. This definition does not include limited licenses, provisional licenses, intern licenses, special education licenses, family education licenses, prekindergarten licenses, postsecondary vocational licenses, or secondary vocational licenses based upon criteria other than degree requirements in home economics education, industrial education, agriculture education, business education, or marketing education. This definition also does not include licenses as school psychologists, school counselors, school social workers, school nurses, recreation personnel, school administrators, school business officers, community education directors, special education directors, or secondary vocational directors or supervisors.

Subp. 6. **Renewal of previously issued entrance license.** An applicant with a current or expired two-year entrance license who has not completed one year of teaching experience while holding a valid license may renew the entrance license for one additional two-year period only, after which time an applicant shall be granted a professional license. The professional license shall be renewed upon application according to the rules of the Board of Teaching governing continuing education. First time entrance licenses shall not be issued on or after October 16, 2000.

Subp. 7. **Licensure based on minor preparation.** A teacher holding a license that was first issued prior to September 1, 2001, and is valid for teaching in grades 7 through 12 based on Board of Teaching rules authorizing half-time teaching based on minor preparation may teach half time or less during the school

day in any secondary school those subjects or fields in which the teacher holds licensure. Notwithstanding subpart 1a, any teacher holding licensure valid for half-time teaching in grades 7 through 12 first issued after September 1, 1966, shall, within seven years after first issuance, acquire the minimum established by the Board of Teaching for major preparation based on rules authorizing the issuance of the original half-time license in order to continue to be licensed to teach in that subject or field.

Subp. 8. Validity of licenses held. A teacher holding secondary school licensure valid for teaching in grades 7 through 12 may teach in grades 7 and 8 of any school organizational pattern in those subjects or fields for which valid licensure is held. A teacher holding elementary school licensure valid for teaching in grades 1 through 6 may teach in grades 7 and 8 only if the teacher is providing instruction using a self-contained classroom teaching model. Any other license issued prior to September 1, 2001, is valid only for the grade level, licensure field, and school organizational pattern for which the license was first issued.

Subp. 9. Emergencies. If a person documents an emergency that prevents the person from completing rule requirements in order to continue to be licensed in that field, or if a school district or charter school documents an emergency for which no additional temporary limited licenses or personnel variances are permitted by rule, the Board of Teaching may take action to grant an emergency extension of time. Upon receiving an application for an extension of time, the Board of Teaching shall consider whether an extension of time shall be granted based on documentation of the emergency.

Subp. 10. Corrections. A license issued in error to a person who does not qualify for the license shall be corrected without charge to the licensee and the corrections shall be made without a hearing under part 8710.0900 and Minnesota Statutes, chapter 14. A license issued in error is not valid.

Subp. 11. Annual review. By September 1 of each year, the Board of Teaching shall issue an annual report summarizing the previous fiscal year's temporary limited licenses, personnel variances, waivers, and permissions to hire nonlicensed community experts, organized by licensure field and by school district or charter school.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.0350 [Repealed, 25 SR 805]

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8710.0400 APPLICANTS PREPARED OUTSIDE MINNESOTA.

Subpart 1. In general. A license to teach in Minnesota shall be granted to an applicant who otherwise meets applicable statutory requirements and who completes programs leading to licensure in a teacher preparation institution located outside Minnesota. A license shall be granted only in licensure fields for which the Board of Teaching has rules governing programs leading to licensure. A license shall be issued according to either subpart 2 or 3.

Subp. 2. Applicants prepared in states with contracts with Minnesota. An applicant who completes approved programs leading to licensure in teacher preparation institutions within states which have signed contracts with Minnesota according to the interstate agreement on qualification of educational personnel shall be granted a first Minnesota professional license. No license shall be issued on the basis of teaching experience only.

Subp. 3. Applicants prepared in states without contracts with Minnesota. An applicant who completes programs leading to licensure in teacher preparation institutions within states which have not signed contracts with Minnesota according to the interstate agreement on qualification of educational personnel shall be granted a first Minnesota professional license when the following criteria are met:

A. the teacher preparation institution is accredited by the regional association for the accreditation of colleges and secondary schools;

B. the program leading to licensure has been recognized by the other state as qualifying the applicant completing the program for current licensure within that state;

C. the program leading to licensure completed by the applicant is essentially equivalent in content to approved programs offered by Minnesota teacher preparation institutions according to Board of Teaching rules governing the licensure field and the grade level range of preparation is the same as, greater than, or not more than one year less than the grade level range of the Minnesota licensure field for which application is made;

D. the teacher preparation institution which offers the program leading to licensure verifies that the applicant has completed an approved licensure program at that institution and recommends the applicant for a license in the licensure field and at the licensure level;

E. the applicant has completed a program leading to licensure as verified by an official transcript issued by the institution recommending the applicant for licensure;

F. the applicant has completed instruction in methods of teaching in the licensure field and at the licensure level of the program; and

G. the applicant has completed student teaching or essentially equivalent experience.

Subp. 3a. Applicants prepared outside United States. An applicant who completes a licensure program from a college or university outside the United States shall be granted a first Minnesota professional license when the following criteria are met:

A. the application packet includes a credential evaluation completed by a credential evaluator approved by the executive director of the Board of Teaching;

B. the licensure program completed by the applicant is essentially equivalent in content to approved programs offered by Minnesota teacher preparation institutions according to Board of Teaching rules governing the licensure field and the grade level range of preparation is the same as, greater than, or not more than one year less than the grade level range of the Minnesota licensure field for which application is made;

C. the applicant has completed instruction in methods of teaching in the licensure field and at the licensure level of the program; and

D. the applicant has completed student teaching or essentially equivalent experience.

Subp. 4. Exception for applicants who have not met part 8700.2700 or 8710.0500. An applicant who has completed a teacher licensure program outside Minnesota, has met the criteria of subpart 3 or 3a, but has not completed the requirements of part 8700.2700 or 8710.0500, or both, shall be granted a Minnesota temporary limited license based upon the provisions of this part.

An applicant who has completed a teacher licensure program outside Minnesota, has met the criteria of subpart 3 or 3a with the exception of the grade level range of the Minnesota licensure field for which application is made, but has not completed the requirements of part 8700.2700 or 8710.0500, or both, shall

be granted a Minnesota temporary limited license based upon the provisions of this part. The license shall be issued for the grade level range of preparation, not to exceed the grade level range of the Minnesota licensure field for which application is made.

If part 8710.0500 has not been met upon expiration of the temporary limited license, a person may renew the temporary limited license twice. Each renewal of the temporary limited license requires the applicant to submit an official score report verifying having taken the skills area examination during the period of each temporary limited license and evidence of participating in an approved remedial assistance program provided by a school district or postsecondary institution that includes a formal diagnostic component in the specific areas in which the licensee did not obtain qualifying scores during the period of each temporary limited license.

Upon meeting this part and parts 8700.2700 and 8710.0500, including preparation for the grade level range of the Minnesota licensure field, a first professional license shall be granted.

Subp. 5. Exception for elementary education applicants who have not met specialty requirements. An applicant who has completed a teacher licensure program outside Minnesota that meets this part, but has not met the specialty requirements of part 8710.3200, subpart 4, for the license, shall be granted one of the following:

A. a nonrenewable license, valid for teaching elementary students in kindergarten through grade 6, if the applicant has met the requirements of parts 8700.2700, 8710.0500, and 8710.3200 for teaching elementary students in kindergarten through grade 6, but has not met the requirements of part 8710.3200, subpart 4; or

B. a temporary limited license, valid for teaching elementary students in kindergarten through grade 6, if the applicant has met the requirements of part 8710.3200 for teaching elementary students in kindergarten through grade 6, but has not met the requirements of part 8700.2700; 8710.0500; or 8710.3200, subpart 4.

A teacher issued a kindergarten through grade 6 nonrenewable license shall have two years from the expiration date of the first Minnesota license to complete the requirements for a specialty license required by part 8710.3200, subpart 4. A teacher issued a kindergarten through grade 6 temporary limited license may renew the license under subpart 4 if part 8710.0500 has not been met. No person may hold a nonrenewable license, a temporary limited license, or any combination of these licenses for more than three years. Upon meeting the requirements of this part and parts 8700.2700, 8710.0500, and 8710.3200, a first professional license shall be granted.

Subp. 6. Exception for applicants who have not met licensure level requirements. An applicant who has completed a teacher licensure program outside Minnesota that meets the requirements of this part, with the exception of the licensure level requirements of subpart 3, item C, or 3a, item B, shall be granted one of the following:

A. a nonrenewable license, in the licensure field at the grade level range of preparation, not to exceed the grade level range of the Minnesota licensure field for which application is made, if the applicant has met parts 8700.2700 and 8710.0500; or

B. a temporary limited license, in the licensure field at the grade level range of preparation, not to exceed the grade level range of the Minnesota licensure field for which application is made, if the applicant has met the requirements of this part, but has not met part 8700.2700 or 8710.0500.

A teacher issued a nonrenewable license shall have two years from the expiration date of the first Minnesota license to complete the requirements for teaching at the grade level range of the Minnesota licensure field. A teacher issued a temporary limited license may renew the license under subpart 4 if part 8710.0500 has not been met. No person may hold a nonrenewable license, a temporary limited license, or any combination of these licenses for more than three years. Upon meeting the requirements of this part and parts 8700.2700 and 8710.0500, and the licensure grade level range of the Minnesota licensure field, a first professional license shall be granted.

Subp. 7. Exception for applicants who have not met licensure requirements in part 8710.4250, 8710.4300, 8710.4750, or 8710.4800. An applicant for licensure as a teacher of communication arts and literature, a teacher of dance and theatre arts, a teacher of science, or a teacher of social studies who has completed a teacher licensure program outside Minnesota, who meets the requirements of this part with the exception of licensure level requirements of subpart 3, item C, or 3a, item B, shall be granted one of the following:

A. a nonrenewable license, in the licensure field, which shall be restricted for teaching only in the field of major preparation, if the applicant has met the requirements of parts 8700.2700 and 8710.0500, but has not met the requirements of part 8710.4250, 8710.4300, 8710.4750, or 8710.4800; or

B. a temporary limited license, in the licensure field, which shall be restricted for teaching only in the field of major preparation, if the applicant has not met the requirements of parts 8700.2700 and 8710.0500, and part 8710.4250, 8710.4300, 8710.4750, or 8710.4800.

A teacher issued a nonrenewable license shall have two years from the expiration date of the first Minnesota teaching license to complete the licensure requirements of part 8710.4250, 8710.4300, 8710.4750, or 8710.4800. A teacher issued a temporary limited license may renew the limited temporary license under subpart 4 if part 8710.0500 has not been met. No person may hold a nonrenewable license, a temporary limited license, or any combination of these licenses for more than three years. Upon meeting the requirements of this part, parts 8700.2700 and 8710.0500, and part 8710.4250, 8710.4300, 8710.4750, or 8710.4800, a first professional license in the licensure field shall be granted.

Subp. 8. Exception for applicants who have completed alternative preparation programs. An applicant who has completed a teacher licensure program outside Minnesota that meets the requirements of this part, with the exception of having completed the preparation program in a teacher preparation institution accredited by the regional association for the accreditation of colleges and secondary schools, shall be granted a first professional license. To meet the requirements of subpart 3, item D, if the applicant is unable to secure a teacher preparation institution recommendation for licensure, the preparation program that offers the program leading to licensure must verify that the applicant has completed the approved licensure program and must recommend the applicant for a license in the licensure field and at the licensure level. To meet the requirements of subpart 3, item E, if an official transcript verifying completion of the licensure program is not available, the preparation program must provide official documentation of the program leading to licensure and must verify that the applicant has completed the approved licensure program.

If the applicant has not completed the requirements for a first professional license, a temporary limited license or a nonrenewable license may be issued upon meeting the requirements of subpart 4, 5, 6, or 7.

Subp. 9. Exception for national board certified teachers. An applicant who provides evidence of current national board certification, but has not completed the requirements of part 8700.2700 or 8710.0500, shall be granted a temporary limited license. If the requirements of part 8710.0500 have not been met upon expiration, the temporary limited license may be renewed under subpart 4. The Board of Teaching shall

accept current national board certification in a licensure field for which the Board of Teaching has established rules governing programs leading to licensure as evidence of having met the criteria of subpart 3, item C, or 3a, item B. If the applicant also provides evidence of current licensure from another state in the same field as national board certification is held, but at a different grade level designation, the Board of Teaching shall accept evidence of licensure and certification together as having met the requirements of subpart 3, item C, or 3a, item B, provided this evidence includes all grade level designations of the Board of Teaching licensure rule. Upon meeting the requirements of parts 8700.2700 and 8710.0500, a first professional license based on this subpart shall be granted.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.06; 125.185*

History: *11 SR 1793; 15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.0500 EXAMINATIONS FOR TEACHER LICENSES.

Subpart 1. Examination requirements.

A. An applicant for a first professional teaching license shall provide official evidence of having successfully completed examinations of skills in reading, writing, and mathematics before being issued an initial Minnesota professional teaching license. The examinations must have been adopted by the Board of Teaching. An applicant who is deaf must fulfill the mathematics requirement of this part by successfully completing the mathematics examination, and must fulfill the reading and writing requirements of this part either by successfully completing the reading and writing examinations or by evaluation by board approved colleges and universities of demonstrated proficiency (Intermediate Plus) in the expressive and receptive use of alternative communication systems including sign language and finger spelling as measured by the Sign Communication Proficiency Inventory (SCPI). This inventory is published by the National Technical Institute for the Deaf in Rochester, New York, and is administered through the College of Education at the University of Minnesota on at least an annual basis. A description of this inventory is available through the Minitex interlibrary loan system in the Journal of Sign Language Studies and American Annals for the Deaf. The inventory is incorporated by reference. It may be periodically changed. An applicant who is blind shall be required to fulfill requirements of this part by successfully completing the examinations with an opportunity to select a reader, to use adaptive visual aids or technology aids, and to complete the testing under adaptive conditions.

B. On or after September 1, 2001, an applicant for a first professional teaching license in any field shall provide evidence of having successfully completed an examination of general teaching knowledge and the examination required for the teaching field for which licensure is applied under this chapter. The examinations must have been adopted by the Board of Teaching. Teachers applying to add teaching fields to existing licenses must successfully complete the examination required for each teaching field to be added, but are not required to complete an examination of general teaching knowledge.

Subp. 2. **Selection and adoption.** The Board of Teaching shall solicit proposals for the development, validation, and implementation of teacher examinations under subpart 1. The Board of Teaching shall select the proposal of a party whose understanding of the project, statement of work to be performed, management plan, staffing, and related experience demonstrate the ability to develop, validate, and implement a statewide examination system and to conduct subsequent administrations of the adopted examinations. The Board of Teaching shall adopt examinations that have been validated by another state or reputable national testing organization and field tested in Minnesota.

Subp. 3. Requirement.

A. An applicant must achieve a minimum passing score on each examination required under subpart 1. The Board of Teaching shall establish a minimum passing score for each examination based on validation for use in Minnesota.

B. Notwithstanding item A, for applications submitted on or before August 31, 2002, examinations required under subpart 1, item B, shall have no minimum passing score. The Board of Teaching shall use test scores achieved by applicants on or before August 31, 2002, to establish minimum passing scores.

Subp. 4. Notification. Minimum passing scores applicants must achieve on the examinations and the identification of the examinations adopted shall be published in the State Register within 60 days of adoption by the Board of Teaching. Before July 2 of each calendar year, the Board of Teaching shall notify the colleges and universities approved by the board to prepare candidates for teacher licensure of the minimum passing score applicants must achieve on the examinations and which examinations are adopted under subpart 2.

Subp. 5. Licensure recommendation. In recommending candidates for licensure, Minnesota colleges and universities shall attest that license requirements have been met, including successful completion of all examinations required under this part.

Subp. 6. Administration, scoring, and reporting. Administration, scoring, and reporting of examinations shall be conducted by the party whose examinations have been adopted by the Board of Teaching. Applicants may take the examinations on any of the dates that are established by the party for national administration or on dates established by the Board of Teaching for special administration. Examinations shall be administered at least four times a year in Minnesota. It is the responsibility of the applicant to be informed about the dates and locations of the examinations and to apply for the appropriate examinations. Registration procedures are governed by the party whose examinations have been adopted. Examinees shall authorize the forwarding of their scores to the institutions they attend and to the Board of Teaching. The scores as forwarded are the official evidence required in this part.

Subp. 7. Fees. Candidates for licenses shall pay the examination fee approved by the Board of Teaching for the examinations they take.

Subp. 8. Admission to upper division or graduate coursework. Candidates for an initial license shall provide official evidence to the institutions they attend of having taken the examinations adopted under subpart 1, item A, before enrolling in upper division coursework in the professional education sequence. Candidates for an initial license who have a baccalaureate degree shall provide official evidence to the institutions they attend of having taken the examinations adopted under subpart 1, item A, before enrolling in coursework in the professional education sequence. Candidates who fail to achieve the minimum passing score on one or more of the examinations may enroll in upper division or graduate coursework in the professional education sequence; however, candidates must achieve the passing scores established under subpart 3 before recommendation for a first professional teaching license. Colleges and universities must provide candidates who fail the examinations access to opportunities to enhance their skills.

Subp. 9. [Repealed, 25 SR 877]

Subp. 10. Retesting procedures. Examinees who fail to achieve at least the minimum score on one or more of the examinations are permitted to retake the examination or examinations for which the minimum score was not achieved under this part. No minimum waiting time is required.

Subp. 11. **Applicants prepared outside Minnesota.** Applicants for Minnesota licensure who complete teacher preparation outside Minnesota but who have not met the requirements under subpart 1 and who otherwise meet the applicable statutes and rules shall be granted no more than three one-year temporary licenses. An applicant who has not achieved a minimum passing score on the examinations required under subpart 1, may renew a temporary license under this subpart if the applicant provides evidence of having taken all required examinations under subpart 1 and having enrolled in programs designed to assist the applicant to achieve the minimum passing scores. Applicants prepared outside Minnesota who provide evidence of meeting all examination requirements for professional Minnesota licensure shall be granted the professional teaching licenses for which they qualify.

Subp. 12. **Review and modification.** The Board of Teaching shall periodically review the examination system to determine whether the system meets the requirements of this part. Modifications by the Board of Teaching in the adoption of examinations or the minimum passing scores shall be published in the State Register. The modifications are effective for administration of the examinations 30 days after publication.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *11 SR 1793; 15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805; 25 SR 877; 26 SR 700*

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8710.0550 ADDITIONAL FIELDS OF LICENSURE.

Subpart 1. **In general.** A person who holds a life license; a current nonvocational entrance, professional, or nonrenewable 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 granted by the Board of Teaching may apply for an additional field of licensure upon meeting the rule requirements for the licensure field and level. A person who holds only a Board of Teaching license as an educational speech-language pathologist, school nurse, school psychologist, school social worker, or school counselor, or a secondary vocational license other than one based on a degree program in agriculture education, business education, consumer homemaking and family life education, industrial education, or marketing education must meet the rule requirements for the licensure field and level and part 8710.2000.

Subp. 2. **Middle level academic specialty.** A person may apply for licensure in a middle level academic specialty upon meeting the requirements of part 8710.3300 provided that the applicant holds one or more of the following classroom teaching licenses issued by the Board of Teaching: a life license; a current nonvocational entrance, professional, or nonrenewable 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.

Subp. 3. **Kindergarten.** Until June 30, 2005, an applicant holding a current entrance or professional elementary teaching license first granted by the Board of Teaching prior to September 1, 2001, shall be granted kindergarten licensure upon submitting evidence of having completed requirements for methods of kindergarten education in a state-approved teacher preparation program at a college or university that is accredited by the regional association for the accreditation of colleges and secondary schools and a recommendation for kindergarten licensure from that college or university.

Subp. 4. Exemption from teaching experience. On or before August 31, 2001, the Board of Teaching shall waive the teaching experience requirement for all applicants for licensure as teachers of reading.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *25 SR 805*

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8710.0600 PROCEDURES FOR ISSUANCE OF LIFE LICENSES.

Any teacher currently holding a valid license to teach granted by the Board of Teaching having a minimum of five years teaching experience in Minnesota, who was actually employed as a classroom teacher or other similar professional employee on a regular contract in any one of three years immediately preceding July 1, 1969, may apply for and receive a life license for those grades, subjects, and fields for which Minnesota licensure was held prior to July 1, 1969, upon payment of a processing fee set by the Board of Teaching.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185; L 1983 c 314 art 7 s 46*

History: *15 SR 2267; L 1995 1Sp3 art 16 s 13; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.0700 PROCEDURES FOR VOLUNTARY SURRENDER OF LICENSES.

Subpart 1. Materials required to surrender license. A person holding a license granted by the Board of Teaching may voluntarily surrender the license by submitting to the executive director of the Board of Teaching the following:

- A. a written request to surrender which specifies the license or licenses to be surrendered;
- B. the applicant copy of the license;
- C. the school district copy of the license, together with a written statement that the designated administrator of the employing school district or charter school has been notified that the employer's copy of the license has been removed from the school district or charter school files; and
- D. the required processing fee in part 8710.0200.

Subp. 2. Surrender date. When the executive director receives the materials listed in subpart 1 by January 1, the date of surrender is July 1 of that year. When the materials are received after January 1, the date of surrender is July 1 of the following calendar year. An applicant may revoke the request. The revocation must be made in writing to the executive director no later than December 31 of the year in which the request for voluntary surrender is received by the executive director.

Subp. 3. When surrender is prohibited. A person may not voluntarily surrender a license if any of the following exists:

- A. the school board has commenced proceedings to terminate the continuing contract, pursuant to Minnesota Statutes, section 122A.40, subdivision 9 or 13, or 122A.41, subdivision 6;
- B. the Board of Teaching has commenced proceedings to suspend or revoke the license pursuant to Minnesota Statutes, sections 122A.20 and 214.10 or part 8700.7500; or

C. any educational agency or board has commenced proceedings which could result in alteration of the status of the license due to the person's conduct.

Subp. 4. First professional license after surrender. A person whose Minnesota license has been voluntarily surrendered may apply for first professional licensure in the subject or field for which licensure was previously surrendered. A first professional license shall be granted to the applicant if the following criteria are met:

- A. a licensure rule exists in the subject or field for which licensure was previously surrendered;
- B. the applicant meets the first professional licensure standards which are in effect in the subject or field at the time of application and meets procedures set forth in Board of Teaching rules applicable to a first professional license; and
- C. the required processing fee set forth in part 8710.0200 accompanies the application for first professional licensure.

Subp. 5. Construction of rule. Nothing in subparts 1 to 4 shall prohibit a person from holding or applying for a license in any subject or field upon surrender of a license in another subject or field.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *8 SR 244; 15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.0800 PROCEDURES FOR REVOCATION OR SUSPENSION OF ALL LICENSES.

Subpart 1. Statutory requirements. Licenses shall be revoked or suspended pursuant to the provisions of Minnesota Statutes, sections 122A.09 and 122A.20, or part 8700.7500.

Subp. 2. Revocation. Revocation shall include the cancellation or repeal of a license or renewal privilege. Revocation shall disqualify a person from teaching, or performing any other function, which is permitted on the basis of holding a license issued pursuant to the rules of the Board of Teaching. Revocation shall be final, except that a person whose license has been revoked may petition the Board of Teaching for a license pursuant to part 8710.0850, subpart 1.

Subp. 3. Suspension. Suspension shall include the temporary withdrawal of a license or renewal privilege. Suspension shall disqualify a person from teaching or performing any other function which is permitted on the basis of holding a license issued pursuant to the rules of the Board of Teaching. The length of each suspension and any terms and conditions attached thereto shall be determined by the Board of Teaching upon the consideration of the following factors:

- A. the activity of the individual which led to the license suspension;
- B. any relevant mitigating factors which the individual may interpose on the individual's behalf;
- C. the prior teaching record of the individual; and
- D. other similar factors.

Unless otherwise provided by the Board of Teaching, a revocation or suspension applies to each license or renewal privilege held by the individual at the time final action is taken by the Board of Teaching. A person whose license or renewal privilege has been suspended or revoked shall be ineligible to be issued any other license by the Board of Teaching during the pendency of the suspension or revocation.

Statutory Authority: *MS s 122A.09; 122A.18; 125.09; 125.185*

History: *17 SR 1279; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.0850 ISSUANCE OR REINSTATEMENT OF LICENSE AFTER REVOCATION OR SUSPENSION.

Subpart 1. **After revocation.** A person whose license or renewal privilege has been revoked by the Board of Teaching may apply for and shall be granted a first professional license upon presentation of competent evidence that all terms and conditions which the board may have imposed have been fulfilled, and upon meeting current licensure standards.

Subp. 2. **After suspension.** A person whose license or renewal privilege has been suspended by the Board of Teaching may apply for reinstatement of that license in one of the following manners:

A. If the suspended license was a license which expired during the suspension, that license shall be renewed upon proper application after the period of suspension has expired provided that this chapter permits renewal of the license and that all renewal requirements have been met and upon presentation of competent evidence that all terms and conditions which the board may have imposed have been fulfilled.

B. If the suspended license was a license which has not expired during the suspension, the person may resume teaching or performing any other function which is permitted on the basis of holding a license granted by the Board of Teaching for whatever period of time remains on that license after the period of the suspension has expired and upon presentation of competent evidence that all terms and conditions which the board may have imposed have been fulfilled.

C. If the suspended license was a life license, the person may resume teaching or performing any other function which is permitted on the basis of holding a license granted by the Board of Teaching after the period of the suspension has expired and upon presentation of competent evidence that all terms and conditions which the board may have imposed have been fulfilled.

Statutory Authority: *MS s 122A.09; 122A.18; 125.09; 125.185*

History: *L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.0900 APPEAL TO BOARD OF TEACHING.

All persons denied issuance or renewal of licenses granted by the Board of Teaching, and all Minnesota teacher-preparing institutions denied program or institutional approval, and all persons licensed by the Minnesota Board of Teaching whose appeals are denied by the local committee for continuing education/relicensures, are hereby entitled to a hearing pursuant to Minnesota Statutes, chapter 14, on such denial and to a final decision by the Board of Teaching.

A person or an institution entitled to a hearing under the provisions of this part shall file a written request for such hearing with the executive secretary of the Board of Teaching within 30 days from the date of the denial. Failure to file a written request for a hearing within 30 days constitutes a waiver of the individual's right to a hearing.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.1000 SUBSTITUTE TEACHERS.

Subpart 1. **Long call substitute teacher.** A long call substitute teacher is one who replaces the same teacher for 15 or more consecutive days. A long call substitute teacher shall hold a Minnesota license valid for the assignment.

Subp. 2. **Short call substitute teacher.** A short call substitute teacher is one who teaches on a day-to-day basis not to exceed 15 consecutive days replacing the same teacher. A short call substitute teacher shall hold a Minnesota license or short call substitute license. These licenses are valid for functioning as a short call substitute teacher at all grade levels in all fields.

Subp. 3. **Criteria for issuance of five-year short call substitute teacher license.** The Board of Teaching shall grant a five-year short call substitute teacher license to an applicant who has completed a teacher preparation program leading to full licensure in the governmental jurisdiction in which the teacher preparation program was completed.

Subp. 4. **Criteria for issuance of temporary limited short call substitute teacher license.** The Board of Teaching shall grant a temporary limited short call substitute teacher license to an applicant if it finds that the following conditions are met:

A. the designated administrator of an employing school district or charter school requests a temporary limited short call substitute teacher license;

B. the designated administrator of an employing school district or charter school verifies in writing that the school district or charter school is experiencing hardship in securing a sufficient number of licensed teachers to meet the need for short call substitute teachers; and

C. the applicant holds a baccalaureate degree from a United States college or university, or the equivalent.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *15 SR 2267; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805*

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8710.1050 LIMITED INTERN LICENSES.

Subpart 1. **Authority to issue limited intern licenses.** The Board of Teaching authorizes the issuance of limited intern licenses that permit a person to serve as an intern under the direct supervision of a licensed teacher or other education professional licensed by the Board of Teaching for the equivalent of no more than one school year while completing a preparation program leading to Board of Teaching licensure. The limited intern license does not authorize the intern to serve as a teacher or other education professional.

Subp. 2. **Criteria for issuance.** The Board of Teaching shall grant a limited intern license authorized under subpart 1 to an applicant if it finds that the following conditions are met:

A. the designated administrator of the employing school district or charter school requests a limited intern license according to this part;

B. the designated administrator of the employing school district or charter school verifies in writing that:

- (1) the intern position is designed to serve as a learning experience for a college or university student who is completing a preparation program leading to Board of Teaching licensure;
- (2) the intern will be assigned to assist a licensed teacher or other education professional licensed by the Board of Teaching whose students are the responsibility of the licensed teacher or other licensed professional;
- (3) the intern will serve under the direct, day-to-day supervision of a licensed teacher or other education professional licensed by the Board of Teaching, and will not serve as the classroom teacher or other education professional for students; and
- (4) the intern will not replace a licensed teacher or other licensed professional; and

C. the applicant is recommended for limited intern licensure by a college or university approved by the Board of Teaching, verifying in writing that:

- (1) the applicant is currently enrolled in an approved preparation program leading to Board of Teaching licensure and has completed at least three years of preparation required for licensure; and

- (2) the college or university will assist in designing the learning experience and will provide supervision of the intern during the learning experience.

Subp. 3. Validity and duration of limited intern licenses. A limited intern license is issued for one school year or a portion of a school year from the date of issuance to the following June 30 and is valid for use in the requesting school district or charter school only. The license may be renewed once, upon application, if the intern must complete the equivalent of one school year of internship experience during the following school year. The license shall be revoked by the Board of Teaching when it has been demonstrated that the intent and purpose of the licensure have not been fulfilled.

Statutory Authority: *MS s 122A.09; 122A.18*

History: 25 SR 805

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8710.1100 [Repealed, 25 SR 805]

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8710.1200 [Repealed, 25 SR 805]

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8710.1250 TEMPORARY LIMITED LICENSES.

Subpart 1. Authority to issue temporary limited licenses. The Board of Teaching authorizes the issuance of temporary limited licenses that permit a person to teach in an area for which the person has not completed an approved preparation program that leads to licensure by the Board of Teaching.

Subp. 2. Criteria for issuance. The Board of Teaching shall grant a temporary limited license authorized by subpart 1 to an applicant if it finds that the following conditions are met:

A. the designated administrator of the employing school district or charter school requests a temporary limited license according to this part;

B. the designated administrator of the employing school district or charter school verifies in writing that:

(1) no applicant holding a license in a subject or field for which a temporary limited license is requested can fulfill the requirements of the position;

(2) the position has been advertised, and if the position is one-half time or more, the position has been advertised statewide;

(3) the school district or charter school will provide a mentor to give support and assistance in necessary skill development for the person holding a temporary limited license;

(4) the applicant for whom the temporary limited license is requested holds a baccalaureate degree from a college or university accredited by the regional association for the accreditation of colleges and secondary schools; and

(5) the applicant has completed a college or university degree with at least a minor in the area for which teacher licensure is requested, or a degree directly related to the professional preparation for which educational speech/language pathology, school nurse, school psychologist, school social worker, or school counselor licensure is requested. An applicant for a temporary limited license as a school nurse must also provide evidence of current registration to practice as a licensed registered nurse and current registration as a public health nurse under the Board of Nursing. An applicant for a temporary limited license as a school social worker must also provide evidence of current licensure to practice as a social worker under the Board of Social Work.

Subp. 2a. Exception for temporary limited licenses for career and technical fields. Limited licenses shall be issued for teaching career and technical fields under parts 8710.8010 to 8710.8080 to applicants who do not meet the criteria defined in subpart 2, item B, subitem (4), if the employing school district verifies that the individual has completed specific training for and at least four years of full-time employment or the equivalent in an occupation of the employment field to be taught. Renewal of temporary limited licenses issued under this subpart must require evidence of the applicant's having completed eight semester credits toward full licensure within the previous year. All other provisions of this part apply.

Subp. 3. Validity and duration of temporary limited licenses. An application for a temporary limited license must not be submitted prior to August 1 of the school year for which it is requested. A temporary limited license is issued for one school year or a portion of a school year from the date of issuance to the following June 30 and is valid for use in the requesting school district or charter school only. If the requesting school district or charter school offers summer school, a temporary limited license that expires on June 30 is valid for teaching summer school in the year of expiration of the license.

Subp. 4. Number of temporary limited licenses allowed. Beginning with temporary limited licenses issued on or after October 16, 2000, no more than three temporary limited licenses shall be granted to an applicant under subpart 2 and no more than five temporary limited licenses shall be granted to an applicant under subpart 2a.

Subp. 5. Exception for applicants prepared in Minnesota teacher preparation institutions. A graduate of a Minnesota teacher preparation institution who has been granted a temporary limited license

under subpart 2 but has not successfully completed the skills area examination may renew the temporary limited license two times. To renew a temporary limited license an applicant must:

A. provide an official score report which verifies having taken the examination during the period of each temporary limited license; and

B. provide evidence of participating in an approved remedial assistance program provided by a school district or postsecondary institution that includes a formal diagnostic component in the specific areas in which the applicant did not obtain qualifying scores during the period of each temporary limited license.

Subp. 6. Exception for applicants prepared outside Minnesota. An applicant who has completed a licensure program outside Minnesota may be granted a temporary limited license under part 8710.0400.

Statutory Authority: *MS s 14.388; 122A.09; 122A.18*

History: *25 SR 805; 26 SR 81; 26 SR 700*

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8710.1300 [Repealed, 25 SR 805]

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8710.1400 PERSONNEL VARIANCES.

Subpart 1. Authority to issue personnel variances. The Board of Teaching hereby authorizes the issuance of personnel variances which permit a teacher to teach in related subjects or fields for which such teacher is not currently licensed. The designated administrator of a local school district or charter school may request the Board of Teaching to issue a personnel variance which permits a teacher to teach subjects or fields for which that teacher is not currently licensed.

Subp. 2. Criteria for issuance. A personnel variance authorized by subpart 1 shall be issued to the designated administrator of a school district or charter school if the following conditions are met:

A. the designated administrator of the school district or charter school requests a personnel variance according to this part;

B. the designated administrator of the school district or charter school verifies in writing that:

(1) reasonable efforts have been made to assign existing staff to fill the position with a fully licensed teacher;

(2) no applicant holding a teaching license in a subject or field for which a personnel variance is requested can fulfill the requirements of the position; and

(3) the position has been advertised, and if the position is one-half time or more, the position has been advertised statewide;

C. the teacher for whom the request is made holds a current valid Minnesota entrance, professional, or nonrenewable license granted by the Board of Teaching; and

D. the teacher for whom the request is made is aware of the assignment.

Subp. 2a. Exceptions. No personnel variances shall be granted based on holding a current valid Minnesota temporary limited license unless the temporary limited license was granted based on having met all requirements except part 8710.0500. No personnel variances shall be granted for educational

speech/language pathologists, school counselors, school nurses, school psychologists, or school social workers.

Subp. 3. Duration of personnel variance. An application for a personnel variance must not be submitted prior to July 1 of the school year for which it is requested. A personnel variance is valid for one school year or a portion of a school year from the date of state approval to the following June 30. If the requesting school district or charter school offers summer school, the personnel variance that expires on June 30 is valid for teaching summer school in the year of expiration of the personnel variance.

Subp. 3a. Number of personnel variances allowed. Beginning with personnel variances issued on or after October 16, 2000, no more than three personnel variances shall be granted for any teacher to teach in subjects or fields for which the teacher is not licensed.

Subp. 4. Written conditions for granting or denying personnel variance. The Board of Teaching shall state in writing to the designated administrator of the school district or charter school the conditions for granting or denying the personnel variance requested pursuant to this part.

Statutory Authority: *MS s 14.388; 122A.09; 122A.18; 125.05; 125.185*

History: *L 1995 1Sp3 art 16 s 13; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 805; 26 SR 81*

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8710.1410 NONRENEWABLE LICENSE.

Subpart 1. Authority to issue nonrenewable license. The Board of Teaching may issue a nonrenewable license that permits a licensed teacher to teach in a subject or field for which the teacher is not currently licensed. The designated administrator of a local school district or charter school may request the board to issue the teacher's nonrenewable license.

Subp. 2. Criteria for issuance. A nonrenewable license under subpart 1 shall be issued to the school district or charter school when the following conditions are met:

A. the designated administrator of the school district or charter school requests a nonrenewable license under this part;

B. the designated administrator of the school district or charter school in the application verifies in writing that:

(1) reasonable efforts have been made to assign existing staff to fill the position with a fully licensed teacher;

(2) no applicant holding a teaching license in the subject or field for which a nonrenewable license is requested can fulfill the requirements of the position;

(3) the position has been advertised, and if the position is one-half time or more, the position has been advertised statewide;

(4) the administrator on behalf of the licensed teacher will use the "High Objective Uniform State Standard of Evaluation" (HOUSSE) and those criteria as necessary and proper to demonstrate subject matter competence in the nonlicensed area as established by the Board of Teaching in collaboration with the Department of Education, and that the teacher meets the board's criteria;

(5) the district will provide for a high quality professional development plan for the teacher that is sustained and classroom-focused before and while teaching; and will provide ongoing support for the teacher or a teacher mentoring program; and

(6) the teacher is in an approved course of study and will complete the approved program by the end of the third school year;

C. the teacher for whom the request is made holds a current valid Minnesota entrance or professional license granted by the Board of Teaching; and

D. the teacher for whom the request is made understands the criteria of the assignment and is in an approved course of study or there is evidence to demonstrate the teacher is making application for an approved course of study.

Subp. 3. **Exceptions.** A nonrenewable license shall not be granted to a teacher holding a temporary limited license. A nonrenewable license shall not be granted to speech/language pathologists, school counselors, school nurses, school psychologists, or school social workers.

Subp. 4. **Duration of nonrenewable license.** An application for a nonrenewable license must not be submitted before the July 1 preceding the first school year for which it is requested. A nonrenewable license is valid for three school years from the date of state approval to the end of the third school year, June 30. If the requesting school district or charter school offers summer school, the nonrenewable license that expires on June 30 is valid for teaching summer school in the year of expiration of the nonrenewable license.

Subp. 5. **Written conditions for granting or denying a nonrenewable license.** The Board of Teaching shall state in writing to the designated administrator of the school district or charter school the conditions for granting or denying the nonrenewable license requested under this part.

Subp. 6. **Approval for professional license.** The board will issue a professional license to a teacher who has successfully completed all requirements under the board's jurisdiction as defined in Minnesota Statutes, section 122A.18.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *30 SR 504*

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TEACHER STANDARDS

8710.2000 STANDARDS OF EFFECTIVE PRACTICE FOR TEACHERS.

Subpart 1. **Standards.** A candidate for teacher licensure shall show verification of completing the standards in subparts 2 to 11 in a teacher preparation program approved under part 8700.7600.

Subp. 2. **Standard 1, subject matter.** A teacher must understand the central concepts, tools of inquiry, and structures of the disciplines taught and be able to create learning experiences that make these aspects of subject matter meaningful for students. The teacher must:

A. understand major concepts, assumptions, debates, processes of inquiry, and ways of knowing that are central to the disciplines taught;

B. understand how students' conceptual frameworks and misconceptions for an area of knowledge can influence the students' learning;

- C. connect disciplinary knowledge to other subject areas and to everyday life;
- D. understand that subject matter knowledge is not a fixed body of facts but is complex and ever developing;
- E. use multiple representations and explanations of subject matter concepts to capture key ideas and link them to students' prior understandings;
- F. use varied viewpoints, theories, ways of knowing, and methods of inquiry in teaching subject matter concepts;
- G. evaluate teaching resources and curriculum materials for comprehensiveness, accuracy, and usefulness for presenting particular ideas and concepts;
- H. engage students in generating knowledge and testing hypotheses according to the methods of inquiry and standards of evidence used in the discipline;
- I. develop and use curricula that encourage students to understand, analyze, interpret, and apply ideas from varied perspectives; and
- J. design interdisciplinary learning experiences that allow students to integrate knowledge, skills, and methods of inquiry across several subject areas.

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:

- A. understand how students internalize knowledge, acquire skills, and develop thinking behaviors, and know how to use instructional strategies that promote student learning;
- B. understand that a student's physical, social, emotional, moral, and cognitive development influence learning and know how to address these factors when making instructional decisions;
- C. understand developmental progressions of learners and ranges of individual variation within the physical, social, emotional, moral, and cognitive domains, be able to identify levels of readiness in learning, and understand how development in any one domain may affect performance in others;
- D. use a student's strengths as a basis for growth, and a student's errors as opportunities for learning;
- E. assess both individual and group performance and design developmentally appropriate instruction that meets the student's current needs in the cognitive, social, emotional, moral, and physical domains;
- 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:

- A. understand and identify differences in approaches to learning and performance, including varied learning styles and performance modes and multiple intelligences; and know how to design instruction that uses a student's strengths as the basis for continued learning;
- B. know about areas of exceptionality in learning, including learning disabilities, perceptual difficulties, and special physical or mental challenges, gifts, and talents;
- C. know about the process of second language acquisition and about strategies to support the learning of students whose first language is not English;
- D. understand how to recognize and deal with dehumanizing biases, discrimination, prejudices, and institutional and personal racism and sexism;
- E. understand how a student's learning is influenced by individual experiences, talents, and prior learning, as well as language, culture, family, and community values;
- F. understand the contributions and lifestyles of the various racial, cultural, and economic groups in our society;
- G. understand the cultural content, world view, and concepts that comprise Minnesota-based American Indian tribal government, history, language, and culture;
- H. understand cultural and community diversity; and know how to learn about and incorporate a student's experiences, cultures, and community resources into instruction;
- I. understand that all students can and should learn at the highest possible levels and persist in helping all students achieve success;
- J. know about community and cultural norms;
- K. identify and design instruction appropriate to a student's stages of development, learning styles, strengths, and needs;
- L. use teaching approaches that are sensitive to the varied experiences of students and that address different learning and performance modes;
- M. accommodate a student's learning differences or needs regarding time and circumstances for work, tasks assigned, communication, and response modes;
- N. identify when and how to access appropriate services or resources to meet exceptional learning needs;
- O. use information about students' families, cultures, and communities as the basis for connecting instruction to students' experiences;
- 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.

Subp. 6. **Standard 5, learning environment.** A teacher must be able to use an understanding of individual and group motivation and behavior to create learning environments that encourage positive social interaction, active engagement in learning, and self-motivation. The teacher must:

- A. understand human motivation and behavior and draw from the foundational sciences of psychology, anthropology, and sociology to develop strategies for organizing and supporting individual and group work;
- B. understand how social groups function and influence people, and how people influence groups;
- C. know how to create learning environments that contribute to the self-esteem of all persons and to positive interpersonal relations;
- D. know how to help people work productively and cooperatively with each other in complex social settings;

E. understand the principles of effective classroom management and use a range of strategies to promote positive relationships, cooperation, and purposeful learning in the classroom;

F. know factors and situations that are likely to promote or diminish intrinsic motivation and how to help students become self-motivated;

G. understand how participation supports commitment;

H. establish a positive climate in the classroom and participate in maintaining a positive climate in the school as a whole;

I. establish peer relationships to promote learning;

J. recognize the relationship of intrinsic motivation to student lifelong growth and learning;

K. use different motivational strategies that are likely to encourage continuous development of individual learner abilities;

L. design and manage learning communities in which students assume responsibility for themselves and one another, participate in decision making, work both collaboratively and independently, and engage in purposeful learning activities;

M. engage students in individual and group learning activities that help them develop the motivation to achieve, by relating lessons to students' personal interests, allowing students to have choices in their learning, and leading students to ask questions and pursue problems that are meaningful to them and the learning;

N. organize, allocate, and manage the resources of time, space, activities, and attention to provide active engagement of all students in productive tasks;

O. maximize the amount of class time spent in learning by creating expectations and processes for communication and behavior along with a physical setting conducive to classroom goals;

P. develop expectations for student interactions, academic discussions, and individual and group responsibility that create a positive classroom climate of openness, mutual respect, support, inquiry, and learning;

Q. analyze the classroom environment and make decisions and adjustments to enhance social relationships, student motivation and engagement, and productive work; and

R. organize, prepare students for, and monitor independent and group work that allows for full, varied, and effective participation of all individuals.

