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8VAC20-542

CHAPTER 542

REGULATIONS GOVERNING THE REVIEW AND APPROVAL OF EDUCATION PROGRAMS IN VIRGINIA
(REPEALED)

CHAPTER 543

REGULATIONS GOVERNING THE REVIEW AND APPROVAL OF EDUCATION PROGRAMS IN VIRGINIA

8VAC20-543-10

Part I

Definitions

8VAC20-543-10. Definitions.

The following words and terms when used in this chapter shall have the meanings indicated unless the context implies otherwise:

"Accreditation" means a process for assessing and improving academic and educational quality through voluntary peer review. This process informs the public that an institution has a professional education program that has met national standards of educational quality.

"Accredited institution" means an institution of higher education accredited by a regional accrediting agency recognized by the United States Department of Education.

"Accredited program" means a Virginia professional education program accredited by the Council for the Accreditation of Educator Preparation (CAEP), including CAEP/National Council for the Accreditation of Teacher Education (NCATE) and CAEP/Teacher Education Accreditation Council (TEAC).

"Annual report card" means the Virginia Department of Education yearly data report card required of all professional education programs in Virginia that offer approved programs for the preparation of school personnel.

"Biennial accountability measures" means those specific benchmarks set forth in 8VAC20-543-40 to meet the standards required to obtain or maintain education endorsement program approval status.

"Biennial accountability measurement report" means the compliance report submitted to the Virginia Department of Education every two years by an accredited professional education program.

"Candidates" means individuals enrolled in education programs.

"Department" means the Virginia Department of Education.

"Diversity" means the wide range of differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, and geographical area.

"Education endorsement program" means a state-approved course of study, the completion of which signifies that an enrollee has met all the state's educational and training requirements for initial licensure in a specified endorsement area.

"Field experiences" means program components that are (i) conducted in off-campus settings or on-campus settings dedicated to the instruction of children who would or could otherwise be served by school divisions in Virginia or accredited nonpublic schools and (ii) accredited for this purpose by external entities such as regional accrediting agencies. Field experiences include classroom observations, tutoring, assisting teachers and school administrators, and supervised clinical experiences (i.e., practica, student teaching, and internships).

"Indicators" means operational definitions that suggest the kinds of evidence that professional education programs shall provide to demonstrate that a standard is met.

"Instructional technology" means the theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning and the use of computers and other technologies.

"Licensing" means the official recognition by a state governmental agency that an individual has met state requirements and is, therefore, approved to practice as a licensed professional.

"Professional education program" means the Virginia institution, college, school, department or other administrative body within a Virginia institution of higher education, or another Virginia entity, for a defined education program that is primarily responsible for the preparation of teachers and other professional school personnel.

"Professional studies" means courses and other learning experiences designed to prepare candidates to demonstrate competence in the areas of human development and learning, curriculum and instruction, assessment of and for learning, classroom and behavior management, the teaching profession, reading, and supervised clinical experiences.

"Program approval" means the process by which a state governmental agency reviews an education program to determine if it meets the state's standards for the preparation of school personnel.

"Program completers" means individuals who have successfully completed all coursework, required licensure assessments, including those prescribed by the Board of Education, and supervised student teaching or required internship.

"Program noncompleters" means individuals who have been officially admitted into an education program and who have taken, regardless of whether the individuals passed or failed, required licensure assessments and who exit the program prior to completion. Program noncompleters shall have been officially released in writing from an education endorsement program by an authorized administrator of the program. Program noncompleters who did not take required assessments are not included in biennial reporting pass rates.

"Regional accrediting agency" means one of the six accrediting associations recognized by the United States Department of Education as follows: New England Association of Schools and Colleges, Middle States Association of Colleges and Schools, North Central Association of Colleges and Schools, Northwest Commission on Colleges and Universities, Southern Association of Colleges and Schools, and Western Association of Schools and Colleges.

"Standards of Learning for Virginia public schools" means the Commonwealth's expectations for student learning and achievement in grades K-12 in English, mathematics, science, history/social science, technology, fine arts, foreign language, health and physical education, and driver education.

8VAC20-543-20

Part II

Accreditation and Administering this Chapter

8VAC20-543-20. Accreditation and administering this chapter.

A. Institutions of higher education seeking approval of an education endorsement program shall be accredited by a regional accrediting agency.