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:

A. understand communication theory, language development, and the role of language in learning;

B. understand how cultural and gender differences can affect communication in the classroom;

C. understand the importance of nonverbal as well as verbal communication;

D. know effective verbal, nonverbal, and media communication techniques;

E. understand the power of language for fostering self-expression, identity development, and learning;

- F. use effective listening techniques;
- G. foster sensitive communication by and among all students in the class;
- H. use effective communication strategies in conveying ideas and information and in asking questions;
- I. support and expand learner expression in speaking, writing, and other media;
- J. know how to ask questions and stimulate discussion in different ways for particular purposes, including probing for learner understanding, helping students articulate their ideas and thinking processes, promoting productive risk-taking and problem-solving, facilitating factual recall, encouraging convergent and divergent thinking, stimulating curiosity, and helping students to question; and
- 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:

- A. understand learning theory, subject matter, curriculum development, and student development and know how to use this knowledge in planning instruction to meet curriculum goals;
- B. plan instruction using contextual considerations that bridge curriculum and student experiences;
- C. plan instructional programs that accommodate individual student learning styles and performance modes;
- D. create short-range and long-range plans that are linked to student needs and performance;
- 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:

- A. be able to assess student performance toward achievement of the Minnesota graduation standards under chapter 3501;
- B. understand the characteristics, uses, advantages, and limitations of different types of assessments including criterion-referenced and norm-referenced instruments, traditional standardized and performance-based tests, observation systems, and assessments of student work;
- C. understand the purpose of and differences between assessment and evaluation;

- D. understand measurement theory and assessment-related issues, including validity, reliability, bias, and scoring concerns;
- E. select, construct, and use assessment strategies, instruments, and technologies appropriate to the learning outcomes being evaluated and to other diagnostic purposes;
- F. use assessment to identify student strengths and promote student growth and to maximize student access to learning opportunities;
- G. use varied and appropriate formal and informal assessment techniques including observation, portfolios of student work, teacher-made tests, performance tasks, projects, student self-assessments, peer assessment, and standardized tests;
- H. use assessment data and other information about student experiences, learning behaviors, needs, and progress to increase knowledge of students, evaluate student progress and performance, and modify teaching and learning strategies;
- I. implement students' self-assessment activities to help them identify their own strengths and needs and to encourage them to set personal goals for learning;
- J. evaluate the effect of class activities on both individuals and the class as a whole using information gained through observation of classroom interactions, questioning, and analysis of student work;
- K. monitor teaching strategies and behaviors in relation to student success to modify plans and instructional approaches to achieve student goals;
- 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:

- A. understand the historical and philosophical foundations of education;
- B. understand methods of inquiry, self-assessment, and problem-solving strategies for use in professional self-assessment;
- C. understand the influences of the teacher's behavior on student growth and learning;
- D. know major areas of research on teaching and of resources available for professional development;
- E. understand the role of reflection and self-assessment on continual learning;
- F. understand the value of critical thinking and self-directed learning;
- G. understand professional responsibility and the need to engage in and support appropriate professional practices for self and colleagues;
- H. use classroom observation, information about students, and research as sources for evaluating the outcomes of teaching and learning and as a basis for reflecting on and revising practice;

- I. use professional literature, colleagues, and other resources to support development as both a student and a teacher;
- J. collaboratively use professional colleagues within the school and other professional arenas as supports for reflection, problem-solving, and new ideas, actively sharing experiences, and seeking and giving feedback;
- 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:

- A. understand schools as organizations within the larger community context and understand the operations of the relevant aspects of the systems within which the teacher works;
- B. understand how factors in a student's environment outside of school, including family circumstances, community environments, health and economic conditions, may influence student life and learning;
- C. understand student rights and teacher responsibilities to equal education, appropriate education for students with disabilities, confidentiality, privacy, appropriate treatment of students, and reporting in situations of known or suspected abuse or neglect;
- D. understand the concept of addressing the needs of the whole learner;
- E. understand the influence of use and misuse of tobacco, alcohol, drugs, and other chemicals on student life and learning;
- F. understand data practices;
- G. collaborate with other professionals to improve the overall learning environment for students;
- H. collaborate in activities designed to make the entire school a productive learning environment;
- I. consult with parents, counselors, teachers of other classes and activities within the school, and professionals in other community agencies to link student environments;
- J. identify and use community resources to foster student learning;
- 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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.2100 CODE OF ETHICS FOR MINNESOTA TEACHERS.

Subpart 1. **Scope.** Each teacher, upon entering the teaching profession, assumes a number of obligations, one of which is to adhere to a set of principles which defines professional conduct. These principles are reflected in the following code of ethics, which sets forth to the education profession and the public it serves standards of professional conduct and procedures for implementation.

This code shall apply to all persons licensed according to rules established by the Board of Teaching.

Subp. 2. **Standards of professional conduct.** The standards of professional conduct are as follows:

- A. A teacher shall provide professional education services in a nondiscriminatory manner.
- B. A teacher shall make reasonable effort to protect the student from conditions harmful to health and safety.
- C. In accordance with state and federal laws, a teacher shall disclose confidential information about individuals only when a compelling professional purpose is served or when required by law.
- D. A teacher shall take reasonable disciplinary action in exercising the authority to provide an atmosphere conducive to learning.
- E. A teacher shall not use professional relationships with students, parents, and colleagues to private advantage.
- F. A teacher shall delegate authority for teaching responsibilities only to licensed personnel.
- G. A teacher shall not deliberately suppress or distort subject matter.
- H. A teacher shall not knowingly falsify or misrepresent records or facts relating to that teacher's own qualifications or to other teachers' qualifications.
- I. A teacher shall not knowingly make false or malicious statements about students or colleagues.
- J. A teacher shall accept a contract for a teaching position that requires licensing only if properly or provisionally licensed for that position.

Subp. 3. Statutory enforcement of code: complaints, investigation, and hearing.

A. The enforcement of the provisions of the code of ethics for Minnesota teachers shall be in accord with Minnesota Statutes, section 214.10:

"Minnesota Statutes, section 214.10, complaints; investigation and hearing.

Subd. 1. Receipt of complaint. The executive secretary of a board, a board member or any other person who performs services for the board who receives a complaint or other communication, whether oral or written, which complaint or communication alleges or implies a violation of a statute or rule which the board is empowered to enforce, shall promptly forward the substance of the communication on a form

prepared by the attorney general to the designee of the attorney general responsible for providing legal services to the board. Before proceeding further with the communication, the designee of the attorney general may require the complaining party to state the complaint in writing on a form prepared by the attorney general. Complaints which relate to matters within the jurisdiction of another governmental agency shall be forwarded to that agency by the executive secretary. An officer of that agency shall advise the executive secretary of the disposition of that complaint. A complaint received by another agency which relates to a statute or rule which a licensing board is empowered to enforce shall be forwarded to the executive secretary of the board to be processed in accordance with this section.

Subd. 2. Investigation and hearing. The designee of the attorney general providing legal services to a board shall evaluate the communications forwarded by the board or its members or staff. If the communication alleges a violation of statute or rule which the board is to enforce, the designee is empowered to investigate the facts alleged in the communication. In the process of evaluation and investigation, the designee shall consult with or seek the assistance of the executive secretary or, if the board determines, a member of the board who has been designated by the board to assist the designee. The designee may also consult with or seek the assistance of any other qualified persons who are not members of the board who the designee believes will materially aid in the process of evaluation or investigation. The executive secretary or the consulted board member may attempt to correct improper activities and redress grievances through education, conference, conciliation, and persuasion, and in these attempts may be assisted by the designee of the attorney general. If the attempts at correction or redress do not produce satisfactory results in the opinion of the executive secretary or the consulted board member, or if after investigation the designee providing legal services to the board, the executive secretary or the consulted board member believes that the communication and the investigation suggest illegal or unauthorized activities warranting board action, the designee shall inform the executive secretary of the board who shall schedule a disciplinary hearing in accordance with Minnesota Statutes, chapter 14. Before the holding of a disciplinary hearing may be directed, the designee or executive secretary shall have considered the recommendations of the consulted board member. Before scheduling a disciplinary hearing, the executive secretary must have received a verified written complaint from the complaining party. A board member who was consulted during the course of an investigation may participate at the hearing but may not vote on any matter pertaining to the case. The executive secretary of the board shall promptly inform the complaining party of the final disposition of the complaint. Nothing in this section shall preclude the board from scheduling, on its own motion, a disciplinary hearing based upon the findings or report of the board's executive secretary, a board member or the designee of the attorney general assigned to the board. Nothing in this section shall preclude a member of the board or its executive secretary from initiating a complaint.

Subd. 3. Discovery; subpoenas. In all matters pending before it relating to its lawful regulation activities, a board may issue subpoenas and compel the attendance of witnesses and the production of all necessary papers, books, records, documents, and other evidentiary material. Any person failing or refusing to appear or testify regarding any matter about which the person may be lawfully questioned or produce any papers, books, records, documents, or other evidentiary materials in the matter to be heard, after having been required by order to the board or by a subpoena of the board to do so may, upon application to the district court in any district, be ordered to comply therewith. The chair of the board acting on behalf of the board may issue subpoenas and any board member may administer oaths to witnesses, or take their affirmation. Depositions may be taken within or without the state in the manner provided by law for the taking of depositions in civil actions. A subpoena or other process or paper may be served upon any person named therein, anywhere within the state by any officer authorized to serve subpoenas or other process or paper in civil actions, with the same fees and mileage and in the same manner as prescribed by law for

service of process issued out of the district court of this state. Fees and mileage and other costs shall be paid as the board directs."

Subp. 4. Complaints handled by board. When oral complaints alleging violations of the code of ethics are received, the executive secretary of the Board of Teaching shall request the complaining party to submit the complaint in writing within ten days.

Upon the receipt of a complaint in writing alleging violations of the code of ethics, the teacher named in the complaint shall be notified in writing within ten days of the receipt of the complaint.

The teacher shall be entitled to be represented by the teacher's own counsel or representative at each stage of the investigation and hearing.

Subp. 5. Enforcement procedures. The Board of Teaching may impose one or more of the following penalties when it has found a violation of the code of ethics. These actions shall be taken only after all previous efforts at remediation have been exhausted.

A. The Board of Teaching may enter into agreements with teachers accused of violating the code of ethics which would suspend or terminate proceedings against the teacher on conditions agreeable to both parties.

B. A letter of censure from the Board of Teaching may be sent to the person determined to be in violation of the standards of the code of ethics. A copy of the letter shall be filed with the Board of Teaching. Such letters shall be kept on file for a period of time not to exceed one calendar year.

C. A teacher who has been found to have violated the code of ethics may be placed on probationary licensure status for a period of time to be determined by the Board of Teaching. The board may impose conditions on the teacher during the probationary period which are to be directed toward improving the teacher's performance in the area of the violation. During this period, the teacher's performance or conduct will be subject to review by the Board of Teaching or its designee. Such review will be directed toward monitoring the teacher's activities or performance with regard to whatever conditions may be placed on the teacher during the probationary period. Before the end of the probationary period the Board of Teaching shall decide to extend or terminate the probationary licensure status or to take further disciplinary actions as are consistent with this rule.

D. The license to teach of the person determined to be in violation of the standards of the code of ethics may be suspended for a period of time determined by the Board of Teaching.

E. The license to teach of the person determined to be in violation of the standards of the code of ethics may be revoked by the Board of Teaching.

Statutory Authority: *MS s 125.185*

History: *17 SR 1279; L 1998 c 397 art 11 s 3; 39 SR 822*

Published Electronically: *August 4, 2015*

8710.3000 TEACHERS OF EARLY CHILDHOOD EDUCATION.

Subpart 1. Scope of practice. A teacher of early childhood education is authorized to design, implement, and evaluate developmentally appropriate learning experiences for young children from birth through grade 3 in a variety of early childhood settings and to collaborate with families, colleagues, and related service personnel to enhance the learning of all young children.

Subp. 2. Licensure requirements. A candidate for licensure in early childhood education for teaching young children from birth through age eight 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 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 early childhood education in subpart 3.

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.

A. A teacher of infant or toddler-aged, preprimary-aged, and primary-aged children must understand child development and learning, including:

(1) the research base for and the best practices of early childhood education;

(2) the physical, social, emotional, language, cognitive, and creative development of young children from birth through age eight;

(3) how young children differ in their development and approaches to learning to support the development and learning of individual children;

(4) the major theories of early childhood development and learning and their implications for practice with young children and families from birth through age eight;

(5) the concepts of "belonging" and "family connectedness" as crucial to the development of young children;

(6) that children are best understood in the contexts of family, culture, and society; and

(7) the interrelationships among culture, language, and thought and the function of the home language in the development of young children.

B. A teacher of infants and toddlers plans, designs, and implements developmentally appropriate learning experiences. The teacher must understand:

(1) the unique developmental milestones associated with young infants 0 to 9 months, mobile infants 8 to 18 months, and toddlers 16 to 36 months;

(2) the need to build and maintain a primary care relationship with each infant and toddler;

(3) how to build and maintain positive care giving relationships with infants and toddlers in groups;

(4) how to use observation skills to determine infants' and toddlers' needs, interests, preferences, and particular ways of responding to people and things;

(5) strategies for developing an appropriate learning environment that:

(a) meet the physical needs of infants and toddlers through small and large group muscle play, feeding, diapering and toileting, and rest, including:

i. health and safety procedures and universal precautions to limit the spread of infectious diseases;

ii. symptoms of common illness and environmental hazards;

iii. how to evaluate infant and toddler environments to ensure the physical and emotional safety of children in care; and

iv. how to use environmental factors and conditions to promote the health, safety, and physical development of infants and toddlers;

(b) use scheduling and daily routines to meet infants' and toddlers' needs for balance in predictable active and quiet activities, social and solitary experiences, reliable transitions, and rest;

(c) use educational materials for infants and toddlers that balance needs for growing independence and active exploration with the need for safety and health;

(d) create learning experiences that incorporate the infants' and toddlers' cultural and home experiences; and

(e) use guidance and management techniques to accommodate the developmental characteristics of infants and toddlers and to support their need for a sense of security and self-esteem;

(6) strategies for assessing an infant's or toddler's emerging level of cognitive development and how to use this information to establish individual cognitive development goals and design developmentally appropriate learning experiences that:

(a) facilitate the acquisition of skills to acquire, organize, and use information in increasingly complex ways;

(b) create experiences that enable infants and toddlers to use play as an organizer between the acquisition and use of information;

(c) encourage curiosity and exploration;

(d) support development of language and communication skills;

(e) provide opportunities for infants and toddlers to use self-initiated repetition to practice newly acquired skills and to experience feelings of autonomy and success;

(f) enhance infants' and toddlers' emerging knowledge of cause and effect and spatial relations;

(g) encourage self-expression through developmentally appropriate music, movement, dramatic, and creative art experiences; and

(h) provide a foundation for literacy and numeracy development through daily exposure to books, stories, language experiences, and activities that involve object relationships;

(7) strategies for assessing an infant's or toddler's emerging level of social and emotional development and how to use this information to establish individual social and emotional development goals and design developmentally appropriate learning experiences that:

(a) establish environments in which responsive and predictable interaction sequences occur;

(b) structure the classroom to promote positive, constructive interactions between and among children;

- (c) promote healthy peer relationships;
- (d) adapt a pattern of care to meet infants' and toddlers' rapidly changing needs;
- (e) emphasize caregiving routines that allow for interaction and visual and tactile learning;
- (f) facilitate the development of infants' and toddlers' self-esteem; and
- (g) provide continuity and consistency of affectionate care for infants and toddlers;

(8) strategies for assessing an infant's or toddler's emerging level of physical development and how to use this information to establish individual physical development goals and design developmentally appropriate learning experiences that:

- (a) foster a positive attitude toward activity;
- (b) enhance infants' and toddlers' perceptual skills, balance and coordination, and flexibility, strength, and endurance; and
- (c) create environments that provide opportunities for active physical exploration and the development of emerging fine and gross motor skills;

(9) strategies for assessing an infant's or toddler's emerging level of creative development and how to use this information to establish individual creative development goals and design developmentally appropriate learning experiences that:

- (a) enhance infants' and toddlers' abilities to create their own ideas and solve problems through art, music, movement, dramatic play, and other creative activities;
- (b) develop experiences that encourage initiative, creativity, autonomy, and self-esteem, integrating adult support, comfort, and affection to facilitate these aspects of development; and
- (c) create an environment where infants and toddlers are able to explore and expand their creative abilities.

C. A teacher of young children in preprimary classrooms plans, designs, and implements developmentally appropriate learning experiences. The teacher must understand:

- (1) the cognitive, social and emotional, physical, and creative development of preprimary-aged children and how children's development and learning are integrated;
- (2) the development of infants and toddlers and its effects on the learning and development of preprimary-aged children;
- (3) how to establish and maintain physically and psychologically safe and healthy learning environments for preprimary-aged children that:
 - (a) acknowledge the influence of the physical setting, schedule, routines, and transitions on children and use these experiences to promote children's development and learning;
 - (b) acknowledge the developmental consequences of stress and trauma, protective factors and resilience, and the development of mental health, and the importance of supportive relationships;
 - (c) acknowledge basic health, nutrition, and safety management practices for young children, including procedures regarding childhood illness and communicable disease;

(d) use appropriate health appraisal procedures and how to recommend referrals to appropriate community health and social services when necessary; and

(e) recognize signs of emotional distress, child abuse, and neglect in young children and know responsibility and procedures for reporting known or suspected abuse or neglect to appropriate authorities;

(4) how to plan and implement appropriate curriculum and instructional practices based on developmental knowledge of individual preprimary-aged children, the community, and the curriculum goals and content, including how to use:

(a) developmentally appropriate methods that include play, small group projects, open-ended questioning, group discussion, problem solving, cooperative learning, and inquiry experiences to help children develop curiosity, solve problems, and make decisions; and

(b) knowledge of the sequence of development to create and implement meaningful, integrated learning experiences using children's ideas, needs, interests, culture, and home experiences;

(5) strategies for assessing a preprimary-aged child's emerging level of cognitive development and how to use this information to establish individual cognitive development goals and design developmentally appropriate learning experiences that:

(a) facilitate the acquisition of skills to acquire, organize, and use information in increasingly complex ways;

(b) create experiences that enable preprimary-aged children to use play as an organizer between the acquisition and use of information;

(c) extend children's thinking and learning and move them to higher levels of functioning;

(d) assist children to plan, evaluate, reflect on, revisit, and build on their own experiences;

(e) allow children to construct understanding or relationships among objects, people, and events;

(f) encourage the use and construction of numeracy skills;

(g) encourage the development of language and communication skills;

(h) encourage the use and construction of literacy skills; and

(i) allow children to construct knowledge of the physical world, manipulate objects for desired effects, and understand cause-and-effect relationships;

(6) strategies for assessing a preprimary-aged child's emerging level of social and emotional development and how to use this information to establish individual social and emotional development goals and design developmentally appropriate learning experiences that:

(a) establish environments in which responsive and predictable interaction sequences occur;

(b) structure the classroom to promote positive and constructive interactions among children;

(c) promote healthy peer relationships;

(d) build in each child a sense of belonging, security, personal worth, and self-confidence toward learning;

(e) allow for the construction of social knowledge, such as cooperating, helping, negotiating, and talking with others to solve problems;

(f) facilitate the development of self-acceptance, self-control, and social responsiveness in children through the use of positive guidance techniques; and

(g) promote children's understanding, acceptance, and appreciation of human differences due to social, cultural, physical, or developmental factors;

(7) strategies for assessing a preprimary-aged child's emerging level of physical development and how to use this information to establish individual physical development goals and design developmentally appropriate learning experiences that:

(a) foster a positive attitude toward physical activity;

(b) enhance preprimary-aged children's perceptual skills; balance and coordination; and flexibility, strength, and endurance;

(c) support age-appropriate risk-taking within safe boundaries;

(d) assist children in becoming competent in acquiring basic gross and fine motor skills;

(e) facilitate children's understanding of maintaining a desirable level of nutrition, health, fitness, and physical safety; and

(f) meet children's physiological needs for activity, sensory stimulation, fresh air, rest, hygiene, and nourishment and elimination; and

(8) strategies for assessing a preprimary-aged child's emerging level of creative development and how to use this information to establish individual creative development goals and design developmentally appropriate learning experiences that:

(a) help children develop and sustain curiosity about the world including past, present, and future events, trends, relationships, and understandings;

(b) build children's confidence, creativity, imagination, personal expression of thoughts and feelings, initiative, and persistence in task completion;

(c) encourage children to express ideas and feelings;

(d) provide children with opportunities to use materials in self-selected and self-directed ways;

(e) use open-ended activities to reinforce positive self-esteem and individuality among children; and

(f) promote shared problem solving, creativity, and conceptual integration among children.

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

(1) the cognitive, social and emotional, physical, and creative development of primary-aged children and how children's development and learning are integrated;

(2) how to establish and maintain physically and psychologically safe and healthy learning environments for primary-aged children that:

(a) acknowledge the influence of the physical setting, scheduling, routines, and transitions on children and use these experiences to promote young children's development and learning;

(b) acknowledge developmental consequences of stress and trauma, protective factors and resilience, and the development of mental health and the acceptance of supportive relationships;

(c) acknowledge basic health, nutrition, and safety management practices for primary-aged children, including procedures regarding childhood illness and communicable diseases; and

(d) recognize signs of emotional distress, child abuse, and neglect in young children and know responsibility and procedures for reporting known or suspected abuse or neglect to appropriate authorities;

(3) how to create learning environments that emphasize play, active manipulation of concrete materials, child choice and decision making, exploration of the environment, and interactions with others;

(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;

(5) the central concepts and tools of inquiry for teaching mathematics, including:

(a) the use and understanding of mathematics and of how primary-aged children learn mathematics to guide instruction that develops children's understanding of number sense and number systems, geometry, and measurement;

(b) planning activities that develop primary-aged children's understanding of mathematics and increases their ability to apply mathematics to everyday problems;

(c) helping primary-aged children experience mathematics as a way to explore and solve problems in their environment at home and in school through open-ended work that includes child-invented strategies with different problems, games, and authentic situations;

(d) selecting and creating a variety of resources, materials, and activities for counting and studying patterns and mathematical relationships;

(e) building learning environments where children can construct their own knowledge for learning mathematics;

(f) providing objects, counters, charts, graphs, and other materials to help primary-aged children express ideas, and represent and record problem solving through numbers and symbols;

(g) using field trips, science experiments, cooking and snack times, sports, and games to use mathematics to solve problems, to symbolize phenomena and relationships, and to communicate quantitative information; and

(h) asking questions to clarify how primary-aged children perceive a problem, develop a strategy, and understand different approaches to reasoning and thinking in mathematics;

(6) the central concepts and tools of inquiry for teaching science, including:

(a) supporting primary-aged children's enthusiasm, wonder, and curiosity about the world and increase their understanding of the world;

(b) building on primary-aged children's capabilities for using their senses to acquire information by examining, exploring, comparing, classifying, describing, and asking questions about materials and events in their environment;

(c) creating engaging and useful interdisciplinary projects that introduce primary-aged children to the major ideas of science;

(d) encouraging primary-aged children to make predictions, gather and classify data, carry out investigations, make observations, and test ideas about natural phenomena and materials; and

(e) designing experiences to help primary-aged children construct and build their knowledge of science;

(7) the central concepts and tools of inquiry for teaching social studies, including:

(a) building on primary-aged children's experiences in their classrooms, homes, and communities to enrich understandings about social relationships and phenomena;

(b) leading primary-aged children to examine and discuss similarities, common interests, and needs and important differences among peoples, communities, and nations; and

(c) promoting social development, democratic ideals, civic values, cooperative relationships, and mutual respect within the school community while helping primary-aged children grow as citizens;

(8) the central concepts and tools of inquiry for teaching visual and performing arts, including:

(a) providing primary-aged children with the time, materials, and opportunities to explore, manipulate, and create using a variety of media;

(b) providing primary-aged children with experiences producing, discussing, and enjoying various forms of the arts, including visual art, music, creative drama, and dance;

(c) enabling primary-aged children to understand how the arts represent different ways to perceive and interpret the world;

(d) promoting primary-aged children's knowledge of various criteria for evaluating the arts; and

(e) using a variety of artistic materials and techniques for discussing, experiencing, and thinking about important and interesting questions and phenomena with primary-aged children; and

(9) the central concepts and tools of inquiry for teaching health and physical education, including:

(a) providing experiences to encourage personal and community health promotion, disease prevention, and safety;

(b) applying movement concepts and principles to the learning and development of motor skills; and

(c) encouraging the development of a health-enhancing level of physical fitness.

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 learners; and

(c) the interrelated elements of language arts instruction that support the reading development of English 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 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; 122A.18*

History: *23 SR 1928; 34 SR 595; L 2012 c 239 art 1 s 33*

Published Electronically: *October 12, 2012*

8710.3100 TEACHERS OF PARENT AND FAMILY EDUCATION.

Subpart 1. **Scope of practice.** A teacher of parent and family education is authorized to instruct parents in an early childhood family education program.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach parent and family education in an early childhood family education program shall:

- A. hold a baccalaureate degree from a college or university that is accredited by the regional association for accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 parent and family education in subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of parent and family 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 D.

A. A teacher of parent and family education must understand families:

- (1) the parent's role as primary socializer and educator of the family;
- (2) theories of family dynamics;
- (3) family communication;
- (4) family structures;
- (5) family strengths from multiple perspectives;
- (6) human sexual behavior;
- (7) gender roles;
- (8) family decision-making and problem-solving processes;
- (9) the effects of disabilities on family relationships;
- (10) the reciprocal relationships between family and community;
- (11) the effects of culture and ethnicity on family relationships;
- (12) the interaction of socioeconomic situations and family dynamics;
- (13) the influence of public policies on families;
- (14) influence of the social and historical climate on families; and
- (15) the effects of change and loss on family functioning.

B. A teacher of parent and family education must understand parent-child relationships:

(1) multidisciplinary descriptions of parenting practices and healthy parent-child relationships;

- (2) theories of parent-child interaction;
- (3) the reciprocal nature of parent-child relationships;
- (4) the impact of parent expectations, practices, and behaviors on the child's development;
- (5) the impact of work and other external influences on parental behaviors;
- (6) stages of parenting across the life span;
- (7) mother-child, father-child, and other primary caregiver-child relationships;
- (8) the influence of adult partner relationships on parent-child relationships;
- (9) the signs of emotional distress, abuse, and neglect in parent-child relationships;
- (10) specific family situations, for example, single parenting, stepparenting, adolescent parenting, adoptive parenting, grandparenting, and the effects of disabilities on parenting; and
- (11) the effects of culture and ethnicity on parent-child relationships.

C. A teacher of parent and family education must understand child development:

- (1) theories of child development;

- (2) social, psychological, physical, cognitive, language, and moral development;
- (3) individual differences among children;
- (4) the effects of disabilities on child development;
- (5) the influence of culture, community, and experiences on development;
- (6) the formation of a child's self-identity and self-esteem;
- (7) the role of play in child development;
- (8) sexuality development;
- (9) developmentally appropriate learning environments, activities, and interactions; and
- (10) the effects of health and nutrition on child development.

D. A teacher of parent and family education must understand adult development:

- (1) that each adult is unique and exhibits individual patterns of development influenced by physical, social, cultural, psychological, and experiential factors;
- (2) biological changes in adulthood and developmental aspects of aging and the impact on adult learning;
- (3) adult learning and learning styles, adult cognitive development, and use of instructional strategies that promote adult learning and development;
- (4) theories of adult development and how to apply theory when making instructional decisions; and
- (5) how to apply the standards of effective practice in teaching adult students through a series of formal observations and directed instructional experiences with adults participating in early childhood and family education programs.

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

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of parent and family education are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928*

Published Electronically: *November 19, 2009*

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 learners; and

(c) the interrelated elements of language arts instruction that support the reading development of English 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 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; 122A.18*

History: *23 SR 1928; 34 SR 595; L 2012 c 239 art 1 s 33*

Published Electronically: *October 12, 2012*

8710.3300 [Repealed, 34 SR 595]

Published Electronically: *November 19, 2009*

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*

Published Electronically: *November 19, 2009*

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*

Published Electronically: *November 19, 2009*

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*

Published Electronically: *November 19, 2009*

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*

Published Electronically: *November 19, 2009*

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*

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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.

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*

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8710.4000 TEACHERS OF ADULT BASIC EDUCATION.

Subpart 1. **Scope of practice.** A teacher of adult basic education is authorized to provide to learners who are 16 years of age or over and are not enrolled in elementary or secondary schools instruction that is designed to develop mastery of basic education skills including English language skills. This part shall not prohibit a school board from employing a teacher who holds a valid Minnesota classroom teaching license but who is not licensed as a teacher of adult basic education to teach adult basic education. A license under this part does not qualify a teacher to provide instruction leading to a high school diploma.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach adult basic education shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 adult basic education in subpart 3.

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.

A. A teacher of adult basic education must understand adult basic education organizational structure:

- (1) the history and philosophy of adult basic education including its purposes, mission, and populations to be served;

(2) federal and state adult basic education legislation, policies, and regulatory agencies including sources of funding; and

(3) systems of delivering adult education programs and services.

B. A teacher of adult education must understand adult learning theories:

(1) characteristics common to all adult learners as well as those common to unique populations;

(2) contemporary strategies and models for teaching adults; and

(3) formal and informal diagnostic procedures, including self-assessment, for identifying the academic and personal needs of adult learners and how to use this information as the basis for customizing the curriculum so as to meet their needs.

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.

D. A teacher of adult education must understand the content and methods for teaching mathematics:

- (1) mathematical concepts and the procedures and connections between them including:
 - (a) basic mathematics processes including addition, subtraction, multiplication, and division;
 - (b) basic mathematics systems of whole numbers, fractions, decimals, and percentages;
 - (c) estimation of quantities and the evaluation of the reasonableness of estimates;
 - (d) systems of measurement and their use; and
 - (e) constructing, reading, interpreting, and making inferences from tables, charts, and graphs;
- (2) mathematical problem-solving techniques and strategies; and
- (3) how to teach mathematics contextually to reflect actual uses using real world materials and situations that build on the adult learner's prior knowledge.

E. A teacher of adult education must understand the content and methods for teaching listening and speaking:

- (1) the listening process and how to receive, attend to, interpret, and respond appropriately to verbal messages and other cues;
- (2) ways of constructing meaning for participation in formal and informal speaking situations so students can organize ideas and use different verbal and nonverbal communication styles;
- (3) how to teach listening and speaking contextually to reflect actual uses using real world materials and situations that build on the adult learner's prior knowledge; and
- (4) how to adopt appropriate learning materials and adapt teaching strategies to meet the second language needs of adult learners whose first language is not English.

F. A teacher of adult education must understand the content and methods for teaching writing:

- (1) the stages of the writing process;
- (2) multiple strategies to assess and respond to student writing;
- (3) the principles and formats of communicating thoughts, ideas, information, and messages appropriately and effectively in written English; and
- (4) how to teach writing contextually so as to reflect actual uses using real world materials and situations that build on the adult learner's prior knowledge.

G. A teacher of adult education must understand the content and methods for teaching application skills:

- (1) the higher order thinking skills of thinking critically, solving problems, and making decisions;
- (2) effective interpersonal and group participation; and
- (3) understanding how to learn.

H. A teacher of adult basic education must understand career development and transition skills:

- (1) the culture of the contemporary workplace and the changing nature of job skills;
- (2) the process of accessing information and resources of jobs and training;
- (3) the career decision-making process; and
- (4) the skills necessary to find and keep a job.

I. A teacher of adult basic education must understand adult teaching and learning:

(1) factors for selecting and techniques for using materials and resources in adult education programming;

(2) formal and informal diagnostic procedures for identifying the academic and personal needs of adult learners and how to use this information to develop competency-based instruction for individuals, small groups, and large groups;

- (3) strategies for learners to assess their own progress; and
- (4) factors to consider in developing unique curricula for specialized adult populations.

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

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

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8710.4050 TEACHERS OF AGRICULTURAL EDUCATION.

Subpart 1. **Scope of practice.** A teacher of agricultural education is authorized to provide to students in grades 5 through 12 instruction that is designed to develop the student's literacy in the food, fiber, and natural resources systems, the agricultural applications of the concepts, and the interdisciplinary nature of science; and to assist students to develop agricultural and agriculture-related career perspectives and workplace skills.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach agricultural education to students in grades 5 through 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 agricultural education in subpart 3.

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.

A. A teacher of agricultural education must understand the anatomy, taxonomy, physiology, and ecology of plants and the application of the principles of genetics, propagation, selection, culture, and use of plants in agronomy, horticulture, or forestry.

B. A teacher of agricultural education must understand the anatomy and physiology of animals; the application of principles of genetics, breeding, selection, nutrition, care and health of animals for use in production, companionship, and recreation; and other contemporary issues that include ethics and waste management.

C. A teacher of agricultural education must understand the principles and practices of ecology and conservation in the areas of air, water, land, and wildlife flora and fauna; the principles and practices of soils and soil management; and the interactions of humans in natural and managed environments.

D. A teacher of agricultural education must understand the principles of economics; business and resource management; sales and marketing of commodities and services; and managerial accounting and bookkeeping procedures.

E. A teacher of agricultural education must understand the principles and practices of mechanical systems that include fluid, electrical, and fuel-powered units; the design, fabrication, construction, and use of agricultural structures, equipment, and systems; alternative energy sources, including wind, solar, and geothermal energy; measuring tools and equipment; and product storage, water management, waste management, and materials handling.

F. A teacher of agricultural education must understand the selection and use of technology appropriate to the industry.

G. A teacher of agricultural education must understand the production, processing, preservation, packaging, storage, marketing, and distribution of dairy products, meats, fruits and vegetables, textiles, and wood products; and have knowledge of the laws, regulations, and issues affecting food and fiber quality and safety.

H. A teacher of agricultural education must understand the diversity of agriculture; population and cultural impact on world economics and trade; and productive capacity, productive potential, and comparative advantage.

I. A teacher of agricultural education must understand the principles and practices of leadership and communication that apply to organizations and community settings; role and structure of the student organization as an integral curricular component; and integration of the role and structure of the student organizations in developing the student through individual, cooperative, and collaborative activities that prepare the student for a role in the school, community, and workplace.

J. Through regular employment, internship, mentorship, job shadowing, or apprenticeship, a teacher of agricultural education must understand the function and operation of:

(1) businesses that supply goods and services to agriculture and agricultural-related enterprises; production units; and businesses that process, market, and distribute agricultural-related products; and

(2) diverse natural resources occupations, including recreational, conservation, and related occupations.

K. A teacher of agricultural education must understand the principles and practices of career planning and development that incorporates the role of career exploration in the process.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;
- (2) understand and apply the research base and the best practices of middle level and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of agricultural education; and know how to apply instructional strategies and materials for achieving student understanding of agricultural education;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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

(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.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.4100 TEACHERS OF AMERICAN INDIAN LANGUAGE, HISTORY, AND CULTURE.

Subpart 1. Issuance of license authorized. The Board of Teaching shall, under this part and Minnesota Statutes, section 126.49, authorize the issuance of a license to teach American Indian language, history, and culture to an applicant who has achieved and demonstrated competence in an American Indian language or knowledge and understanding of American Indian history and culture.

Subp. 2. Scope of practice. A teacher of American Indian language, history, and culture is authorized to teach an American Indian language or an American Indian history and culture to students in kindergarten through grade 12. This part shall not prohibit a school board from employing a person to teach an American Indian language or American Indian history and culture who does not hold a license under this part.

Subp. 3. License requirements. A candidate for licensure to teach American Indian language, history, and culture shall submit an application that:

- A. specifies the American Indian language or history and culture to be taught;

B. includes certified copies of two resolutions attesting to the applicant's competence in an American Indian language or the knowledge and understanding of an American Indian history and culture. One of the resolutions must be from the tribal government governing the tribe or community speaking the language or representing the history and culture for which licensure is requested with the second resolution being from one of subitems (1) to (4):

(1) another reservation or business committee serving the tribe or community speaking the language or representing the history and culture for which licensure is requested;

(2) the local Indian education committee serving the tribe or community speaking the language or representing the history and culture for which licensure is requested;

(3) other bodies governing or serving the tribe or community speaking the language or representing the history and culture; or

(4) authorized officials of professional or learned societies, organizations, or institutions who are qualified to assess the applicant's competence in an American Indian language or the knowledge and understanding of the applicant of the American Indian history and culture.

The resolution shall confirm that the applicant has been assessed and is competent in the language to be taught or possesses knowledge and understanding of the American Indian history and culture to be taught.

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

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of American Indian language, history, and culture are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928*

Published Electronically: *November 19, 2009*

8710.4150 TEACHERS OF BILINGUAL/BICULTURAL EDUCATION.

Subpart 1. **Scope of practice.** A teacher holding a bilingual/bicultural license is authorized to teach the academic content in the students' native or first language at the grade levels defined by the prerequisite classroom teacher license in subpart 2, item B. Bilingual/bicultural education licensure is required when the teaching assignment focuses on providing academic content instruction to English learners in their native or first language for the purposes of gaining access to the curriculum through instruction of academic content in the students' native or first language and developing both the students' native or first language and English language skills.

Subp. 2. **Licensure requirements.** A candidate recommended for licensure to teach bilingual/bicultural education shall:

A. hold a baccalaureate degree from a college or university that is accredited by the regional association for accreditation of colleges and secondary schools;

B. hold a valid Minnesota elementary education or a grade 5 through 12 or grade 7 through 12 license in mathematics, a science field, social studies, or health education;

- C. demonstrate oral and written proficiency in the students' native or first language as described in subpart 3;
- D. demonstrate the standards of effective practice for teaching in part 8710.2000; and
- E. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to licensure of teachers of bilingual/bicultural education under subpart 4.

Subp. 3. **Demonstration of oral and written proficiency.** A candidate for licensure as a teacher of bilingual/bicultural education shall demonstrate oral and written proficiency in the students' native or first language under item A or B.

A. The candidate shall verify the completion of a high school or postsecondary education using the students' native or first language as the means of oral and written communication.

B. The candidate shall demonstrate an advanced level of oral proficiency as defined in the ACTFL Proficiency Guidelines established by the American Council on the Teaching of Foreign Languages and an advanced level writing proficiency as defined in this part. The written language proficiency does not apply to a candidate for licensure whose first or native language is a language that is not commonly communicated in written form by native speakers of that language.

A candidate who has an advanced level of written proficiency is able to write routine social correspondence and join sentences in simple discourse of at least several paragraphs in length on familiar topics; write simple social correspondence, take notes, write cohesive summaries and resumes, and narratives and descriptions of a factual nature; use sufficient writing vocabulary to express self simply with some circumlocution; make few errors in punctuation, spelling, or the formation of nonalphabetic symbols; and demonstrate good control of the morphology and the most frequently used syntactic structures; for example, common word order patterns, coordination, and subordination.

Subp. 4. **Subject matter standard.** A candidate for licensure as a teacher of bilingual/bicultural education must complete a preparation program under subpart 2, item E, that must include the candidate's demonstration of the knowledge and skills in items A to I.

A. A bilingual/bicultural education teacher demonstrates an understanding of the contributions of general and applied linguistics to second language education. The bilingual/bicultural education teacher must:

- (1) understand basic phonology of language;
- (2) understand grammatical concepts that are applicable to dual language instruction;
- (3) compare and contrast English with another language;
- (4) understand word forms and their contribution to the lexicon in English and other languages;
- (5) understand the multiple perspectives of language learners who share a common first language but come from a number of different cultural backgrounds; and
- (6) understand how to promote proficiency in two languages.

B. A bilingual/bicultural education teacher understands the fundamentals of the first and second language acquisition process. The bilingual/bicultural education teacher must:

- (1) understand the processes of and differences between first and second language acquisition;

- (2) understand the similarities and differences between child and adult language acquisition;
- (3) understand individual variation in language development of the first and second language;
- (4) understand that making errors is part of the natural language acquisition process; and
- (5) develop and use curricula that demonstrates an understanding of first and second language acquisition.

C. A bilingual/bicultural education teacher demonstrates an understanding of the history of bilingual education and the cultures represented in the United States and other countries. This includes a solid understanding of the foundations of bilingual education. The bilingual/bicultural education teacher must:

- (1) understand cultural pluralism in the United States and the relationships between the majority and minority groups;
- (2) be knowledgeable about the cultures of the United States and how these cultures interrelate in the global context;
- (3) know about the history and development of bilingual education in the United States;
- (4) understand the historical contributions of bilingual educators and advocates who have facilitated development of the field;
- (5) understand the contributions of the various communities and the importance of family and community participation in education; and
- (6) understand the various bilingual education program models and the implications for implementation.

D. A bilingual/bicultural education teacher understands and uses formal and informal assessment techniques to evaluate the progress of English learners. This understanding includes using two languages for assessment purposes. The bilingual/bicultural education teacher must understand:

- (1) entrance, exiting, and monitoring procedures for determining the readiness of English learners for academic mainstreaming;
- (2) the characteristics, uses, advantages, and limitations of formal and informal second language assessment instruments and techniques in assessing English learners;
- (3) the characteristics, uses, advantages, and limitations of formal and informal academic assessment instruments and techniques in assessing English learners;
- (4) item and test construction methods appropriate to the learning needs of English learners including a thorough knowledge of dual language assessment;
- (5) how to administer, interpret, and explain the results of standardized and alternative methods of assessment to English learners, parents, and colleagues;
- (6) measurement theory and assessment-related issues including validity, reliability, linguistic, and cultural bias, and scoring concerns;

(7) that ongoing assessment is essential to the instructional process and recognize that many different assessment strategies are necessary for monitoring and promoting an English learner's learning; and

(8) the limitations of using traditional special education assessment procedures in the identification and placement of English learners in special education programs.

E. A bilingual/bicultural education teacher understands the importance of developing communication skills in listening, speaking, reading, and writing as being essential to student achievement in all academic areas. The bilingual/bicultural education teacher must:

(1) understand the differences between literacy development in the first language and second language, and the implications for teaching second language learners;

(2) recognize the critical role of language in fostering identity and self-esteem;

(3) understand how cultural and linguistic differences influence communication; and

(4) understand the variation in communication styles of English learners from diverse cultural backgrounds.

F. A bilingual/bicultural education teacher demonstrates the ability to communicate successfully with students, parents, and members of various cultural groups in the community. The bilingual/bicultural education teacher must understand:

(1) the social structures of diverse cultural groups represented in the bilingual education classroom;

(2) schools as organizations within the larger community and how to communicate successfully with English learners and their parents within the larger cultural framework;

(3) how factors in the English learners' environment that include family circumstances, community status, health, and economic conditions may influence learning; and

(4) the legal issues evolving the education of English learners.

G. A bilingual/bicultural education teacher understands and facilitates content-based language instruction as a means to provide integrated learning experiences for English learners. The bilingual/bicultural education teacher must:

(1) understand the major concepts, assumptions, and processes of inquiry that are central to the academic content areas that are taught;

(2) understand the connection between language proficiency and learning subject matter content;

(3) understand the importance of building relationships with content area specialists in order to facilitate the acquisition of content knowledge by English learners; and

(4) develop and use curricula and instructional approaches that enable English learners to acquire content understandings and skills.

H. The bilingual/bicultural education teacher models correct usage of the English language. The teacher must demonstrate an advanced level of speaking proficiency as defined in the ACTFL Proficiency Guidelines as established by the American Council on the Teaching of Foreign Languages.

I. A bilingual/bicultural education teacher understands and uses a variety of methods and materials suitable for teaching diverse bilingual education learners. The bilingual/bicultural education teacher must:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;
- (2) understand and apply the research base for and the best practices of middle level and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of the bilingual/bicultural education and know how to apply instructional strategies and materials for achieving student understanding;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;
- (8) understand how English learners construct knowledge, acquire skills, and develop proficiency in both social and academic setting;
- (9) understand the importance of using multiple forms of instructional approaches to address the different learning styles, background experiences, and performance modes of English learners;
- (10) know how to create, select, and adapt learning materials to meet the dual language needs of English learners in a school setting;
- (11) understand the developmental progression and range of individual variation that can be expected of English learners in the context in which taught;
- (12) know when and how to access appropriate services to meet exceptional learning needs beyond the scope of the bilingual education program; and
- (13) apply the standards of effective practice in teaching students in kindergarten through grade 8 or in grades 5 through 12 through a variety of early and ongoing experiences within a range of educational programming models.

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

Subp. 6. Incorporation by reference. For the purposes of this part, the ACTFL Proficiency Guidelines published in 1986 by the American Council on the Teaching of Foreign Languages, 6 Executive Plaza, Yonkers, NY 10701-6801, and subsequent editions are incorporated by reference. The guidelines are not subject to frequent change and are available from the State Law Library.

Subp. 7. Effective date. The requirements of this part for licensure as a teacher of bilingual/bicultural education are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; L 2012 c 239 art 1 s 33*

Published Electronically: *October 12, 2012*

8710.4200 TEACHERS OF BUSINESS.

Subpart 1. **Scope of practice.** A teacher of business is authorized to provide to students in grades 5 through 12 instruction that is designed to develop understanding of the functional areas of business including management, sales and marketing, finance, accounting, human resources, and information systems; the factors that affect business including economics, international business, business law, and technology; and the personal and work skills of communications and interpersonal relations, data interpretation and management, computation, collaboration and group process, and career development and transitions.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach business to students in grades 5 through 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers in part 8700.2000; and

C. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of business in subpart 3.

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.