B. Professional education programs in Virginia shall obtain and maintain national accreditation from the Council for the Accreditation of Educator Preparation (CAEP), including CAEP/National Council for the Accreditation of Teacher Education (NCATE) and CAEP/Teacher Education Accreditation Council (TEAC). Professional education programs in Virginia seeking accreditation through CAEP shall adhere to procedures and timelines established by CAEP and the CAEP/Virginia Partnership Agreement. Professional education programs shall ensure and document that programs are aligned with standards set forth in 8VAC20-543-40 through 8VAC20-543-50 and meet competencies outlined in 8VAC20-543-60 through 8VAC20-543-640.

C. If a professional education program fails to maintain accreditation, enrolled candidates shall be permitted to complete their programs of study. Professional education programs that fail to maintain accreditation shall not admit new candidates. Candidates shall be notified of the education endorsement program's approval status.

D. Teacher candidates shall complete academic degrees in the arts and sciences, or equivalent, except in health, physical, and career and technical education. Candidates in early/primary education preK-3, elementary education (preK-6), middle education (6-8), and special education programs may complete a major in interdisciplinary studies or its equivalent. Candidates seeking a secondary endorsement area must have earned a major, or the equivalent, in the area sought.

E. Professional studies coursework and methodology, including field experiences, required in this chapter shall be designed for completion within a baccalaureate degree program.

F. Professional education programs shall ensure that candidates demonstrate proficiency in the use of educational technology for instruction; complete study in child abuse recognition and intervention; and complete training or certification in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators.

G. Standards and procedures for the review and approval of each education endorsement program shall adhere to procedures for administering the chapter as defined in this section and in 8VAC20-543-40, 8VAC20-543-50, and 8VAC20-543-60. These procedures shall result in biennial recommendations to the Board of Education for one of the following three ratings: "approved," "approved with stipulations," or "approval denied."

H. Education endorsement programs shall be approved under this chapter biennially based on compliance with the criteria described in 8VAC20-543-40, 8VAC20-543-50, and 8VAC20-543-60.

I. The Department of Education will determine the timeline and procedures for applying for education endorsement program approval.

J. Education endorsement programs in Virginia shall address the competencies set forth in this chapter, and the curriculum for each program must be documented and submitted to the Department of Education for approval.

K. Professional education programs shall submit to the Department of Education on behalf of each education endorsement program under consideration a biennial accountability measurement report and an annual report card to include data prescribed by the Board of Education on education endorsement programs in accordance with department procedures and timelines.

L. The professional education program authorized administrator shall maintain copies of approved education endorsement programs and required reports.

M. The Department of Education may conduct onsite visits to review education endorsement programs and verify data.

N. The Advisory Board on Teacher Education and Licensure (ABTEL) is authorized to review and make recommendations to the Board of Education on approval of Virginia education endorsement programs for school personnel. The Board of Education has final authority on education endorsement program approval.

O. Modifications may be made by the Superintendent of Public Instruction in the administration of this chapter. Proposed modifications shall be made in writing to the Superintendent of Public Instruction, Commonwealth of Virginia.

8VAC20-543-30

Part III

Application for New Education Endorsement Programs

8VAC20-543-30. Application for new education endorsement programs.

A. Requests for new education endorsement programs shall be approved by the Virginia Board of Education.

B. The professional education program shall submit a request for the new program in a format provided by the Department of Education that shall address the following requirements:

1. Rationale for the new education endorsement program, to include local division or service area demand data and statements of support from the institution's dean, provost, president, or designee and Virginia school divisions. A summary of the stakeholders' involvement in the development of the education endorsement program must be included.

2. Capacity of the institution to offer the education endorsement program.

3. List of the requirements for the education endorsement program, to include the degree, major, and the curriculum.

4. Matrices demonstrating that the competencies set forth in this chapter have been incorporated in the education endorsement program.

5. Description of structured and integrated field experiences to include early clinical experiences and a summative supervised student teaching experience.

6. Description of the partnerships and collaborations based on preK-12 school needs.

8VAC20-543-40

Part IV

Standards for Biennial Approval of Education Endorsement Programs

8VAC20-543-40. Standards for biennial approval of education endorsement programs.

Education endorsement programs in Virginia shall be approved by the Board of Education and demonstrate achievement biennially of the accountability measures in this section. The institution of higher education must report evidence of the standards for Board of Education review biennially.

1. Candidate progress and performance on prescribed Board of Education licensure assessments. Candidate passing rates, reported by percentages, shall not fall below 80% biennially for program completers and program noncompleters. Program completers are individuals who have successfully completed all coursework, required licensure assessments, and supervised student teaching or required internship. Program noncompleters are those individuals who have been officially admitted into the education program and who have taken, regardless of whether the individual passed or failed, required licensure assessments, and who exit the program prior to completion. Program noncompleters shall have been officially released (in writing) from an education endorsement program by an authorized administrator of the program.