A. A teacher of business has an integrated understanding of the functional areas of business from the perspective of the consumer, the employee, the business manager, and the entrepreneur. The teacher of business must understand:

(1) business organization and management, including the functions of management; historical and contemporary management theories; characteristics and the advantages and disadvantages of the major forms of business organizations; organizational structures and principles; the role of ethics in management; the impact and relationship of government regulations and community involvement to business management decisions; and the role of organized labor and its influence on government and business;

(2) sales and marketing, including roles of marketing and the impact of marketing on the individual, business, and society; the role and application of ethics in marketing; external factors that influence or dictate marketing decisions; product development and forecasting principles and methods for determining sales potential; role of pricing in the marketing process and the use of various pricing strategies; distribution processes and methods in developing distribution plans; general forms of promotion and how each contributes to successful marketing; market research development, implementation, and evaluation; marketing variables and strategies in dealing with a diversified marketplace; the components of a comprehensive marketing plan; principles of selling and merchandising; and the function of retailing and wholesaling;

(3) financing, including the influence of internal and external factors, including stock market implications, on corporate financial data and how this data is used to make long-term and short-term management decisions; traditional sources for securing financing; the relationships among price, market share, and profitability; personal financial resource management and how more individual wants and needs can be satisfied by wise consumer decision making; the functions of commercial paper, insurance, secured transactions, and bankruptcy; the role of credit and the impact of long-term and short-term credit; and different types of budget processes;

(4) accounting, including the accounting cycle and the purposes of each component of the cycle, methods for determining the value of assets, liabilities, and owner's equity according to generally accepted accounting principles and when and why they are used; how to prepare, interpret, and analyze financial statements using manual and computerized systems for service, merchandising, and manufacturing businesses; and the use of planning and control principles to evaluate the performance of an organization and apply differential analysis and present value concepts to make decisions;

(5) business information systems, including entry-level career expertise in the use of office technology and can explain the purpose, functions, and common features of contemporary office technology including:

- (a) computer technology including fundamentals of contemporary computer architecture and touch keyboarding skills to enter and manipulate text and data through word processing, database, spreadsheet, desktop publishing, and presentation graphics software;
- (b) multimedia and imaging technology;
- (c) telecommunications technology; and
- (d) the impact of information systems on society; and

(6) human resources, including the activities of human resources management, its importance to the successful operation of an organization, and the role and importance of employment law as related to the conduct of business in the national and international marketplace.

B. A teacher of business has a fundamental and integrated understanding of the factors that affect business from the perspective of the consumer, the employee, the business manager, and the entrepreneur. The teacher of business must understand:

- (1) economic fundamentals, including:
 - (a) the role of competitive markets and the price mechanism in the production, distribution, and allocation of scarce resources, including human, capital, technological, and natural within the United States economy;
 - (b) how the basic economic concepts of scarcity, opportunity cost, and trade-off influence the production, allocation, and consumption of goods and services in businesses and households, and the formulation of government domestic and international economic policy;
 - (c) the linkages between gross domestic production, consumption, investment and savings, employment levels, inflation, international trade, and government policy on taxation and spending;
 - (d) how the Federal Reserve System acts as our nation's central bank to promote a safe, sound money supply and how it initiates and effectuates the monetary system to allow for noninflationary economic growth;

(e) alternative economic systems, and the philosophical assumptions supporting these alternative systems; and

(f) the importance of, and economic interdependencies that exist in the global economy in relation to world trade, investment, and monetary flows;

(2) international business fundamentals, including:

(a) the role of international business and its impact on careers and doing business at the local, state, national, and international levels;

(b) communication strategies and ethics necessary and appropriate for effective and profitable international business relations;

(c) the role, importance, and basic concepts of international finance and risk management, international marketing, and balance of trade concepts; and

(d) the social, cultural, political, legal, and economic factors that shape and impact the international business environment;

(3) business law fundamentals, including:

(a) the relationship between ethics and the law;

(b) the sources of the law, structure of the court system, and different classifications of procedural and substantive law;

(c) the relationships among contract law, law of sales, and consumer law;

(d) the legal rules that apply to personal property and real property;

(e) how advances in computer technology impact property law, contract law, criminal law, and international law; and

(f) the role and importance of agency law and employment law as they relate to the conduct of business in the national and international marketplaces;

(4) technology concepts that are of lasting value rather than mastery of specific hardware or software skills and knowledge, including:

(a) understanding the fundamentals of current and emerging technological concepts including types, transmissions, storage, and display systems; and

(b) the ability to examine the technological issues from a variety of perspectives including appropriate use, privacy, ethics, remaining current, access, and economic advantages and disadvantages.

C. A teacher of business demonstrates the following essential workplace skills and understands how to create learning experiences that make this content meaningful to students. The teacher of business must demonstrate:

(1) communication and interpersonal skills including the ability to:

(a) understand how to approach communication from a systems perspective including cultural, organizational, technological, and interpersonal perspectives and how to use the system perspective to analyze and direct the choice of communication strategies and forms;

(b) communicate in a clear, courteous, concise, and correct manner using oral communication skills, informational reading skills, written communication skills, and effective listening skills; and

(c) apply effective human relations and interpersonal skills;

(2) data interpretation and management skills, including the ability to acquire, evaluate, organize, maintain, and interpret and communicate information using both manual and computer technology;

(3) computational skills, including the ability to:

(a) use mathematical procedures to analyze and solve business problems for areas, including taxation; savings and investments; payroll records; cash management; financial statements; credit management; purchases; inventory records; depreciation, cost-recovery, and depletion; and

(b) construct, read, and interpret and make inferences from tables, charts, and graphs;

(4) collaboration and group process skills, including the ability to understand a holistic perspective, develop and communicate group goals, understand the role of the individual in groups, and interpret and process feedback within groups; and

(5) career development and transition skills, including the ability to understand and apply career development theory, the job procurement process, and all forms of communication used in the successful pursuit of a career.

D. A teacher of business understands occupational clusters within business, marketing, and information management sufficient to:

(1) enable students to develop a perspective of career options in the business fields of management, sales and marketing, accounting and finance, information systems, or office management and administrative support;

(2) gain understanding of the basic purposes, issues, skills, nature of work, and major concepts that undergird employment in one or more occupations centrally associated with applying academic business content;

(3) establish activities that allow students to understand individual work in the context of broader business goals;

(4) organize instruction that enables students to more effectively learn how to acquire skills, gain a perspective on a career, and embark on the first job; and

(5) understand the unique characteristics of an entrepreneur and the special skills of entrepreneurship associated with starting, owning, and managing a business.

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:

(1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;

(2) understand and apply the research base for and the best practices of middle level and high school education;

- (3) know how to develop curriculum goals based on the central concepts of the business and how to apply instructional strategies and materials for achieving student understanding of this discipline;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand key legislation germane to business education and school-to-work transition programming;
- (6) understand fiscal, budgetary, and purchasing practices that focus on how to organize and equip an effective and efficient classroom including selecting and maintaining instructional materials, supplies, furniture, and technology that are consistent with the current program standards;
- (7) understand the need for and how to connect student secondary schooling experiences with the workplace or further educational opportunities;
- (8) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (9) understand the role and purpose of cocurricular and extracurricular business activities in the teaching and learning process;
- (10) know how to access information relevant to the field of business through consumer, business, and professional organizations, publications, and journals;
- (11) know strategies for marketing the business education program, including student recruitment and retention techniques and practices;
- (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.

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

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.4250 TEACHERS OF COMMUNICATION ARTS AND LITERATURE.

Subpart 1. **Scope of practice.** A teacher of communication arts and literature is authorized to provide to students in grades 5 through 12 instruction that is designed to develop skills and understanding in reading, writing, speaking, listening, media literacy, and literature.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach communication arts and literature to students in grades 5 through 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 communication arts and literature in subpart 3.

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.

A. A teacher of communication arts and literature understands central concepts common to the teaching and learning of communication arts and literature content. The teacher must understand and apply:

- (1) language development, cognition, and learning;
- (2) the phonological, grammatical, and semantic functions of language;
- (3) philosophy and theories of communication arts and literature instruction;
- (4) technological resources including software, databases, and networks that can be used to gather, synthesize, create, and communicate knowledge;
- (5) language for independent learning and enjoyment;
- (6) communication which is clear, fluent, strategic, critical, and creative;
- (7) the aesthetic dimensions of communication arts and literature;

- (8) strategies that allow appropriate engagement in communication tasks for a variety of purposes and audiences;
- (9) the integration of reading, writing, speaking, listening, and viewing;
- (10) strategies for selecting and using texts and materials that correlate individual student abilities with developmentally appropriate learning experiences;
- (11) strategies for selecting and using texts and materials which recognize and accept a broad range of common and diverse perspectives;
- (12) research methods encompassing content;
- (13) the social, intellectual, and political importance and impact of communication;
- (14) the meanings of messages, content and relational;
- (15) communication and its value in exploring and expressing ideas; and
- (16) communication arts and literature activities such as forensics, debate, journalism, literary journals, and related activities.

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:

(a) various stages of the writing process, including prewriting, writing, conferencing, revising, and publishing used in teaching writing;

(b) diverse strategies for assessing and responding to student writing;

(c) the functions of language and how they influence effective written communication; and

(d) conventions for presenting, arranging, and organizing information in particular genres or media;

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

(a) relationships among the verbal and nonverbal components of the speaking process across a variety of contexts including small group, interpersonal, and public;

(b) methods and steps necessary to construct meaning for participants in both formal and informal speaking situations;

(c) methods of managing and overcoming communication anxiety and apprehension; and

(d) ethical responsibilities of a speaker associated with competent and effective communication in society;

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

- (a) relationships between and among the components of the listening process;
- (b) the different listening skills appropriate for diverse types and levels of listening;
- (c) how to identify and manage barriers to listening; and
- (d) ethical responsibilities of a listener;

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

- (a) relationships among the elements of the communication process across various types of print and nonprint media;
- (b) effects of the various types of electronic audiovisual media on the communication process;
- (c) competent participation as a consumer and producer of media communication; and
- (d) functional, aesthetic, and ethical values of media communication; and

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

- (a) a repertoire of literary texts, including fiction and nonfiction, classic and contemporary works, and works written for preadolescents and adolescents by a diversity of authors;
- (b) characteristics of various literary genres, including poetry, drama, novel, short story, and essays;
- (c) tools of interpretation including literary devices, critical theories, and various methods of analysis, interpretation, presentation, and evaluation of literature;
- (d) how to help students respond to, interpret, and evaluate texts in a variety of ways, including text centered and reader centered approaches;
- (e) how to encourage students to respond to texts through written and oral communication, both privately and publicly;
- (f) how to help students construct meaning out of texts through various processes applied before, during, and after reading;
- (g) how context shapes meaning; and
- (h) how to encourage students to become lifelong readers and writers.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;

(2) understand and apply the research base for and the best practices of middle level and high school education;

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

(4) understand the role and alignment of district, school, and department mission and goals in program planning;

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

(6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;

(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.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *July 14, 2010*

8710.4300 TEACHERS OF DANCE AND THEATRE ARTS.

Subpart 1. Scope of practice. A teacher of dance and theatre arts education is authorized to provide to students in kindergarten through grade 12 instruction that is designed to develop an understanding of the creative works and the process of producing dance and theatre art forms.

Subp. 2. Licensure requirements. A candidate for licensure to teach dance and theatre arts to students in kindergarten through grade 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 dance and theatre arts in subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of dance and theatre 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, B, and D or A, C, and D.

A. All teachers of dance and theatre arts education must demonstrate competency in:

- (1) choreography, improvisation, and in one dance movement genre in the context of performance opportunities;
- (2) the theory and practice of acting and directing in the context of performance opportunities;
- (3) the theory and practice in technical production and creative technology of dance and theater in the context of performance opportunities;
- (4) teaching methods and instructional content of creative dance and creative dramatics;
- (5) comparing and contrasting and using materials, elements, and modes of expression, production, and communication that support the processes of creation, analysis and interpretation, performance or exhibition, inquiry, and creative technology in all the arts;
- (6) comparing and contrasting ways of knowing in the arts with ways of knowing in the humanities, the sciences, and other subject areas; and
- (7) analyzing the economics and career opportunities of arts creation, performance, analysis, and creative technology.

B. A teacher of dance and theatre arts with a dance specialization must demonstrate competency in:

- (1) a selected core dance movement genre through performance or concert opportunities;
- (2) a second dance movement genre in the context of reflective performance opportunities;
- (3) choreography and improvisation through performance or concert opportunities;
- (4) critical analysis and interpretation of the technical and choreographic aspects of performance;
- (5) the historical and aesthetic development of dance in diverse cultures;
- (6) contemporary technological principles, concepts, and tools and communicating the environmental and ethical issues concerning creative technology in dance; and
- (7) analyzing the functional, expressive, and health aspects of the human body.

C. A teacher of dance and theatre arts with a theatre specialization must demonstrate competency in:

- (1) the theories and practices of acting through performance opportunities;
- (2) the theories and practices of stage direction through performance opportunities;
- (3) the process and techniques of creating a dramatic text;
- (4) the critical analysis and interpretation of theater performance;
- (5) contemporary technological principles, concepts, and tools and communicating the environmental and ethical issues concerning creative technology in theatre;
- (6) the historical and aesthetic development of theater in diverse cultures; and
- (7) communicating and understanding the dramatic literature of diverse cultures.

D. A teacher of dance and theatre arts must demonstrate an understanding of the teaching of dance and theatre arts that integrates understanding of dance and theatre arts with the teacher's understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of dance and theatre arts shall:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- (2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of theatre and dance and know how to apply instructional strategies and materials for achieving student understanding of these disciplines;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' academic experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;
- (8) understand the impact of reading ability on student achievement in dance and theatre studies, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read dance and theatre arts content more effectively; 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, and middle level and high school students within a range of educational programming models.

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

Subp. 5. **Effective date.** The requirements of this part for licensure as a teacher of dance and theatre arts are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928*

Published Electronically: *November 19, 2009*

8710.4310 TEACHERS OF DANCE.

Subpart 1. **Scope of practice.** A teacher of dance is authorized to provide to students in kindergarten through grade 12 instruction that is designed to develop an understanding of the creative works and processes of producing dance.

Subp. 2. **Licensure.** A candidate for licensure to teach dance to students in kindergarten through grade 12 shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 dance in subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of dance 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 and B.

- A. All teachers of dance must demonstrate competency in:
 - (1) theories and practices of at least two dance forms in the context of performance;
 - (2) theories and practices of choreography in the context of performance;
 - (3) theories and practices of improvisation as applied to choreography and performance;
 - (4) analysis, interpretation, and evaluation of technique, performance, and choreographic aspects of dance;
 - (5) understanding theories and practices of dance in diverse cultures and historical periods;
 - (6) theories and practices of design and technical production in dance in the context of performance;
 - (7) understanding human anatomy and physiology, and health and safety practices related to dance;
 - (8) theories and practices of creative dance;
 - (9) understanding ethical issues in dance;
 - (10) comparing and contrasting the processes of creating, performing, and responding in dance with the processes and content in other arts areas;
 - (11) comparing and contrasting the processes of creating, performing, and responding in dance with the processes and content in the humanities, the sciences, and other subject areas; and
 - (12) analyzing the economics and career opportunities of dance creation, performance, analysis, and technology.

B. A teacher of dance must demonstrate integration of content with an understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of dance shall:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- (2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of dance and know how to apply instructional strategies and materials for achieving student standards in dance;

(4) understand the role and alignment of district, school, and department mission and goals in program planning;

(5) understand the need for and how to connect students' academic experiences with everyday life, the workplace, and further educational opportunities;

(6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;

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

(8) understand the impact of reading ability on student achievement in dance studies, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read dance content more effectively; 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, and middle level and high school students within a range of educational programming models.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

Subp. 5. Effective date. The requirements of this part for licensure as a teacher of dance are effective September 1, 2005, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *30 SR 1054*

Published Electronically: *November 19, 2009*

8710.4320 TEACHERS OF THEATRE ARTS.

Subpart 1. Scope of practice. A teacher of theatre arts is authorized to provide to students in kindergarten through grade 12 instruction that is designed to develop an understanding of the creative works and processes of producing theatre.

Subp. 2. Licensure. A candidate for licensure to teach theatre arts to students in kindergarten through grade 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 theatre in subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of theatre 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 and B.

A. All teachers of theatre arts must demonstrate competency in:

- (1) theories and practices of acting in the context of performance, including movement and voice;
- (2) theories and practices of directing in the context of performance;
- (3) theories and practices of design and technical production in theatre in the context of performance;
- (4) theories and practices of creative dramatics and improvisation;
- (5) processes and techniques of creating dramatic texts;
- (6) analysis, interpretation, and evaluation of theatre texts and performances;
- (7) understanding ethical issues in theatre;
- (8) understanding theories, practices, and literature of theatre in diverse cultures and historical periods;
- (9) comparing and contrasting the processes of creating, performing, and responding in theatre with the processes and content in other arts areas;
- (10) comparing and contrasting the processes of creating, performing, and responding in theatre with the processes and content in the humanities, the sciences, and other subject areas; and
- (11) analyzing the economics and career opportunities of theatre creation, performance, analysis, and technology.

B. A teacher of theatre arts must demonstrate integration of content with an understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of theatre shall:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- (2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of theatre and know how to apply instructional strategies and materials for achieving student standards in theatre;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' academic experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;
- (8) understand the impact of reading ability on student achievement in theatre studies, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read theatre content more effectively; 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, and middle level and high school students within a range of educational programming models.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

Subp. 5. Effective date. The requirements of this part for licensure as a teacher of theatre arts are effective September 1, 2005, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *30 SR 1054*

Published Electronically: *November 19, 2009*

8710.4350 TEACHERS OF DRIVER AND TRAFFIC SAFETY.

Subpart 1. Scope of practice. A teacher of driver and traffic safety is authorized to provide to students 15 years of age or older instruction that is designed to develop the skills and understanding essential for acquiring a Minnesota driver's license.

Subp. 2. Licensure requirements. A candidate for licensure to teach driver and traffic safety shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 driver and traffic safety in subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of driver and traffic safety 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. The teacher must understand:

A. traffic safety problems;

B. the complexities of the driving task;

C. the research base for and the best practices of teaching driver and traffic safety including strategies for teaching in a laboratory environment;

D. the needs of the new driver as they relate to the organization of classroom and laboratory phases of driver and traffic safety programs in light of contemporary knowledge of adolescent development, psychology, and culture;

E. the components that contribute to the effective design and delivery of the behind-the-wheel phase of driver and traffic safety, including a properly equipped vehicle, an established route, route selection, and entry and exit level assessments of student understandings and skills;

F. the strengths and limitations of various forms of laboratory instruction specific to driver and traffic safety, including behind-the-wheel, multiple vehicle driving range, and simulation, and their application in designing and delivering this instruction;

G. the origins of driver and traffic safety programs and major milestones in the history of driver and traffic safety;

H. the impact of recent trends and issues affecting driver and traffic safety programs;

I. the role of federal, state, and local government agencies and the private sector in providing driver and traffic safety services;

J. how to design driver and traffic safety programs that are in compliance with professional standards and applicable state rules and laws in a manner responsive to the emerging trends impacting driver and traffic safety;

K. the major tasks required of the driver and traffic safety coordinator needed for successful program management; and

L. how to apply the standards of effective practice in teaching students through a variety of early and ongoing clinical experiences within a range of educational programming models.

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

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of driver and traffic safety are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928*

Published Electronically: *November 19, 2009*

8710.4400 TEACHERS OF ENGLISH AS A SECOND LANGUAGE.

Subpart 1. **Scope of practice.** A teacher of English as a second language is authorized to provide to students in kindergarten through grade 12 instruction that is designed to provide English language instruction to students whose English proficiency is not sufficient to benefit from the curriculum through mainstream instruction in English or to collaborate and consult with other classroom teachers for the purpose of integrating language and content teaching for English learners.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach English as a second language to students in kindergarten through grade 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 English as a second language in subpart 3.

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of English as a second language 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.

A. An English as a second language teacher demonstrates a high level of proficiency in English commensurate with the role of an instructional model and develops an awareness of the process of formal

language learning by learning a second language through two years of second language instruction in a high school setting or one year of second language instruction in a postsecondary setting, or the equivalent.

B. An English as a second language teacher understands a variety of methods, techniques, and program models suitable for second language instruction with diverse learners including adapting existing materials to meet the needs of English learners. The teacher must:

- (1) demonstrate an understanding of the importance of using multiple forms of instructional approaches to address different learning styles, background experiences, and performance modes of English learners;
- (2) be able to adopt appropriate learning materials and adapt teaching strategies to meet the second language needs of English learners in a school setting; and
- (3) understand the developmental progression and range of individual variation of English learners in the context in which taught.

C. An English as a second language teacher uses various content-based methodologies and integrates language acquisition and use of language functions across learning experiences to facilitate full inclusion of English learners in the school setting. The teacher must:

- (1) understand how limited English proficiency affects learning; and
- (2) understand that both language learning and subject matter content are essential to student success in an academic setting.

D. An English as a second language teacher demonstrates the ability to communicate successfully with students, parents, colleagues, and community members. The teacher must:

- (1) understand that cultural practices may differ and that these differences may affect the way students learn;
- (2) understand schools as organizations within the larger community context and that successful communication with parents must be undertaken within that larger sociocultural framework;
- (3) understand how the student's environment, including family circumstances, community systems, and health and economic conditions, may influence learning; and
- (4) work with other professionals to improve the quality of educational services provided to English learners.

E. An English as a second language teacher demonstrates an understanding of communication instruction in the second language context and the importance of developing communication skills in listening, speaking, reading, and writing across the curriculum. The teacher must:

- (1) understand the differences between literacy development in the first language and the second language, and the implications for teaching second language learners;
- (2) understand how to develop communication skills in listening, speaking, reading, and writing as an important contributor to academic success across the curriculum; and
- (3) understand and use a variety of communication techniques and be able to use verbal, nonverbal, and multimedia and other technology based resources that enhance student learning.

F. An English as a second language teacher understands and uses formal and informal second language assessment techniques to determine appropriate placement and to evaluate the progress of English

learners. The teacher knows and uses criteria for determining the readiness of students to enter and exit English learner programs. The teacher must:

- (1) understand the characteristics, uses, advantages, and limitations of formal and informal second language assessment techniques;
- (2) understand the limitations of using traditional assessment procedures in the identification and placement of English learners in academic programs, including gifted and special education programs;
- (3) understand second language assessment including item and test construction methods appropriate for English learners; and
- (4) know how to administer, interpret, and explain the results of standardized tests and alternative methods of assessment to English learners, the students' parents, and to colleagues.

G. An English as a second language teacher understands the contributions of general and applied linguistics to second language education. The teacher must:

- (1) understand basic linguistic concepts;
- (2) understand features of English including phonology, morphology, syntax, and semantics;
- (3) relate knowledge of English to other languages; and
- (4) understand the history and development of the English language.

H. An English as a second language teacher understands the fundamentals of the first and second language acquisition processes and their similarities and differences. The teacher must:

- (1) understand the processes of first and second language acquisition; and
- (2) understand that there are similarities and differences between child, adolescent, and adult language acquisition.

I. An English as a second language teacher is aware of how the historical, social, and political aspects of language and cultural patterns in the United States influence second language instruction. The teacher must:

- (1) understand cultural pluralism in the United States, how cultural and social differences are reflected;
- (2) be knowledgeable about the sociolinguistic dynamics of the cultures of the United States; and
- (3) understand how cultural, linguistic, ethnic, regional, and gender differences affect communication in the classroom.

J. An English as a second language teacher must demonstrate an understanding of the teaching of English as a second language that integrates understanding of English as a second language with the teacher's understanding of pedagogy, students, learning, classroom management, and professional development. The teacher of English as a second language in kindergarten through grade 12 must:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;

- (2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle level and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of English as a second language and know how to apply instructional strategies and materials for achieving student understanding;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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, and middle level and high school students within a range of educational programming models.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

Subp. 5. Effective date. The requirements of this part for licensure as a teacher of English as a second language are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; L 2012 c 239 art 1 s 33*

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8710.4450 TEACHERS OF FAMILY AND CONSUMER SCIENCES.

Subpart 1. Scope of practice. A teacher of family and consumer sciences is authorized to provide to students in grades 5 through 12 instruction that is designed to prepare students for family life and the interrelationships between family, community, and work.

Subp. 2. Licensure requirements. A candidate for licensure to teach family and consumer sciences to students in grades 5 through 12 shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 family and consumer sciences in subpart 3.

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.

A. A teacher of family and consumer sciences understands how the family functions and develops within the home environment. The teacher must understand:

- (1) reciprocal influences between the family and family members to the workplace;
- (2) family structures, functions, relationships, and dynamics;
- (3) parenting as a process through the life cycle;
- (4) physiological, psychological, and social aspects of sexual development throughout the life span;
- (5) management of household and natural resources to achieve personal and family goals including food, clothing, shelter, recreation, transportation, education, and investments;
- (6) the influence of ethics on personal, family, and consumer decisions;
- (7) decision-making models within the context of problem solving in the home environment and the extension to the community;
- (8) the developmental changes of individuals across the life span and ways to meet their corresponding physical, emotional, cognitive, social, and moral development needs;
- (9) how to identify and meet personal and family needs and wants for shelter and clothing to include finding, selecting, and maintaining suitable housing and the role of aesthetics and design in textiles, apparel, and interiors;
- (10) nutrition planning and food preparation, handling, and storage for personal and family safety and well-being; and
- (11) stress factors that affect the family including multigenerational households, family members with special needs, dual careers, economic uncertainty, violence, substance abuse, resolving conflict, and death.

B. A teacher of family and consumer sciences understands the interrelatedness of family and community. The teacher must understand:

- (1) the effects of social and technological changes on families;
- (2) value systems within the family and their relationship to social consequences and public policy;
- (3) cultural and ethnic variations in families;
- (4) rights and responsibilities of children, parents or guardians, grandparents, and others;
- (5) variations in parenting practices;
- (6) how to access community resources to solve family problems;
- (7) reciprocal influences of the major social institutions, including governmental and educational, on the family;
- (8) the impact of historical, environmental, and cultural influences on living environments, textiles, and interior design;
- (9) global food sources and their impact on the community; and
- (10) cultural and political aspects of food distribution and consumption.

C. A teacher of family and consumer sciences understands career development in related services occupations. As a result of both school-based and work-based learning experiences, the teacher must understand:

- (1) career decision-making process including self-awareness, career research, workplace expectations, career strategies, goal setting, school-to-work transition, and lifelong learning;
- (2) the basic purposes, issues, skills, nature of work, and competencies in one or more of the following related service occupations: Family and Community Support Services; Consumer Resources Management; Early Childhood and Educational Services; Apparel and Textile Design, Manufacturing, and Merchandising; Interior Design and Furnishings; Management and Maintenance of Facilities; Hospitality, Tourism, and Recreation; Food Science, Dietetics, and Nutrition; and Food Production Services;
- (3) the impact of consumer practices, laws, global economics, and conservation or recycling on the service occupations;
- (4) uses and influences of technology in related service occupations;
- (5) the impact of interpersonal skills on the work environment; and
- (6) how families contribute to the preparation of family members for the work environment.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;
- (2) understand and apply the research base for and the best practices of middle level and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of family and consumer sciences and know how to apply instructional strategies and materials;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (7) understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;
- (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.

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

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.4500 TEACHERS OF HEALTH.

Subpart 1. **Scope of practice.** A teacher of health is authorized to provide to students in grades 5 through 12 instruction that is designed to develop the knowledge and skills necessary to practice healthy behaviors.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach health to students in grades 5 through 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 health in subpart 3.

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.

- A. A teacher of health understands behaviors and factors that:
 - (1) prevent or reduce the risk of accidents, sudden illness, and violent injuries;
 - (2) prevent or reduce the risk of tobacco use or alcohol and other drug abuse;
 - (3) prevent or reduce the risk of HIV infection and AIDS, sexually transmitted diseases, and unintentional pregnancy; and
 - (4) contribute to sufficient physical activity and promote health-enhancing dietary practices.
- B. A teacher of health understands concepts related to health promotion and disease prevention including:
 - (1) the need for and role of a philosophy of health, health education, and health promotion;
 - (2) primary, secondary, and tertiary prevention;
 - (3) components of comprehensive school health programs and interrelationships among components;
 - (4) behaviors that foster and those that hinder well-being; and
 - (5) physical, social, emotional, and intellectual factors that influence health.
- C. A teacher of health understands how to access valid health information and health-promoting products and services including:
 - (1) selecting and evaluating the validity of sources of health education information;
 - (2) identifying and accessing appropriate and cost-effective school and community health services;
 - (3) identifying and evaluating appropriate lifestyle assessments and health-risk appraisals;

(4) using or developing appropriate data gathering instruments to include national, state, or district level morbidity, mortality, behavioral risk, and needs assessment data; and

(5) articulating research and public policy regarding health issues.

D. A teacher of health understands health-enhancing behaviors that reduce health risks including:

(1) the short-term and long-term consequences of positive and negative health choices;

(2) the relationship between and among the major health determinants of genetics, environments, health care, and personal behavior;

(3) the importance of individual responsibility for health; and

(4) strategies to reduce and prevent stress-related health problems.

E. A teacher of health understands the effects of advertising, media, technology, and social norms on health behaviors.

F. A teacher of health understands how to use interpersonal communication skills to enhance health including:

(1) models and strategies for teaching communication skills for expressing needs, wants, and feelings; communicating, care, consideration, and respect of self and others; conflict resolution; and refusal skills; and

(2) strategies for facilitating dialogue related to controversial health issues.

G. A teacher of health understands how to use goal-setting and decision-making skills to enhance health including:

(1) age appropriate decision-making and goal-setting models;

(2) applying decision-making and goal-setting processes to personal health choices;

(3) the components of and processes for the development and implementation of personal health plans; and

(4) predicting the immediate and long-range impact of health decisions on the individual, family, and the community.

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:

(1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;

(2) understand and apply the research base for and the best practices of middle and high school education;

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

(4) understand the role and alignment of district, school, and department mission and goals in program planning;

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

(6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;

(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.

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

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

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.

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 computer, keyboarding, and related technology applications are effective on September 1, 2010, and thereafter.

Statutory Authority: *MS s 122A.09*

History: *26 SR 700; 34 SR 595*

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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.

Subp. 2. **Licensure requirements.** A candidate for licensure as a library media specialist shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 library media specialists in subpart 3.

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;
- (3) collaborate with teachers of early childhood through adult students to design, implement, and assess learning activities to meet specific learning objectives;
- (4) guide students in locating, processing, critically evaluating, and communicating information and to assess the processes and products of the learning;
- (5) provide reading, viewing, and listening guidance appropriate to the students' interests, goals, needs, and abilities;
- (6) provide leadership and staff development in effective use of technologies, strategies, and resources;
- (7) assist teachers in the selection and evaluation of resources;
- (8) consider the developmentally appropriate level, format, and curricular objectives in the design and production of media; and
- (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:

- (1) monitor needs, usage, and trends to structure and justify program budgets;
- (2) administer program budgets in a fiscally sound manner;
- (3) develop a collection based on curriculum and learner needs;
- (4) acquire, process, organize, maintain, circulate, and inventory resources;
- (5) identify and acquire resources beyond the media center to expand information access;
- (6) identify personnel needs and supervise personnel;
- (7) consult and participate in the planning of the media center facility;
- (8) consult and participate in the design of school facilities so that information and technology tools can be used;
- (9) evaluate program, facilities, and resource collections;
- (10) develop and monitor information technology policies and procedures to protect constitutional and statutory rights; and
- (11) establish and maintain a learning environment in the media center.

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;

(3) disseminate pertinent information about educational and technological trends and legal developments; and

(4) provide leadership in incorporating research referenced innovations.

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:

(1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;

(2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;

(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;

(4) understand the role and alignment of district, school, and department mission and goals in program planning;

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

(6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;

(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.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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; 122A.18*

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8710.4600 TEACHERS OF MATHEMATICS.

Subpart 1. **Scope of practice.** A teacher of mathematics is authorized to provide to students in grades 5 through 12 instruction that is designed to develop understanding and skill in mathematical content and perspectives.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach mathematics in grades 5 through 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 mathematics in subpart 3.

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.

A. A teacher of mathematics understands patterns, relations, functions, algebra, and basic concepts underlying calculus from both concrete and abstract perspectives and is able to apply this understanding to represent and solve real world problems. The teacher of mathematics must demonstrate knowledge of the following mathematical concepts and procedures and the connections among them:

(1) recognize, describe, and generalize patterns and build mathematical models to describe situations, solve problems, and make predictions;

(2) analyze the interaction between quantities and variables to model patterns of change and use appropriate representations including tables, graphs, matrices, words, ordered pairs, algebraic expressions, algebraic equations, and verbal descriptions;

(3) represent and solve problem situations that involve variable quantities and use appropriate technology;

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

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

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

(7) apply concepts and standard mathematical representations from differential, integral, and multivariate calculus; linear algebra, including vectors and vector spaces; and transformational operations to solve problems; and

(8) apply properties of group and field structures to mathematical investigations.

B. A teacher of mathematics understands the discrete processes from both concrete and abstract perspectives and is able to identify real world applications; the differences between the mathematics of continuous and discrete phenomena; and the relationships involved when discrete models or processes are used to investigate continuous phenomena. The teacher of mathematics must demonstrate knowledge of the following mathematical concepts and procedures and the connections among them:

(1) the application of discrete models to problem situations using appropriate representations such as sequences, vertex-edge graphs and trees, matrices, and arrays;

(2) application of systematic counting techniques to problem situations including determination of the existence of a solution, the determination of the number of possible solutions, or the optimal solution;

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

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

(5) application of additional discrete strategies including symbolic logic and linear programming;

(6) matrices as a mathematical system and matrices and matrix operations as tools to record information and find solutions of systems of equations; and

(7) analysis of iterative and recursive algorithms to estimate the time needed in order to execute the algorithms for data likely to be encountered in problem situations.

C. A teacher of mathematics understands that number sense is the underlying structure that ties mathematics into a coherent field of study, rather than an isolated set of rules, facts, and formulae. The teacher of mathematics must demonstrate knowledge of the following mathematical concepts and procedures and the connections among them:

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

(2) an understanding of number systems, their properties and relations including whole numbers, integers, rational numbers, real numbers, and complex numbers;

(3) translation among equivalent forms of numbers to facilitate problem solving;

(4) application of appropriate methods of estimation of quantities and evaluation of the reasonableness of estimates;

(5) a knowledge of elementary operations, application of properties of operations, and the estimation of results;

(6) geometric and polar representation of complex numbers and the interpretation of complex solutions to equations;

(7) algebraic and transcendental numbers;

(8) numerical approximation techniques as a basis for numerical integration, numerical-based proofs, and investigation of fractals; and

(9) number theory divisibility, properties of prime and composite numbers, and the Euclidean algorithm.

D. A teacher of mathematics understands geometry and measurement from both abstract and concrete perspectives and is able to identify real world applications and to use geometric learning tools and models, including geoboards, compass and straight edge, rules and protractor, patty paper, reflection tools,

spheres, and platonic solids. The teacher of mathematics must demonstrate knowledge of the following mathematical concepts and procedures and the connections among them:

- (1) shapes and the ways shapes can be derived and described in terms of dimension, direction, orientation, perspective, and relationships among these properties;
- (2) spatial sense and the ways shapes can be visualized, combined, subdivided, and changed to illustrate concepts, properties, and relationships;
- (3) spatial reasoning and the use of geometric models to represent, visualize, and solve problems;
- (4) motion and the ways in which rotation, reflection, and translation of shapes can illustrate concepts, properties, and relationships;
- (5) 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;
- (6) 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;
- (7) attributes of shapes and objects that can be measured, including length, area, volume, capacity, size of angles, weight, and mass;
- (8) the structure of systems of measurement, including the development and use of measurement systems and the relationships among different systems;
- (9) measuring, estimating, and using measurements to describe and compare geometric phenomena;
- (10) systems of geometry, including Euclidean, non-Euclidean, coordinate, transformational, and projective geometry;
- (11) transformations, coordinates, and vectors, including polar and parametric equations, and the use of these in problem solving;
- (12) three-dimensional geometry and its generalization to other dimensions;
- (13) topology, including topological properties and transformations;
- (14) extend informal argument to include more rigorous proofs; and
- (15) extend work with two-dimensional right triangles including unit circle trigonometry.

E. A teacher of mathematics uses a variety of conceptual and procedural tools for collecting, organizing, and reasoning about data; applies numerical and graphical techniques for representing and summarizing data; and interprets and draws inferences from these data and makes decisions in a wide range of applied problem situations. The teacher of mathematics must demonstrate knowledge of the following mathematical concepts and procedures and the connections among them:

- (1) data and its power as a way to explore questions and issues in our world;
- (2) investigation through data including formulating a problem; devising a plan to collect data; and systematically collecting, recording, and organizing data;

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

(4) 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

(5) descriptive and inferential statistics, including validity and reliability.

F. A teacher of mathematics understands how to reduce the uncertainties through predictions based on empirical or theoretical probabilities. The teacher of mathematics must demonstrate knowledge of the following mathematical concepts and procedures and the connections among them:

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

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

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

(4) predicting outcomes based on theoretical probabilities, and comparing mathematical expectations with experimental results;

(5) random variable and the application of random variable to generate and interpret probability distributions;

(6) probability theory and the link of probability theory to inferential statistics; and

(7) discrete and continuous probability distributions as a basis for making inferences about population.

G. A teacher of mathematics is able to reason mathematically, solve problems mathematically, and communicate in mathematics effectively at different levels of formality and knows the connections among mathematical concepts and procedures as well as their application to the real world. The teacher of mathematics must be able to:

(1) solve problems in mathematics by:

(a) formulating and posing problems;

(b) solving problems using different strategies, verifying and interpreting results, and generalizing the solution;

(c) using problem solving approaches to investigate and understand mathematics; and

(d) applying mathematical modeling to real world situations;

(2) reason in mathematics by:

(a) examining patterns, abstracting and generalizing based on the examination, and making convincing mathematical arguments;

(b) framing mathematical questions and conjectures, formulating counter-examples, and constructing and evaluating arguments; and

(c) using intuitive, informal exploration, and formal proof.

(3) communicate in mathematics by:

- (a) expressing mathematical ideas orally, visually, and in writing;
- (b) using the power of mathematical language, notation, and symbolism; and
- (c) translating mathematical ideas into mathematical language, notations, and symbols; and

(4) make mathematical connections by:

- (a) demonstrating the interconnectedness of the concepts and procedures of mathematics;
- (b) making connections between mathematics and other disciplines;
- (c) making connections between mathematics and daily living; and
- (d) making connections between equivalent representations of the same concept.

H. A teacher of mathematics must:

- (1) understand the historical bases of mathematics, including the contributions made by individuals and cultures, and the problems societies faced that gave rise to mathematical systems;
- (2) recognize that there are multiple mathematical world views and how the teacher's own view is similar to or different from that of the students;
- (3) understand the overall framework of mathematics including the:
 - (a) processes and consequences of expanding mathematical systems;
 - (b) examination of the effects of broad ideas, including operations or properties, as these ideas are applied to various systems;
 - (c) examination of the same object from different perspectives; and
 - (d) investigation of the logical reasoning that takes place within a system; and
- (4) understand the role of technology, manipulatives, and models in mathematics.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;
- (2) understand and apply the research base for and the best practices of middle level and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of mathematics and know how to apply instructional strategies and materials for achieving student understanding of this discipline;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;

(6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;

(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;

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.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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

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8710.4650 TEACHERS OF VOCAL MUSIC AND OF INSTRUMENTAL MUSIC.

Subpart 1. Scope of practice. A teacher of vocal music is authorized to provide to students in kindergarten through grade 12 instruction that is designed to develop vocal music competence and understanding of general music history, theory, and practice. A teacher of instrumental music is authorized to provide to students in kindergarten through grade 12 instruction that is designed to develop instrumental music competence and understanding of general music history, theory, and practice.

Subp. 2. Licensure requirements. A candidate for licensure to teach vocal music or instrumental music to students in kindergarten through grade 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 vocal music and of instrumental music.

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.

A. All music teachers must have the ability to:

(1) identify and analyze representative musical forms, styles, performance contexts, performance media, and composers and compositions of western music, and describe the musical traditions, context, and characteristics of diverse and representative world cultures;

(2) demonstrate a basic knowledge of vocal development and production and instrumental techniques and acoustics;

(3) perform simple keyboard accompaniments and play parts from a musical score;

- (4) demonstrate basic skills and techniques for playing typical classroom instruments including recorder or fretted instruments;
- (5) demonstrate competence in improvising, composing, and arranging music examples for diverse developmental and ability groupings represented by students;
- (6) demonstrate physical response to music through movement or dance;
- (7) identify and reproduce intervals, scales, and chord structures;
- (8) demonstrate a basic knowledge of approaches to general music instruction, materials, and literature for students of varying abilities;
- (9) demonstrate the understandings and skills necessary to choose appropriate current technology and integrate its use into instruction for music classroom and ensemble settings in kindergarten through grade 12; and
- (10) demonstrate a basic knowledge of the interrelationship of music with other art forms and disciplines.

B. A teacher of vocal music must:

- (1) demonstrate advanced vocal ensemble performance and advanced solo performance with the voice, keyboard, or guitar and demonstrate musical accuracy and expressiveness using music examples from diverse styles and time periods;
- (2) demonstrate ability to accompany a vocal ensemble on a keyboard instrument;
- (3) interpret choral music scores with an understanding of range, tessitura, phrasing, diction, and articulation;
- (4) interpret vocal and instrumental scores and understand percussion, string, or wind instrument requirements necessary for interpreting and producing music from scores;
- (5) know vocal and choral instructional materials and solo and ensemble repertoire, representing diverse periods and cultures, and beginning, intermediate, and advanced levels from kindergarten through grade 12;
- (6) demonstrate understandings and skills of vocal performance pedagogy and vocal health, including the child voice and the changing voice;
- (7) rehearse and conduct small and large vocal and choral performance ensembles; and
- (8) improvise using keyboard or voice.

C. A teacher of instrumental music must:

- (1) demonstrate advanced solo and ensemble performance on at least one instrument of the keyboard, percussion, string, or wind families and demonstrate musical accuracy and expressiveness using music examples from diverse styles and time periods;
- (2) interpret scores designed for instrumental ensembles and understand bowing, fingering, or articulation specific to percussion, string, and wind instruments;
- (3) interpret combined vocal and instrumental scores and understand vocal requirements necessary for interpreting and producing music from scores;

- (4) know instrumental instructional materials and solo and ensemble repertoire, representing diverse periods and cultures, and beginning, intermediate, and advanced levels;
- (5) demonstrate understandings and skills or performance pedagogy for percussion, string, and wind instruments;
- (6) rehearse and conduct small and large instrumental ensembles;
- (7) improvise by means of a keyboard, percussion, string, or wind instrument; and
- (8) understand the fundamentals of the construction, operation, and repair of percussion, string, and wind instruments.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- (2) understand and apply the research base for and the best practices of kindergarten or primary, intermediate, and middle level and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of vocal or instrumental music and know how to apply instructional strategies and materials for achieving student understanding of this discipline;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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.

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

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.

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8710.4700 TEACHERS OF PHYSICAL EDUCATION.

Subpart 1. **Scope of practice.** A teacher of physical education is authorized to provide to students in kindergarten through grade 12 instruction that is designed to enhance physical growth and development through learning to move and learning through movement.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach physical education to students in kindergarten through grade 12 shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 physical education.

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.

A. A teacher of physical education understands and applies the skills necessary to perform varied physical activities including:

- (1) essential elements and sequencing of basic motor skills;
- (2) individual, dual, and team activities; lifetime fitness activities; fundamental gymnastics; rhythms and dance, for example, singing games and folk, square, ballroom, creative, contemporary, and modern dance; low organization, lead up, and cooperative games; aquatics; aerobics, body mechanics, conditioning exercises, and strength training;
- (3) appropriate instructional cues and prompts for basic motor skills and physical activity; and
- (4) how to support and encourage learner expression through movement.

B. A teacher of physical education understands disciplinary knowledge of physical activities and well-being, including:

- (1) the organic, skeletal, and neuromuscular structures of the human body and how these structures adapt and contribute to physical activity, motor performance, fitness, and wellness;
- (2) concepts and strategies related to physical activity and fitness;
- (3) disciplinary concepts and principles to skillful movement and physical activity;
- (4) interdisciplinary learning experiences that allow students to integrate knowledge, skills, and methods of inquiry from multiple subject areas;

- (5) organization and administration of physical education programs;
- (6) etiquette, sportsmanship, and officiating;
- (7) selection and use of appropriate supplies and equipment;
- (8) safety issues to consider when planning and implementing instruction;
- (9) appropriate emergency procedures;
- (10) safety, CPR, first aid procedures, and prevention and care of injuries;
- (11) the relationship among physical activity, fitness, and health including developmental adaptive physical education programs;
- (12) historical, philosophical, sociological, and psychological factors associated with varied physical activities; and
- (13) health-related concepts, concerns, assumptions, debates, processes of inquiry, and personal hygiene central to the study of physical activity.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- (2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;
- (3) understand the benefits and implications of, and how to, promote lifelong physical recreation;
- (4) develop curriculum goals and purposes based on the central concepts of physical education and know how to apply instructional strategies and materials for achieving student understanding of this discipline;
- (5) understand the role and alignment of district, school, and department mission and goals in program planning;
- (6) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (7) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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.

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

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

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:
 - (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; 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;
- (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.

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; 122A.18*

History: *26 SR 700; 30 SR 943; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.4750 TEACHERS OF SCIENCE.

Subpart 1. **Scope of practice.** A teacher of chemistry, earth and space science, life science, or physics is authorized to provide instruction in all science disciplines to students in grades 5 through 8 and either chemistry, earth and space science, life science, or physics, and integrated science offerings, to students in grades 9 through 12. The science discipline that the teacher is qualified to teach in grades 9 through 12 shall be identified on the teacher's license.

Subp. 2. Licensure requirements. A candidate for licensure to teach science to students in grades 5 through 12 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 in part 8700.2000; and
- C. show verification of completing a preparation program approved under part 8700.7600 leading to the licensure of teachers of science in grades 5 through 8 in subpart 3 and chemistry, earth and space science, life science, or physics in grades 9 through 12 in subpart 4, 5, 6, or 7.

Subp. 2a. Exception for candidates with partial science teaching qualification. The board shall issue a license valid for teaching chemistry, earth and space science, life science, or physics in grades 9 through 12 for candidates who complete the requirements of subpart 2, items A and B; and subpart 4; 5; 6; or 7, but have not completed subpart 3. The board shall issue a license to teach all sciences in grades 5 through 8 to a candidate who has completed the requirements of subparts 2, items A and B, and 3 but has not completed subpart 4, 5, 6, or 7. Licenses issued to teach all sciences in grades 5 through 8 under this exception or as a science specialty under part 8710.3200 are not valid for teaching integrated science offerings above grade 9.

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.

- A. A teacher of science must demonstrate science perspectives, including:
 - (1) understanding and conducting science inquiry as evidenced by the ability to:
 - (a) ask appropriate theoretical or empirical questions about a given system or event that build on current scientific knowledge and can be answered scientifically;
 - (b) design and conduct, using appropriate methods, technology, and mathematical tools, a scientific investigation to answer a given question;
 - (c) develop, using appropriate sources of information, qualitative and quantitative solutions to problems;
 - (d) communicate clearly and concisely, using words, diagrams, tables, graphs, and mathematical relationships, the methods and procedures, results, and conclusions for a given empirical question or problem;
 - (e) justify a scientific explanation of a given system or event, compared to alternative explanations, based on the available empirical evidence, current scientific understanding, and logical arguments; and
 - (f) criticize, using knowledge of common errors of evidence and logic, a given science-related claim or argument; and
 - (2) understanding the history and nature of scientific knowledge as evidenced by the ability to:
 - (a) describe the evolution of scientific knowledge in a given historical context in terms of the contributions of male and female individuals from various cultures; the influence of society,

culture, and personal beliefs of the scientists involved; and the accumulating empirical evidence and logical arguments used to develop the new knowledge;

(b) explain why scientists disagree on a given contemporary controversy in terms of the different assumptions made by the scientists, the different values the scientists place on a particular piece of evidence, and the limitations of the available data or theories, or both; and

(c) explain, using knowledge of the role of empirical evidence and logical argument in science and the assumption that the universe is a vast single system in which the basic rules are everywhere the same, why a given contemporary or historical belief is nonscience.

B. A teacher of science must have the knowledge and ability to make conceptual connections within and across the domains of science and between science and technology. The teacher of science must understand:

(1) connections across the domains of science as evidenced by the ability to:

(a) describe, using words and diagrams, a given technological, biological, physical, earth, or space system in terms of its components, inputs, outputs, and control or feedback;

(b) describe, using a specific example, the use of a given unifying theme or principle in the physical sciences, life sciences, and earth and space sciences; and

(c) explain, using unifying scientific principles, a given set of seemingly unrelated systems or events, both within a science domain and across science domains;

(2) connections between science and technology as evidenced by the ability to:

(a) describe the similarities and differences between the goals and processes of scientific inquiry and the goals and processes of technological design;

(b) explain how the availability of new technology influenced the development of scientific knowledge in a given contemporary or historical context and how the development of new scientific knowledge led to technological advances in a given contemporary or historical context;

(c) explain and predict the possible unexpected benefits and the negative side effects and unintended consequences of a given technological advance;

(d) explain why the contributions of individuals from different scientific disciplines and of technology were necessary for the success of a given contemporary or historical scientific investigation; and

(e) design a modification or use of a system to meet certain needs or criteria in either chemistry, earth and space science, biology, or physics; and

(3) connections between science and other school subjects as evidenced by the ability to:

(a) communicate clearly and precisely, using words, physical models, computer models, demonstrations, diagrams, flow charts, numbers, tables, graphs, and appropriate mathematical relationships, the observations, methods and procedures, results, and conclusions for a given empirical question or problem; explanations of how or why something happens; predictions of what will happen when a change is made; the design for modifying or using a system; and the evaluation of the design against the needs or criteria it was designed to meet;

(b) interpret a given text, physical or computer model, demonstration, diagram, flow chart, set of numbers, table, graph, and appropriate mathematical relationships;

(c) use computer software or graphing calculators to display and analyze data and to model solutions to a prediction or design problem;

(d) explain how mathematics influenced the development of scientific knowledge in a given contemporary or historical context, and how the development of new scientific knowledge led to new mathematics in a given contemporary or historical context; and

(e) describe the impact on society and culture of a given historical development of scientific ideas.

C. A teacher of science understands how knowledge of concepts and principles of science and technology and knowledge of factors influencing personal and community health, population growth, natural resources, environmental quality, and natural and human-induced hazards influence decisions about personal and societal issues. The teacher of science must:

(1) predict the scientific, economic, political, and ethical factors that could influence a course of action to address a given personal issue or local, national, or global challenge;

(2) design, using the systematic approaches of science and scientific knowledge, a course of action to address a personal issue or a given local, national, or global challenge; and

(3) justify and defend a given design for a course of action in terms of an assessment of alternatives, risks, costs, and benefits, and consideration of who benefits and who suffers, who pays and gains, and what the risks are and who bears them.

D. A teacher of science must be able to understand and apply fundamental principles, laws, and concepts of earth and space science, life science, and physical science. The teacher of science must:

(1) know and apply the fundamental principles, laws, and concepts of earth and space science including understanding:

(a) the components and evolution of the Earth system as evidenced by the ability to:

i. describe, using words, diagrams, pictures, and graphs, the physical properties of a given Earth material;

ii. explain, from observation of its composition, texture, and physical state using physical, geological, or biological processes, a plausible way in which a given rock formed through time;

iii. explain, in terms of environmental changes, structural events, plate tectonics, and sedimentary, igneous, metamorphic, and biologic processes, how observed differences within a given rock sequence are related to the various processes that may have formed the rocks;

iv. explain, in terms of environmental changes, structural events, plate tectonics, and sedimentary, igneous, metamorphic, and biologic processes, a plausible way in which a given rock sequence formed through time;

v. explain, in terms of the physical processes that formed it, the origin and development of a given Earth structure;

vi. predict, in terms of known rock sequences, how a given geologic or biologic event might be recorded in a rock sequence; and

vii. explain, using the fossil record and decay rates of radioactive isotopes, how the age of a given rock is determined;

(b) matter and energy in the Earth system as evidenced by the ability to:

- i. explain, using convection, conduction, and radiation, how matter is transported and how energy drives the process of transportation of matter within and between given Earth subsystems or structures;
- ii. explain, using convection, conduction, radiation, and conservation of energy, how energy is transmitted and transformed within and between given Earth subsystems or structures;
- iii. design a simple physical model that mimics the behavior of a given Earth system; and
- iv. describe, using words, diagrams, and chemical equations, the processes involved in the movement of chemical elements or compounds among different given chemical reservoirs in the Earth;

(c) the Earth in the solar system and the universe as evidenced by the ability to:

- i. explain how the properties and organization of galaxies provide evidence that the universe is continuously changing;
- ii. explain qualitatively, using fundamental processes of chemical, physical, and geological change, how processes of change on a given solar system object are different or similar to Earth;
- iii. describe, using words, diagrams, and physical models, the motion of objects in our solar system; and
- iv. explain qualitatively, using Earth's axial rotation, tilt of its rotational axis, and changing position with respect to the sun, the seasonal variations in the length of a day and sun angle at various latitudes on Earth; and

(d) human interactions with the earth system as evidenced by the ability to:

- i. describe, using words, diagrams, pictures, graphs, historic records, and physical models, the scientific basis for predicting the occurrence of a given environmental hazard on a human time frame;
- ii. describe, using words, diagrams, pictures, maps, and physical or computer models, the observed changes in a given Earth system that are due directly or indirectly to human activity; and
- iii. predict, using words, diagrams, pictures, maps, and physical or computer models, the probable movement of pollutants in a given Earth system;

(2) know and apply the fundamental principles, laws, and concepts of life science including understanding:

(a) structural and functional relationships in living systems and environments as evidenced by the ability to:

- i. perform observations to describe the macroscopic structures of a given common organism;
- ii. describe, using words, pictures, and diagrams, the conditions required to sustain life for a given common organism;

iii. describe, using words and diagrams, the characteristics of what determines life in a given common organism;

iv. design a system to support, sustain, and continue the life of a given set of common organisms;

v. describe, using words, pictures, dioramas, and physical or computer models, the structure and function of the components of a given living system in relation to its overall function;

vi. explain, in terms of the function of the organs of that system, the structure of a given plant and animal system;

vii. explain, using structure-function relationships, how and why the structures for a given function are different in different given species;

viii. describe the origins, transmission, prevention, management, or cure of a given disease; and

ix. explain and predict, in terms of the defense mechanism and the method by which the immunity is established, how a given active or passive immunity functions in a human;

(b) molecular and cellular life processes as evidenced by the ability to:

i. perform observations to describe cellular structures and physiological processes;

ii. describe, using words, pictures, and models, the components of a given cell;

iii. explain, in terms of the structure and function of the cell components, the differences between prokaryotic and eukaryotic cells and between given eukaryotic cells;

iv. describe, using words, pictures, and diagrams, the cellular processes of a given plant or animal cell;

v. explain, using the process of photosynthesis, how plants transform solar energy into cellular energy;

vi. explain, using the process of cellular respiration, how energy stored in food molecules is released;

vii. explain, using the process of DNA replication, how proteins are synthesized in a cell;

viii. explain, using the structure-function relationships between cells, tissues, organs, and systems, how cells function as primary building blocks of an organism;

ix. describe, using words, pictures, and models, the physical changes at each given stage of cellular asexual reproduction;

x. describe, using words, diagrams, and charts, how traits are inherited and sex is determined in a given animal; and

xi. explain, using the relationships between genetic change and expression, how a mutation occurs and predict the effect an environmental change will have on the expression of a trait;

(c) diversity and biological evolution as evidenced by the ability to:

- i. describe, using words, pictures, and diagrams, the range of physical and behavioral adaptations that can occur in response to environmental stresses for a given species;
- ii. describe, using words, diagrams, charts, and graphs, the range of observable characteristics of a given species in a given environment;
- iii. explain the speciation process in a given fossil record; and
- iv. design, based only on observable structure, a classification key for a given set of organisms; and

(d) the interdependence among living things as evidenced by the ability to:

- i. collect and analyze data to describe the diversity and number of species in a given ecosystem;
- ii. describe, using words, pictures, and diagrams, the biotic and abiotic components of a given niche, habitat, ecosystem, or biome;
- iii. explain, in terms of environmental adaptations and development, the diversity of a given species;
- iv. describe, using words and diagrams, the cycling of matter and the flow of energy within a given system;
- v. explain and predict the behavioral responses of an animal to a given set of environmental changes; and
- vi. design, using environmental changes, an experiment to elicit a specific behavioral response from a given animal; and

(3) know and apply the fundamental principles, laws, and concepts of the physical sciences including understanding:

- (a) one-dimensional and two-dimensional linear motion and forces as evidenced by the ability to:

 - i. perform measurements and calculations to determine the position, average speed, and direction of motion of a given object;
 - ii. describe, using words, pictures or diagrams, graphs, vectors, and simple mathematical relationships, the vertical and horizontal components of the motion of a given object;
 - iii. describe, using words and free body vector diagrams, the forces acting on an object in a given system of interacting objects, and explain qualitatively, using Newton's Second and Third Laws, the relationships between all the forces;
 - iv. describe, using words, energy diagrams or graphs, and simple mathematical relationships, the change of energy of a system and any transfer of energy into or out of a given system of interacting objects; and
 - v. explain qualitatively, in terms of balanced and unbalanced forces and the conservation of energy, the observed motion of an object in a given system of interacting objects;

(b) vibrations and wave motion as evidenced by the ability to:

- i. perform measurements and calculations to describe the wavelength, amplitude, period, and frequency of a given oscillating object or wave;

ii. describe, using words, diagrams, and graphs, the frequency and amplitude of a given simple pendulum or vibrating object;

iii. describe, using words, diagrams, and graphs, the wave motion of a traveling or standing wave in a given medium; and

iv. explain qualitatively, in terms of the changes in the frequency, amplitude, wavelength, or wave velocity, the observed changes in the pitch or intensity of a sound when given changes are made to the source, the medium through which the sound travels, or the relative motion of the source or detector;

(c) the behavior of light as evidenced by the ability to:

i. explain qualitatively, using the directionality and chromatic composition of light, how we see a given object and its color;

ii. explain and predict, using ray diagrams, the observed shadows in a simple geometrical system of objects and point or extended light sources;

iii. describe, using words and ray diagrams, the reflection, refraction, transmission, and absorption of light when it encounters an ordinary object, a plain or curved mirror, a prism, and thin concave or convex lenses; and

iv. explain qualitatively, using ray diagrams and the laws of reflection and refraction of light, the observed location and magnification of the real or virtual images for a given pinhole system, simple system of mirrors, or simple system of thin lenses;

(d) electricity and magnetism as evidenced by the ability to:

i. perform measurements to determine the type of charge of a given charged object, and the north and south poles of an unmarked magnet;

ii. explain qualitatively, in terms of the movement of electrons, observed changes in the charge of an object in a given system of interacting charged and uncharged objects;

iii. describe, using words and diagrams, the magnetic field around a straight current carrying wire and a current-carrying solenoid; and

iv. design a circuit using batteries, bulbs, and switches to meet given criteria for the brightness and control of the bulbs;

(e) the properties and structure of matter as evidenced by the ability to:

i. perform measurements and calculations to describe the mass, volume, density, concentration, melting and boiling temperatures, and solubility limits of a given substance;

ii. describe, using words and diagrams, common substances as pure elements or compounds, solutions, suspensions, or colloids;

iii. perform procedures of distillation, precipitation, extraction, or chromatography to separate the substances in a given mixture;

iv. describe, using words and diagrams, the basic atomic and subatomic constituents of matter;

v. describe, using the kinetic-molecular theory or intermolecular forces, or both, the arrangement and motion of the atoms, ions, or molecules in a given gas, liquid, or solid substance, and explain the characteristic properties of the substance;

vi. explain and predict, using the principles for filling the electron orbital of atoms and the Periodic Table, the periodic trends in electrical conductivity, ionization, and metallic character of a given set of elements;

vii. predict, using the Periodic Table, whether the bonding in a given substance is primarily covalent, metallic, or ionic;

viii. describe, with words and diagrams, the electrical conductivity of a given conductor, insulator, or semiconductor using periodic trends;

ix. describe, in words and diagrams using conservation of mass and energy, the changes in matter and energy that occur in the nuclear processes of radioactive decay, fission, and fusion; and

x. describe, with words, structural and chemical diagrams and formulas, and physical and computer models, the unique structure of carbon, and explain how that structure results in the large variety of organic molecules;

(f) chemical reactions as evidenced by the ability to:

i. describe, using words, diagrams, physical or computer models, and a balanced chemical equation, changes in the energy and arrangement of atoms for a given chemical reaction;

ii. describe, using words, diagrams, and chemical symbols, a given chemical reaction as oxidation-reduction, acid-base, free radical, precipitation, metathesis, or a combination of these; and

iii. explain and predict qualitatively, using solubility rules, the common oxidation states of elements, the activity series of metals and nonmetals, the stability of radicals, and the properties of acids and bases, the most likely type of reaction for a given set of given reactants;

(g) thermodynamics as evidenced by the ability to:

i. describe, using words and pictures or diagrams, the characteristics of an ideal gas;

ii. describe and predict, using words, graphs, and mathematical relationships, changes in pressure, volume, or temperature of a given ideal gas;

iii. describe, using words, diagrams, and energy graphs, the changes in the enthalpy and entropy during a given chemical reaction; and

iv. explain qualitatively, using the First and Second Laws of Thermodynamics energy, changes in a given spontaneous or nonspontaneous reaction; and

(h) chemical kinetics and equilibrium as evidenced by the ability to:

i. explain, using the requirements for effective particle collisions and activation energy, why a given spontaneous reaction is fast or slow, and predict the conditions necessary to make the reaction occur more rapidly;

ii. explain, using the concept of activation energy and the requirements for effective particle collisions, how a given catalyst increases the rate of a given reaction;

iii. explain, using the kinetic-molecular model, how a given change in temperature, concentration, or particle surface area changes the rate of a given chemical reaction;

iv. describe, using words, diagrams, chemical equations, and concentration graphs, the equilibrium of a given reaction;

v. explain, in terms of changes in the number of effective collisions of the molecules in the forward and reverse reaction, why the chemical equilibrium of a given reaction is a dynamic process; and

vi. explain and predict change in the equilibrium of a given chemical reaction when the temperature changes, the pressure changes, a catalyst is added, or the concentration of reactants or products changes.

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:

(1) curriculum and instruction in science as evidence by the ability to:

(a) select, using local, state, and national science standards, appropriate science learning goals and content;

(b) plan a coordinated sequence of lessons and instructional strategies that support the development of students' understanding and nurture a community of science learners including appropriate inquiry into authentic questions generated from students' experiences; strategies for eliciting students' alternative ideas; strategies to help students' understanding of scientific concepts and theories; and strategies to help students use their scientific knowledge to describe real-world objects, systems, or events;

(c) plan assessments to monitor and evaluate learning of science concepts and methods of scientific inquiry; and

(d) justify and defend, using knowledge of student learning, research in science education, and national science education standards, a given instructional model or curriculum;

(2) safe environments for learning science as evidenced by the ability to:

(a) use required safety equipment correctly in classroom, field, and laboratory settings;

(b) describe, using knowledge of ethics and state and national safety guidelines and restrictions, how to make and maintain a given collection of scientific specimens and data;

(c) describe, using knowledge of ethics and state and national safety guidelines and restrictions, how to acquire, care for, handle, and dispose of live organisms;

(d) describe, using state and national guidelines, how to acquire, care for, store, use, and dispose of given chemicals and equipment used to teach science;

(e) implement safe procedures during supervised science learning experiences in the public schools; and

(f) develop a list of materials needed in an elementary science safety kit;

(3) how to apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;

- (4) how to apply the research base for and the best practices of middle level and high school education;
- (5) how to develop curriculum goals and purposes based on the central concepts of science and how to apply instructional strategies and materials for achieving student understanding of the discipline;
- (6) the role and alignment of district, school, and department mission and goals in program planning;
- (7) the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (8) how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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.

A. A teacher of chemistry must demonstrate a conceptual understanding of chemistry. The teacher must:

(1) use sources of information to solve unfamiliar quantitative problems and communicate the solution in a logical and organized manner as evidenced by the ability to:

(a) describe, in terms of the known and unknown quantities, a given problem in appropriate pictorial, graphical, or written forms;

(b) describe, in terms of the relevant numerical and algebraic quantities and equations, a given problem mathematically;

(c) plan, using words, diagrams, and mathematical relationships, a solution for a given problem in terms of steps necessary to solve the problem and to verify the solution; and

(d) evaluate, in terms of unit consistency, reasonableness, and completeness of solution, the solution of a given problem;

(2) use computers to display and analyze experimental and theoretical data as evidenced by the ability to:

(a) describe data graphically using a computer; and

(b) design a mathematical model to provide a reasonable fit to a given set of data; and

(3) develop a plan to ensure a safe environment and practices in chemistry learning activities.

B. A teacher of chemistry must demonstrate a knowledge of chemistry concepts. The teacher must:

(1) understand the properties and structure of matter as evidenced by the ability to:

(a) explain and predict, using the principles for filling the electron orbitals of atoms and the Periodic Table, the periodic trends in electrical conductivity, atomic radii, ionization energy, electronegativity, electron affinity, and metallic character of a given set of elements;

(b) predict, using the Periodic Table and the arrangement and energies of the element's outermost electrons, whether the bonding in a given substance is primarily covalent, metallic, or ionic;

(c) explain and predict, using the periodic trends in the physical and chemical characteristics of the elements and the type of bonds, or intermolecular forces, or both, the relative magnitudes of a given property for a set of elements or compounds;

(d) predict, using existing models including the Valence Shell electron Pair Repulsion theory, the shape of a given molecule; and

(e) describe, with words and diagrams using neutron to proton ratios and binding energies, the changes in matter and energy that occur in the nuclear processes of radioactive decay, fission, fusion, and other common nuclear transformations;

(2) understand chemical reactions as evidenced by the ability to:

(a) perform measurements and calculations to determine the chemical formulas of the products of a given chemical reaction;

(b) explain and predict qualitatively and quantitatively, using the Periodic Table and the concept of chemical stoichiometry, the mass relationships between reactants and products for a given chemical reaction;

(c) predict quantitatively, using the principle of state functions and Hess's Law, the molar heat of a given reaction from known values of molar heats of formation or molar heats of a series of related reactions; and

(d) explain and predict qualitatively and quantitatively, using solubility rules, the common oxidation states of elements, the activity series of metals and nonmetals, stability of radicals, and the properties of acids and bases, the most likely type of reaction for a given set of given reactants;

(3) understand thermodynamics as evidenced by the ability to:

(a) perform measurements and calculations to determine the molar heat energy absorbed or released in a given phase change or chemical reaction;

(b) predict qualitatively and quantitatively, using the Ideal Gas Law, changes in the pressure, volume, temperature, or quantity of gas in a given thermally isolated ideal gas system when the gas is heated or cooled, is compressed or expanded adiabatically, or enters or leaves the system;

(c) describe, using words, diagrams, energy graphs, and mathematical relationships, the changes in the enthalpy, entropy, and Gibb's free energy during a given chemical reaction;

(d) explain and predict qualitatively and quantitatively, using the First and Second Laws of Thermodynamics and the relationship between Gibb's free energy and the equilibrium constant, changes in the equilibrium and Gibb's free energy for a given change in the reaction conditions;

(e) design, using Gibb's free energy, a method for changing the direction of spontaneity of a given reaction; and

(f) explain qualitatively and quantitatively, using Gibb's free energy, how the electrochemical potential of a given cell depends on given changes in the temperature or the concentration of ions in solution, or both;

(4) understand chemical kinetics and equilibrium as evidenced by the ability to:

(a) perform measurements and calculations to determine the rate of a chemical reaction, the rate expression, half-life of given reaction, the activation energy of a given reaction, and the equilibrium constant of a given reaction;

(b) describe, using words, energy diagrams, graphs, and mathematical relationships, the activation energy, enthalpy changes, and reaction rate of a given reaction;

(c) explain and predict qualitatively and quantitatively, using the rate equation for the reaction, changes in the reaction rate for a given change in the concentration of a reactant or product;

(d) predict, using the rate equation and the presence or absence of intermediates, a possible mechanism for a given reaction;

(e) describe, using words, diagrams, chemical equations, concentration and rate graphs, and mathematical relationships, the equilibrium of a given reaction;

(f) explain, in terms of changes in the number of effective collisions of the molecules in the forward and reverse reaction, why the chemical equilibrium of a given reaction is a dynamic process;

(g) explain and predict quantitatively, using the equilibrium constant, the concentration of a reactant or product in a given gas phase or solution chemical reaction;

(h) design, using LeChatelier's principle, a method for achieving a specified change in the equilibrium constant or the position of equilibrium of a given chemical reaction; and

(i) design, using the rate laws and requirements for effective collisions, a method for achieving a specified change in the rate of a given chemical reaction; and

(5) understand organic and biochemical reactions as evidenced by the ability to:

(a) perform measurements and calculations to determine the melting point, boiling point, solubility, or other common physical properties of an organic compound;

(b) describe, using words, structural and chemical formulas, and physical and computer models, the functional groups and polarity of the molecule of a given organic compound;

(c) describe, using words, structural and chemical formulas, and physical or computer models, a given hydrocarbon compound as aromatic or aliphatic; saturated or unsaturated; alkanes, alkenes, or alkynes; and branched or straight chains;

(d) explain and predict, using a molecular orbital model of the pi-bond, the outcomes of reactions of given aromatic, allylic and conjugated alkenes, and other delocalized electron systems;

(e) explain and predict, using functional groups, structure, and polarity, the reactivity, solubility, melting point, and boiling point of an organic compound;

(f) predict, using infrared, nuclear magnetic resonance, and mass spectra, the structure of an organic molecule;

(g) design and carry out a single step synthesis of an organic compound, purify the compound, and characterize the product;

(h) describe, using words, diagrams, structural and chemical formulas, and physical and computer models, the origin of optical activity of a given chiral organic compound;

(i) explain why the reactivity of a chiral compound depends on its stereochemistry when acted upon by a living system, and predict whether a particular substrate enantiomer would or would not react with its enzyme;

(j) describe, using words, structural and chemical formulas, and physical and computer models, a given set of biomolecules as a carbohydrate, lipid, protein, or nucleic acid, and explain how biomolecules are made from typical chemical components by chemical reactions;

(k) perform tests and measurements to determine if a given biological substance is a carbohydrate, lipid, protein, or nucleic acid;

(l) explain, using the concepts of electrostatic attraction, repulsion, and stereochemistry in the catalytic process, how enzymes facilitate a given biochemical reaction; and

(m) design a method to use organic compounds to demonstrate a given general chemical principle.

C. A teacher of chemistry must demonstrate an advanced conceptual understanding of chemistry and the ability to apply its fundamental principles, laws, and concepts by completing a full research experience. The teacher must:

(1) identify various options for a research experience including independent study projects, participation in research with an academic or industry scientist, directed study, internship, or field study;

(2) select an option and complete a research experience that includes conducting a literature search on a problem;

(3) design and carry out an investigation;

(4) identify modes for presenting the research project; and

(5) present the research project in the selected mode.

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.

A. A teacher of earth and space science must demonstrate a conceptual understanding of earth science. The teacher must:

(1) use sources of information to solve unfamiliar qualitative and quantitative problems and communicate the solution in a logical and organized manner as evidenced by the ability to:

- (a) describe, in terms of the known and unknown quantities, a given problem in appropriate pictorial, graphical, or written forms;
- (b) translate a given topographical or geological map into a cross-sectional view;
- (c) describe qualitatively in appropriate terms, using words, stratigraphic columns, flow charts, maps, cross-sectional views, graphs, and drawings as necessary, a given problem situation;
- (d) plan, using words, diagrams, pictures, and simple mathematical relationships, a solution for a given problem in terms of steps necessary to solve the problem and to verify the solution; and
- (e) evaluate, in terms of unit consistency, reasonableness, and completeness of solution, the solution of a given problem;

(2) use computers to display and analyze experimental and theoretical data as evidenced by the ability to:

- (a) describe data graphically using a computer; and
- (b) design a mathematical model to provide a reasonable fit to a given set of data; and

(3) develop a plan to ensure a safe environment and practices in all earth and space science learning activities.

B. A teacher must demonstrate knowledge of earth and space science concepts. The teacher must:

- (1) understand the components that make up the Earth system as evidenced by the ability to:
 - (a) perform measurements and statistical analyses to describe the physical properties of a given Earth material;
 - (b) explain for a given Earth material, in terms of chemical bond strength and chemical composition, how physical properties are related to basic chemical structure;
 - (c) describe, using words, pictures, diagrams, maps or globes, and satellite images, the component materials, large scale structures, and dominant physical processes of a given Earth subsystem; and
 - (d) explain, using seismic evidence, laboratory simulations of Earth-interior conditions, terrestrial and extraterrestrial samples, and models of chemical differentiation, how we know the interior of the Earth is segregated chemically and physically into layers;
- (2) understand energy in the Earth system as evidenced by the ability to:
 - (a) describe, using words, pictures, diagrams, and physical or computer models, the radiant, chemical, nuclear, and gravitational energies of a given Earth subsystem or structure;
 - (b) describe, using words, pictures, diagrams, and physical or computer models, the flow of energy within and between given Earth subsystems or structures;
 - (c) describe, using words, pictures, diagrams, mathematical and chemical equations, physical or computer models, and electronic data sets, the transportation of matter within and between given Earth subsystems and structures; and

(d) explain and predict, in terms of conservation of energy, dynamic equilibrium, and geologic or atmospheric models, changes in behavior of an Earth subsystem or structure due to a given change in energy;

(3) understand geochemical cycling as evidenced by the ability to:

(a) explain, in terms of reaction equilibrium and disequilibrium and mass balance, how chemical elements and compounds in a given simple Earth system are distributed;

(b) explain and predict quantitatively and qualitatively, using related experimental data and the principles of mass balance and chemical equilibrium, how the concentration of an element or compound will change in a given reservoir interacting with another given reservoir;

(c) describe, using words, pictures, and diagrams, the concentration and depletion of given elements or compounds in a given reservoir; and

(d) explain, using mass balance, advection, convection, and chemical equilibrium, the process by which a given depletion or concentration of elements or compounds could have occurred in a given reservoir;

(4) understand the origin and evolution of the universe as evidenced by the ability to:

(a) describe, using words, drawings, and graphs, the properties of a given galaxy;

(b) explain, using the observed distribution of structural types, the relationship between astronomical distances and age, and the Big Bang theory, how differences in the composition and types of galaxies and the organization of galaxies into systems lead us to conclude that the universe is continuously changing;

(c) perform measurements to describe the spectral distribution of light from a given star;

(d) explain and predict, using the Hertzsprung-Russell Diagram, distance to the star, and stellar models, the changes in mass, luminosity, and size of a given star as it evolves from birth to death;

(e) explain, using models of stellar evolution, how stars die and become neutron stars and black holes;

(f) explain, using theories for nuclear stabilities and nuclear reactions, how elements can be formed in stars and novae;

(g) describe, using words, pictures, diagrams, and mathematical relationships, the distance over which a given astronomical distance scale is accurate; and

(h) explain, using blackbody radiation and quantization of energy levels, how to determine the temperature and elemental composition of a stellar object from its spectral signature;

(5) understand the Earth in the solar system as evidenced by the ability to:

(a) describe, with words, chemical formulas, drawings, scaled diagrams, and numerical orders of magnitude, the mass, size, and composition for a given solar system object;

(b) explain and predict, using geologic and climatic stability, availability of nutrients, and atmospheric parameters, the suitability for life for a given planetary description;

(c) explain and predict quantitatively and qualitatively, using Newton's laws of motions and gravitation and conservation of momentum, the motion of the bodies of a given solar system;

(d) explain, with words, diagrams, and models using orbital paths and relative sizes of solar system objects, the locationally dependent observation of solar and lunar eclipses and phases of the moon for a given simple solar system;

(e) explain, using Newton's laws of motion and gravitation and relative orbital positions, the origin of oceanic tides on the Earth; and

(f) design a physical solar-planetary model to demonstrate eclipses and lunar phases;

(6) understand the evolution of the Earth as evidenced by the ability to:

(a) perform measurements to describe the physical properties of a given rock sequence;

(b) describe, using words, pictures, and diagrams, the composition, textures, spatial relationships, and fossil content of a given rock sequence;

(c) explain, in terms of type and quantity of fossils, isotopic concentrations, unconformities, rock types, and rock sequences, the connection between a given major biospheric change and the rock and fossil record and a given major lithospheric change and the rock and fossil record;

(d) explain, using the principle of actualism, the relationship between features seen in the rock record and processes observable in the Earth today;

(e) predict, in terms of known rock sequences and the principle of actualism, how a given geologic or biologic event might be recorded in a rock sequence; and

(f) explain, using the fossil record and decay rates of radioactive isotopes, how the age of a given rock is determined; and

(7) understand human interactions with the Earth system as evidenced by the ability to:

(a) describe, using words, charts, figures, and maps or globes, the present distribution of a given natural resource;

(b) explain, using words, charts, figures, illustrations, and maps, how the distribution of a given resource has affected the distribution and history of human society;

(c) predict, in terms of present trends, possible alternative resources, and changes in technology or social structure, the plausible impacts on human society of future changes in the availability of a given natural resource;

(d) describe, using words, charts, figures, and maps or globes, a given occurrence of an environmental hazard;

(e) predict, in terms of direct and indirect, short-term and long-term effects, the probable impacts of a given environmental hazard on human society;

(f) explain, in terms of chemical changes, physical modifications, and changes in energy, how human activity impacts a given Earth system;

(g) predict, in terms of direct and indirect, short-term and long-term effects, the probable effects of a given human activity on an Earth system;

(h) explain, using words, diagrams, graphs, and maps, how it is known that there have been long-term changes in climate and sea level during the course of human existence;

(i) explain, using words, diagrams, pictures, and maps, how observed changes in climate and sea level may have impacted the history of human development; and

(j) predict, in terms of changes in resource availability, production, population size and distribution, and current social structures, the probable impacts of future changes in climate or sea level on human society.

C. A teacher of earth and space science must demonstrate an advanced conceptual understanding of earth and space science and the ability to apply its fundamental principles, laws, and concepts by completing a full research experience. The teacher must:

(1) identify various options for a research experience including independent study projects, participation in research with an academic or industry scientist, directed study, internship, or field study;

(2) select an option and complete a research experience that includes conducting a literature search on a problem;

(3) design and carry out an investigation;

(4) identify modes for presenting the research project; and

(5) present the research project in the selected mode.

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.

A. A teacher of life science must demonstrate a conceptual understanding of life science. The teacher must:

(1) use sources of information to solve unfamiliar quantitative problems and communicate the solution in a logical and organized manner as evidenced by the ability to:

(a) describe, using appropriate alternative forms including pictorial, graphical, or written descriptions, the known and unknown quantities of a given problem; and

(b) describe, in terms of the relevant numerical and algebraic quantities and equations required to solve the problem, the relevant numerical and algebraic quantities and equations required to solve a given problem mathematically;

(2) use computers to display and analyze experimental and theoretical data as evidenced by the ability to:

(a) describe data graphically using a computer; and

(b) design a mathematical model to provide a reasonable fit to a given set of data;

(3) use mean, standard deviation, chi-squared, linear regression, and correlation to describe and analyze experimental and theoretical data; and

(4) develop a plan to ensure a safe environment and practices in all life science learning activities.

B. A teacher of life science must demonstrate knowledge of biological concepts. The teacher must:

- (1) understand structural and functional relationships as evidenced by the ability to:
 - (a) perform observations to describe the structures of a given common organism;
 - (b) describe, using words, descriptions of appropriate experimental procedures, and diagrams, the characteristics of what determines life in a given common organism;
 - (c) predict, using structure-function relationships, the system function from which a given set of plant and animal tissue samples is derived;
 - (d) describe, using words, diagrams, and pictures, immune system responses that take place in human cells, tissues, organs, and organ systems throughout the progression of a given viral, bacterial, fungal, and parasitic disease; and
 - (e) design a personal course of action to prevent a given human disease;
- (2) understand molecular and cellular life processes as evidenced by the ability to:
 - (a) perform measurements to describe cellular structures and physiological processes;
 - (b) describe, using words, chemical formulas and equations, and diagrams, the cellular processes of a given plant or animal cell;
 - (c) explain, using the structure-function relationship of the chloroplast, conservation of energy, and the fundamental nature of light, how solar energy is transformed during photosynthesis into cellular energy in a given plant cell;
 - (d) explain, using the structure-function relationship of the mitochondria and molecular energy transformations involving ATP, how energy stored in food molecules is released during cellular respiration in a given cell;
 - (e) qualitatively predict, using structure-function relationships and relationships between organelles and the cellular environment, the effect of a given natural and applied physical and chemical change in the environment of a cell on photosynthesis and cellular respiration;
 - (f) design experiments to test the properties of structure-function relationships in photosynthesis or cellular respiration;
 - (g) explain, using the processes of replication, transcription, and translation, how proteins are synthesized in a cell; and
 - (h) predict the amino acid sequence of a protein from a given codon sequence;
- (3) understand molecular reproduction and heredity as evidenced by the ability to:
 - (a) perform measurements and statistical analyses to describe the results from a given plant and animal breeding experiment;
 - (b) describe, using words, pictures, and diagrams, and models, the changes in the visibility, arrangement, and number of chromosomes at each given state of mitosis and meiosis;
 - (c) explain, using the Laws of Segregation and Independent Assortment, why fertilization and the production of sperm and eggs through meiosis is necessary for species variability;
 - (d) describe, using words, diagrams, and charts, how a given trait is inherited and expressed;

(e) explain and predict qualitatively and quantitatively, using rules of probability and heredity, the genotype and phenotype of the offspring of parents with given genotypic traits to include dominant-recessive traits, incomplete and co-dominant traits, polygenic traits, and sex-linked and sex-influenced traits;

(f) explain, using the Laws of Segregation and Independent Assortment, how the sex is determined in humans;

(g) describe, using words, diagrams, and charts, how a mutation occurs;

(h) explain and predict, using the relationship between genes and their expression, the effect an environmental change will have on the expression of a given genetic trait;

(i) describe, using words, diagrams, and charts, the process of producing recombinant DNA; and

(j) describe, using words, pictures, and diagrams, how genetic technology is used in treatment of human disease and development of agriculture products;

(4) understand diversity and biological evolution as evidenced by the ability to:

(a) describe in words, pictures, and diagrams the range of physical, behavioral, and biochemical adaptations that can occur in response to environmental stresses for a given species;

(b) explain, using the principles of mutation and natural selection, how a specific adaptation of a given species might have developed in response to environmental stresses;

(c) describe, using words, diagrams, charts, and statistical relationships, the range of phenotypes of a given species in a given environment;

(d) explain and predict, using the principles of mutation, recombination, and natural selection, changes in the range of phenotypes of a species when a given change occurs in the environment of the species;

(e) explain, using the principles of mutation, recombination, and natural selection, why certain species are found in the fossil records relatively unchanged while others are not and others are extinct;

(f) explain and predict, using the evolutionary tree, morphological variations between two or more given species; and

(g) explain the variations in morphological characteristics and DNA composition of two or more given species;

(5) understand the interdependence among living things as evidenced by the ability to:

(a) perform measurements and statistical analyses to describe results of a study investigating the relationship between a given common organism and its environment;

(b) perform measurements and statistical analyses to describe the diversity and number of species in a given ecosystem;

(c) describe, using words, pictures, and diagrams, the cycling of a given substance among living and nonliving components of the biosphere;

(d) describe, using words, pictures, diagrams, and simple mathematical relationships, the cycling of matter and the flow of energy both within a given system, and between the system and the biosphere;

(e) explain, using the relationships between biotic and abiotic components of that system, why the population size and diversity of species is different between two different niches, habitats, ecosystems, or biomes;

(f) explain and predict, using population growth dynamics and interspecific and intraspecific interactions, changes in population size of organisms in an ecosystem for a given change in the biotic and abiotic components of the ecosystem; and

(g) design an experiment to investigate relationships within and among species in a simple ecosystem; and

(6) understand behavior of organisms as evidenced by the ability to:

(a) perform measurements and statistical analyses to describe the physical behavior of animals in a given natural and perturbed situation;

(b) describe, using words, pictures, and diagrams, behaviors of a given animal that allow it to interact with organisms of its own and other species and to respond to environmental changes;

(c) explain and predict, in terms of the principles of animal communication and adaptation, the behavioral responses of an animal to a given set of interactions or environmental changes; and

(d) explain behavioral responses of a given animal in terms of natural selection.

C. A teacher of life science must demonstrate an advanced conceptual understanding of life science and the ability to apply its fundamental principles, laws, and concepts by completing a full research experience. The teacher must:

(1) identify various options for a research experience including independent study projects, participation in research with an academic or industry scientist, directed study, internship, or field study;

(2) select an option and complete a research experience that includes conducting a literature search on a problem;

(3) design and carry out an investigation;

(4) identify modes for presenting the research project; and

(5) present the research project in the selected mode.

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.

A. A teacher of physics must demonstrate a conceptual understanding of physics. The teacher must:

(1) use sources of information to solve unfamiliar quantitative problems and communicate the solution in a logical and organized manner as evidenced by the ability to:

- (a) describe, in terms of the known and unknown quantities, a given problem in the appropriate pictorial, graphical, or written form;
- (b) qualitatively describe, in appropriate physics terms using motion diagrams, vector force diagrams, energy or momentum diagrams, ray diagrams, or field diagrams as necessary, a given problem situation;
- (c) mathematically describe, in terms of the relevant numerical, algebraic, and trigonometric quantities and equations, a given problem;
- (d) plan, using words, diagrams, and mathematical relationships, a solution for solving a given problem and verify the solution;
- (e) implement, using algebra and manipulation and solution of coupled sets of linear equations, quadratic equations, simple differential equations, and simple integrals as necessary, a solution to a given problem; and
- (f) evaluate, in terms of unit consistency, reasonableness, and completeness of solution, the solution of a given problem;

(2) use computers to display and analyze experimental and theoretical data as evidenced by the ability to:

- (a) graphically describe data using a computer;
- (b) design a mathematical model to provide a reasonable fit to a given set of data;
- (c) compute and evaluate the statistical significance of mean and standard deviation for a distribution of data;

(3) estimate common physical properties as evidenced by the ability to:

- (a) describe numerically, using reasonable physical estimates, the physical properties of common objects; and
- (b) compute and evaluate the reasonableness of calculated physical parameters of common objects; and

(4) develop a plan to ensure a safe environment and practices in all physics learning activities.

B. A teacher of physics must demonstrate a knowledge of physics concepts. The teacher must:

(1) understand linear and rotational motion as evidenced by the ability to:

- (a) perform measurements and calculations to describe the linear and angular position, velocity, and acceleration of a given object; the forces and torques acting on an object; and the energy, momentum, and angular momentum of a system before and after an interaction;
- (b) describe, using words, pictures and diagrams, graphs, vectors, and mathematical relationships, the motion of a given object;
- (c) describe, using words, free-body vector diagrams, and mathematical relationships, the forces acting on each object in a given system of interacting objects and explain, using Newton's Second and Third Laws, the relationships between all the forces;

(d) describe, using words, energy diagrams or graphs, and mathematical relationships, the change of energy of a system and any transfer of energy into or out of a given system of interacting objects;

(e) describe, using words, vector diagrams, and mathematical relationships, the change of linear or angular momentum of a given system and any transfer of momentum into or out of the system of interacting objects;

(f) explain and predict qualitatively and quantitatively, in terms of Newton's Laws, the conservation of energy, and the conservation of momentum, the motion of objects in a given system of interacting objects; and

(g) design a strategy for making an object move in a given way;

(2) understand simple harmonic and wave motion as evidenced by the ability to:

(a) perform measurements and calculations to describe the wavelength, amplitude, period, frequency, and energy of a traveling wave or an object in simple harmonic motion;

(b) describe, using words, force diagrams, energy diagrams or graphs, motion graphs, and mathematical relationships, simple or damped harmonic motion or resonance of a given oscillating system;

(c) explain and predict qualitatively and quantitatively, using the equation of motion, changes in motion of an oscillator in a given system when the intrinsic characteristics of the oscillator change, when a given external force is applied to the oscillator, and when the oscillator loses energy to its surroundings;

(d) design, using words, diagrams or graphs, and mathematical relationships, a system which oscillates at a given frequency or exhibits damped oscillations;

(e) describe a traveling or standing wave in a given medium;

(f) explain and predict qualitatively and quantitatively, using the wave equation of motion and the superposition principle, changes in wave motion when a given traveling wave interacts with a given object or boundary;

(g) explain and predict qualitatively and quantitatively, using the wave equation of motion and the superposition principle, changes in wave motion when a given traveling wave interacts with a second wave; and

(h) explain and predict qualitatively and quantitatively, using the wave equation of motion and the superposition principle, changes in the wave when the source and detector are moving relative to each other;

(3) understand electricity and magnetism as evidenced by the ability to:

(a) perform measurements and calculations to describe time varying or constant values of current, voltage, and power in electric circuits and in magnetic fields;

(b) describe, using words, circuit diagrams, graphs, and mathematical relationships, the current, voltage, resistance, capacitance, or inductance of a given system of circuit elements;

(c) explain and predict qualitatively and quantitatively, using the conservation of charge and the conservation of energy, the current through or the voltage across each element in a given circuit when changes are made to the circuit;

- (d) design a circuit in which the current varies in a given way;
- (e) explain and predict qualitatively and quantitatively, in terms of Newton's laws and the Lorentz Force, the motion of charges in given electric and magnetic fields;
- (f) predict qualitatively and quantitatively, using Gauss's law or Ampere's law, the electric field around a given simple geometric distribution of charges and the magnetic field around a given simple geometric system of current-carrying wires;
- (g) predict qualitatively, using Lenz's law and Faraday's Law, the induced currents from a given changing magnetic flux;
- (h) design, using simple materials, a working electric motor and an air-core electromagnet that produces a field strength; and
- (i) explain, in terms of the motion of charges and the electromagnetic nature of light, how electromagnetic radiation is generated in a given situation;

(4) understand physical and geometrical optics as evidenced by the ability to:

- (a) perform measurements and calculations to describe light intensity and polarization of a given light source, the location of images formed by a simple mirror and lens system, and the focal length and magnification of a curved mirror or thin lens;
- (b) describe, using words, ray diagrams, graphs, and mathematical relationships, the reflection, refraction, transmission, and absorption of light when it encounters a given macroscopic object, a plane or curved mirror, a boundary between media of different indices of refraction, a linear polarizer, a prism, and thin concave and convex lenses;
- (c) explain and predict qualitatively and quantitatively, in terms of ray diagrams and the laws of reflection and refraction of light, the location and magnification of a real or virtual image for a given system of mirrors or lenses;
- (d) design a system of lenses and mirrors to produce a real or virtual image of a given magnification;
- (e) describe, using words, diagrams, and graphs, the interaction of monochromatic light with a given single or pair of parallel slits and with thin films; and
- (f) explain and predict qualitatively and quantitatively, using the behavior of waves and the principle of superposition, the change in the resulting light pattern with given changes in slit width, separation, and the wavelength of the incident light on a system of slits;

(5) understand the kinetic-molecular model of matter and thermodynamics as evidenced by the ability to:

- (a) perform measurements and calculations to describe the mass, volume, density, temperature, and heat capacity of a solid, liquid, or gas at constant pressure and the pressure in a gas;
- (b) explain qualitatively, using the kinetic-molecular model of matter, a common physical change;
- (c) describe, using words, graphs, and mathematical relationships, changes in pressure, volume, or temperature of an ideal gas;
- (d) predict, using the First Law of Thermodynamics, the final temperature of a given thermally isolated system of interacting objects and materials;

(e) explain and predict qualitatively and quantitatively, using the First Law of Thermodynamics, the transfer of heat into or out of a given system;

(f) explain, using the First Law of Thermodynamics, the changes of pressure, temperature, and volume for a monatomic ideal gas operating in a Carnot cycle between given states, and describe quantitatively, using words, graphs, and mathematical relationships, the thermal efficiency of the system; and

(g) explain, in terms of the second law of thermodynamics, why energy flows from hot to cold objects; and

(6) understand contemporary physics as evidenced by the ability to:

(a) perform measurements and calculations to detect nuclear radiation in the environment, and determine wavelengths and energy of the emission spectrum of a given gas;

(b) describe, using words, diagrams, and mathematical relationships, the time dilation, length contraction, and momentum and energy of an object of given velocity;

(c) describe, using words, diagrams, and tables, the basic atomic and subatomic constituents of matter;

(d) explain qualitatively, in terms of the standard model, the observed interaction between atomic or subatomic particles in a simple situation;

(e) explain qualitatively, using the quantum nature of light and matter, and the conservation of energy and momentum, the observed interaction between photons and matter in a given situation;

(f) explain, using conservation principles, the observed changes in the matter and energy of a given nuclear process;

(g) predict, using the Heisenberg Uncertainty Principle, the lower limit of size, momentum, energy, or time that could be expected in a given atomic or subatomic measurement or situation; and

(h) describe, in terms of the energy bands and levels in the material, the electrical conductivity of a given conductor, insulator, or semiconductor.

C. A teacher of physics must demonstrate an advanced conceptual understanding of physics and the ability to apply its fundamental principles, laws, and concepts by completing a full research experience. The teacher must:

(1) identify various options for a research experience including independent study projects, participation in research with an academic or industry scientist, directed study, internship, or field study;

(2) select an option and complete a research experience that includes conducting a literature search on a problem;

(3) design and carry out an investigation;

(4) identify modes for presenting the research project; and

(5) present the research project in the selected mode.

Subp. 8. **Continuing license.** A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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; 122A.18*

History: *23 SR 1928; 26 SR 700; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.4770 TEACHERS OF SCIENCE ENDORSEMENT LICENSURE BY EXAMINATION.

Subpart 1. **Scope of practice.** A teacher of science is authorized to provide instruction in chemistry, earth and space science, life science, or physics to students in grades 9 through 12. The science discipline that the teacher is qualified to teach must be identified on the teacher's license.

Subp. 2. **Qualifications for licensure by examination.** A candidate for science endorsement licensure by examination to teach chemistry, earth and space science, life science, or physics to students in grades 9 through 12 shall:

- A. hold a Minnesota full professional license valid for classroom teaching as described in part 8710.4750 for chemistry, earth and space science, life science, or physics for students in grades 9 through 12 or 7 through 12;
- B. have completed three years of science teaching in grades 7 through 12 or 9 through 12; and
- C. provide evidence of passing the required PRAXIS II science content exam for the desired science discipline of licensure in chemistry, earth and space science, life science, or physics.

Subp. 3. **Professional license.** A professional license shall be issued and renewed according to the rule of the Board of Teaching governing licensure.

Subp. 4. **Effective date.** The requirements of this part for endorsement licensure by examination for specific science disciplines are effective October 15, 2007.

Statutory Authority: *MS s 122A.09*

History: *32 SR 653*

Published Electronically: *November 19, 2009*

8710.4800 TEACHERS OF SOCIAL STUDIES.

Subpart 1. **Scope of practice.** A teacher of social studies is authorized to provide to students in grades 5 through 12 instruction that is designed to provide an understanding of the following social studies concepts:

- A. culture and cultural diversity;
- B. the ways human beings view themselves in and over time;
- C. 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, authority, and governance;
- G. how people organize for production, distribution, and consumption of goods and services;
- H. relationships among science, technology, and society;
- I. global connections and interdependence; and
- J. ideals, principles, and practices of citizenship in a democratic republic.

Subp. 2. Licensure requirements. A candidate for licensure to teach social studies to students in grades 5 through 12 shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 social studies in subpart 3.

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.

A. A teacher of social studies understands how human beings create, learn, and adapt culture. The teacher must understand:

- (1) ways in which groups, societies, and cultures address human needs and concerns;
- (2) how data and experiences may be interpreted by people from diverse cultural perspectives and frames of reference;
- (3) culture as an integrated whole, including the functions and interactions of language, literature, the arts, traditions, beliefs and values, and behavior patterns;
- (4) societal patterns for preserving and transmitting culture while adapting to environmental or social change;
- (5) benefits of cultural diversity and cohesion, within and across groups;
- (6) patterns of behavior reflecting values and attitudes that contribute or pose obstacles to cross-cultural understanding;
- (7) the causes and effects of stereotyping on American Indians within their society and on society as a whole;
- (8) specific cultural responses to persistent human issues; and
- (9) ideas, theories, and modes of inquiry drawn from anthropology and sociology in the examination of persistent issues and social problems.

B. A teacher of social studies understands historical roots based on what things were like in the past and how things change and develop over time. The teacher must understand:

- (1) that historical knowledge and the concept of time are socially influenced constructions that lead historians to be selective in the questions they seek to answer and in the evidence they use;

- (2) key concepts, including time, chronology, causality, change, conflict, and complexity to explain, analyze, and show connections among patterns of historical change and continuity;
- (3) historical periods and patterns of change within and across cultures;
- (4) the significance of American Indian oral tradition in the perpetuation of culture and history;
- (5) processes of critical historical inquiry to reconstruct and reinterpret the past;
- (6) multiple historical and contemporary viewpoints with viewpoints within and across cultures; and
- (7) ideas, theories, and modes of historical inquiry to analyze historical and contemporary developments, and to inform and evaluate actions concerning public policy issues.

C. A teacher of social studies understands the world within and beyond personal locations. The teacher must understand:

- (1) the relative location, direction, size, and shape of locales, regions, and the world;
- (2) how to create, interpret, use, and synthesize information from various representations of the earth;
- (3) appropriate resources, data sources, and geographic tools to generate and manipulate charts, graphs, and maps and to interpret information from resources including atlases, databases, and grid systems;
- (4) how to determine distance, scale, area, density, and distinguish spatial distribution patterns;
- (5) the relationships among various regional and global patterns of geographic phenomena;
- (6) physical earth system changes to explain geographic phenomena;
- (7) how people create places that reflect culture, human needs, government policy, and current values and ideals as they design and build specialized buildings, neighborhoods, shopping centers, urban centers, industrial parks, and the like;
- (8) physical and cultural patterns and their interactions;
- (9) how historical events have been influenced by, and have influenced, physical and human geographic factors in local, regional, national, and global settings;
- (10) social and economic effects of environmental changes and crises resulting from phenomena; and
- (11) policies for the use of land and other resources in communities and regions.

D. A teacher of social studies understands that personal identity is shaped by an individual's culture, by groups, and by institutional influences. The teacher must understand:

- (1) personal connections to time, place, and social and cultural systems;
- (2) influences of various historical and contemporary cultures on an individual's daily life;

- (3) the ways family, religion, gender, ethnicity, nationality, socioeconomic status, and other group and cultural influences contribute to the development of a sense of self;
- (4) the vital role the process of achieving harmony and balance and the American Indian value system play in American Indian philosophy and in the daily lives of American Indians;
- (5) concepts, methods, and theories about the study of human growth and development;
- (6) how ethnicity, nationality, and culture interact to influence specific situations or events;
- (7) the role of perceptions, attitudes, values, and beliefs in the development of personal identity;
- (8) the impact of stereotyping, conformity, acts of altruism, and other behaviors on individuals and groups;
- (9) how to work independently and cooperatively within groups and institutions to accomplish goals; and
- (10) factors that contribute to and damage mental health and issues that relate to mental health and behavioral disorders in contemporary society.

E. A teacher of social studies understands how institutions are formed, what controls and influences them, how institutions control and influence individuals and culture, and how institutions can be maintained or changed. The teacher must understand:

- (1) how concepts, including role, status, and social class, impact the connections and interactions of individuals, groups, and institutions in society;
- (2) group and institutional influences on people, events, and elements of culture in both historical and contemporary settings;
- (3) the various forms institutions take and how they develop and change over time;
- (4) how Minnesota-based Anishinabe reservations and Dakota communities are influenced by history, geography, and contemporary issues;
- (5) that expressions of individuality and efforts to promote social conformity by groups or institutions can result in tensions;
- (6) belief systems in contemporary and historical movement;
- (7) how institutions can further both continuity and change;
- (8) how groups and institutions meet individual needs and promote the common good in contemporary and historical settings; and
- (9) the application of ideas and modes of inquiry drawn from behavioral science and social theory in the examination of persistent issues and social problems.

F. A teacher of social studies understands the historical development of structures of power, authority, and governance and their evolving functions in contemporary United States society and other parts of the world. The teacher must understand:

- (1) persistent issues involving the rights, roles, and status of the individual in relation to the general welfare;

- (2) the purpose of government and how its powers are acquired, used, and justified;
- (3) ideas and mechanisms to meet needs and wants of citizens, regulate territory, manage conflict, establish order and security, and balance competing conceptions of a just society;
- (4) ways nations and organizations respond to conflicts between forces of unity and forces of diversity;
- (5) American Indian treaties and how they function, the meaning of tribal sovereignty, and the concept of sovereignty as related to tribal government;
- (6) the impact of ever changing United States policies on American Indians;
- (7) existing differing political systems and the role representative political leaders from selected historical and contemporary settings have had in shaping these systems;
- (8) conditions, actions, and motivations that contribute to conflict and cooperation within and among nations;
- (9) the role of technology in communications, transportation, information processing, development, or other areas as it contributes to or helps resolve conflicts;
- (10) how to apply ideas, theories, and modes of inquiry drawn from political science to the examination of persistent issues and social problems;
- (11) the extent to which governments achieve their stated ideals and policies at home and abroad; and
- (12) how public policy is formed and expressed.

G. A teacher of social studies understands how people organize for the production, distribution, and consumption of goods and services. The teacher must understand:

- (1) how the scarcity of productive human, capital, technological, and natural resources requires the development of economic systems to make decisions about how goods and services are to be produced and distributed;
- (2) the role that supply and demand, prices, incentives, and profits play in determining what is produced and distributed in a competitive market system;
- (3) the costs and benefits to society of allocating goods and services through private and public sectors;
- (4) relationships among the various economic institutions that comprise economic systems;
- (5) the role of specialization and exchange in economic processes;
- (6) how values and beliefs influence economic decisions in different societies;
- (7) basic economic systems according to how rules and procedures deal with demand, supply, prices, the role of government, banks, labor and labor unions, savings and investments, and capital;
- (8) how to apply economic concepts and reasoning in evaluating historical and contemporary social developments and issues;
- (9) differences between the domestic and global economic systems and how the two interact; and

(10) the relationship of production, distribution, and consumption in establishing socially desirable outcomes for resolving public issues.

H. A teacher of social studies understands the relationships among science, technology, and society. The teacher must understand:

(1) both current and historical examples of the interaction and interdependence of science, technology, and society in a variety of cultural settings;

(2) how science and technology have transformed the physical world and human society to include its impact on time, space, place, and the interactions between humans and their environment;

(3) how science and technology influence the core values, beliefs, and attitudes of society, and how core values, beliefs, and attitudes of society shape scientific and technological change;

(4) how to evaluate various policies that have been proposed as ways of dealing with social changes resulting from new technologies, for example, genetically engineered plants and animals;

(5) varied perspectives about human societies and the physical world using scientific knowledge, ethical standards, and technologies from diverse world cultures; and

(6) strategies and policies for influencing public discussions associated with technology-society issues, such as the greenhouse effect.

I. A teacher of social studies understands the relationship of global connections among world societies to global interdependence. The teacher must understand:

(1) how language, art, music, belief systems, and other cultural elements can facilitate global understanding or cause misunderstanding;

(2) conditions and motivations that contribute to conflict, cooperation, and interdependence among groups, societies, and nations;

(3) the effects of changing technologies on the global community;

(4) causes, consequences, and possible solutions to persistent, contemporary, and emerging global issues;

(5) relationships and tensions between national sovereignty and global interests;

(6) the role of international and multinational organizations in the global arena;

(7) how individual behaviors and decisions connect with global systems; and

(8) concerns, issues, and conflicts related to universal human rights.

J. A teacher of social studies understands that civic ideals and practices of citizenship is critical to full participation in society and is the central purpose of the social studies. The teacher must understand:

(1) the origins and the continuing influence of key ideals of the democratic republican form of government;

(2) sources and examples of citizens' rights and responsibilities;

(3) how to locate, access, analyze, organize, synthesize, evaluate, and apply information about selected public issues that are representative of multiple points of view;

(4) forms of civic discussion and participation that are consistent with the ideals of citizens in a democratic republic;

- (5) the influence of various forms of citizen action on public policy;
- (6) how to analyze a variety of public policies and issues from the perspective of formal and informal political actors;
- (7) how to evaluate the effectiveness of public opinion in influencing and shaping public policy development and decision-making;
- (8) the degree to which public policies and citizen behaviors reflect or foster the stated ideals of a democratic republican form of government; and
- (9) ways for strengthening the common good through citizen empowerment and action.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;
- (2) understand and apply the research base for and the best practices of middle and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of each social studies discipline and know how to apply instructional strategies and materials for achieving student understanding of these disciplines;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing 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; 122A.18*

History: *23 SR 1928; 34 SR 595*

Published Electronically: *November 19, 2009*

8710.4825 TEACHER COORDINATORS OF WORK-BASED LEARNING.

Subpart 1. Scope of practice. A teacher coordinator of work-based learning is authorized to provide and coordinate instruction that enables students to learn through work and to consult and collaborate with families, other teachers, and business, industry, labor, and community representatives in designing, implementing, and evaluating student learning through work. For the purposes of this part, "work-based learning" means learning through paid and unpaid work-based experiences where the worksite is the educational setting for one or more hours of the school day or week for one or more quarters or semesters of the school year.

Subp. 2. License requirements. A candidate for licensure as a teacher coordinator of work-based learning shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. hold or apply and qualify for another Minnesota license valid for teaching in grades 9 through 12; and
- C. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teacher coordinators of work-based learning in subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher coordinator of work-based learning 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. The knowledge and skills required in this subpart shall be acquired through college coursework and experiences including employment, internship, mentorship, job shadowing, or apprenticeships.

A. A teacher coordinator understands the central concepts, tools of inquiry, and history and context of work-based learning. The teacher must understand:

- (1) contemporary issues pertaining to creating learning environments for students at work;
- (2) models and legislation that provide the basis for connecting students' school experiences with the workplace or further education and for learning through work; and
- (3) the role of work-based learning in providing students kindergarten through grade 12 with opportunities to learn about work and how to work and, when appropriate, to learn through work.

B. A teacher coordinator understands how to design and implement school-based instruction that focuses on enabling students to learn about work, how to acquire skills, and gain a perspective and direction on a career pathway. The teacher must understand:

- (1) basic workplace readiness and employability skills and employment trends;
- (2) the role and process of a human resources department in the organizational structure;

- (3) the career decision-making process, including self-awareness, career research, workplace expectations, career development strategies, school-to-work transition, and life-long learning;
- (4) how to research a career and access career information;
- (5) how to connect students' school-based experiences with everyday life, the workplace, and future educational opportunities;
- (6) unique student needs and how to adapt and modify curriculum and instruction and work collaboratively with other teachers to accommodate the unique needs;
- (7) strategies for teaching students self-advocacy and functional life skills relevant to independence, social skills, and community and personal living;
- (8) strategies for teaching students to learn about work, how to acquire skills, and gain a perspective on a career;
- (9) role and purpose of intra-curricular activities including their application as a vehicle for teaching group process, cooperation, collaboration, service, and leadership;
- (10) how to market the work-based learning program including student and employer recruitment and retention techniques; and
- (11) how to implement systematic procedures for continuous program improvement.

C. A teacher coordinator understands how to establish and monitor work-based instruction that focuses on enabling students to learn about work, how to acquire skills, and gain a perspective and direction on a career pathway. The teacher must understand:

- (1) criteria for determining when work is a learning experience;
- (2) various placement options and selection of educational options based on the needs, abilities, and interests of the student;
- (3) laws pertaining to employment including the Americans with Disabilities Act, state and federal labor laws including wage and hour laws and volunteerism, and data privacy laws;
- (4) how to develop and implement training agreements that are consistent with school guidelines and expectations for student participation in the program;
- (5) how to match the individual needs of the student to the work-based learning site;
- (6) how to work collaboratively in designing, implementing, and evaluating a student's individual training plan;
- (7) job task analysis and how to use it to appropriately sequence instruction;
- (8) how to teach mentors and students in the work-based learning setting;
- (9) how to monitor, summarize, and report the acquisition of the work-based learning outcomes identified in the training plan;
- (10) performance assessment and how to apply it to assessing student on-the-job learning; and
- (11) how to identify, develop, and maintain employment sites.

D. A teacher coordinator communicates and interacts with students, their families, other teachers, and representatives of business, industry, labor, and the community to support student learning through work. The teacher must understand:

- (1) how to actively engage parents, and representatives of business, industry, labor, and community organizations as active partners in creating educational opportunities;
- (2) how to assist students and their parents in making decisions about students' academic and occupational choices;
- (3) effective communication and problem-solving skills; and
- (4) how to access and evaluate information from consumer and professional organizations, publications, and journals relevant to teaching and learning through work.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher coordinator of work-based learning are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928*

Published Electronically: *November 19, 2009*

8710.4850 TEACHERS OF TECHNOLOGY.

Subpart 1. **Scope of practice.** A teacher of technology is authorized to provide to students in grades 5 through 12 instruction that is designed to provide an understanding of the continually developing technological world using as its context the areas of transportation, construction, power and energy, communications, manufacturing, biotechnology, and other contemporary and emerging technologies to include orienting students to careers in these and other technological areas. The instruction focuses on teaching students how to extend human capability with products or processes using the technological method through providing them with experiences for creating a system that integrates equipment, machines, tools, software, hardware, and other technological devices to complete a task; how to adapt to technological changes in all aspects of their lives including home, leisure, and work; and how to assess the impact of technology from an environmental, social, economic, cultural, historical, and ethical perspective.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach technology to students in grades 5 through 12 shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards for effective practice for licensing of beginning teachers 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 technology in subpart 3.

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.

A. A teacher of technology understands central concepts common to technology content. The teacher must understand:

(1) the technological method including defining the problem, researching, identifying possible solutions, analysis, implementation, and evaluation and how to apply it;

(2) how to identify, classify, and organize content within the following technological bodies of knowledge:

(a) communications technology including:

i. graphic and electronic forms of communications;

ii. the processes of designing, drafting, photographing, printing, technical writing, and computer-based communication; and

iii. communication systems such as data processing, programming, recording and playing, and transmitting and receiving information;

(b) construction technology including:

i. the fields of residential, commercial, and civil construction; and

ii. construction systems, including wood, concrete, steel, composites, electrical, mechanical, and site development;

(c) manufacturing technology including:

i. custom, intermittent, and continuous types of manufacturing;

ii. manufacturing processes relating to materials used and the processes of forming, separating, combining, measuring, and finishing; and

iii. manufacturing systems such as research and development, automation, material handling, and quality control;

(d) energy and power technology including:

i. radiant, chemical, thermal, mechanical, electrical, and nuclear forms of energy;

ii. methods of extracting, conserving, measuring, controlling, converting, transmitting, and storing energy;

iii. fossil fuel, solar, nuclear, electrical, fluid, and renewable energy resources; and

iv. converting, measuring, altering and controlling mechanical power systems;

(e) transportation technology including:

i. terrestrial, marine, atmospheric, and space modes of transportation; and

ii. propulsion, suspension, guidance, control, support, and structural systems of transportation;

(f) biotechnology including:

i. plant, animal, and machine applications of biotechnology and biotechnology processes for propagating, growing, maintaining, harvesting, adapting, treating, and converting; and

ii. human factors, engineering, health care, cultivation of plants and animals, fuel and chemical production, waste management and treatment, and biomaterials; and

(g) management of technologically related resources including the resources of time, capital, energy, tools, materials, information, and people needed to use biotechnology, communication, construction, manufacturing, energy and power, and transportation technology;

(3) how technological elements, components, and devices function in micro and macro systems including input, process, output, and feedback, and why systems interact or behave as they do;

(4) historical, sociological, ethical, environmental, and economic impacts of technology; and

(5) current and emerging technological careers, the importance of possessing lifelong learning values, workplace skills, and an understanding of the developmental career process as gained through employment, internship, mentorship, job shadowing, or apprenticeship.

B. A teacher of technology understands central concepts common to the teaching and learning of technology education content. The teacher must understand:

(1) the definition, philosophy, and rationale of technology education;

(2) technological issues and problems for teaching decision-making, critical thinking, and problem-solving skills;

(3) how to use tools, equipment, materials, and processes in technology education learning environments safely; and

(4) laboratory oriented instructional skills necessary for modeling technological expertise including craftsmanship, visualization skills, spatial relationships, mechanical aptitude, and design principles.

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:

(1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of preadolescents and adolescents;

(2) understand and apply the research base for and the best practices of middle and high school education;

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

(4) understand the role and alignment of district, school, and department mission and goals in program planning;

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

(6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;

(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.

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.

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

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

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8710.4900 TEACHERS OF VISUAL ARTS.

Subpart 1. **Scope of practice.** A teacher of visual arts is authorized to provide to students in kindergarten through grade 12 instruction that is designed to develop an understanding of the creative works and processes of producing visual art forms.

Subp. 2. **Licensure requirements.** A candidate for licensure to teach visual arts to students in kindergarten through grade 12 shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers 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 visual arts in subpart 3.

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.

A. A teacher of visual arts demonstrates an understanding of and how to teach aesthetic principles and habits and knows processes for evaluating them. The teacher must:

(1) know how to make careful and clear distinctions to support factual claims from value and meaning claims;

(2) know that learning about art involves questioning, making conclusions, and forming concepts of the nature of art to distinguish works of art from other objects;

(3) understand that philosophers of art have reached quite different conclusions about what art is; and

(4) know questioning strategies that lead to understanding the nature, relationship, and value of art.

B. A teacher of visual arts understands and evaluates art theory and art studio practice. The teacher must:

(1) understand and apply formal elements and principles of design;

(2) understand and apply theories of color, spatial relationships, and perception;

(3) know ways for developing ideas for artistic metaphors derived from exploration of the physical world, the needs of other people, psychological interests, and reflecting on sensory and formal qualities;

(4) be able to make technical and aesthetic decisions and modify ideas as work proceeds;

(5) develop skills in manipulating two-dimensional and three-dimensional art materials and explore a variety of methods and effects;

(6) know the various standards to consider in determining whether a work is finished or successful;

(7) be able to apply various artistic standards in judging personal works of art;

(8) know how to alternate between invention, the role of artist, and selection, the role of critic;

(9) understand the sustained personal effort and the pleasure and satisfaction of producing a work of art; and

(10) demonstrate competence in a minimum of one medium or process in each of the following six studio art areas, with an emphasis in at least two areas:

(a) drawing, including experiences in rendering, gesture, and contour;

(b) painting, for example, experiences with water color, tempera, oil, acrylic, or mixed media;

(c) sculpture, for example, experiences with wood, metal, fibers, paper mache, molding, casting, or found objects; ceramics, for example, experiences with glazing, hand building, throwing, and firing; or architecture, for example, experiences with model making, rendering, and computer imaging;

(d) graphic arts; photography, for example, experiences with still, black and white, film processing, and digital imaging; or printmaking, for example, experiences with silk screening, monoprinting, relief printing, stenciling, serigraphy, engraving, or intaglio;

(e) fiber arts, for example, experiences with weaving, papermaking, quilting, or stitchery; and

(f) computer graphics, video and animation, performance art, or conceptual art.

C. A teacher of visual arts understands that works of art are affected by where and when they were produced. The teacher must:

(1) understand the effect of culture and temporal contexts on the appearance of artworks and the point of view of persons of other cultures or other times in interpreting the art;

(2) analyze and interpret contextual information about traditional art forms within various cultures;

(3) understand the chronological development of art from prehistoric to present; and

(4) use art historical research processes.

D. A visual arts teacher understands, produces, and evaluates critical interpretations of works of art. The teacher must:

(1) understand that art critics base their judgment of artworks on specific standards, interpret how artworks function in society, and select appropriate standards for judging artworks;

(2) know how to apply a variety of critical perspectives in interpreting works by investigating significant meaning and expressive content of the works, to synthesize description and analysis into an interpretive judgment; and

(3) know how to use criticism models to compare and contrast qualities within artwork using the sensory, formal, technical, and expressive scanning model and the description, analysis, interpretation, and judgment strategies model.

E. A teacher of visual arts understands central concepts common to the teaching and learning of art education content. The teacher must understand:

- (1) philosophical influences within art education;
- (2) the goals and purposes of art education, making principled decisions about practice;
- (3) the historical foundations of art education and training in visual art;
- (4) art education research to enhance teaching effectiveness;
- (5) the importance of the arts to the individual, school, community, and society to include careers, hobbies, and leisure time activities;
- (6) how to budget an art program and manage art classroom procedures;
- (7) how to conduct meaningful and appropriate assessments and evaluations of programs; and
- (8) safe use of tools, equipment, materials, and processes in visual art education learning environments.

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:

- (1) understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- (2) understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;
- (3) develop curriculum goals and purposes based on the central concepts of visual arts and know how to apply instructional strategies and materials for achieving student understanding of this discipline;
- (4) understand the role and alignment of district, school, and department mission and goals in program planning;
- (5) understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- (6) know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- (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.

Subp. 4. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

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; 122A.18*

History: *23 SR 1928; 34 SR 595*

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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*

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8710.4950 TEACHERS OF WORLD LANGUAGES AND CULTURES.

Subpart 1. **Scope of practice.** A teacher of world languages and cultures is authorized to provide to students instruction that is designed to develop language fluency and cultural understanding in a language other than spoken English. If teaching in an immersion setting where the entire academic curriculum is taught in a language other than English, the teacher shall hold licensure with the scope of practice appropriate to the subjects to be taught. The specific language or languages which the teacher is qualified to teach must be clearly indicated on the license.

Subp. 2. Licensure requirements for teachers of world languages and cultures.

A. A candidate for licensure to teach world languages and cultures to students in kindergarten through grade 8 shall:

- (1) hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- (2) hold or apply and qualify for a Minnesota elementary education classroom teaching license; and
- (3) show verification of completing a Board of Teaching approved preparation program leading to the licensure of teachers of world languages and cultures in subpart 3, 4, or 5.

B. A candidate for licensure to teach world languages and cultures to students in kindergarten through grade 12 shall:

- (1) hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- (2) demonstrate the standards for effective practice for licensing of beginning teachers in part 8700.2000; and
- (3) show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of world languages and cultures in subparts 3 and 6, 4 and 6, or 5 and 6.

Subp. 3. Subject matter standard for teachers of modern languages and cultures. A candidate for licensure as a teacher of modern languages and cultures must complete a preparation program under subpart 2, item A or B, subitem (3), that must include the candidate's demonstration of the knowledge and skills in items A to C.

A. All teachers of modern languages and cultures must:

- (1) understand language as a system;
- (2) understand first and second language acquisition theory and how this informs practice;
- (3) demonstrate intermediate-high level speaking proficiency as defined in the ACTFL Proficiency Guidelines established by the American Council on the Teaching of Foreign Languages;
- (4) comprehend, interpret, and evaluate information received in the target language through reading and listening at the level that results from demonstrating the speaking proficiency; and
- (5) use familiar topics to write narratives and descriptions of a factual nature or routine correspondence consisting of several paragraphs at a level understandable to a native speaker of the target language.

B. A teacher who is a native speaker of the modern language to be taught must:

(1) demonstrate advanced level speaking proficiency in English and the target language as defined in the ACTFL Proficiency Guidelines;

(2) comprehend, interpret, and evaluate information received in the target language and in English through reading and listening at the level that results from demonstrating the speaking proficiency; and

(3) use familiar topics to write in English and the native language narratives and descriptions of a factual nature or routine correspondence consisting of several paragraphs to a level understandable to a native.

C. A teacher of modern languages and cultures must:

(1) be aware of areas of the world where the target language is spoken and know that life in all these areas may vary widely;

(2) understand the target culture from a variety of perspectives, including historical, geographical, political, and artistic and contemporary viewpoints;

(3) be familiar with culture and literature of children and adolescents in both the United States and target cultures;

(4) understand the history of institutions within the cultures sufficiently for comprehending why current conditions exist;

(5) have a sociolinguistic understanding sufficient for accurately communicating the interrelationships of the language and culture;

(6) understand that both content and process are important and that cultural knowledge and understanding are interdisciplinary;

(7) understand that culture is neither monolithic nor static and that developing insights into the variability of cultural phenomena is a lifelong process;

(8) know that every cultural phenomenon is unique and is affected by age, geographic region, sex, class, and other factors and that multiple perspectives, value systems, and modes of decision-making and behaviors exist;

(9) know about cultural stereotyping and how to address it as a result of developing skills in processing information which include observing, comparing, and inquiring about cultural phenomena; analyzing and hypothesizing about the phenomena; and synthesizing and determining their generalizability;

(10) compare and contrast cultures of people who speak another language with the teacher's own culture; and

(11) have opportunities for first-hand experiences with the target cultures, whether in the United States or abroad, and relate those experiences to the classroom setting.

Subp. 4. Subject matter standard for teachers of classical languages and cultures/Greek and Latin. A candidate for licensure as a teacher of classical languages and cultures must complete a preparation program under subpart 2, item A or B, subitem (3), that must include the candidate's demonstration of the knowledge and skills in items A and B.

A. A teacher of classical languages and cultures must:

(1) understand language as a system;
(2) understand first and second language acquisition theory and how this informs practice;
(3) demonstrate competencies in four modalities of reading, speaking, listening, and writing:

(a) the teacher must:
i. read with understanding passages of prose or poetry of the most important Latin and Greek authors, for example, Caesar, Cicero, Vergil, Ovid, Horace, Livy, Plato, Homer, and dramatists;
ii. explain grammatical structures of the sentences and analyze word forms, including case use, mood, and tense; and
iii. infer meanings of unfamiliar words from cognates, derivatives, and context;

(b) the teacher must:
i. pronounce Latin and Greek correctly;
ii. orate prose with expression and correct inflection;
iii. orate poetry according to metrical principles;
iv. greet students, give simple commands, and lead oral exercises; and
v. orally formulate Latin and Greek questions based on a reading passage;

(c) the teacher must understand main ideas of a connected oral reading; and

(d) the teacher must:
i. accurately construct grammatical Latin and Greek from a moderately complex English original; and
ii. transform sentences from one grammatical structure to another;

(4) understand Latin's relation to English and other modern languages; identify Latin- and Greek-based English words, understand their etymology, and provide cognates; and identify Latin and Greek terminology commonly used in science, law, medicine, and Latin abbreviations, terms, phrases, and mottos commonly used in English; and

(5) understand the value of extra activities promoting cultural interest.

B. A teacher of classical languages and cultures must:

(1) be aware of areas of the world where the language was spoken and know that life in these areas varied widely;
(2) have a sociolinguistic understanding sufficient for accurately communicating the interrelationships of the language and culture;
(3) understand that both content and process are important and that cultural knowledge and understanding are interdisciplinary;
(4) understand that culture is neither monolithic nor static and that developing insights into the variability of cultural phenomena is a lifelong process;

(5) know that every cultural phenomenon is unique and is affected by age, geographic region, sex, class, and other factors and that multiple perspectives, value systems, and modes of decision-making and behaviors exist;

(6) know about cultural stereotyping and how to address it as a result of developing skills in processing information, including observing, comparing, and inquiring about cultural phenomena; analyzing and hypothesizing about the phenomena; and synthesizing and determining generalizability of the phenomena;

(7) compare and contrast cultures of people who speak another language with the teacher's own culture; and

(8) have opportunities for on-site experiences with chronologically distant cultures and relate those experiences.

Subp. 5. Subject matter standard for teachers of American sign language and deaf culture. A candidate for licensure as a teacher of American sign language and deaf culture must complete a preparation program under subpart 2, item A or B, subitem (3), that must include the candidate's demonstration of the knowledge and skills in items A to C.

A. A teacher of American sign language and deaf culture must:

(1) understand language as a system;

(2) understand first and second language acquisition theory and how this informs practice;

(3) demonstrate intermediate-plus level of expressive language proficiency on the Signed Communication Proficiency Interview established by the National Technical Institute for the Deaf;

(4) demonstrate receptive language proficiency in American sign language through comprehending, explaining, and evaluating information received from an individual who signs at the intermediate high level as defined by the Signed Communication Proficiency Interview Guidelines established by the National Technical Institute for the Deaf; and

(5) use familiar topics to narrate and describe factual information or routine communication at a level understandable to a native American sign language user.

B. A teacher whose first language is American sign language must:

(1) comprehend and evaluate information received in English; and

(2) use familiar topics to write in English narratives and descriptions of a factual nature or routine correspondence consisting of several paragraphs to a level understandable to a person whose first language is American sign language.

C. A teacher of American sign language and deaf culture must:

(1) know where American sign language is used;

(2) understand the deaf culture from a variety of perspectives, including historical, geographical, political, and contemporary viewpoints;

(3) be familiar with similarities and differences between deaf and hearing culture in the United States;

(4) understand the history, customs, and practices of deaf culture sufficiently to comprehend why current conditions exist;

- (5) have a sociolinguistic understanding sufficient for accurately communicating the interrelationships of the language and culture;
- (6) understand that both content and process are important and that cultural knowledge and understanding are interdisciplinary;
- (7) understand that culture constantly grows and that developing insights into culture is a lifelong process;
- (8) know that every cultural phenomenon is unique and is affected by age, geographic region, sex, class, and other factors and that multiple perspectives, value systems, and modes of decision-making and behaviors exist;
- (9) know about cultural stereotyping and how to address it as a result of developing skills in processing information that include observing, comparing, and inquiring about cultural phenomena; analyzing and hypothesizing about the phenomena; and synthesizing and determining generalizability of the phenomena;
- (10) compare and contrast cultures of people who use languages other than spoken English with the teacher's own culture; and
- (11) have opportunities for first-hand experiences in deaf culture and relate to those experiences.

Subp. 6. Teaching and learning. A candidate for licensure as a teacher of world languages and cultures must complete a preparation program under subpart 2, item B, subitem (3), that must include the candidate's demonstration of an understanding of the teaching of world languages and cultures that integrates understanding of the world language and culture with an understanding of pedagogy, students, learning, classroom management, and professional development. A teacher of world languages and cultures to children, preadolescents, and adolescents in kindergarten through grade 12 shall:

- A. understand and apply educational principles relevant to the physical, social, emotional, moral, and cognitive development of children, preadolescents, and adolescents;
- B. understand and apply the research base for and the best practices of kindergarten and primary, intermediate, and middle and high school education;
- C. develop curriculum goals and purposes based on the central concepts of language and culture and know how to apply instructional strategies and materials for achieving student understanding of the language and culture;
- D. understand the role and alignment of district, school, and department mission and goals in program planning;
- E. understand the need for and how to connect students' schooling experiences with everyday life, the workplace, and further educational opportunities;
- F. know how to involve representatives of business, industry, and community organizations as active partners in creating educational opportunities;
- G. understand the role and purpose of cocurricular and extracurricular activities in the teaching and learning process;

H. understand the impact of reading ability on student achievement in second language studies, recognize the varying reading comprehension and fluency levels represented by students, and possess the strategies to assist students to read world language content more effectively; and

I. apply the standards of effective practice in teaching students through a variety of early and ongoing clinical experiences with kindergarten, primary, or intermediate; and middle level and high school students within a range of educational programming models.

Subp. 7. Continuing license. A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licensure.

Subp. 8. Incorporations by reference.

A. For the purposes of this part, the ACTFL Proficiency Guidelines published in 1986 by the American Council on the Teaching of Foreign Languages, 6 Executive Plaza, Yonkers, NY 10701-6801, and subsequent editions are incorporated by reference. The guidelines are not subject to frequent change and are available from the State Law Library.

B. For the purposes of this part, the Signed Communication Proficiency Interview Guidelines published in August 1994 by the National Technical Institute for the Deaf, 52 Lomb Memorial Drive, Rochester, NY 14623-5604, and subsequent editions are incorporated by reference. The guidelines are not subject to frequent change and are available from the State Law Library.

Subp. 9. Effective date. Requirements in this part for licensure as a teacher of world languages and cultures are effective on September 1, 2001, and thereafter.

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8710.5000 CORE SKILLS FOR TEACHERS OF SPECIAL EDUCATION.

Subpart 1. Licensure requirements.

A. A candidate recommended for licensure in special education shall complete the core skill area licensure requirements in subpart 2 as part of each special education teacher preparation program approved under part 8700.7600 by the Board of Teaching.

B. A candidate recommended for licensure in special education shall meet the statutory requirements regarding comprehensive scientifically based reading instruction required by Minnesota Statutes, section 122A.09, subdivision 4, paragraph (e), and as specified in part 8710.3200, subpart 3, items C to F.

Subp. 2. Core skill areas. A teacher of special education possesses understandings and skills in special education foundations: referral, evaluation, planning, and programming processes; instructional design, teaching, and ongoing evaluation; and collaboration and communication in items A to D.

A. Foundational knowledge: A teacher of special education understands the foundations of special education, including information about students served by special education. The teacher must demonstrate knowledge of the:

(1) role of special education within the structure of a single, evolving, and changing education system that provides, based on an individualized planning and programming process, free appropriate public education to students in special education through a continuum of services;

(2) relationship of special education to other components of the education system, including access to grade-level content standards, prevention efforts and early intervening services, Title 1, bilingual education, the education of English learners, Section 504 accommodations, and gifted education;

(3) historical and philosophical foundations, legal bases, ethical principles and standards of professional practice, principles of evidence-based practice, the effects of attitudes and expectations, and contemporary issues pertaining to the education of individuals with disabilities;

(4) definitions, characteristics, and educational implications for students with disabilities eligible for special education services;

(5) similarities and differences among the cognitive, physical, sensory, cultural, social, emotional, behavioral, and communication needs of individuals with and without disabilities and across different disabilities;

(6) impact of coexisting conditions, multiple disabilities, and gifts and the implications for the provision of educational services;

(7) impact of gender, familial background, socioeconomic status, racial, cultural, and linguistic diversity on disabilities and involvement in all aspects of special education;

(8) rights and responsibilities of students, parents, teachers, other professionals, and schools related to students with disabilities;

(9) medical terminology and educational implications of medical conditions, including the effect of medication and specialized health care in educational settings;

(10) standards for restrictive procedures, alternatives to using those procedures, the risks of using those procedures including medical contraindications, and principles of individual and schoolwide positive behavioral interventions and supports, including the roles of systems, data, and practices;

(11) the importance and utility of parent involvement in student academic achievement, and the implications for the provision of educational services;

(12) legal, judicial, medical, and educational systems and their terminologies and implications in serving students with disabilities; and

(13) roles and organizational structures of general and special education and the part they play in providing total services to all students.

B. Referral, evaluation, planning, and programming: A teacher of special education understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement. The teacher must be able to:

(1) convey the rights and responsibilities of students, parents, teachers, and schools regarding the provision of educational services to students with disabilities;

(2) satisfy the due process, data privacy, procedural safeguards, and ethical requirements of the referral, evaluation, planning, and programming processes of special education;

- (3) satisfy child find requirements during universal screening and early intervening efforts;
- (4) integrate multiple sources of student data relative to progress toward grade-level content standards from prior prevention and alternate instruction efforts into the referral process;
- (5) implement required prereferral intervention procedures;
- (6) design, facilitate, and support a comprehensive, multidisciplinary evaluation process using unbiased assessment measures;
- (7) select and use assessment measures and procedures that are technically adequate and appropriate for the student and specific assessment purpose, including assistive technology supports where appropriate;
- (8) communicate the results of assessments and the evaluation process to students, families, teachers, and other professionals;
- (9) understand the effects of various physical and mental health conditions, including the effects of medications, on the educational, cognitive, physical, social, and emotional behavior of individuals with disabilities when planning and administering assessments;
- (10) conduct functional behavioral assessments and use the results to develop behavior intervention plans;
- (11) assess the impact of environmental factors on assessment results and the special education evaluation, planning, and programming process;
- (12) assess the impact of gender, familial background, socioeconomic status, and cultural and linguistic diversity on assessment results and the special education referral, evaluation, planning, and programming process;
- (13) integrate multiple sources of data to develop individualized educational programs and plans;
- (14) produce and maintain the reports, plans, and student assessment and performance data that are required by due process procedures and the school system according to the timelines for each;
- (15) support the selection, acquisition, and use of assistive technology and supplementary aids and services in collaboration with parents and specialists; and
- (16) address the transition needs of students to enhance participation in family, school, recreation or leisure, community, and work life, including personal self-care, independent living, safety, and prevocational and vocational skills.

C. Instructional design, teaching, and ongoing evaluation: A teacher of special education understands how to provide and evaluate specially designed instruction to meet the unique needs of students in special education through individualized educational plans. The teacher must be able to:

- (1) adapt and modify curriculum and deliver evidence-based instruction, including scientific research-based interventions when available, aligned with state and local grade-level content standards to meet individual learner needs;
- (2) lead individual education plan teams through statewide assessment options to make appropriate decisions for a learner's participation within the statewide assessment system;

(3) apply evidence-based methods, strategies, universal design for learning, and accommodations including assistive technologies to meet individual student needs and provide access to grade-level content standards;

(4) use evidence-based instruction, knowledge of subject matter, grade-level content standards, task analysis, and student performance data to sequence instruction and accelerate the rate of learning;

(5) collaborate with other professionals and parents on the design and delivery of prevention efforts, early intervening services, prereferral interventions, English learning, gifted education, and intervention strategies to promote the academic, behavioral, linguistic, communication, functional, social, and emotional competency of students;

(6) apply behavioral theory, student data, evidence-based practices, and ethics in developing and implementing individual student and classroom behavior management plans;

(7) design and manage positive instructional environments that convey high expectations for students to develop independence, self-motivation, self-direction, self-regulation, and self-advocacy;

(8) teach in a variety of service delivery models, including the delivery of specially designed instruction in the general education classroom and collaboration with other educational professionals and paraprofessionals;

(9) apply systematic procedures for compiling and using data for the purposes of continuous progress-monitoring, modification of instruction, and program and schoolwide improvement;

(10) apply knowledge of comprehensive scientifically based reading instruction including phonemic awareness, phonics, fluency, vocabulary development, and reading comprehension as required in subpart 1, item B;

(11) construct and implement instructional sequences to address and teach transition skills based on the cognitive, affective, and academic strengths of each student and plan for transition from school to community living, recreational and leisure, postsecondary training, career training, and employment.

D. Communication and collaboration: A teacher of special education cultivates and maintains positive, collaborative relationships with children and youth, families, educators, other professionals, and the community to support student development and educational progress. The teacher must be able to:

(1) understand how disabilities can impact families as well as the student's ability to learn, interact socially, and contribute to the community throughout the life span;

(2) take into account the dynamics, roles, and relationships within families and communities resulting from differences in familial background, socioeconomic status, and cultural and linguistic diversity and collaborate with language interpreters and cultural liaisons when communicating with families and planning and implementing services;

(3) assist families in identifying resources, priorities, and concerns in relation to a child's development and education;

(4) work collaboratively with family members, including children and youth, in designing, implementing, and evaluating individual educational plans and programs;

(5) facilitate and manage student-specific teams, including those for child study, individualized education program planning, and planning for transitions;

- (6) understand and make use of structures supporting interagency collaboration, including interagency services, agreements, referral, and consultation;
- (7) provide consultation to and receive it from other professionals regarding specially designed instruction and program organization and development for children and youth and families;
- (8) direct and monitor the activities of paraprofessionals, aides, volunteers, and peer tutors;
- (9) access services, networks, agencies, and organizations relevant to the needs of the children and youth and their families;
- (10) access and evaluate information, research, and emerging practices relevant to the field of special education through consumer and professional organizations, peer-reviewed journals, and other publications;
- (11) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with children and youth and their families; and
- (12) cultivate professional relationships that encourage peer observation, coaching, and systems for giving and receiving feedback from colleagues to enhance student instruction and program outcomes.

Subp. 3. Program requirements.

A. An institution applying to the Board of Teaching for approval to prepare teachers of special education in parts 8710.5100 to 8710.5800 shall incorporate the requirements of this part in each preparation program.

B. All colleges and universities approved by the Board of Teaching to prepare persons for classroom teacher licensure must include in teacher preparation programs research-based best practices in reading, consistent with Minnesota Statutes, section 122A.18, subdivision 2a, that enable the licensure candidate to know how to teach reading in the candidate's content areas.

Subp. 4. Effective date. The requirements in this part are effective January 1, 2013, for all applicants for licensure in areas or fields in special education.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 36 SR 1243; L 2012 c 239 art 1 s 33*

Published Electronically: *January 8, 2013*

8710.5050 TEACHERS OF SPECIAL EDUCATION: ACADEMIC AND BEHAVIORAL STRATEGIST.

Subpart 1. Scope of practice. A teacher of special education: academic and behavioral strategist is authorized to provide evaluation and specially designed instruction to eligible children and youth with disabilities from kindergarten through age 21 who have a range of mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance. These students come from the primary disability areas of autism spectrum disorders (ASD), developmental cognitive disability (DCD), emotional or behavioral disorders (EBD), other health disorders (OHD), and specific learning

disabilities (SLD). This teacher is not prepared to serve needs beyond those that are moderate in these disability areas.

The teacher with this license may work in collaboration with, but not replace the expertise and services of those who serve children and youth with a disability in the areas of: blind or visually impaired, deaf or hard of hearing, deaf-blind, speech and language impairment, physical impairments, traumatic brain injury, and severely multiply impaired. For these children and youth, a teacher with the academic and behavioral strategist (ABS) licensure would need to refer to an educational professional with expertise, certification, or specific special education licensure. This teacher is required to collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized education program plans.

Subp. 2. License requirements. A candidate for licensure to teach students from kindergarten through age 21 who have a range of mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;
- C. demonstrate core skill requirements in part 8710.5000; and
- D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to licensure of teachers of special education: academic and behavioral strategist in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: academic and behavioral strategist understands the foundations of special education services for students who have mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance on which to base practice. The teacher must demonstrate knowledge of the:

- (1) central concepts, tools of inquiry, history and context, models, theories, and philosophies that form the bases for special education practice for students with academic, behavioral, functional, social, emotional, and communication needs;
- (2) laws, policies, and ethical principles regarding behavior management planning and implementation of positive behavior supports for students with challenging behavior;
- (3) educational definitions, issues related to identification, and eligibility criteria pertaining to students with emotional or behavioral disorders, specific learning disabilities, developmental cognitive disabilities, autism spectrum disorders, and other health disabilities, including those from culturally and linguistically diverse backgrounds;
- (4) etiology, characteristics, and classifications of students with emotional or behavioral disorders, specific learning disabilities, developmental cognitive disabilities, autism spectrum disorders, other health disabilities, and traumatic brain injury;

- (5) similarities and differences across disabilities, including impact of coexisting conditions or multiple disabilities, on acquisition of academic, behavioral, functional, social, emotional, and communication skills and how to meet the needs in a range of service delivery models;
- (6) levels of support required and a continuum of related services available for students with developmental cognitive and other disabilities to succeed in a range of environments;
- (7) research-based theories of behavior and the impact of disability, gender, familial background, socioeconomic status, cultural, and linguistic factors on perceptions and interpretations of behavior for students with emotional or behavioral disorders and other disabilities;
- (8) impact of abuse and dependency on individuals, their families, and the community;
- (9) impact of information processing deficits on children and youth with specific learning disabilities and other disabilities;
- (10) legal, judicial, medical, and educational systems and their terminologies and implications in serving students with disabilities;
- (11) how attributions, anxiety, withdrawal, and thought disorders affect learning and behavior; and
- (12) the major mental health disorders manifested during early childhood, childhood, adolescence, and adulthood and the complexities of comorbidity including behavioral manifestations of these disorders and their effects on learning and implications for instruction.

B. Referral, evaluation, planning, and programming. A teacher of special education: academic and behavioral strategist understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students who have mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance. The teacher must be able to:

- (1) select, administer, and interpret academic, behavioral, functional, social, emotional, and communication screening tools;
- (2) design, implement, evaluate, and adjust as needed, research-based interventions based on screening results, information from families, and performance data in the context of general education instruction and prereferral interventions;
- (3) consult and collaborate with school personnel and families to maintain educational supports found to be effective during prereferral interventions and needed in the general education classroom;
- (4) apply decision-making procedures based on data to determine when students are not responding to interventions and should be referred for a formal, comprehensive evaluation;
- (5) evaluate one's own knowledge, strengths, and limitations in evaluation planning, administration, and interpretation of results to assemble a comprehensive team with the capacity to assess all known and suspected areas of student needs, disability, and level of severity, in the areas of specific learning disabilities, emotional or behavioral disorders, developmental cognitive disabilities, autism spectrum disorders, other health disabilities, and other related disabilities;
- (6) select, administer, and interpret a variety of informal and formal assessments, including rating scales, interviews, observation checklists, direct observations, formative assessments,

assistive technology considerations, and academic achievement assessments, accounting for technical adequacy, limitations, and ethical concerns;

(7) complete, as a member of a team, a systematic, functional behavioral assessment including consideration of the forms and functions of behaviors, context in which behaviors occur, and antecedents and consequences of behaviors for the purpose of developing an individual positive behavior support plan;

(8) integrate assessment results and information available from family, school personnel, legal system, medical, and mental health providers into the evaluation, planning, and programming process;

(9) communicate the purpose, procedures, and results of interventions, assessments, and the evaluation process to students, families, educators, and other professionals;

(10) collaborate with teachers, specialists, and related service providers, to identify patterns of strengths and weaknesses that require systematic explicit instruction, accommodations, and modifications, including the use of assistive technology for access to the curriculum;

(11) address factors such as gender, socioeconomic status, and familial, cultural, and linguistic diversity that may influence the identification of students in the areas of specific learning disabilities, emotional or behavioral disorders, developmental cognitive disabilities, autism spectrum disorders, and other health disabilities; and

(12) design and implement individualized education program plans, considering a range of educational placement options and required levels of support in the least restrictive environment, that integrate student strengths, needs, assessment results, and student and family priorities, incorporating academic and nonacademic goals.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: academic and behavioral strategist understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students who have mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance. The teacher must be able to:

(1) utilize principles of universal design for learning in order to meet student needs across disability areas and across settings and provide access to grade-level content standards;

(2) design, implement, modify, and adjust instructional programs and processes and adapt materials and environments to enhance individual student participation and performance when serving students with a range of disabilities and diverse needs;

(3) design, implement, monitor, and adjust goals and objectives to address the individual strengths and needs of students with autism spectrum disorders, developmental cognitive disabilities, emotional or behavioral disorders, specific learning disabilities, and other health disabilities;

(4) monitor, collect, summarize, evaluate, and interpret data to document progress on skill acquisition and make adjustments to and accommodations in instruction;

(5) select and apply evidence-based instructional practices, including those supported by scientifically based research when available, for academic instruction, social skills instruction, affective education, and behavior management for students with a range of disabilities and diverse needs within a common instructional setting;

(6) apply strategies to increase functional developmental skills, academic skills, reasoning, problem solving skills, study skills, organizational skills, coping skills, social skills, self-advocacy, self-assessment, self-awareness, self-management, self-control, self-reliance, self-esteem, test-taking skills, and other cognitive strategies to ensure individual success in one-to-one, small-group, and large-group settings, including preparation for transition;

(7) modify instruction and teach skills to increase accuracy, fluency, academic vocabulary, and comprehension in reading, writing, and listening including modifying pace of instruction, introducing monitoring strategies, and providing organizational cues;

(8) modify instruction and teach skills to increase accuracy and proficiency in mathematical reasoning and calculation;

(9) collect and interpret academic progress monitoring data using a variety of assessment tools, including general outcome measures, curriculum-specific measures, and grade-level content standard measures;

(10) design, implement, monitor, and adjust instructional programs;

(11) utilize assistive technology devices, accessible instructional materials, and accommodations to strengthen or compensate for differences in perception, attention, memory, processing, comprehension, and expression;

(12) design, implement, monitor, and adjust a range of evidence-based instructional strategies and practices and develop and adapt specialized materials that facilitate student engagement and the maintenance and generalization of skills;

(13) access information from functional behavioral assessments in order to develop, implement, monitor, evaluate, and revise as needed an individual positive behavioral support plan across settings and personnel;

(14) design functional and safe school and classroom environments, utilize classroom management theories and strategies, establish consistent classroom-based positive behavioral support practices, and apply individual positive behavioral interventions and practices to support learning, behavior, social, and emotional needs; and

(15) collect, interpret, and use data to monitor the effectiveness of replacement behaviors, prompts, routines, and reinforcers in changing and maintaining positive behaviors.

D. Collaboration and communication. A teacher of special education: academic and behavioral strategist cultivates and maintains positive, collaborative relationships with children and youth with disabilities who have a range of mild to moderate needs in the areas of academics, behavior, social, emotional, communication, and functional performance, families, educators, other professionals, and the community to support development and educational progress. The teacher must be able to:

(1) access services, networks, agencies, and organizations for individuals with autism spectrum disorders, developmental cognitive disability, emotional or behavioral disability, specific learning disabilities, and other health disabilities and their families;

(2) understand the issues and resources and apply strategies needed when transitioning and reintegrating children and youth into and out of alternative environments;

(3) provide and receive consultation and collaborate with educators, specialists, families, paraprofessionals, and interagency professionals for the purposes of observation, problem-solving,

providing positive behavior supports, and coaching in order to improve the academic and nonacademic performance of children and youth;

(4) differentiate the roles and responsibilities of mental health professionals and agencies from those of school professionals in order to align services to children and youth with disabilities;

(5) assist children and youth and families in understanding terminology and identifying concerns, priorities, and resources during the identification of a disability and at critical transition points across the life span;

(6) apply cultural competencies, including self-awareness of one's personal perspectives, when communicating and problem solving, taking into account differences in familial background, socioeconomic status, and cultural and linguistic diversity;

(7) collaborate and actively participate with stakeholders to develop, implement, and refine schoolwide systems of academic and behavioral supports;

(8) cultivate professional relationships that encourage peer observation, coaching, and systems for giving and receiving feedback from colleagues to enhance student instruction and program outcomes;

(9) access and evaluate information, research, and emerging practices relevant to the fields of autism spectrum disorders, developmental cognitive disability, emotional or behavioral disability, specific learning disabilities, other health disabilities, and academic and behavioral interventions through consumer and professional organizations, peer-reviewed journals, and other publications; and

(10) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with children and youth and their families.

E. Clinical experiences. A teacher of special education: academic and behavioral strategist applies the standards of effective practice in teaching students who have a range of mild to moderate needs from the primary disability areas of autism spectrum disorders, developmental cognitive delays, emotional or behavioral disorders, other health disorders, and specific learning disabilities in primary (kindergarten through grade 4), middle level (grades 5 through 8), and secondary (grades 9 through 12, including transition programs) settings.

Subp. 4. **Continuing licensure.** A continuing license shall be issued and renewed according to rules of the Board of Teaching governing continuing licenses and upon demonstration of holding or being recommended for licensure in one of the following licensure fields: autism spectrum disorders, developmental disabilities, emotional or behavioral disorders, or learning disorders.

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of special education: academic and behavioral strategist are effective January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09*

History: *36 SR 1243*

Published Electronically: *May 21, 2012*

8710.5100 TEACHERS OF SPECIAL EDUCATION: BLIND OR VISUALLY IMPAIRED.

Subpart 1. **Scope of practice.** A teacher of special education: blind or visually impaired is authorized to provide evaluation and specially designed instruction to eligible infants, children, and youth from birth through age 21 who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include vision loss. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized education program plans.

Subp. 2. **License requirements.** A candidate for licensure to teach infants, children, and youth from birth through age 21 who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include vision loss shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;

C. demonstrate core skill requirements in part 8710.5000; and

D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to licensure of teachers of special education: blind or visually impaired in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: blind or visually impaired understands the foundations of special education services for students with vision loss on which to base practice. The teacher must demonstrate knowledge of the:

(1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to the education of infants, children, and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include vision loss;

(2) educational definitions, issues relating to identification, and eligibility criteria for services pertaining to individuals who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include vision loss;

(3) development and use of the human visual system and basic terminology related to the structure, function, diseases, and disorders of the visual system;

(4) the impact of blindness and low vision on the early development of the motor system, cognition, social and emotional interactions, independence, environmental awareness, and language and communication;

(5) effects of blindness or visual impairment on the psychosocial development, self-esteem, and behavior of the student within the family system;

(6) effect that perceptions about blindness, visual impairments, and deaf-blindness can have on individuals with disabilities;

(7) effects of different social, cultural, and linguistic backgrounds on the student's and family's attitudes toward independence, self-evaluation results and interpretation, curriculum and

instruction, advocacy, daily living, social interactions, and transition planning for students who are blind, visually impaired, or deaf-blind and those with additional disabilities that include vision loss;

(8) impact of coexisting conditions or multiple disabilities on students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss; and

(9) writing instruments and devices for students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss.

B. Referral, evaluation, planning, and programming. A teacher of special education: blind or visually impaired understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with vision loss. The teacher must be able to:

(1) understand the ethical considerations, laws, policies, and specialized procedures regarding screening, prereferral, referral, evaluation, identification, and educational planning and service delivery models for students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;

(2) administer and interpret specialized vision evaluation measures, including a functional vision assessment and an assistive technology evaluation, for students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;

(3) integrate evaluation results from multiple professions and communicate the educational implications to students, families, educators, and others;

(4) adapt existing non-disability-specific assessment tools and methods to accommodate the abilities and needs of students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;

(5) collect, integrate, and interpret data from children and youth, parents, families, educators, and others to evaluate, plan, and develop individualized education program plans;

(6) apply evaluation results in the selection of writing instruments and appropriate learning media, including devices and methodologies for students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;

(7) assess, in collaboration with certified specialists, the need for orientation and mobility services for students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;

(8) apply the results of assessments for students with low vision to utilize optical and nonoptical devices and strategies to optimize the use of vision;

(9) assess how students who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss, can enhance the use of senses other than vision;

(10) consider various educational placement options based on the needs of the individual; and

(11) apply evaluation results to design an individualized education program that integrates student and family priorities and concerns to address academic and nonacademic goals.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: blind or visually impaired understands how to use individualized education program plans to design,

implement, monitor, and adjust instruction for infants, children, and youth with hearing loss. The teacher must be able to:

- (1) integrate knowledge of evidence-based instruction, including scientifically based research interventions when available, in language development, reading, writing, and math with characteristics of vision loss in order to design, implement, monitor, and adjust instruction aligned with grade-level content standards;
- (2) transcribe, proofread, interline, and produce Braille materials and tactile graphics using a variety of devices and assistive technologies;
- (3) design, implement, monitor, and adjust strategies to teach basic concepts through the use of auditory, tactual, and modified visual skills to children and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;
- (4) select and use instructional methods, specialized materials, and assistive technologies and strategies that are appropriate for the individual to accomplish instructional objectives for children and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;
- (5) participate in the designing, implementing, monitoring, and adjusting of instructional methods and materials based on grade-level content standards for teaching children and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;
- (6) access and use materials, equipment, and assistive technologies and strategies from a variety of sources to meet the needs of children and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;
- (7) teach the reading and writing of Braille using accepted codes in the Codes of American Usage of English Braille, the Nemeth Code, and computer, music, and foreign language codes for Braille, and tactile graphics;
- (8) use assistive technology and technical aids in the production and use of accessible instructional materials;
- (9) develop, sequence, implement, and evaluate learning objectives based on grade-level core curriculum and expanded core curriculum;
- (10) apply strategies for teaching expanded core curriculum in self-advocacy and functional life skills relevant to independence, social interactions, community and personal living, recreation, and employment;
- (11) design secondary transition plans and teach transition skills for postsecondary education, employment, recreation and leisure, daily living, and community participation;
- (12) monitor, evaluate, and summarize the acquisition of instructional goals and objectives stated in the individualized education program plans; and
- (13) reinforce and support instruction in orientation and mobility provided by certified specialists.

D. Collaboration and communication. A teacher of special education: blind or visually impaired cultivates and maintains positive, collaborative relationships with infants, children, and youth, families, other professionals, and the community to support student development and educational progress. The teacher must be able to:

(1) provide and receive consultation and collaborate with children and youth who are blind, visually impaired, deaf-blind, and those with additional disabilities that include a vision loss, their families, educators, related services personnel, and other service providers in evaluating, planning, and making choices related to academic, postsecondary, and occupational decisions;

(2) identify sources of unique services, networks, agencies, consumer advocacy groups, vendors, and organizations for infants, children, and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss, including rehabilitation agencies, volunteer organizations, private nonprofit organizations, and federal entitlements that relate to the provision of specialized equipment and materials;

(3) understand the roles and responsibilities of educators, related services personnel, orientation and mobility specialists, paraprofessionals, and role models;

(4) make use of structures supporting interagency collaboration and coordinate interagency agreements and transition plans;

(5) identify and access school, community, and social services appropriate to infants, children, and youth who are blind, visually impaired, or deaf-blind, and those with additional disabilities that include a vision loss;

(6) promote collaborative practices that respect the individual and family culture and values relative to the impact that vision loss may have on the individual and family across the life span;

(7) access and evaluate information, research, and emerging practices relevant to the field of blindness, visual impairments, and deaf-blindness through consumer and professional organizations, peer-reviewed journals, and other publications; and

(8) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with children and youth and the family.

E. Clinical experiences. A teacher of special education: blind or visually impaired applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching infants, children, and youth with vision loss in birth through preschool, primary (kindergarten through grade 4), and secondary (grades 5 through 12, including transition programs) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of special education: blind or visually impaired are effective on January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: 23 SR 1928; 36 SR 1243

Published Electronically: *January 8, 2013*

8710.5200 TEACHERS OF SPECIAL EDUCATION: DEAF OR HARD OF HEARING.

Subpart 1. **Scope of practice.** A teacher of special education: deaf or hard of hearing is authorized to provide specially designed instruction, from birth through age 21, to infants, children, and youth with

a broad range of hearing loss and to collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized educational program plans for infants, children, and youth who are auditory, visual, or multimodal learners.

Subp. 2. License requirements. A candidate for licensure to teach, from birth through age 21, infants, children, and youth who are deaf or hard of hearing shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;
- C. demonstrate core skill requirements in part 8710.5000;
- D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of special education: deaf or hard of hearing in subpart 3; and
- E. demonstrate proficiency in American Sign Language communication fluency commensurate with an Intermediate-Plus level of American Sign Language proficiency on the Sign Language Proficiency Interview (SLPI) or a comparable American Sign Language evaluation jointly approved by the Board of Teaching and commissioner of education in consultation with the Minnesota Association of Deaf Citizens and the Commission of Deaf, DeafBlind, and Hard of Hearing Minnesotans, in accordance with Minnesota Statutes, section 122A.28, subdivision 1.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of special education: deaf or hard of hearing must complete a preparation program under subpart 2, item D, that must include the candidate's demonstration of the knowledge and skills in items A to F.

A. **Foundational knowledge.** A teacher of special education: deaf or hard of hearing understands the foundations of special education services for infants, children, and youth who are deaf or hard of hearing, deaf-blind, and those with additional disabilities coexisting with hearing loss on which to base practice. The teacher must demonstrate knowledge of:

- (1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to services to and the education of infants, children, and youth with a hearing loss;
- (2) measurement of hearing loss, educational and audiological definitions, issues related to identification, eligibility criteria, and entrance and exit criteria for services pertaining to infants, children, and youth who are deaf or hard of hearing, deaf-blind, and those with additional disabilities coexisting with hearing loss;
- (3) models, theories, and philosophies that provide the basis for education of children and youth with hearing loss;
- (4) etiologies of hearing loss that can result in additional sensory, motor, or learning differences in infants, children, and youth who are deaf or hard of hearing, deaf-blind, and those with additional disabilities coexisting with hearing loss;
- (5) the effects of compromised sensory input and communication access on the development of language, literacy, academic skills, social, and emotional development of infants, children, and youth who are deaf or hard of hearing, deaf-blind, and those with additional disabilities coexisting with hearing loss;

- (6) selection, acquisition, and use of hearing technologies and assistive technologies;
- (7) diverse beliefs, traditions, and values across cultures and within society and their impact on children and youth with hearing loss, their families, and their education; and
- (8) deaf culture from a variety of perspectives, including the historical, geographical, political, and contemporary viewpoints.

B. Communication systems. A teacher of special education: deaf or hard of hearing demonstrates knowledge of communication systems used by infants, children, and youth who are deaf, hard of hearing, deaf-blind, and those with additional disabilities coexisting with hearing loss. The teacher must demonstrate knowledge of:

- (1) theoretical principles and evidence-based practices of visual, auditory-oral, and tactile modes to convey language with children and youth who are deaf or hard of hearing;
- (2) theories of normative language development, including first and second language acquisition and the importance of early intervention;
- (3) theories of auditory and visual development; and
- (4) theories of linguistics, including linguistics of American Sign Language and English.

C. Referral, evaluation, planning, and programming. A teacher of special education: deaf or hard of hearing understands and applies principles of early identification and intervention and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching infants, children, and youth with hearing loss. The teacher must be able to:

- (1) understand evidence-based screening protocols and practices for the identification of hearing loss in children and youth, with emphasis on early detection, referral, and intervention;
- (2) select, adapt, and modify assessment tools appropriate for infants, children, and youth with a hearing loss and interpret and report results;
- (3) interview, gather, and interpret information from parents, families, educators, and others as part of comprehensive evaluations, which include communication, language, academic, and other developmental domains to determine eligibility and plan individual educational programs;
- (4) assess phonological, morphological, syntactical, semantic, and pragmatic development of language of children and youth with hearing loss specific to the languages used by the child;
- (5) interpret results of a comprehensive evaluation and communicate the impact of the child's hearing loss on language, communication, literacy, academic, social, and emotional development;
- (6) determine, as part of a team, the need for, and the selection, acquisition, and use of hearing technologies and assistive technologies to meet the needs of children and youth with hearing loss;
- (7) design and use strategies to optimize the auditory and visual environments for children and youth with hearing loss; and
- (8) use data to identify and evaluate educational program and placement options to meet the individual needs of children and youth with hearing loss and their families.

D. Instructional design, teaching, and ongoing evaluation. A teacher of special education: deaf or hard of hearing understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for children and youth with hearing loss. The teacher must be able to:

- (1) identify gaps in incidental and experiential knowledge and explicitly teach concepts and skills essential for mastery in multiple educational settings;
- (2) adapt learning environments and use evidence-based instructional strategies, including scientifically based research interventions when available, to meet the physical, academic, cultural, sensory, social, emotional, and communication needs of children and youth with hearing loss;
- (3) support the early development of expressive and receptive language and communication skills and provide for the early development of visual, spoken, auditory, and tactile communication skills;
- (4) facilitate independent and pragmatic communication and language skills in infants, children, and youth with hearing loss and their families;
- (5) design, implement, monitor, and adjust instruction based on ongoing assessment to accommodate the language and academic needs of infants, children, and youth with hearing loss;
- (6) provide access to, develop goals to address, and monitor individual progress in alignment with grade-level content standards;
- (7) incorporate evidence-based first and second language instructional strategies to promote the development of auditory, spoken language, or sign language skills that are consistent with the individualized educational program plan;
- (8) use evidence-based strategies to promote literacy in English;
- (9) use strategies for teaching self-advocacy and compensatory skills related to hearing loss;
- (10) assess and determine the educational need for educational interpreters, transliterators, interveners, tutors, transcribers, notetakers, and other support services;
- (11) identify and implement transition strategies unique to children and youth who are deaf or hard of hearing; and
- (12) determine the need for and implement social learning opportunities.

E. Collaboration and communication. A teacher of special education: deaf or hard of hearing cultivates and maintains positive, collaborative relationships with students, families, other professionals, and the community to support student development and educational progress. The teacher must be able to:

- (1) provide information on laws and best practices to general education teachers, special education teachers, and district-level administration regarding evidence-based practices for children and youth who are deaf or hard of hearing, deaf-blind, and those with additional disabilities coexisting with hearing loss;
- (2) collaborate with children and youth with a hearing loss and their families in making informed educational, communication, and transition choices related to the desired outcomes of children and youth and families across the life span;
- (3) make use of structures supporting interagency collaboration and coordinate interagency agreements and transition plans;
- (4) identify sources of unique services, networks, agencies, and organizations for individuals who are deaf or hard of hearing, deaf-blind, those with additional disabilities coexisting with hearing loss, and those from diverse cultural and language backgrounds;

(5) access school, community, and social service agencies for the purpose of providing appropriate and equitable programming for children and youth who are deaf or hard of hearing, deaf-blind, those with additional disabilities coexisting with hearing loss, and those from diverse cultural and language backgrounds;

(6) understand and communicate educational roles and shared responsibilities of other educators and support personnel, including educational interpreters, transliterators, interveners, paraprofessionals, speech and language clinicians, educational audiologists, notetakers, transcribers, and other related service providers, in providing education services to children and youth who are deaf or hard of hearing, deaf-blind, those with additional disabilities coexisting with hearing loss, and those from diverse cultural and language backgrounds; and

(7) promote collaborative practices that respect the child's and family's culture and values relative to the impact that hearing loss and deaf-blindness may have on the individual and family across the life span;

(8) provide and receive consultation and collaborate in a variety of settings regarding development and implementation of the comprehensive evaluation process, individualized education program planning, delivery of instruction and accommodations, and transition with individuals and agencies;

(9) access and evaluate information, research, and emerging practices relevant to the fields of hearing loss, audiology, and deaf-blindness through consumer and professional organizations, peer-reviewed journals, and other publications; and

(10) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with children and youth and their families.

F. Clinical experiences. A teacher of special education: deaf or hard of hearing shall apply the standards of effective practice in teaching infants, children, and youth who are deaf or hard of hearing through a variety of early and ongoing clinical experiences with birth through preschool, primary (kindergarten through grade 4), and secondary (grades 5 through 12, including transition programs) settings across a range of service delivery models.

Subp. 4. **Continuing licensure.** A continuing license shall be issued and renewed according to the rules of the Board of Teaching governing continuing licenses and must include continuing education in a range of topics relating to hearing loss including American Sign Language, American Sign Language linguistics, or deaf culture in accordance with Minnesota Statutes, section 122A.28.

Subp. 5. **Incorporation by reference.** For the purposes of this part, the Signed Language Proficiency Interview (SLPI) Guidelines published by the National Technical Institute for the Deaf, Rochester Institute of Technology, 52 Lomb Memorial Drive, Rochester, NY 14623-5604, and subsequent editions are incorporated by reference. The guidelines are not subject to frequent change and are available from the State Law Library.

Subp. 6. **Effective date.** Requirements in this part for licensure as a teacher of special education: deaf or hard of hearing are effective on January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 36 SR 1243*

Published Electronically: *January 8, 2013*

8710.5250 TEACHERS OF SPECIAL EDUCATION: ORAL/AURAL DEAF EDUCATION.

Subpart 1. **Scope of practice.** A teacher of special education: oral/aural deaf education is authorized to provide specially designed instruction, from birth through grade 12, to individuals with a broad range of hearing loss and to collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized educational program plans for students only in oral/aural deaf education programs or itinerant services and only for students who do not require American Sign Language or other signed systems for their language of instruction.

Subp. 2. **License requirements.** A candidate for licensure as a teacher of oral/aural deaf education, from birth through grade 12, shall meet all requirements of part 8710.5200, subpart 2, items A to D.

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of oral/aural deaf education shall demonstrate all knowledge and skills in part 8710.5200, subpart 3, items A to F, and shall demonstrate at least minimum skills in American Sign Language, verified through one of the following:

A. successful completion of at least six semester credits of coursework in American Sign Language; or

B. demonstration of at least survival level proficiency in American Sign Language on the Signed Language Proficiency Interview (SLPI), as incorporated by reference in part 8710.5200, subpart 5.

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

Subp. 5. **Effective date.** All requirements in this part for licensure as a teacher of special education: oral/aural deaf education are effective on January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.28*

History: *24 SR 1129; 36 SR 1243*

Published Electronically: *January 8, 2013*

8710.5300 TEACHERS OF SPECIAL EDUCATION: DEVELOPMENTAL ADAPTED PHYSICAL EDUCATION.

Subpart 1. **Scope of practice.** A teacher of special education: developmental adapted physical education is authorized to provide evaluation and specially designed instruction in physical education to eligible students from prekindergarten through age 21 who have needs in the areas of physical fitness and gross motor skills. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized physical educational program plans.

Subp. 2. **License requirements.** A candidate for licensure as a teacher of special education: developmental adapted physical education to teach students from prekindergarten through age 21 who have needs in the areas of physical fitness and gross motor skills shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. hold or apply and qualify for a valid Minnesota physical education teaching license;
- C. demonstrate core skill requirements in part 8710.5000; and
- D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of special education: developmental adapted physical education in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: developmental adapted physical education understands the foundations of special education services for students with disabilities relating to physical and motor fitness on which to base practice. The teacher must demonstrate knowledge of the:

(1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to the education of students with identified disabilities as the issues apply to physical and motor fitness;

(2) educational definitions, issues related to identification, and eligibility criteria pertaining to students who have disabilities relating to physical and motor fitness;

(3) theoretical foundations and sequences of typical and atypical motor learning, motor development, and motor skills acquisition from birth to adulthood relating to physical and motor fitness;

(4) special physical education, adapted physical education, movement education, and motor development, including skills in aquatics, dance, games, and individual, group, intramural, and lifetime sports;

(5) implications of medical, health, skeletal, and neurological conditions on motor learning, including typical and atypical development across the life span;

(6) principles of anatomical structure, physiology, and kinesiology across the lifespan, including typical and atypical development;

(7) impact of single, multiple, coexisting conditions or disabilities on motor functioning and motor skill acquisition; and

(8) impact of typical and atypical motor development and function on the educational, social, and psychological well-being of students.

B. **Referral, evaluation, planning, and programming.** A teacher of special education: developmental adapted physical education understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with disabilities relating to physical and motor fitness. The teacher must be able to:

(1) understand the use, limitations, ethical concerns, administration, and interpretation of formal and informal assessments for students with identified disabilities that impact physical and motor fitness and how to communicate the results to the students, families, educators, and other professionals;

- (2) adapt and modify existing assessment tools and methods to accommodate the unique abilities and needs of students with disabilities in physical and motor fitness;
- (3) apply an understanding of health-related aspects of physical and motor fitness in program planning;
- (4) support the selection, acquisition, and use of assistive technology for the development of physical and motor fitness, including physical education hardware and software, adapted and adaptive equipment, and supports for participation and communication;
- (5) apply evaluation results to assist the IEP team in selection of service options for addressing individual needs in physical education; and
- (6) design individualized program plans that integrate evaluation results, student and family priorities, and concerns that incorporate academic and nonacademic goals in physical education.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: developmental adapted physical education understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with disabilities relating to physical and motor fitness. The teacher must be able to:

- (1) design, implement, monitor, and adjust a variety of evidence-based instructional resources, strategies, and techniques, including scientifically based research interventions when available, to implement developmental adapted physical education services;
- (2) select and adapt equipment used for instruction in physical and motor fitness;
- (3) design and adapt learning environments that support students with disabilities in safely and actively participating in physical and motor fitness;
- (4) communicate with students, using a range of methods and strategies, including students who are nonverbal or have limited verbal expression;
- (5) provide students with exploration and learning experiences that support life-long participation in physical recreation and leisure activities;
- (6) develop students' self-advocacy and life skills relevant to independence, social skills, community and personal living, recreation, leisure, and employment; and
- (7) monitor progress, adjust instruction, and evaluate the acquisition of skills related to developmental adapted physical education.

D. Communication and collaboration. A teacher of special education: developmental adapted physical education cultivates and maintains positive, collaborative relationships with students, families, other professionals, and the community to support student development and educational progress. The teacher must be able to:

- (1) collaborate with students and their families in making choices, given identified strengths and needs in physical and motor fitness, that impact academic, occupational, and other domains across the life span;
- (2) access services, networks, agencies, and organizations relevant to the field of developmental adapted physical education;

(3) identify and coordinate educational roles and responsibilities with individualized education program team members and stakeholders in providing educational services that impact physical and motor fitness;

(4) provide and receive consultation and coordinate with related service providers, including occupational therapists and physical therapists, in delivering developmental adapted physical education services;

(5) collaborate with students, families, and other service providers to locate community and state resources for further participation in leisure and recreational activities;

(6) promote collaborative practices that respect the individual's and family's culture and values relative to access to physical education and recreation and leisure options across the life span;

(7) access and evaluate information, research, and emerging practices relevant to the field of developmental adapted physical education through consumer and professional organizations, peer-reviewed journals, and other publications; and

(8) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with students and their families.

E. Clinical experiences. A teacher of special education: developmental adapted physical education applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching students who have needs in the areas of physical fitness and gross motor skills in prekindergarten and primary (prekindergarten through grade 4), middle level (grades 5 through 8), and high school (grades 9 through 12) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of special education: developmental adapted physical education are effective on January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 36 SR 1243*

Published Electronically: *January 8, 2013*

8710.5400 TEACHERS OF SPECIAL EDUCATION: DEVELOPMENTAL DISABILITIES.

Subpart 1. **Scope of practice.** A teacher of special education: developmental disabilities is authorized to provide evaluation and specially designed instruction to eligible students from kindergarten through age 21 who have a broad range of cognitive disabilities and deficits in adaptive behavior. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized education program plans.

Subp. 2. **License requirements.** A candidate for licensure to teach students from kindergarten through age 21 who have a broad range of cognitive disabilities and deficits in adaptive behavior shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards of effective practice for licensing of beginning teachers enumerated in part 8710.2000;

C. demonstrate core skill requirements in part 8710.5000; and

D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of special education: developmental disabilities enumerated in subpart 3.

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

A. Foundational knowledge. A teacher of special education: developmental disabilities understands the foundations of special education services for students with developmental disabilities on which to base practice. The teacher must demonstrate knowledge of the:

(1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to the education of students with a broad range of cognitive disabilities and deficits in adaptive behavior;

(2) etiology, characteristics, and classifications of developmental disabilities;

(3) educational definitions, issues related to identification, and eligibility criteria pertaining to students with developmental disabilities, including those from culturally and linguistically diverse backgrounds;

(4) general developmental, academic, social and behavioral, and functional characteristics of individuals with developmental disabilities as they relate to levels of support needed;

(5) impact of research-based theories of cognition, communication, and behavior on the education of students with developmental disabilities;

(6) social-emotional aspects of developmental disabilities, including supports necessary to foster adaptive behavior, social competence, social participation, and self-determination;

(7) impact of coexisting conditions and multiple disabilities; and

(8) medical terminology and implications of medical conditions for students with developmental disabilities, including the role of other professionals in meeting educational needs.

B. Referral, evaluation, planning, and programming. A teacher of special education: developmental disabilities understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with developmental disabilities. The teacher must be able to:

(1) collect and interpret data and information specific to research-based interventions and supports provided prior to referral and integrate into the special education evaluation processes;

(2) select, administer, and interpret assessments for students with developmental disabilities, accounting for technical adequacy, ethical concerns, expressive and receptive communication needs, use of necessary assistive technologies, and communicate the results to students, families, educators, and other professionals;

(3) integrate multiple methods of collecting data from students, parents, families, teachers, and other professionals for the purpose of evaluation and planning, developing, implementing, and evaluating individualized education programs;

(4) adapt and modify data collection procedures to accommodate the abilities and needs of students with developmental disabilities;

(5) assess, accommodate, and modify the environmental conditions that impact academic achievement and functional performance;

(6) support the use and maintenance of orthotic, prosthetic, assistive, and adaptive equipment in collaboration with parents and specialists;

(7) support and manage student health needs and plan for emergency situations in collaboration with parents and medical professionals;

(8) design individualized education program plans, considering a range of educational placement options and required levels of support in the least restrictive environment, that integrate student strengths, needs, assessment results, and student and family priorities, incorporating academic and nonacademic goals; and

(9) address factors that influence the disproportional identification of culturally, linguistically, and socioeconomically diverse students as students with developmental disabilities.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: developmental disabilities understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with developmental disabilities. The teacher must be able to:

(1) integrate knowledge of evidence-based instruction, including scientifically based research interventions when available, in language development, reading, writing, and mathematics with characteristics of developmental disabilities in order to design, implement, monitor, and adjust instruction aligned with grade-level content standards;

(2) apply evidence-based instructional strategies and practices, including functional, community-based instruction, task analysis, multisensory, and concrete or manipulative techniques, to facilitate acquisition of academic and functional skills in the least restrictive environment;

(3) select, adapt, and implement developmentally appropriate classroom management strategies, including proactive and positive behavioral interventions and supports, for students with developmental disabilities to promote progress in the least restrictive environment;

(4) provide instructional, curricular, and physical accommodations across environments to meet the physical, cognitive, sensory, cultural, and expressive and receptive communication needs of students with developmental disabilities;

(5) implement positioning and movement techniques and reinforce and support instruction in orientation and mobility provided by certified specialists;

(6) design, implement, monitor, and adjust use of assistive technologies, including communication systems, for students with developmental disabilities to promote language development, communication, literacy, and access to and progress in the general education curriculum;

(7) address the transition needs of students to enhance participation in family, school, recreation or leisure, community, and work life, including personal self-care, independent living, safety, and prevocational and vocational skills, for students with increasingly complex needs;

(8) make decisions about the participation of students with disabilities in the full range of state assessment options including necessary accommodations; and

(9) provide sequential instruction on grade-level content standards, adjusting when necessary for breadth, depth, and complexity, for students participating in alternate assessments.

D. Collaboration and communication. A teacher of special education: developmental disabilities cultivates and maintains positive, collaborative relationships with students, families, other professionals, and the community to support student development and educational progress. The teacher must be able to:

(1) collaborate with students and their families in making choices that impact academic, occupational, and other domains across the life span;

(2) make use of structures supporting interagency collaboration and coordinate interagency services and transition plans;

(3) select and plan for the integration of related services personnel and other service providers into the instructional programs and setting for students utilizing a transdisciplinary team approach;

(4) direct, structure, support, and monitor the activities of paraprofessionals regarding student instruction and intervention with an emphasis on supporting student independence and achievement;

(5) understand and communicate the educational roles and shared responsibilities of educators, paraprofessionals, and other staff when collaborating for the consistent implementation of academic instruction, support for student independence, and individualized positive behavior supports across environments;

(6) identify and access school, community and social services, networks, agencies, and organizations, including day habilitation and recreational leisure programs appropriate to students with developmental disabilities to enhance instruction and programming;

(7) provide and receive consultation and collaborate in a variety of settings regarding development and implementation of the comprehensive evaluation process, individualized education program planning, delivery of instruction and accommodations, and transition with individuals and agencies;

(8) promote collaborative practices that respect the individual's and family's culture and values relative to the impact that developmental disabilities may have on the individual and family across the life span;

(9) access and evaluate information, research, and emerging practices relevant to the field of developmental disabilities through consumer and professional organizations, peer-reviewed journals, and other publications;

(10) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with students and their families; and

(11) promote peer acceptance, social participation, and achievement by training, coaching, supporting, structuring, and modeling evidence-based strategies for developmental disabilities to peers, parents, paraprofessionals, and other school staff.

E. Clinical experiences. A teacher of special education: developmental disabilities applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching students who have a broad range of cognitive disabilities and deficits in adaptive behavior in primary (kindergarten through grade 4), middle level (grades 5 through 8), and high school (grades 9 through 12, including transition programs) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of special education: developmental disabilities are effective on January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 36 SR 1243*

Published Electronically: *January 8, 2013*

8710.5500 TEACHERS OF SPECIAL EDUCATION: EARLY CHILDHOOD.

Subpart 1. **Scope of practice.** A teacher of special education: early childhood is authorized to provide evaluation and specially designed instruction to eligible children, birth through age six, who exhibit a broad range of developmental delays or disabilities, including those with a diagnosed physical or mental condition or disorder that has a high probability of resulting in developmental delay. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized education program plans for children and families.

Subp. 2. **License requirements.** A candidate for licensure as a teacher of special education: early childhood to teach children from birth to age six who exhibit a broad range of developmental delays or disabilities shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards for effective practice for licensing of beginning teachers enumerated in part 8710.2000;

C. demonstrate core skill requirements in part 8710.5000; and

D. show verification of completing a Board of Teaching approved preparation program under part 8700.7600 leading to the licensure of teachers of special education: early childhood in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: early childhood understands the foundations of special education services for children with a broad range of developmental delays or disabilities on which to base practice. The teacher must demonstrate knowledge of the:

- (1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to the education of young children with a broad range of developmental delays or disabilities and their families;
- (2) etiology and characteristics of specific disabilities, disorders, and developmental delays, and the developmental and educational implications on infants, toddlers, and young children;
- (3) educational definitions, issues related to identification, and eligibility criteria pertaining to young children with a broad range of developmental delays or disabilities;
- (4) definitions and distinctions between and among screening, evaluation, assessment, and progress monitoring related to the legal standards and practice;
- (5) rationale and application of due process and procedural safeguards for young children with a broad range of developmental delays or disabilities and their families;
- (6) ethical, policy, and practice issues related to educational, social, economic, cultural, linguistic, and medical factors unique to young children with a broad range of developmental delays or disabilities and their families;
- (7) early childhood developmental theory and the impact of coexisting developmental delays or multiple disabilities across domains, including cognitive, physical, vision, hearing, adaptive, behavioral, social or emotional, and communication; and
- (8) responsibilities of the Interagency Early Intervention Committee (IEIC).

B. Referral, evaluation, planning, and programming. A teacher of special education: early childhood understands and applies principles of screening, prevention, and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching children with a broad range of developmental delays or disabilities. The teacher must be able to:

- (1) apply screening, prevention, referral, assessment, and evaluation for eligibility determination including consideration of criteria for vision loss, hearing loss, deaf-blind, speech and language delays, developmental cognitive delays, physical or health disabilities, autism spectrum disorders, other health disorders, and traumatic brain injury;
- (2) select, administer, and interpret formal and informal evaluation and assessment measures for young children with developmental delays or disabilities, accounting for limitations, ethical concerns, and the need for assistive technologies and communicate the results to the children, families, teachers, and other professionals;
- (3) adapt and modify existing evaluation and assessment measures and methods to accommodate the abilities and specific needs of young children with developmental delays or disabilities including those with a diagnosed physical or mental condition or disorder that has a high probability of resulting in developmental delay;
- (4) integrate and interpret multiple sources of information from families, educators, and others for the purpose of evaluating, planning, implementing, and monitoring the individualized family service plan, individualized education program plan, or individualized interagency intervention plan;
- (5) design individual plans that integrate evaluation and assessment results and family concerns and priorities to determine goals, including the use of assistive technologies;

(6) collaborate in determining services and placement within a range of delivery models, natural environments, and educational settings based on the needs and required levels of support for the child and the family; and

(7) address factors such as gender, socioeconomic status, familial background, and cultural and linguistic diversity that may influence the identification of young children with developmental delays or disabilities.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: early childhood understands how to use individual family services plans and individual education program plans to design and implement developmentally appropriate instruction for young children with developmental delays or disabilities or medical conditions. The teacher must understand how to:

(1) apply multiple evidence-based instructional practices, including those supported by scientifically based research when available, and materials that meet the needs of children and families in the areas of language and literacy, cognitive, adaptive, physical, social or emotional, and behavioral development;

(2) select, implement, monitor, and adjust curricula and intervention strategies across developmental domains;

(3) provide, as well as teach families and other early childhood providers, developmentally and functionally appropriate individual and group activities within natural routines and across settings for infants, toddlers, and young children;

(4) implement positive behavior supports appropriate for young children with developmental delays or disabilities and their families with a focus on teaching the child necessary and appropriate replacement skills;

(5) align current developmental and learning experiences and teaching strategies with the expectations of subsequent educational settings and facilitate the transition process for young children with developmental delays or disabilities and families; and

(6) design, implement, monitor, and adjust instruction and supports, including the use of assistive technologies, to accelerate the rate of learning in reaching age-appropriate benchmarks, attain child and family outcomes, and facilitate transition processes.

D. Collaboration and communication. A teacher of special education: early childhood cultivates and maintains positive, collaborative relationships with children, families, educators, other professionals, and the community to support student development and educational progress. The teacher must be able to:

(1) apply cultural competencies, including self-awareness of one's personal perspectives, when using verbal, nonverbal, and written communication and interpersonal skills to collaborate with families and consult with those providing services;

(2) facilitate and manage student-specific teams, including those for child study, individualized program planning, and planning for transitions;

(3) identify and access sources of services, agencies, and organizations for young children with developmental delays or disabilities and their families;

(4) understand the educational roles and responsibilities of instructional and related service providers and paraprofessionals, and coordinate the provision of services to young children with developmental delays or disabilities and their families;

(5) assist the family in understanding the impact of the developmental delays or disabilities and planning for the transitions of young children;

(6) communicate and collaborate with service coordinators and providers in planning for the transition process across hospital, home, and infant and toddler, early childhood, and elementary programs;

(7) provide and receive consultation and collaborate in a variety of settings regarding development and implementation of the comprehensive evaluation process, individualized education program planning, delivery of instruction and accommodations, and transition with individuals and agencies;

(8) access and evaluate information, research, and emerging practices relevant to the field of early childhood special education through consumer and professional organizations, peer-reviewed journals, and other publications; and

(9) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with children and their families.

E. Clinical experiences. A teacher of special education: early childhood applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching children who exhibit a broad range of developmental delays or disabilities in infant or toddler, preschool, and primary (kindergarten and grade 1) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of special education: early childhood are effective on January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

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8710.5600 TEACHERS OF SPECIAL EDUCATION: EMOTIONAL OR BEHAVIORAL DISORDERS.

Subpart 1. **Scope of practice.** A teacher of special education: emotional or behavioral disorders is authorized to provide evaluation and specially designed instruction to eligible students from kindergarten through age 21 who have emotional or behavioral disorders or related behavioral difficulties. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized education program plans.

Subp. 2. **License requirements.** A candidate for licensure to teach students from kindergarten through age 21 who have emotional or behavioral disorders shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;
- C. demonstrate core skill requirements in part 8710.5000; and
- D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure as a teacher of special education: emotional behavioral disorders in subpart 3.

Subp. 3. Program requirements. A candidate for licensure as a teacher of special education: emotional or behavioral disorders must complete a preparation program under subpart 2, item D, that must include the candidate's demonstration of the knowledge and skills in items A to E.

A. Foundational knowledge. A teacher of special education: emotional or behavioral disorders understands the foundations of special education services for students with emotional or behavioral disorders on which to base practice. The teacher demonstrates knowledge of the:

- (1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to services to the education of students with emotional or behavioral disorders;
- (2) differing perspectives and terminology of emotional behavioral disorders within mental health, legal, social welfare, and education systems;
- (3) educational definitions, issues related to identification, and eligibility criteria pertaining to students with emotional or behavioral disorders, including those from culturally and linguistically diverse backgrounds;
- (4) etiology, characteristics, and classifications of emotional behavioral disorders;
- (5) research-based theories of social, emotional, and behavioral development;
- (6) impact of gender, familial background, socioeconomic status, cultural, and linguistic factors on perceptions of student behavior;
- (7) impact of coexisting conditions or multiple disabilities on behaviors and the similarities, differences, and interactions between emotional or behavioral disorders and other disability areas and their effects on learning;
- (8) impact of abuse and chemical dependency on students and their families;
- (9) factors that build and support student resiliency;
- (10) impact of attributions, anxiety, withdrawal, and thought disorder on behavior;
- (11) major mental health disorders manifested at different points across the life span and the implications for education;
- (12) connection of functional behavioral assessments and behavior intervention plans to principles of individual positive behavior interventions and supports;
- (13) legal provisions related to the juvenile justice, mental health, and educational systems including understanding reporting mandates and confidentiality regulations; and
- (14) impact of school personnel and environments on maintaining or changing student behavior.

B. Referral, evaluation, planning, and programming. A teacher of special education: emotional or behavioral disorders understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with emotional or behavioral disorders. The teacher must be able to:

- (1) collect and interpret data and information specific to research-based interventions and supports provided prior to referral and integrate into the special education evaluation process;
- (2) select, administer, and interpret formal and informal assessments for students with emotional or behavioral disorders, accounting for technical adequacy and ethical concerns and communicate the results to students, families, teachers, and other professionals;
- (3) adapt and modify assessment tools and methods to determine the skills, abilities, and needs of students with emotional or behavioral disorders;
- (4) interview, conduct structured observations, and document behavior in school and nonschool settings for the purposes of evaluating for eligibility and planning, developing, and implementing individualized education programs;
- (5) complete, as a member of a team, a systematic, functional behavior assessment including consideration of the forms and functions of behaviors, context in which behaviors occur, and antecedents and consequences of behaviors for the purpose of developing an individual positive behavior support plan;
- (6) integrate multiple sources of data, including information available from students, families, school personnel, the community, and mental health, legal, and social welfare systems in developing individualized education program plans;
- (7) address factors such as gender, socioeconomic status, familial background, and cultural and linguistic diversity that influence the disproportional identification of students with emotional or behavioral disorders; and
- (8) design individualized program plans, considering a range of educational placement options and required levels of support in the least restrictive environment, that integrate student strengths, needs, assessment results, and student and family priorities, incorporating academic and nonacademic goals.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: emotional behavioral disorders understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with emotional or behavioral disorders. The teacher must be able to:

- (1) integrate knowledge of evidence-based instruction, including scientifically based research interventions when available, in language development, reading, writing, and mathematics with characteristics of emotional or behavioral disorders in order to design, implement, monitor, and adjust instruction aligned with grade-level content standards;
- (2) access information from functional behavioral assessments in order to develop, implement, monitor, evaluate, and revise as needed an individual positive behavior support plan across settings and personnel;
- (3) collect and use data to monitor the effectiveness of replacement behaviors, prompts, routines, and reinforcers in changing and maintaining positive behaviors;

(4) provide access to grade level content standards by applying principles of universal design for learning and assistive technologies and selecting, developing, monitoring, modifying, and adjusting materials and instruction for students with emotional or behavioral disorders;

(5) select, implement, evaluate, and modify evidence-based instructional strategies for social and emotional skills development for students with emotional or behavioral disorders;

(6) apply ethical and legal considerations in the selection and use of behavioral interventions that are generally available;

(7) apply individual positive behavioral interventions and support practices for managing behavior and meeting specific educational and social needs, design a functional and safe classroom, and establish consistent classroom routines for students with emotional or behavioral disorders; and

(8) construct instructional sequences to teach transition and generalization skills based on the cognitive, social, emotional, and academic strengths of each student and plans for transition from school to postsecondary training and employment.

D. Collaboration and communication. A teacher of special education: emotional or behavioral disorders cultivates and maintains positive, collaborative relationships with students, families, other professionals, and the community to support student development and educational progress. The teacher must be able to:

(1) collaborate with children and youth and their families in making choices and accessing community-based services and advocacy organizations that support positive outcomes for students across the life span;

(2) identify and coordinate interagency services, networks, agencies, and organizations for students with emotional or behavioral disorders to support their educational programs;

(3) understand issues involved and apply supportive strategies needed when transitioning students with emotional or behavioral disorders into and out of alternative environments, including psychiatric hospitals, juvenile justice system, correctional facilities, and residential treatment centers;

(4) understand and communicate educational roles and shared responsibilities of educators, paraprofessionals, and other staff when collaborating for the consistent implementation of positive behavior supports and academic instruction across environments;

(5) recognize the roles and responsibilities of mental health professionals in providing services to students with emotional or behavioral disorders and how these roles differ from that of the special education teachers;

(6) consult and collaborate with early childhood educators to address the challenging behaviors of students in a prekindergarten setting;

(7) provide and receive consultation and collaborate in a variety of settings regarding development and implementation of the comprehensive evaluation process, individualized education program planning, delivery of instruction and accommodations, and transition with individuals and agencies;

(8) promote collaborative practices that respect individual and family culture and values relative to the impact that emotional or behavioral disorders may have on the individual and family across the life span;

(9) access and evaluate information, research, and emerging practices relevant to the field of emotional or behavioral disorders through consumer and professional organizations, peer-reviewed journals, and other publications; and

(10) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with students and their families.

E. Clinical experiences. A teacher of special education: emotional or behavioral disorders applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching students who have emotional or behavioral disorders in primary (kindergarten through grade 4), middle level (grades 5 through 8), and high school students (grades 9 through 12, including transition programs) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of special education: emotional behavioral disorders are effective on January 1, 2013, and thereafter.

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8710.5700 TEACHERS OF SPECIAL EDUCATION: LEARNING DISABILITIES.

Subpart 1. **Scope of practice.** A teacher of special education: learning disabilities is authorized to provide evaluation and specially designed instruction to eligible students from kindergarten through age 21 who have specific learning disabilities or related learning difficulties. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized educational program plans.

Subp. 2. **License requirements.** A candidate for licensure to teach students from kindergarten through age 21 who have specific learning disabilities or related learning difficulties shall:

A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;

B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;

C. demonstrate core skill requirements in part 8710.5000; and

D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of special education: learning disabilities in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: learning disabilities understands the foundations of special education services for students with learning disabilities and related learning difficulties on which to base practice. The teacher must demonstrate knowledge of the:

(1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to the education of students with mild to moderate academic, behavioral, social, emotional, communication, and functional needs;

(2) educational definitions, issues relating to identification, medical diagnoses, and eligibility criteria for students with learning disabilities and related learning difficulties, including those from culturally and linguistically diverse backgrounds;

(3) etiology and characteristics, including deficits in basic psychological processes, of specific learning disabilities and related learning difficulties and the implications for learning and performance across ages and grade levels;

(4) impact of coexisting conditions or multiple disabilities;

(5) impact of learning disabilities and related learning difficulties on social or emotional development, including social skill deficits, challenging behaviors, mental health issues, juvenile delinquency, learned helplessness, and other conditions that occur in students with learning disabilities, as well as factors that build and support student resilience;

(6) information regarding theories, research, medical terminology and implications, and legal requirements and their relationship to education; and

(7) factors that influence accurate identification of culturally, linguistically, and socioeconomically diverse students as students with specific learning disabilities.

B. Referral, evaluation, planning, and programming. A teacher of special education: learning disabilities understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with learning disabilities or related learning difficulties. The teacher must be able to:

(1) apply competencies in measurement and assessment, including technical adequacy and ethical concerns, throughout the evaluation process and communicate the purpose, procedures, and results to the students, families, educators, and other professionals;

(2) collect and interpret data and information specific to scientific research-based interventions and supports provided prior to referral and integrate into the special education evaluation processes;

(3) adapt and modify evaluation methods, including the use of assistive technology, to identify and accommodate the unique abilities and needs of students;

(4) use multiple methods of data gathering, such as progress monitoring, record reviews, interviews, test administration, work sampling, observation, functional behavioral assessments, curriculum evaluation, dynamic assessment, and testing of limits, from multiple stakeholders, including families and interpreters;

(5) select, integrate, and interpret appropriate sources of data relevant for determining the needs of students and compliance with legal requirements for eligibility, continuing service, transition services, and exit of special education services;

(6) address factors that influence the disproportional identification of culturally, linguistically, and socioeconomically diverse students as students with learning disabilities or related learning difficulties;

(7) collaborate with families, educators, and specialists to identify patterns of strengths and weaknesses that require systematic explicit instruction, accommodations, and modifications, including the use of assistive technology for access to the curriculum; and

(8) design individualized education program plans, considering a range of educational placement options and required levels of support in the least restrictive environment, that integrate student strengths, needs, assessment results, and student and family priorities, incorporating academic and nonacademic goals.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: learning disabilities understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with learning disabilities or related learning difficulties. The teacher must be able to:

(1) apply multiple evidence-based instructional practices, including those supported by scientifically based research when available, and materials that meet the needs of students with specific learning disabilities and related learning difficulties in the areas of language development, listening comprehension, oral and written expression, reading, and mathematics;

(2) use multiple sources of data, including basic psychological processes and links to achievement, to understand persistent lack of progress, inform instruction, and select accommodations and assistive technologies, as well as determine appropriate participation in district and statewide assessments;

(3) design, implement, monitor, and adjust instruction and supports to accelerate the rate of learning, provide access to grade level content standards, promote social competence, and facilitate the transition to postsecondary life;

(4) apply specialized methods, including universal design for learning, accessible instructional materials, assistive technology, task analysis, multisensory methods, modifying the scope and pace of instruction, use of feedback, ration of student response, and schedules of practice and review, for delivering developmentally and culturally appropriate instruction and services to meet student needs related to increasing demands of grade-level curriculum;

(5) apply knowledge of prerequisite skills, instructional language, learning progressions, and student strengths and weaknesses to design and adjust instruction;

(6) implement, monitor, and adjust individualized education programs that integrate evaluation results and family priorities, resources, and concerns, and assist students and their families in making choices that impact academic, nonacademic, and transition goals;

(7) adjust instruction based on student data and knowledge of the developmental sequence of language and its relationship to listening and reading comprehension and oral and written expression;

(8) instruct students in how to self-monitor, use effective learning strategies, and accommodate for strengths and weaknesses as well as generalize new skills to educational and noneducational settings;

(9) coach students in the use of self-advocacy skills, including attending to relevant contextual factors, to develop resilience and maintain self-determination for educational progress;

(10) support and manage the range of social, emotional, and behavioral needs of students during academic instruction and nonacademic situations; and

(11) use individual and collective data to identify gaps and needs and to align instruction to grade level content standards in guiding the selection and implementation of evidence-based practices for the purposes of classroom and schoolwide improvement.

D. Collaboration and communication. A teacher of special education: learning disabilities cultivates and maintains positive, collaborative relationships with students, families, educators, other professionals, and the community to support development and educational progress. The teacher must be able to:

(1) collaborate with students and their families in making choices that impact academic, occupational, and other domains across the life span;

(2) promote collaborative practices that respect individual and family culture and values relative to the impact that learning disabilities and related learning difficulties may have on the individual and family across the life span;

(3) access services, networks, agencies, and organizations, including interpreters or other resources specific to culturally diverse communities, to improve the outcomes of students with learning disabilities or related learning difficulties and their families;

(4) provide and receive consultation and collaborate with educators, specialists, families, paraprofessionals, and interagency professionals for the purposes of observation, problem-solving, providing positive behavior supports, and coaching in order to improve the academic and nonacademic performance of students with learning disabilities and related learning difficulties;

(5) collaborate with stakeholders to develop, implement, and refine schoolwide systems of academic and behavioral support;

(6) access and evaluate information, research, and emerging practices relevant to the field of learning disabilities and related learning difficulties through consumer and professional organizations, peer-reviewed journals, and other publications; and

(7) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with students and their families.

E. Clinical experiences. A teacher of special education: learning disabilities applies the standards of effective practice through a variety of early and ongoing clinical experiences teaching students who have specific learning disabilities or related learning difficulties in primary (kindergarten through grade 4), intermediate (grades 5 through 8), and high school (grades 9 through 12, including transition programs) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a teacher of special education: learning disabilities are effective on January 1, 2013, and thereafter.

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8710.5800 TEACHERS OF SPECIAL EDUCATION: PHYSICAL AND HEALTH DISABILITIES.

Subpart 1. **Scope of practice.** A teacher of special education: physical and health disabilities is authorized to provide evaluation and specially designed instruction to eligible children and youth from birth through age 21 who have medically diagnosed physical or chronic or acute health disabilities. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized educational program plans.

Subp. 2. **License requirements.** A candidate for licensure to teach students from birth through age 21 who have physical and health disabilities shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;
- C. demonstrate core skill requirements in part 8710.5000; and
- D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of teachers of special education: physical and health disabilities in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: physical and health disabilities understands the foundations of special education services for students with physical and health disabilities on which to base practice. The teacher must demonstrate knowledge of the:

- (1) historical and philosophical foundations, legal bases, and contemporary issues pertaining to the education of students with physical or health disabilities;
- (2) etiology and characteristics of physical and health-related diagnoses and their functional and developmental implications on academic, communication, cognitive, physical, social, and emotional outcomes;
- (3) educational definitions, issues related to identification, and eligibility criteria for services pertaining to students with physical or health disabilities, including those from culturally or linguistically diverse backgrounds;
- (4) foundational principles of human anatomy, physiology, pharmacology, kinesiology, neurology, and related medical terminology;
- (5) associated health care issues which accompany specific physical and health disabilities;
- (6) impact of coexisting conditions or multiple disabilities;
- (7) condition-specific needs related to managing personal physical care for students with physical or health disabilities; and
- (8) body mechanics to ensure student and staff safety in transferring, lifting, positioning, seating, and mobility.

B. Referral, evaluation, planning, and programming. A teacher of special education: physical and health disabilities understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with physical or health related disabilities. The teacher must be able to:

- (1) apply referral and evaluation procedures for determining eligibility;
- (2) understand the use, limitations, ethical concerns, administration, and interpretation of formal and informal assessment for students with physical or health disabilities and how to effectively communicate the results to students, families, and other professionals;
- (3) select, administer, and adapt or modify assessment tools used to measure motor, auditory, visual, academic, behavioral, and communication skills, abilities, and needs;
- (4) integrate, interpret, and communicate assessment results and information available from family, school personnel, and medical providers into the evaluation, planning, and programming process;
- (5) support the selection, acquisition, and use of assistive technology and universally designed materials and equipment for evaluation and instruction in collaboration with students, families, staff, and specialists;
- (6) assess and identify structural, environmental, attitudinal, and communication factors to ensure accessibility, participation, and engagement for students with physical or health disabilities;
- (7) consider a range of educational services and placements and participate as a member of the individualized education program team; and
- (8) design individualized education program plans that incorporate academic, age-appropriate goals based on evaluation results, health needs, family priorities, and student strengths and needs in collaboration with other providers.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: physical and health disabilities understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with physical or other health impairments. The teacher must be able to:

- (1) integrate knowledge of evidence-based instruction, including scientifically based research interventions when available, in language development, reading, writing, and mathematics with characteristics of physical and health disabilities in order to design, implement, monitor, and adjust instruction aligned with grade-level content standards;
- (2) interpret, integrate, and apply sensory, motor, perceptual, and medical information to create appropriate individualized education program plans for students with a physical or health disability;
- (3) design, implement, monitor, and adjust multiple communication methods and social interaction strategies, in collaboration with other providers, that meet the ongoing communication needs of students with a range of physical and health disabilities;
- (4) design, implement, monitor, and adjust curriculum and instruction, and adapt environments, applying the principles of fine-, gross-, and sensori-motor development;
- (5) design, implement, monitor, and adjust strategies, including assistive technologies, to ensure accessibility, participation, and engagement, as well as promote academic achievement and positive behavior, for students with physical or health disabilities;

(6) design, implement, monitor, and adjust instructional programs that take into consideration individual strengths, interests, skills, health, and medical needs, including postsecondary transition planning; and

(7) instruct, coach, and monitor student use of self-advocacy skills, including contextual and medical implications, to develop resilience and maintain self-determination.

D. Collaboration and communication. A teacher of special education: physical and health disabilities cultivates and maintains positive, collaborative relationships with children, youth, families, educators, other professionals, and the community to support developmental and educational progress. The teacher must be able to:

(1) collaborate with students and their families for transitions among environments, and connect students, families, and professionals to educational and community agencies that provide support and resources across the life span;

(2) understand and communicate educational roles and shared responsibilities in the areas of educational, medical, vocational, rehabilitation, and related services, including social and county services, when implementing individualized physical, medical, and positive behavior supports and academic instruction across environments;

(3) identify and address medical, health, and educational issues and strategies needed to integrate care and transition for students with physical or health disabilities among home, hospital, rehabilitation, and school settings;

(4) provide and receive consultation and collaborate in a variety of settings regarding development and implementation of the comprehensive evaluation process, individualized education program planning, delivery of instruction and accommodations, and transition with individuals and agencies;

(5) promote collaborative practices that respect individual and family culture and values relative to the impact that physical and health disabilities may have on the individual and family across the life span;

(6) understand the impact of terminal illnesses and assist in providing supports related to bereavement for students, families, and staff;

(7) access and evaluate information, research, and emerging practices relevant to the field of physical and health disabilities through consumer and professional organizations, peer-reviewed journals, and other publications; and

(8) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with students and their families.

E. Clinical experiences. A teacher of special education: physical and health disabilities applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching students who have physical or health disabilities in birth through preschool, primary (kindergarten through grade 4), and secondary (grades 5 through 12, including transition programs) settings across a range of service delivery models.

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

Subp. 5. Effective date. Requirements in this part for licensure as a teacher of special education: physical and health disabilities are effective on January 1, 2013, and thereafter.

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8710.5850 TEACHERS OF SPECIAL EDUCATION: AUTISM SPECTRUM DISORDERS.

Subpart 1. Scope of practice. A teacher of special education: autism spectrum disorders is authorized to provide evaluation and specially designed instruction to eligible children and youth from birth through age 21 who have autism spectrum disorders. Teachers collaborate and consult with families, other classroom and special education teachers, and specialized service providers in designing and implementing individualized education program plans.

Subp. 2. License requirements. A candidate for licensure to teach students from birth through grade 12 who have autism spectrum disorders shall:

- A. hold a baccalaureate degree from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools;
- B. demonstrate the standards of effective practice for licensing of beginning teachers in part 8710.2000;
- C. demonstrate core skill requirements in part 8710.5000; and
- D. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to licensure of teachers of special education: autism spectrum disorders in subpart 3.

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

A. **Foundational knowledge.** A teacher of special education: autism spectrum disorders understands the foundations of special education services for students with autism spectrum disorders on which to base practice. The teacher must demonstrate knowledge of the:

- (1) historical and philosophical foundations, legal basis, and contemporary issues pertaining to the education of students with autism spectrum disorders;
- (2) educational definitions, issues related to identification, medical diagnoses, and eligibility criteria pertaining to students with autism, including those from culturally and linguistically diverse backgrounds;
- (3) research-based theories of neurodevelopment, social cognition, communication development, and learning, including their impact on acquisition of imitation skills and prosocial behavior;
- (4) impact of the range of neurological differences, communication, and social understanding on learning and behavior;
- (5) etiology, early indicators, and core and associated characteristics of autism spectrum disorders and their impact on social interaction, communication, behavior, and learning;

(6) impact of the combined effects of the restricted range of interests, limited social understanding, impaired language skills, idiosyncratic sensory behaviors, and anxiety on the student's ability to benefit from incidental learning opportunities; and

(7) impact of coexisting conditions or multiple disabilities.

B. Referral, evaluation, planning, and programming. A teacher of special education: autism spectrum disorders understands and applies principles of prevention and intervening early and procedures for referral, assessment, evaluation, individualized planning, programming, and placement specific to teaching students with autism spectrum disorders. The teacher must be able to:

(1) select and use a range of procedures, including nonbiased autism spectrum disorders-specific assessments, to screen and complete comprehensive evaluations for autism spectrum disorders eligibility, determine educational needs, and develop and implement individualized educational plans and programs;

(2) conduct and interpret functional behavioral assessments taking into account underlying autism spectrum disorders characteristics, such as sensory, social anxiety, emotional regulation, and communicative intent, and environmental factors when developing a positive behavior support plan;

(3) conduct assessments of environmental conditions that impact academic achievement and functional performance, in order to accommodate student needs across settings in the planning, programming, and placement process;

(4) support the selection, acquisition, and use of assistive technology to meet the communicative and other needs of students with autism spectrum disorders in collaboration with students, families, staff, and specialists;

(5) interpret and integrate evaluation results in the planning and programming process in collaboration with team members and outside agencies;

(6) address factors such as gender, socioeconomic status, and familial, cultural, and linguistic diversity and their relation to the evaluation, planning, and programming process for students with autism spectrum disorders;

(7) identify, support, and plan for the health and safety needs of students with autism spectrum disorders in collaboration with parents and medical professionals as part of the evaluation, planning, and programming process; and

(8) design individualized education program plans, considering a range of educational placement options and required levels of support in the least restrictive environment that integrate student strengths, needs, assessments results, and student and family priorities, incorporating academic and nonacademic goals.

C. Instructional design, teaching, and ongoing evaluation. A teacher of special education: autism spectrum disorders understands how to use individualized education program plans to design, implement, monitor, and adjust instruction for students with autism spectrum disorders. The teacher must be able to:

(1) integrate knowledge of evidence-based instruction, including scientifically based research interventions when available, in language development, reading, writing, and mathematics with characteristics of autism spectrum disorders in order to design, implement, monitor, and adjust instruction aligned with grade-level content standards;

(2) design, implement, monitor, and adjust evidence-based instructional methods and strategies to teach social, communication, behavioral, academic, and functional skills that are age- and ability-appropriate across environments;

(3) implement, monitor, and adjust assistive technology to improve the functional capabilities and communication skills of students with autism spectrum disorders across environments, as well as to promote literacy and participation in and access to the general education curriculum;

(4) design, implement, monitor, and adjust instructional programs that promote social participation and interpersonal interactions by teaching social understanding, communication, problem-solving skills, and self-regulatory skills across environments;

(5) design, implement, monitor, and adjust instructional programs that take into consideration individual strengths, interests, and skills, including postsecondary transition needs;

(6) design, implement, monitor, and adjust program modifications based on factors including social, emotional, and sensory issues, diet, and medication and relationship to communication, socialization, and behavior;

(7) apply structured teaching methods, communication systems, and instructional and environmental modifications and accommodations to develop communication, social, and behavioral competence to promote progress in general education and other instructional settings;

(8) design, implement, monitor, and adjust positive behavior plans as part of the individualized education program that connect challenging behavior to the lack of specific skills and teach functionally equivalent, age-appropriate, alternative communication, social, behavioral, and self-regulatory skills;

(9) design, implement, monitor, and adjust goals and objectives addressing the core features of autism spectrum disorders in social, communication, behavior, and other areas of need identified through evaluation;

(10) design, implement, monitor, and adjust a range of instructional strategies that promote the generalization of skills across staff, materials, and environments;

(11) make decisions about the participation of students with disabilities in the full range of state assessment options including necessary accommodations; and

(12) provide sequential instruction on grade-level content standards, adjusting when necessary for breadth, depth, and complexity, for students participating in alternate assessments.

D. Collaboration and communication. A teacher of special education: autism spectrum disorders cultivates and maintains positive, collaborative relationships with children and youth, families, educators, other professionals, and the community to support development and educational progress. The teacher must be able to:

(1) promote peer acceptance, social participation, and achievement by training, coaching, supporting, structuring, and modeling evidence-based strategies for autism spectrum disorders to peers, parents, paraprofessionals, and other school staff;

(2) provide and receive consultation and collaborate in a variety of settings regarding development and implementation of the comprehensive evaluation process, individualized education program planning, delivery of instruction and accommodations, and transition with individuals and agencies;

(3) coordinate processes that encourage collaboration for transitions between settings and connect families and professionals to educational and community resources for autism spectrum disorders with school, community, social services, networks, agencies, and organizations;

(4) consider the impact of core and associated characteristics of autism spectrum disorders on family dynamics and functioning and the perspectives of families and individuals with autism spectrum disorders when interacting and planning;

(5) promote collaborative practices that respect individual and family culture and values relative to the impact that autism spectrum disorders may have on the individual and family across the life span;

(6) access information, research, and emerging practices relevant to the field of autism spectrum disorders through consumer and professional organizations, peer-reviewed journals, and other publications; and

(7) engage in continuing professional development and reflection to increase knowledge and skill as a special educator and inform instructional practices, decisions, and interactions with children and youth and their families.

E. Clinical experiences. A teacher of special education: autism spectrum disorders applies the standards of effective practice through a variety of early and ongoing clinical experiences in teaching children and youth with autism spectrum disorders in birth through preschool, primary (kindergarten through grade 4), and secondary (grades 5 through 12, including transition programs) settings across a range of service delivery models.

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

Subp. 5. **Effective date.** The requirements in this part for licensure as a teacher of special education: autism spectrum disorders are effective January 1, 2013, and thereafter.

Statutory Authority: *MS s 122A.09*

History: *36 SR 1243*

Published Electronically: *May 21, 2012*

OTHER SCHOOL PROFESSIONALS

8710.5900 CAREER AND TECHNICAL EDUCATION ACCOMMODATION SPECIALIST FOR STUDENTS WITH DISABILITIES.

Subpart 1. **Scope of practice.** A career and technical education accommodation specialist for students with disabilities is authorized to analyze and evaluate vocational training potential, interests, and opportunities; develop career goals, transition needs, and lifework plans; coordinate appropriate career and technical education opportunities and programs; and manage plans for meeting vocational preparation of special needs students.

Subp. 2. **License requirements.** A candidate for licensure as a career and technical education accommodation specialist for students with disabilities shall hold a baccalaureate degree in education or special education or a baccalaureate degree in vocational rehabilitation or a graduate degree in vocational rehabilitation counseling or a graduate degree in vocational education with a special population

specialization from a regionally accredited college or university; and a special education license under part 8710.5100, 8710.5200, 8710.5250, 8710.5400, 8710.5600, 8710.5700, or 8710.5800, and have successfully completed a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of special education; and have successfully completed a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of career and technical education.

Subp. 3. Subject matter standards. A candidate for licensure as a career and technical education accommodation specialist for students with disabilities must successfully complete a preparation program under subpart 2 that includes the candidate's demonstration of the knowledge and skills in items A to D.

A. A career and technical education accommodation specialist for students with disabilities understands various models, methods, and practices of career and technical education and can meet the needs of students with disabilities. The coordinator understands:

- (1) health and safety needs of students to provide a safe education and work environment;
- (2) career and technical education programs such as work-based learning, school-based enterprise, and how students access those programs to gain preparation they need to meet their career goals;
- (3) industry standards for employment;
- (4) laws and rules regarding education, employment, and equity;
- (5) family structures and dynamics;
- (6) labor markets and employment trends;
- (7) important trends in the nature of work settings; and
- (8) graduation standards and how to facilitate appropriate modifications for students with special needs.

B. A career and technical education accommodation specialist for students with disabilities understands and applies processes of referral, assessment, curriculum team planning, and program placement and intervention. The teacher:

- (1) understands career and vocational testing instruments and interpretation of their results;
- (2) adapts and modifies curriculum and instruction to meet individual learner needs;
- (3) compiles student productivity data and provides verbal, written, and graphic presentations;
- (4) knows various teaching and learning styles and strategies that accommodate individual needs;
- (5) adapts and uses assisted technologies and resources for educational and vocational accommodations;
- (6) develops and implements performance evaluation plans based on individual student productivity;
- (7) assesses and documents a learner's skills and abilities through appropriate educational methodology; and
- (8) teaches self-advocacy skills necessary for success in future training or employment.

C. A career and technical education accommodation specialist for students with disabilities understands how to design and manage a system for developmental services and accommodations for students with special needs in career and technical education. The specialist:

- (1) identifies and allocates resources required to perform effective, efficient service coordination;
- (2) collaborates with school personnel, advocacy groups, and outside agencies to ensure equal access and enrollment in career and technical programs;
- (3) designs systems that monitor delivery of services and special accommodations for the purpose of program improvement;
- (4) provides and coordinates professional development activities for career and technical faculty to enhance understanding of students with special needs;
- (5) designs and implements student advising systems and lifework planning skills for career and technical transition to the work and lifelong learning; and
- (6) establishes and maintains positive, collaborative relationships with students, families, community agencies, business and labor representatives, and other professionals to support students' lifework plans.

D. A career and technical education accommodation specialist for students with disabilities understands career development and development of transitional and lifework plans. The teacher:

- (1) understands career development theory and its application to students with disabilities;
- (2) possesses skills needed to develop and interpret career portfolios and lifework plans;
- (3) interprets, or obtains interpretations from appropriate experts when necessary, medical, psychological, social, special education case files, and vocational data for the development of transition and lifework plans;
- (4) applies local and regional labor market information to the development of lifework plans;
- (5) knows industry standards for employment;
- (6) identifies and implements accommodations for special needs students in the workplace;
- (7) knows career resources such as libraries, community, and Internet systems as they apply to lifework planning;
- (8) facilitates the development of realistic occupational goals and academic standards for students with disabilities; and
- (9) facilitates the job and educational placement of students with disabilities.

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

Statutory Authority: *MS s 122A.09*

History: *26 SR 700*

Published Electronically: *November 19, 2009*

8710.6000 SPEECH-LANGUAGE PATHOLOGIST.

Subpart 1. **Scope of practice.** A speech-language pathologist is authorized to provide specialized speech-language services to prekindergarten through grade 12 students with identified communication disabilities including those affecting language, articulation, fluency, and voice.

Subp. 2. **Requirements for first professional license.** A first professional license as a speech-language pathologist shall be granted to an applicant who provides evidence of having completed a master's degree in speech-language pathology from a program accredited by the Council on Academic Affairs of the American Speech-Language-Hearing Association or to an applicant who provides evidence of holding a valid certificate of clinical competence from the American-Speech-Language-Hearing Association.

Subp. 3. [Repealed, 25 SR 805]

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

Subp. 5. **Specialized renewal requirements for licenses issued prior to July 1, 1994.** After June 30, 2007, a person who makes application for renewal of continuing licensure as a speech-language pathologist, but who does not hold a master's degree in speech-language pathology, must provide evidence that at least 24-quarter hours or 16-semester hours of post-baccalaureate college credit in speech-language pathology or related special education instruction and services have been earned and comply with subpart 4.

Subp. 6. **Effective date.** Requirements in this part for licensure as a speech-language pathologist are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 25 SR 805; 30 SR 504*

Published Electronically: *November 19, 2009*

8710.6100 SCHOOL NURSE.

Subpart 1. **Scope of practice.** A school nurse is authorized to provide to prekindergarten through grade 12 students nursing services in a school setting.

Subp. 2. **Requirements for first professional license.** A candidate for licensure as a school nurse shall:

- A. hold a baccalaureate degree in nursing from a regionally accredited college or university;
- B. be currently registered in Minnesota to practice as a licensed registered nurse under the Board of Nursing; and
- C. be currently registered in Minnesota as a public health nurse under the Board of Nursing.

Subp. 3. [Repealed, 25 SR 805]

Subp. 4. **Professional license.** A professional license shall be renewed according to the rules of the Board of Teaching governing professional licensure. Evidence of current Minnesota Board of Nursing registration as a licensed registered nurse is also required.

Subp. 5. **Maintaining board of nursing registration.** In order to retain licensure as a school nurse, current registration as a registered nurse and registration as a public health nurse must be maintained at all times. Lapse of this registration or licensure is grounds for revocation of licensure as a school nurse.

Persons without baccalaureate degrees who hold valid licenses as school nurses may continue to renew their licenses under subpart 4, provided that requirements for renewal are met. However, if a license is allowed to lapse, persons must meet the licensure requirements in subpart 2 in order to receive a current school nurse license.

Subp. 6. **Effective date.** The requirements in this part for licensure as a school nurse are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 25 SR 805*

Published Electronically: *November 19, 2009*

8710.6200 SCHOOL PSYCHOLOGIST.

Subpart 1. **Scope of practice.** A licensed school psychologist is authorized to provide direct and indirect psychological services to prekindergarten through grade 12 students who are at risk of social and academic failure.

Subp. 2. **Requirements for first professional license.** A candidate for licensure as a school psychologist shall provide evidence of having completed a preparation program in school psychology accredited by the National Association of School Psychologists.

Subp. 3. [Repealed, 25 SR 805]

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

Subp. 5. **Effective date.** Requirements in this part for licensure as a school psychologist are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 25 SR 805*

Published Electronically: *November 19, 2009*

8710.6300 SCHOOL SOCIAL WORKER.

Subpart 1. **Scope of practice.** A school social worker is authorized to provide social work services to prekindergarten through grade 12 students in a school setting. Board of Teaching school social worker licensure is not authorization to practice as a social worker in a school setting without current Board of Social Work licensure to practice as a social worker.

Subp. 2. **Requirements for first professional license.** A candidate for licensure as a school social worker shall:

A. hold a baccalaureate or master's degree in social work from a program accredited by the Council on Social Work Education; and

B. be currently licensed in Minnesota to practice as a social worker under the Board of Social Work.

Subp. 3. [Repealed, 25 SR 805]

Subp. 4. **Professional license.** A professional license shall be renewed according to the rules of the Board of Teaching governing professional licensure. Evidence of current Board of Social Work licensure is also required.

Subp. 5. **Maintaining board of social work licensure.** In order to retain licensure as a school social worker, current Minnesota Board of Social Work licensure must be maintained at all times. Lapse of Board of Social Work licensure is grounds for revocation of the school social worker license.

Subp. 6. **Effective date.** Requirements in this part for licensure as a school social worker are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 25 SR 805*

Published Electronically: *November 19, 2009*

8710.6400 SCHOOL COUNSELOR.

Subpart 1. **Scope of practice.** A school counselor is authorized to provide to kindergarten through grade 12 students school counseling services that focus on the promotion of preventive and educational strategies to enhance the cognitive, emotional, and behavioral development; effective decision-making skills; and resiliency capabilities of students.

Subp. 2. **Requirements for first professional license.** A candidate for school counselor licensure shall:

A. hold a master's degree or the equivalent from a college or university that is regionally accredited by the association for the accreditation of colleges and secondary schools; and

B. show verification of completing a Board of Teaching preparation program approved under part 8700.7600 leading to the licensure of school counselors in subpart 3 or provide evidence of having completed a preparation program in school counseling accredited by the Council for the Accreditation of Counseling and Related Educational Services.

Subp. 3. **Subject matter standard.** A candidate for licensure as a school counselor 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 K.

A. A school counselor understands the central concepts, tools of inquiry, and structures of professional school counseling and creates learning experiences that make education meaningful for students. The school counselor must understand:

(1) the major theories, assumptions, professional challenges and ethics, individual and group counseling methods, skills, and techniques that are central to professional school counseling;

(2) basic diagnostic classifications and referral mechanisms of the helping professions;

- (3) comprehensive professional school counseling and guidance program development, implementation, management, and evaluation;
- (4) the role and function in the total organizational, curricular, and academic structure of the school;
- (5) the organizational structure and changing needs of the school;
- (6) human growth and development;
- (7) individual and group appraisal techniques;
- (8) the need for and ability to demonstrate effective communication and human relations skills;
- (9) social and cultural pluralism and diversity;
- (10) consultation techniques;
- (11) career theories, stages of career development, the changing world of work, school-to-work transitions, and lifestyle development;
- (12) educational, career, and vocational interest assessment techniques and demonstrate the ability to provide accurate interpretations in this regard;
- (13) academic curricular requirements of students in their respective school settings;
- (14) career and academic postsecondary requirements and expectations;
- (15) the special learning challenges facing students including collaboration with special education teams;
- (16) the need for student advocacy, including crisis intervention, suicide prevention and intervention, violence prevention, conflict and disciplinary resolution and mediation, and how to mediate conflict and intervene effectively in conflict management and disciplinary prevention and intervention situations; and
- (17) the integration of services model and coordination with related human services and how to effectively collaborate with human service networks.

B. A school counselor understands how children, youth, and adults learn and develop and provides learning opportunities that support their intellectual, social, and personal development. The school counselor must understand:

- (1) human growth and development as it relates to the selection of appropriate counseling skills and techniques;
- (2) human growth and development as they relate to career and academic development; and
- (3) developmental, cognitive, and affective influences on learning and diverse learning styles as these influences relate to the comprehensive school counseling and guidance program.

C. A school counselor understands how students differ in their approaches to counseling and guidance and creates instructional and counseling opportunities that are adapted to students from diverse cultural backgrounds and with exceptionalities. The school counselor must understand the basis underlying:

- (1) the application of multicultural counseling techniques;

- (2) counseling approaches to students with special learning needs and areas of exceptionality; and
- (3) counseling approaches related to gender.

D. A school counselor understands and uses a variety of instructional and counseling strategies to encourage student development of critical thinking, problem solving, and performance skills. The school counselor must understand:

- (1) the implementation of learning strategies underlying classroom guidance instruction;
- (2) the implementation of learning strategies underlying the provision of mental health curriculum;
- (3) the associative links between instruction, behavior, and learning;
- (4) the associative links between counseling, classroom guidance, and learning;
- (5) the transfer of effective decision-making skills to lifelong learning, academic, and career choices; and
- (6) contemporary guidance and counseling and mental health curricula, programs, and instructional materials.

E. A school counselor applies the understanding of individual and group motivation and behavior to create a counseling and learning environment that encourages positive social interaction, active engagement in learning, and self-motivation. The school counselor must understand:

- (1) interpersonal dynamics in individual and group counseling settings;
- (2) classroom guidance dynamics;
- (3) motivational and learning characteristics, classroom guidance, and mental health curricula; and
- (4) the application of counseling, human development, and career theories to classroom settings.

F. A school counselor uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom. The school counselor must understand:

- (1) theoretical approaches and applications of appropriate counseling communication skills in the individual, group, and classroom settings; and
- (2) diverse counseling communication styles related to culture and gender.

G. A school counselor plans and manages counseling and guidance instruction based upon knowledge of subject matter, students, the community, and guidance curriculum goals. The school counselor must understand:

- (1) curricular components of the comprehensive counseling and guidance program in the school setting;
- (2) the link between school-to-community educational opportunities;
- (3) the link between academic, career, and postsecondary planning and instruction; and

(4) how to integrate student emotion, behavior, cognition, and decision making in establishing guidance curriculum objectives.

H. A school counselor understands and uses formal and informal assessment strategies to evaluate and ensure continuous intellectual, social, and physical development of the learner. The school counselor must understand:

(1) the theoretical basis for educational, career, and other assessment techniques and interpretation for which they are appropriately trained;

(2) the basis for making recommendations to administration regarding testing and assessment in the total school curriculum;

(3) the principles of using assessment data and interpreting information in academic instruction and the counseling process;

(4) the ethical, legal, and cultural implications in the use of assessment data in academic instruction and the counseling process; and

(5) the process and implementation of evaluation of the comprehensive guidance and counseling program as a tool to provide optimum guidance and counseling services to students, parents or guardians, families, staff, and the community.

I. A school counselor is a reflective practitioner who continually evaluates the effects of choices and actions on others and who actively seeks opportunities to grow professionally. The school counselor must understand:

(1) the historical and philosophical foundations of professional school counseling;

(2) contemporary and research influences on professional school counseling;

(3) the professional school counseling literature, research, organizations, and resources available to aid in the effective updating of the comprehensive guidance and counseling program; and

(4) the importance of self-care in the ability to provide counseling services.

J. A school counselor communicates and interacts with parents or guardians, families, school colleagues, and the community to support student learning and well-being. The school counselor must understand:

(1) the legal standards particular to professional school counseling;

(2) the ethical standards of relevant professional organizations; and

(3) professional collaboration, integration of services, and networking processes within the helping professions.

K. The school counselor demonstrates through prepracticum and practicum experiences the ability to provide educational counseling services to students. The practicum experiences must include a series of formal observations and directed instructional experiences with kindergarten or primary, intermediate, middle level, and senior high school students who are participating in a range of educational programming models.

Subp. 4. [Repealed, 25 SR 805]

Subp. 5. **Renewal of professional license.** A professional license shall be renewed according to the rules of the Board of Teaching governing professional licensure.

Subp. 6. **Effective date.** The requirements in this part for licensure as a school counselor for providing school counseling services to students in kindergarten through grade 12 are effective on September 1, 2001, and thereafter.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *23 SR 1928; 25 SR 805*

Published Electronically: *November 19, 2009*

CONTINUING EDUCATION AND LICENSE RENEWAL

8710.7000 DUTY OF LICENSEE TO RENEW.

It shall be the responsibility of the person seeking the renewal of a continuing or professional teaching license to comply with licensure renewal requirements in part 8710.7100 and to submit the application, appropriate verification, and other supporting materials to the local continuing education/relicensure committee, in accordance with procedures and due dates established by that committee under part 8710.7200.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *25 SR 588*

Published Electronically: *November 19, 2009*

8710.7100 ISSUANCE AND RENEWAL OF PROFESSIONAL TEACHING LICENSES.

Subpart 1. **Scope.** This part applies to persons who have held entrance licenses and are seeking to obtain first professional licenses or to renew continuing or professional licenses issued by the Board of Teaching, except continuing licenses valid only for substitute teaching.

Subp. 2. **Professional licenses to substitute teach only.** An applicant who holds or has held a valid entrance, continuing, or professional license to teach issued by the Board of Teaching shall be granted a five-year license for short-call substitute teaching. This subpart also applies to an applicant who holds or has held a license to teach issued by another state if that license was issued based on completion of baccalaureate or postbaccalaureate teacher preparation programs.

Subp. 3. **Renewal of professional license.** A license renewal period begins on July 1 of the year of expiration. An application for renewal is accepted for processing by the Department of Education after January 1 of the year of expiration. A valid professional license shall be renewed for a subsequent period of five years when an applicant presents verification by the local continuing education/relicensure committee that the applicant has, within the past five years, successfully completed at least 125 clock hours of professional development as specified in part 8710.7200.

Statutory Authority: *MS s 122A.09; 122A.18*

History: *25 SR 588; L 2003 c 130 s 12*

Published Electronically: *November 19, 2009*

8710.7200 CLOCK HOURS; REQUIREMENTS FOR RENEWAL OF PROFESSIONAL LICENSES.

Subpart 1. **Definition.** "Clock hour" means an hour of actual instruction, or planned group or individual professional development activity as approved by the local continuing education/relicensure committee.

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.

Subp. 3. **Categories for clock hour allocation.** Verification of completion of experiences must be submitted by the applicant to the local committee. Clock hours must be earned in two or more of the categories in items A to I:

- A. relevant coursework completed at accredited colleges and universities;
- B. educational workshops, conferences, institutes, seminars, or lectures in areas appropriate to licenses held;
- C. staff development activities, inservice meetings, and courses;
- D. site, district, regional, state, national, or international curriculum development;
- E. engagement in formal peer coaching or mentorship relationships with colleagues that addresses one or more of the standards in part 8710.2000;
- F. professional service in the following areas:
 - (1) supervision of clinical experiences of persons enrolled in teacher preparation programs;
 - (2) participation on national, state, and local committees involved with licensure, teacher education, or professional standards; or
 - (3) participation in national, regional, or state accreditation;

G. leadership experiences in the following areas:

- (1) development of new or broader skills and sensitivities to the school, community, or profession;
- (2) publication of professional articles in a professional journal in an appropriate field; or
- (3) volunteer work in professional organizations related to the areas of licensure held;

H. opportunities to enhance knowledge and understanding of diverse educational settings in the following areas:

- (1) experiences with students of another age, ability, culture, or socioeconomic level; or
- (2) systematic, purposeful observation during visits to schools and to related business and industry; and

I. preapproved travel or work experience:

- (1) travel for purposes of improving instructional capabilities related to the field of licensure; or
- (2) work experience in business or industry appropriate to the field of licensure.

Subp. 4. **Maximum allocation.** Effective for all experiences completed after June 30, 2000, the local continuing education/relicensure committee shall grant clock hours on the following basis:

A. Relevant coursework under subpart 3, item A, must be granted 16 clock hours for each quarter credit earned, and 24 clock hours for each semester credit earned.

B. Successful completion of activities under subpart 3, items B to I, must be granted one clock hour for each hour of participation with the following exceptions:

(1) Supervision of clinical experiences of persons enrolled in teacher licensure programs for one quarter equals 16 clock hours or one semester equals 24 clock hours. No more than 30 clock hours may be granted in a five-year relicensure period for supervision.

(2) One week of preapproved travel or work experience for purposes of improving instructional capabilities equals ten clock hours. No more than 30 clock hours may be granted in a five-year relicensure period for travel or work experience. The limit of 30 clock hours may be waived when the local committee determines that the preapproved travel or work experience is critical to the teacher's advanced or current skills for the teacher's assignment; for example, travel to experience language or cultural immersion by a teacher of world language.

Subp. 5. **Exception for national board certification.** A local continuing education committee shall accept verification that a teacher is actively engaged in and making progress toward National Board of Professional Standards Certification or other national professional teaching certification approved by the Board of Teaching at the time of renewal as equivalent to fulfilling all clock hour requirements for continuing license renewal. A local continuing education committee shall accept verification that a teacher has earned National Board or other approved certification as equivalent to all clock hour requirements during the life of the certificate. If the certificate expires during the five-year renewal period, the local committee shall prorate hours completed under this exception and require completion of a prorated number of clock hours for the years the certificate is not in effect.

Subp. 6. **Exception for local option.** The Board of Teaching shall approve requests submitted by local committees that, through their school district master contracts or other official agreements between the

local school board and its teachers, wish to substitute development and implementation of individualized professional development plans for some or all of the clock hour requirements for renewal of continuing licenses, provided that each individualized professional development plan:

- A. is designed primarily to enhance the teacher's ability to effect increased student learning;
- B. focuses on standards in part 8710.2000 and specific content knowledge required for the teacher's assignment;
- C. includes management and monitoring of student learning, including positive behavioral interventions and adaptation and modification of curriculum, instruction, and assessment to assist varied student learners in achieving graduation standards;
- D. includes a focus on research-based best practice;
- E. identifies the procedures and criteria by which successful development and implementation of the individualized professional development plan will be validated and communicated with the local continuing education committee; and
- F. requires that each teacher's individualized professional development plan equal or exceed 125 hours of professional development activities during the five-year period.

Subp. 7. Experience for clock hour credit. Except for subpart 3, item H, subitem (1), teaching experiences for which licensure is required shall not qualify for clock hour credit.

Subp. 8. Period for earning clock hours. An applicant requesting renewal of a license to teach must earn a minimum of 125 clock hours during each five-year period preceding application for licensure renewal. An applicant may not bank clock hours for purposes of relicensure, but clock hours earned after an application for renewal has been submitted may be applied to the next renewal period.

Subp. 9. School staff development. Instruction and professional development activities provided by a school may be included among the clock hours in this part.

Subp. 10. Renewal of license for two or more areas. An applicant who seeks renewal of a continuing license for two or more areas should allocate at least 30 clock hours to each of the licensure areas for a total of no fewer than 125 clock hours, with priority given to work in areas where the candidate is employed during the licensure period. An applicant who holds an administrative license or licenses may allocate clock hours for the renewal of teaching licensure under this subpart.

Subp. 11. Denial of clock hours. A local committee shall not grant clock hours for experiences that are primarily for personal rather than professional improvement or for experiences that duplicate other granted clock hour experiences without new or enhanced professional development value.

Statutory Authority: *MS s 122A.09; 122A.18*

History: 25 SR 588; 26 SR 1512; 29 SR 897; 34 SR 595

Published Electronically: November 19, 2009

8710.7300 LOCAL COMMITTEES FOR CONTINUING EDUCATION AND RELICENSURE.

Subpart 1. Membership. A local committee is established in each Minnesota public school district with membership as follows:

- A. Five persons licensed by the Board of Teaching who hold at least a baccalaureate degree, to be elected by the licensed teaching faculty. Nominations may be by building, grade level, or other

appropriate categories, provided that all eligible persons have a fair and equitable chance for nomination. Proportionate representation is encouraged.

B. One licensed person who holds an administrator's license, representing the elementary and secondary administration, to be elected by the licensed practicing administrators employed by the district.

C. One resident of the district who is not an employee of the district, to be designated by the local school board. School board members are not considered to be employees of the district.

Subp. 2. **Notice of election; election.** All members of an appropriate voting group shall be notified of the date of the election at least five days prior to the election. The election shall be held at a convenient time and place and shall be by secret ballot.

Members of the local committee shall be elected in May of each year for terms to begin no later than the following September 1. The term of office of members of the local committee shall be two years.

Subp. 3. **Continuing education committee.** In districts where either teachers or administrators with the specified qualifications are not available for service on the local committee, the superintendent will report the situation to the Board of Teaching who shall make special provisions for establishing a continuing education committee.

Subp. 4. **Organizational meeting.** The local committee shall hold its organizational meeting no later than September of each year. At the organizational meeting the local committee shall elect a chair and secretary whose duties shall be established by the local committee.

Subp. 5. **School district assistance.** Release time or a per diem stipend may be provided by the local school district to each local committee member to attend local committee meetings.

Clerical assistance and supplies as requested by the local committee may be provided by the local school district in sufficient amount to enable the local committee to comply with the record keeping and reporting required.

Subp. 6. **Quorum; calling meetings.** A quorum shall be more than 50 percent of the total voting membership of the committee. A majority vote of those voting members present shall be sufficient to take action. Meetings may be called by the chair of the committee or by written request of three or more of the members. Notice of meetings shall be provided to each member of the committee at least five days prior to the date of the meeting, and shall be posted or otherwise advertised in such a manner as to provide reasonable notice to those teachers subject to the actions of the committee.

Subp. 7. **Duties.** The duties of the local committee are as follows:

A. Set procedures for its own operation:

(1) establish written guidelines which include time, place, and procedures for local committee meetings; and procedures for local committee operations, including a procedure for emergency approval during periods when the committee is not regularly meeting;

(2) make the guidelines available to persons interested in or affected by decisions of the local committee, together with a list of the current local committee membership; and

(3) hold a hearing annually to allow the teachers in the district to review proposed or revised guidelines established by the local committee.

A working draft of local guidelines and proposed revisions shall be made available prior to the local hearing.

The local committee shall schedule the hearing at a time and place which is convenient for those interested in or affected by the guidelines to be able to attend.

Adequate and proper notice shall be given to all such persons within the district.

All local committee members should be present at the hearing.

The hearing shall continue until all persons who wish to speak have had an opportunity to do so.

Although input received at the hearing is not binding, the local committee is encouraged to modify its guidelines, insofar as modifications are consistent with chapters 8700 and 8710, if the information received during the hearing indicates that changes are necessary or desirable.

B. Provide recommendations to the Board of Teaching for the renewal of teaching licenses:

(1) Make recommendations regarding the issuance of the first continuing license by verifying one year of successful teaching experience for individuals on an entrance license. Successful teaching shall be determined by satisfying one or more of the following three criteria: a teacher receives an offer of a contract for the ensuing year; a teacher gains tenure or acquires a continuing contract; or supportive evidence is presented from supervisory personnel, professional colleagues, and/or administrators.

This experience shall be verified by the local committee chair or designee, whose name shall be on file with the Board of Teaching.

(2) Act, within a reasonable time, upon requests for recommendation for renewal of the continuing license by determining whether the applicant has met the requirements for renewal in part 8710.7100.

(3) Endorse the application for first issuance or renewal of the continuing license of each qualified applicant. The applicant shall assume the responsibility for forwarding the endorsed application to the Department of Education.

(4) Provide supporting evidence to the Board of Teaching when a decision of the local committee is appealed.

C. Forward to the Board of Teaching the following information according to the due dates in this rule:

(1) Prior to November 1 of each year, verification of the current membership of the local committee.

(2) Prior to receiving approval from the Board of Teaching to operate as a local committee, a copy of the published local committee guidelines. At the time that substantial changes are made in local guidelines, a revised copy of these guidelines shall be forwarded to the Board of Teaching.

(3) During February of each year, any recommendations for modifications of state continuing licensure renewal requirements, based upon an evaluation of procedures and criteria or granting clock hours.

D. Provide those services and reports that may be required from time to time by the Board of Teaching.

E. Provide recommendations to appropriate personnel concerning the in-service needs of the district.

Subp. 8. Transfer of clock hours. If a licensed person under the jurisdiction of one local committee moves to the jurisdiction of a different local committee during a renewal period, clock hours already earned

and granted during that renewal period are transferred to the new local committee. Clock hours shall be accepted by that committee.

Subp. 9. **Grantor of clock hours.** Clock hours shall be granted by the committee of the district where the applicant was employed at the time that the experience was completed.

Persons who have not been or are not currently employed by a school will be granted clock hours in either of the following ways:

- A. by the local committee of the district where the applicant was last employed; or
- B. by the local committee of the district where the applicant currently resides, if accepted by the local committee.

Subp. 10. **Renewal for persons not continually employed in Minnesota.** Persons who have never been employed on a continuing basis by a school district in Minnesota shall affiliate with the local committee in the district in which they reside.

Subp. 11. **Renewal for out-of-state residents.** A person residing out of Minnesota who wishes to maintain continuing Minnesota licensure may make application for renewal to the Board of Teaching according to parts 8710.7100 and 8710.7300.

Subp. 12. **Rule information.** The board of teaching shall provide each local committee with current Board of Teaching rules which pertain to licensure.

Subp. 13. **Option for formation of joint local committees.** Two or more districts situated in close proximity to each other shall have the option of joining together to establish a joint local committee.

A plan for two or more districts to formulate a joint local committee shall be drawn up by a committee consisting of two teachers, one administrator, and one school board member or a designee, from each participating district, and be ratified by at least 70 percent of the licensed personnel employed by each participating district. The plan shall provide for fair representation of all licensed personnel.

The ratified plan shall be submitted by the superintendent of the district employing the largest number of licensed personnel to the Board of Teaching.

The joint local committee shall be treated as any local committee and shall comply with parts 8700.0900 to 8700.2000 and 8710.7300 to 8710.7700.

Subp. 14. **Local committees in school district consortia and Department of Education.**

A. Licensed personnel employed by a Minnesota public school district consortium that is authorized by Minnesota statutes or a consortium of charter schools may establish a local committee for the same purpose as local committees established by public school districts. The Department of Education may establish a local committee to serve licensed teachers who work for state government.

B. When possible, the committees authorized in item A shall be established according to subpart 1. The committees shall function in the same manner as provided for committees of public school districts and in a way that provides fair representation for all licensed personnel and objective evaluation of requests for renewal of licenses. Duties of the committee and criteria for granting clock hours shall be identical to those for committees of public school districts.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *12 SR 412; 14 SR 165; 7 SR 1279; L 1998 c 397 art 11 s 3; 25 SR 588; L 2003 c 130 s 12*

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8710.7400 LOCAL COMMITTEES IN NONPUBLIC SCHOOLS.

Subpart 1. **Nonpublic school only.** Licensed personnel in a nonpublic school may establish a local committee for the same purpose as local committees established by public school districts. Licensed personnel in two or more nonpublic schools may combine to form a local committee upon the agreement of 70 percent of the licensed personnel in each school. The chair of the committee shall submit to the Board of Teaching, on an annual basis no later than November 1 of each year, verification of the membership of the committee and verification of the school or schools whose personnel have established the committee.

Subp. 2. **Nonpublic and public schools.** Licensed personnel in one or more nonpublic schools may join with an appropriate public school district in the establishment of a local committee, provided that 70 percent of the licensed personnel from each nonpublic school and 70 percent of the licensed personnel employed by the public school district agree to such a committee. The superintendent of the district shall submit to the director of licensing verification of the membership of the committee and verification of the nonpublic schools whose personnel have joined in the establishment of the committee.

Subp. 3. **Committee conduct.** Insofar as possible, the committees authorized in subparts 1 and 2 shall be established and shall function in the same manner as provided for committees of public school districts and in such way as to provide fair representation for all licensed personnel and objective evaluation of requests for renewal of licenses. Duties of the committee and criteria for granting clock hours shall be identical to those for committees of public school districts.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *17 SR 1279; L 1998 c 397 art 11 s 3; 25 SR 588*

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8710.7500 LOCAL COMMITTEE OF COLLEGE OR UNIVERSITY.

A college or university approved to prepare teachers for licensure in education may form a local committee or combine with other approved colleges or universities to form joint committees. Licensed personnel in approved colleges or universities may affiliate with a local committee established in a local school district or nonpublic school. Duties of the committee and criteria for granting clock hours shall be identical to those for committees of public school districts.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *L 1998 c 397 art 11 s 3; 25 SR 588*

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8710.7600 RIGHT OF APPEAL.

Subpart 1. **Appeal to local committee.** When an applicant has not been granted the requested number of clock hours by a local continuing education/relicensure committee, an appeal may be made to the local committee. An applicant must appeal to the local committee within 20 working days after notification of the decision of the local committee. Failure to file a written request with the local committee for an appeal within 20 working days constitutes a waiver of the individual's right to appeal.

Subp. 2. **Appeal to Board of Teaching.** Decisions by a local committee for continuing education/relicensure denying the appeal may be appealed to the Board of Teaching by the applicant according to part 8710.0900.

Subp. 3. **Nonendorsement of application by local committee.** In cases where the applicant has not been granted the required number of clock hours for relicensure, local committees shall not endorse the application for renewal of the continuing license.

Subp. 4. **Licensure extension during appeal.** The Board of Teaching shall extend the previous continuing license until all avenues of administrative appeal have been exhausted.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *12 SR 412; L 1998 c 397 art 11 s 3; 23 SR 1928; 25 SR 588*

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8710.7700 REVIEW OF LOCAL COMMITTEE FUNCTIONS.

The Board of Teaching shall review the compliance of the local committees with parts 8710.7300, 8710.7400, and 8710.7500, as applicable, at least once in each five-year period beginning in the 2000 calendar year.

Statutory Authority: *MS s 122A.09; 122A.18; 125.05; 125.185*

History: *L 1998 c 397 art 11 s 3; 25 SR 588*

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TEACHERS OF CAREER AND TECHNICAL EDUCATION

8710.8000 CORE SKILLS FOR TEACHERS OF CAREER AND TECHNICAL EDUCATION.

Subpart 1. **Licensure requirements.** A candidate recommended for licensure in career and technical education shall complete the core skill area licensure requirements in subpart 2 as part of each career and technical education preparation program approved under part 8700.7600.

Subp. 2. **Core skill areas.** A teacher of career and technical education has direct practical experience as an employee in an occupation within the scope of the licensure field and possesses the understandings and skills in career and technical education foundations, processes, and instructional design and teaching in items A to E.

A. A teacher of career and technical education understands the philosophy and practice of the field in the secondary education system. The teacher must:

(1) identify, apply, and evaluate the current state and federal legislation related to career and technical education;

(2) know how to involve advisory committees, labor, business, and community organizations in the delivery of a comprehensive career and technical education system;

(3) identify and analyze future demographic trends and their implications for career and technical education; and

(4) provide instructional settings and programs, including classroom, laboratory, and work and community-based settings that are safe, equitable, and maintain appropriate behavioral norms and relationships among participants.

B. A teacher of career and technical education understands curriculum development and course construction. The teacher is able to:

(1) design course content comprised of competency-based, contextual learning that contributes to academic knowledge, higher-order reasoning and problem-solving skills, personal and work attitudes, SCANS skills, technical skills including occupation-specific skills, and career exploration and development; and

(2) develop a strategy for the inclusion of leadership development in such activities as student organizations in career and technical education.

C. A teacher of career and technical education understands safe and appropriate methods of instruction. The teacher can:

(1) teach safe use of tools, equipment, materials, and processes in career and technical education learning environments;

(2) demonstrate career and technical education expertise including essentials of craftsmanship, visualization skills, spatial relationships, mechanical aptitude, and successful employment; and

(3) identify, develop, analyze, use, evaluate, and interpret a variety of assessment tools and measures that demonstrate student attainment of graduation, industry, and occupational skill standards.

D. A teacher of career and technical education understands career development theory and practice. The teacher can:

(1) assist students in understanding the variety and nature of technical careers;

(2) provide students opportunities to explore careers;

(3) assist students in evaluating the potential of careers for them as individuals using sound decision-making processes;

(4) promote students' understanding of the importance of preparation for career change and the need for lifelong learning; and

(5) assist students in developing their job seeking and job keeping skills and their career portfolios.

E. A teacher of career and technical education understands management of special learning environments. The teacher can:

(1) utilize fiscal, budgetary, purchasing, and inventory control practices to organize and equip special learning environments, including shops and community-based construction sites; and

(2) maintain laboratories and equipment to ensure a safe learning environment that provides for efficient use of student instructional time.

Subp. 3. Program requirements. An institution applying to the Board of Teaching for approval to prepare teachers under parts 8710.8010 to 8710.8080 shall incorporate the requirements of this part in each preparation program.

Statutory Authority: *MS s 122A.09*

History: *26 SR 700*

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8710.8010 TEACHERS OF COMMUNICATIONS TECHNOLOGY CAREERS.

Subpart 1. **Scope of practice.** A teacher of communications technology careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an effective understanding of current communications technology core skills standards through instruction including the following areas:

- A. academic foundations specific to communications technology;
- B. standard safety practices in communications technology;
- C. professional responsibilities in communications technology;
- D. communications technology careers exploration and investigation;
- E. effects of communications technology; and
- F. applications of production skills in communications technology.

Subp. 2. **Licensure requirements.** A candidate for licensure as a teacher of communications technology careers shall have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of communications technology careers must complete a preparation program under subpart 2 that includes the candidate's demonstration of the knowledge and skills listed in items A to F.

A. A teacher of communications technology careers must demonstrate the knowledge and applications of the academic subject matter required for proficiency in the following areas:

- (1) apply knowledge of systems specific to the communications technology careers;
- (2) technical reading and writing using charts, manuals, and journals;
- (3) match math activities to communications technology careers processes;
- (4) create and interpret representations of specifications used in communications technology careers;
- (5) use and interpret technical terminology specific to communications technology careers; and
- (6) awareness of emerging products and technologies as related to communications technology careers.

B. A teacher of communications technology careers must demonstrate the knowledge and applications of safety and environmental concerns and policies issued by federal, state, and local regulatory agencies including:

- (1) Occupational Safety and Health Administration (OSHA) rules; and
- (2) Minnesota Pollution Control Agency regulations.

C. A teacher of communications technology careers must demonstrate knowledge and application of legal responsibilities and ethical practices including:

(1) policies issued by federal, state, and local regulatory agencies, such as copyright laws, rating systems, filters/censorship systems, and mandatory reporting;

(2) employee protection procedures, such as the "Right to Know" regulations; and

(3) the management and use of resources, such as: staff policies and procedures, budgets, and training opportunities.

D. A teacher of communications technology careers must demonstrate knowledge by:

(1) describing potential communications technology career pathways;

(2) describing the levels of education, licensing/certification requirements, employment opportunities, workplace environments, and career growth potential for a specific communications technology career;

(3) utilizing personal occupational experiences to make communications technology careers meaningful to the students; and

(4) facilitating work-based learning opportunities including job shadowing, internships, and apprenticeship programs.

E. A teacher of communications technology careers must demonstrate the impact of:

(1) how the products, services, and applications may affect various behavior changes;

(2) the range of products, services, and applications available to employers and customers;

(3) quality control and improvement processes as they relate to customer satisfaction;

(4) past and present effects on the environment, socioeconomic status, and nontraditional technology systems; and

(5) the management and use of resources.

F. A teacher of communications technology careers must demonstrate the skills necessary to:

(1) envision, design, select, and use materials and resources to create, assemble, and deploy a finished product;

(2) problem solve, troubleshoot, maintain, repair, and operate equipment; and

(3) estimate and bid products and services.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

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8710.8020 TEACHERS OF CONSTRUCTION CAREERS.

Subpart 1. Scope of practice. A teacher of construction careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an effective understanding of construction careers including:

- A. academic foundations specific to the construction field;
- B. construction systems and issues;
- C. planning and management in construction;
- D. construction career exploration and investigation; and
- E. safety and environmental practices in the construction field.

Subp. 2. Licensure requirements. A candidate for licensure as a teacher of construction careers shall have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of construction careers must complete a preparation program under subpart 2 that must include the candidate's demonstration of the knowledge and skills in items A to E.

A. A teacher of construction careers must demonstrate the knowledge and applications of the academic subject matter required for proficiency within the following areas:

- (1) knowledge of math and measurement;
- (2) skill in technical reading and writing;
- (3) knowledge of geography and the environment as it relates to decision making and planning;
- (4) construction terminology/vocabulary; and
- (5) scientific principles in the planning and construction process.

B. A teacher of construction careers must demonstrate the knowledge and applications of construction systems and issues including:

- (1) use of materials;
- (2) methods/processes in construction;
- (3) use and maintenance of tools and equipment;
- (4) understanding of subsystems, such as electrical, plumbing, heating, and landscaping; and
- (5) awareness of emerging products and technologies, such as air quality, energy conservation, and computer-controlled systems.

C. A teacher of construction careers must demonstrate knowledge and application of planning, management, and business operation techniques in:

- (1) scheduling of work crews and tasks;
- (2) financial aspects, such as securing financing, project estimating, and bidding procedures;
- (3) management of human and material resources;

(4) understanding and interpreting construction documents, such as project plans, schedules, charts, graphs, and change orders; and

(5) understanding and application of energy and building codes.

D. A teacher of construction careers must demonstrate knowledge of the construction career clusters in the areas of:

(1) potential career paths found in the construction industry;

(2) levels of education, licensing/certification requirements, employment opportunities, and workplace environments including team work and potential career growth;

(3) work-based learning opportunities including job shadowing, internships, and apprenticeship programs;

(4) labor organizations and their impact on the construction trades; and

(5) utilizing personal occupational experiences to make construction careers meaningful to the students.

E. A teacher of construction careers must demonstrate knowledge and application of safety and environmental practices including:

(1) use of tools and equipment;

(2) personal safety concerns including body mechanics and ergonomics;

(3) first aid procedures and universal precautions;

(4) use of energy sources, such as natural gas and electricity;

(5) Environmental Protection Agency (EPA) regulations, such as proper material disposal, indoor air quality, and lead and asbestos abatement;

(6) Occupational Safety and Health Administration (OSHA) regulations;

(7) material safety data sheets (MSDS) adhering to hazardous labeling requirements; and

(8) safety signs, symbols, and labels.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

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8710.8030 TEACHERS OF MANUFACTURING CAREERS.

Subpart 1. **Scope of practice.** A teacher of manufacturing careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an effective understanding of the following areas:

- A. academic foundations specific to the manufacturing field;
- B. standard safety and environmental practices;
- C. manufacturing career exploration and investigation;

- D. industry skills standards for manufacturing technology; and
- E. ethics and legal responsibilities in manufacturing.

Subp. 2. **Licensure requirements.** A candidate for licensure as a teacher of manufacturing careers shall have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of manufacturing careers must complete at least a baccalaureate degree from a regionally accredited college or university and a preparation program under subpart 2 that must include the candidate's demonstration of the knowledge and skills in items A to E.

A. A teacher of manufacturing careers must demonstrate the knowledge and applications of academic subject matter required for proficiency in the following areas:

- (1) knowledge of math and science to manufacturing situations within specific manufacturing careers;
- (2) technical reading and writing in a manufacturing environment such as creating and interpreting graphs, charts, manuals, journals, and specifications;
- (3) problem solving in mathematical applications such as equations, formulas, and processes; and
- (4) applying manufacturing terminology for communication with co-workers, customers, and employers.

B. A teacher of manufacturing careers must demonstrate knowledge and application of safety principles according to the rules and regulations of:

- (1) the Occupational Safety and Health Administration (OSHA);
- (2) the Environmental Protection Agency (EPA); and
- (3) the material safety data sheets (MSDS).

C. A teacher of manufacturing careers must demonstrate knowledge and application of manufacturing careers by:

- (1) describing potential manufacturing careers;
- (2) describing the levels of education, licensing/certification requirements, employment opportunities, workplace environments, potential salaries, and career growth potential; and
- (3) utilizing personal occupational experiences to make manufacturing careers meaningful to the students.

D. A teacher of manufacturing careers must demonstrate the knowledge and ability of the processes used to take a blueprint and manufacture a product from beginning to end using industry standards. These processes include:

(1) general processes for manufacturing technology include: blueprint reading, layout techniques, hand tool processes/identifications, measurement techniques, metallurgy, sawing techniques, abrasive processes, drilling techniques, quality control, jigs, fixtures and fasteners, accreditation/certification, laser processes, water cutting, robotics, fluid power systems, foundry processes, sheet metal processes, forging processes, and plastic technologies;

(2) specific processes for machine trades including: precision measurement techniques, milling processes, turning processes, forming processes, precision grinding, numerical control, plastics/laminates processes, electrical discharge machining processes, stereo-lithography, tool and cutter grinding, computer aided drafting (CAD), computer aided machining (CAM), and geometric tolerancing; and

(3) specific processes for welding trades including: electrical polarities, electrode classifications, plasma arc cutting (ARC), oxy, fuel cutting (OFC), automatic cutting processes, gouging processes, oxy, acetylene welding (OAW), shielded metal arc welding (SMAW), gas metal arc welding (GMAW), flux core arc welding (FCAW), gas tungsten arc welding (GTAW), submerged arc welding (SAW), plasma arc welding (PAW), hard facing processes, and weld testing (nondestructive/destructive).

E. A teacher of manufacturing careers must demonstrate knowledge and application of legal responsibilities and ethical practices in manufacturing including:

(1) morality and ethics and the relationship of each to manufacturing occupations, such as falsifying documents;

(2) legal and policy issues impacting manufacturing industries, such as errors and omissions, negligence liabilities, and environmental issues and concerns;

(3) understanding the importance of customer satisfaction, such as on-time delivery and quality control;

(4) employee protection documents, such as the Right to Know regulations; and

(5) requirements for reporting and documentation of any activity that adversely affects the welfare of customers and fellow workers, such as incident reports and hazardous material spills.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

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8710.8040 TEACHERS OF MEDICAL CAREERS.

Subpart 1. **Scope of practice.** A teacher of medical careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an effective understanding of the National Health Care Skills Standards in the following areas:

- A. academic foundations specific to the medical field;
- B. health care systems and issues;
- C. medical communication;

- D. ethics and legal responsibilities in health care;
- E. medical/health career exploration and investigation; and
- F. standard safety and infection control practices.

Subp. 2. Licensure requirements. A candidate for licensure as a teacher of medical careers shall possess or have possessed licensure or certification to practice in a medical career, direct practical experience as a medical professional, and have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of medical careers must complete a preparation program under subpart 2 that must include the candidate's demonstration of the knowledge and skills in items A to F.

A. A teacher of medical careers must demonstrate the knowledge and applications of the academic subject matter required for proficiency in the following areas:

- (1) knowledge of life sciences such as biology, chemistry, physics, and human growth and development to client care situations within specific medical careers;
- (2) reading and writing in health care situations, such as case studies, medical charts, manuals, and journals;
- (3) mathematical operations, such as computations for drug and fluid dosages and assessment of client condition; and
- (4) health care terminology for interstaff communication and interpretation of information to clients.

B. A teacher of medical careers must demonstrate the knowledge and applications of health care delivery systems and issues including:

- (1) where and how factors, such as cost, managed care, technology, an aging population, access to care, alternative therapies, and how lifestyle/behavior changes may affect various health care delivery systems;
- (2) the range of services available to clients;
- (3) delivery of health care to diverse groups in a variety of situations;
- (4) quality improvement processes as they relate to client outcomes;
- (5) effects on the health care system caused by past and present influences of technology, epidemiology, bioethics, socioeconomics, and other various forms of complimentary (nontraditional) medicine; and
- (6) the use of medical facility resources, such as staff, policy and procedure manuals, and training opportunities.

C. A teacher of medical careers must demonstrate the knowledge and applications of the various methods of giving and obtaining information including:

(1) interpreting, transcribing, and communicating information, data, and observations using medical terminology within various health care situations;

(2) reporting subjective and objective client information in relevant order of occurrence; and

(3) using decision-making models within the context of problem solving in the health care environment.

D. A teacher of medical careers must demonstrate knowledge and application of legal responsibilities and ethical practices in health care, including:

(1) morality and ethics and the relationship of each to health care outcomes;

(2) legal and policy issues impacting health care, such as malpractice, negligence, and liability;

(3) the primacy of client confidentiality;

(4) patient protection documents, such as the Client Bill of Rights and the Vulnerable Adults Protection Act; and

(5) requirements for reporting and documentation of any activity that adversely affects the welfare of clients or fellow workers, such as incident reports, medication, or treatment errors.

E. A teacher of medical careers must demonstrate knowledge of the diagnostic, therapeutic, environmental, and informational medical career clusters by:

(1) describing potential health career paths and ladders in occupations found in aforesaid clusters;

(2) describing the levels of education, licensing/certification requirements, employment opportunities, workplace environments, and career growth potential for a specific medical career; and

(3) utilizing personal occupational experiences to make medical careers meaningful to the students.

F. A teacher of medical careers must demonstrate knowledge and application of safety principles and infection control practices including:

(1) standard precautions as described in the rules and regulations of the Occupational Safety and Health Administration (OSHA);

(2) infection control procedures;

(3) safety procedures to protect clients, co-workers, and self;

(4) body mechanics and ergonomics;

(5) environment modification to create safe conditions in the health care setting;

(6) methods of fire prevention and response;

(7) material safety data sheets (MSDS) and adhering to hazardous labeling requirements;

(8) safety signs, symbols, and labels;

(9) facility evacuation plan; and

(10) emergency plan in response to a natural disaster or other unusual incident.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

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8710.8050 TEACHER OF CREATIVE DESIGN CAREERS.

Subpart 1. **Scope of practice.** A teacher of creative design careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an in-depth understanding and application of the knowledge and skills required in creative design careers including:

- A. textiles and apparel careers; and
- B. housing, interiors, and furnishings careers.

Subp. 2. **Licensure requirements.** A candidate for licensure as a teacher of creative design careers shall have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

Subp. 3. **Subject matter standard.** A candidate for licensure as a teacher of creative design careers must complete a preparation program under subpart 2 that must include the candidate's demonstration of the knowledge and skills in items A and B:

A. A teacher of creative design careers must demonstrate the knowledge, skills, and application of the following subject matter standards:

(1) apply textiles and apparel design skills, such as color and textile analysis, flat pattern design, draping design, and construction;

(2) possess a comprehensive understanding of the history of fashion and design and its impact on current trends in textiles and apparel industry;

(3) apply textile and apparel industry standards to production, alteration, and repair of textile products or apparel, fashion/fabric merchandising, and production of commercial, institutional, and residential textile products;

(4) evaluate the elements of textiles and apparel merchandising, such as customer service, fashion trends, cost-effectiveness, marketing, and merchandise display;

(5) demonstrate operational procedures specific to business profitability and career success in textiles and apparel;

(6) incorporate fashion, apparel, textile career opportunities and activities, such as job shadowing, simulated work experiences, internships, apprenticeships, and student organizations into the curriculum;

(7) describe and analyze career paths and ladders in textiles and apparel careers and utilize personal occupational experiences to make textiles and apparel careers meaningful to students; and

(8) describe the levels of education, licensing or certification requirements, employment opportunities, workplace environments, and career growth in textiles and apparel careers.

B. A teacher of creative design careers must demonstrate the knowledge, skills, and application of the following subject matter standards:

(1) understand the influences which impact housing, interior, and furnishing industries, such as social, economic, cultural, urban, suburban, and rural, and their relationship to client's needs;

(2) evaluate housing decisions based on client's needs, goals, options, and resources to create design plans for commercial and residential environments, such as home, office, health care, hospitality, institutions, and retail;

(3) evaluate products used in housing, interiors, and furnishings to meet specific needs, such as physical disabilities, health conditions, and geographical location;

(4) understand the current industry standards used in housing, interiors, and furnishings;

(5) demonstrate computer-aided drafting design, blueprint reading, and space planning skills required in the housing, interiors, and furnishings industry;

(6) demonstrate design ideas through visual presentation;

(7) demonstrate operational procedures for housing, interiors, and furnishings business profitability and career success;

(8) incorporate housing, interiors, and furnishings career opportunities and activities such as job shadowing, simulated work experiences, internships, apprenticeships, and student organizations into the curriculum;

(9) describe and analyze career paths and ladders in housing, interiors, and furnishings careers;

(10) utilize personal occupational experiences to make housing, interiors, and furnishings careers meaningful to students; and

(11) describe the levels of education, licensing/certification requirements, employment opportunities, workplace environments, and career growth in housing, interiors, and furnishings careers.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

Published Electronically: *August 8, 2013*

8710.8060 TEACHER OF EARLY CHILDHOOD CAREERS.

Subpart 1. **Scope of practice.** A teacher of early childhood careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an in-depth understanding and application of the knowledge and skills in:

A. academic foundations specific to early childhood careers;

B. administration of early childhood programs;

- C. operational procedures of early childhood programs; and
- D. early childhood career exploration and investigation.

Subp. 2. **Licensure requirements.** A candidate for licensure as a teacher of early childhood careers shall have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

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

A. A teacher of early childhood careers must demonstrate the knowledge and applications of the academic subject matter required for proficiency. The teacher must:

- (1) understand and apply the theories of age and stage development of children prenatal through adolescence including an understanding of exceptionalities;
- (2) understand the theory of child psychology and its application through learning, creative, cognitive, physical, language, self-help, and social activities;
- (3) analyze and apply developmentally appropriate practices (National Association for the Education of Young Children NAEYC) to plan for early childhood programs;
- (4) demonstrate appropriate observation techniques; and
- (5) define standards of accreditation in early childhood programs and services.

B. A teacher of early childhood careers must demonstrate the knowledge and applications of program administration. The teacher must:

- (1) possess a comprehensive understanding of the federal, state, and local laws governing programs in early childhood;
- (2) guide students in establishing a safe and healthy learning environment when working with children, families, educational systems, or community agencies;
- (3) demonstrate techniques for positive collaborative relationships when working with children, families, educational systems, or community agencies; and
- (4) integrate the specific needs and interests of children and families throughout developmental stages in a variety of educational and community settings.

C. A teacher of early childhood careers must demonstrate the knowledge and applications of operational procedures. The teacher must:

- (1) understand the ethics and legal responsibilities of working with multidisciplinary systems, such as parents, children, medical services, educational systems, legal systems, and community services;
- (2) perform and teach the appropriate procedures regarding health and safety, nutrition, and food preparation on a daily basis;

(3) demonstrate an understanding of the learning environment, such as equipment, room arrangement, activity schedules, and its potential effect on the program, children, staff, and parents;

(4) model effective use of verbal and nonverbal communication techniques when working with parents, children, staff, educational systems, and community agencies; and

(5) understand the mandatory reporting responsibilities, such as abuse and harassment, in regard to working with children.

D. A teacher of early childhood careers must demonstrate the knowledge and skills in the career field of early childhood to:

(1) describe and analyze career paths and ladders in early childhood careers;

(2) utilize personal occupational experiences to make early childhood careers meaningful to students;

(3) describe the levels of education, licensing/certification requirements, employment opportunities, workplace environments, and career growth potential for a specific early childhood career; and

(4) incorporate early childhood career opportunities and activities, such as job shadowing, simulated work experiences, internships, apprenticeships, and student organizations into the curriculum.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

Published Electronically: *November 19, 2009*

8710.8070 TEACHER OF HOSPITALITY SERVICE CAREERS.

Subpart 1. **Scope of practice.** A teacher of hospitality service careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an in-depth understanding and application of the knowledge and skills required in food preparation/production and service, food science/nutrition, tourism/recreation, and facilities management/maintenance.

Subp. 2. **Licensure requirements.** A candidate for licensure as a teacher of hospitality service careers shall have completed at least a baccalaureate degree from a regionally accredited college or university and a teacher preparation program approved under part 8700.7600, including:

A. the standards of effective practice under part 8710.2000;

B. the core skills for teachers of career and technical education under part 8710.8000; and

C. the standards under subpart 3.

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

A. A teacher of hospitality service careers must be able to demonstrate the knowledge, skills, and applications of the following academic subject matter standards:

- (1) an understanding of bacteriology/food sanitation hygiene and its impact on the production and serving of food;
- (2) an understanding of the current theories and trends in food science and nutrition and their impact on food preparation/production and service;
- (3) the use of specific food service industry and government standards to design the layout of food service facilities;
- (4) the use of appropriate techniques in food production and service, such as quantity food purchasing, cost control, food preparation, and new product development;
- (5) an understanding of how food service impacts the tourism industry, such as its nature, growth, and development;
- (6) an understanding of the coordination techniques of planning activities, events, and convention functions; and
- (7) an understanding of and the use of the principles of small business management involved in tourism/recreation management, food preparation/production, service, and facilities management/maintenance.

B. A teacher of hospitality service careers must be able to demonstrate the knowledge, skills, and applications of administration including:

- (1) use of record keeping and accounting in the hospitality service industry, such as food preparation/production and service, tourism/recreation management, and facilities management/maintenance;
- (2) promotion and use of environmental, security, and safety/sanitation procedures as they pertain to food service, hospitality, tourism/recreation, and facilities management/maintenance;
- (3) selection, use, and maintenance of specialized equipment used in food preparation/production, hospitality, tourism/recreation, and facilities management/maintenance; and
- (4) use of industry skill standards in food service, food preparation/production, tourism/recreation, and facilities maintenance.

C. A teacher of hospitality service careers must be able to demonstrate the knowledge, skills, and applications of operational procedures including:

- (1) the use of appropriate communication skills to foster positive relationships when working in food service, hospitality, tourism/recreation, and facilities management/maintenance;
- (2) a comprehensive understanding of federal, state, and local laws, federal regulations, and state rules governing the hospitality service industries, such as food preparation/production and service, tourism/recreation, and facilities management/maintenance; and
- (3) the use of concepts of production and service to meet customer needs and expectations.

D. A teacher of hospitality service careers must demonstrate the knowledge and skills in the career fields of food preparation/production and service, food science/nutrition, tourism/recreation, and management/maintenance of facilities to:

- (1) describe and analyze career paths and ladders in hospitality service careers;

(2) utilize personal occupational experience to make food preparation/production and service, food science/nutrition, tourism/recreation, and facilities management/maintenance careers meaningful to students;

(3) describe the levels of education, licensing/certification requirements, employment opportunities, workplace environments, and career growth potential in hospitality service careers; and

(4) incorporate hospitality service career opportunities and activities, such as job shadowing, simulated work experiences, internships, apprenticeships, and student organizations into the curriculum.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

Published Electronically: *November 19, 2009*

8710.8080 TEACHERS OF TRANSPORTATION CAREERS.

Subpart 1. Scope of practice. A teacher of transportation careers is authorized to provide students in grades 7 through 12 instruction that is designed to develop an effective understanding of the National Transportation Core Skills Standards.

Subp. 2. Licensure requirements. A candidate for licensure as a teacher of transportation careers shall have completed a teacher preparation program approved under part 8700.7600 including:

- A. the standards of effective practice under part 8710.2000;
- B. the core skills for teachers of career and technical education under part 8710.8000; and
- C. the standards under subpart 3.

Subp. 3. Subject matter standard. A candidate for licensure as a teacher of transportation careers must complete at least a baccalaureate degree from a regionally accredited college or university and a preparation program under subpart 2 that must include the candidate's demonstration of the knowledge and skills in items A to F.

A. A teacher of transportation careers must demonstrate the knowledge and applications of the academic subject matter required for proficiency within the following areas:

- (1) apply knowledge of electricity, electronics, chemistry, and physics specific to the transportation industry;
- (2) match measurement activities to transportation processes;
- (3) create and interpret graphs, charts, manuals, journals, and specifications used in transportation; and
- (4) use and interpret technical terminology specific to transportation industries.

B. A teacher of transportation careers must demonstrate the knowledge and applications of safety and environmental concerns and issues including:

- (1) Occupational Safety and Health Administration (OSHA) rules;

- (2) Minnesota Pollution Control Agency regulations;
- (3) transportation regulatory agencies, such as the Department of Transportation and Federal Aviation Administration; and
- (4) the use of first aid resources, such as staff, policy and procedure manuals, and training opportunities regarding acids, fuels, and chemicals.

C. A teacher of transportation careers must demonstrate knowledge and application of legal responsibilities and ethical practices in transportation, including:

- (1) morality and ethics and the relationship of each to transportation occupations, such as falsifying documents and service work orders;
- (2) legal and policy issues impacting transportation industries, such as errors and omissions, negligence liabilities, environmental issues, and concerns;
- (3) understanding the importance of customer satisfaction, such as avoiding comebacks, warranty work, and doing unauthorized services;
- (4) employee protection documents, such as the Right to Know Regulations; and
- (5) requirements for reporting and documentation of any activity that adversely affects the welfare of customers and fellow workers, such as incident reports and hazardous material spills.

D. A teacher of transportation careers must demonstrate the knowledge and applications of the various methods of giving and obtaining information including:

- (1) interpreting, transcribing, and communicating information, data, and observations using transportation terminology;
- (2) reporting subjective and objective customer information in relevant order of occurrence, such as work orders and cost estimates; and
- (3) using decision-making models within the context of problem solving in the transportation industry, such as diagnostic flow charts and weight and balance calculations.

E. A teacher of transportation careers must demonstrate knowledge of alternative careers within the industry by:

- (1) describing potential transportation career paths and ladders in occupations found in the transportation careers, such as land, air, water, and space;
- (2) describing the levels of education, licensing or certification requirements, employment opportunities, workplace environments, and career growth potential for a specific transportation career; and
- (3) utilizing personal occupational experiences to make transportation careers meaningful to the students.

F. A teacher of transportation careers must demonstrate the knowledge and applications of transportation systems and issues including:

- (1) where and how factors, such as cost, technology, alternative methods, and how lifestyle or behavior changes may affect various transportation systems;
- (2) the range of services and technology applications available to employers and customers, such as the Internet and wireless communications;

(3) quality improvement processes as they relate to customer outcomes, through the use of new technologies, tools, methods, and equipment; and

(4) effects on the transportation systems caused by past and present influences of technology, environmental, socioeconomic, and other various forms of nontraditional transportation.

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

Statutory Authority: *MS s 122A.09; 122A.18*

History: *26 SR 700; 30 SR 1054*

Published Electronically: *November 19, 2009*

8710.9000 VOLUNTARY CREDENTIAL FOR EDUCATION PARAPROFESSIONALS.

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*

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