2. Candidate progress and performance on an assessment of basic skills as prescribed by the Board of Education for individuals seeking entry into an approved education endorsement program.

Indicators of the achievement of this standard shall include the following:

a. Results on Board of Education prescribed entry-level assessments;

b. Documentation that candidates enrolled in the program who fail to achieve a minimum score established by the Board of Education have the opportunity to address deficiencies; and

c. Documentation of the number of candidates admitted into the program who did not meet the prescribed admission assessment and the opportunities provided to the candidates to address deficiencies.

3. Structured and integrated field experiences to include early clinical experiences and a summative supervised student teaching experience.

Indicators of the achievement of this standard shall include the following:

a. Evidence that candidates receive quality clinically-based structured and integrated field experiences that prepare them to work in diverse educational environments; and

b. Evidence that supervised clinical experiences are continuous and systematic and comprised of early field experiences with a minimum of 10 weeks of full-time student teaching under the supervision of a cooperating teacher with demonstrated effectiveness in the classroom, as indicated by a proficient or exemplary evaluation rating. The supervised student teaching experience shall include at least 150 clock hours spent in direct teaching at the level of endorsement.

4. Evidence of opportunities for candidates to participate in diverse school settings that provide experiences with populations that include racial, economic, linguistic, and ethnic diversity throughout the program experiences.

The indicator of the achievement of this standard shall include evidence that the professional education program provides opportunities for candidates to have program experiences in diverse school settings that provide experiences with populations that include racial, economic, linguistic, and ethnic diversity within each biennial period.

5. Evidence of contributions to preK-12 student achievement by candidates completing the program.

Indicators of the achievement of this standard shall include the following:

a. Evidence to show that candidates know about, create, and use appropriate and effective data-driven assessments in teaching that shall provide dependable information about student achievement;

b. Evidence to document that faculty have made provisions for evaluating the effects that candidates have on preK-12 student learning in the context of teaching as they design unit assessment systems and assessments for each program; and

c. Evidence that the education program assesses candidates' mastery of exit criteria and performance proficiencies, including the ability to affect student learning, through the use of multiple sources of data such as a culminating experience, portfolios, interviews, videotaped and observed performance in schools, standardized tests, and course grades.

6. Evidence of employer job satisfaction with candidates completing the program.

Indicators of the achievement of this standard shall include:

a. Documentation that the professional education program has two years of evidence regarding candidate performance based on employer surveys.

b. Documented evidence of teacher effectiveness, including student academic progress.

7. Partnerships and collaborations based on preK-12 school needs.

Indicators of the achievement of this standard shall include the following:

a. Documented evidence that the education endorsement program has established partnerships reflecting collaboratively designed program descriptions based on identified needs of the preK-12 community.

b. Documented evidence that the administration and supervision program collaborates with partnering schools to identify and select candidates for school leadership programs who meet local needs, demonstrate both potential for and interest in school leadership, and meet the qualifications for admission to advanced programs.

8VAC20-543-50

Part V

Application of Standards for Biennial Approval of Education Endorsement Programs

8VAC20-543-50. Application of the standards.

A. As a prerequisite to education endorsement program approval, professional education programs in Virginia shall have national accreditation. Failure to do so will result in the education endorsement program being designated as "approval denied."

B. The education endorsement program's candidate passing rates, reported by percentages, shall not fall below 80% biennially for program completers and program noncompleters. Program completers are individuals who have successfully completed all coursework, required licensure assessments, and supervised student teaching or required internship. Program noncompleters are those individuals who have been officially admitted into the education program and who have taken, regardless of whether the individual passed or failed, required licensure assessments, and who exit the program prior to completion. Program noncompleters shall have been officially released (in writing) from an education endorsement program by an authorized administrator of the program.

C. The professional education program's authorized administrator is responsible to certify documented evidence that the following standards as set forth in 8VAC20-543-40 have been met by the education endorsement program:

1. The professional education program shall demonstrate candidate progress and performance on an assessment of basic skills as prescribed by the Board of Education for individuals seeking entry into an approved education endorsement program.

2. The professional education program shall provide structured and integrated field experiences.

3. The professional education program shall provide evidence of opportunities for candidates to participate in diverse school settings that provide experiences with populations that include racial, economic, linguistic, and ethnic diversity throughout the program experiences.

4. The professional education program shall provide evidence of contributions to preK-12 student achievement by candidates completing the program.

5. The professional education program shall provide evidence of employer job satisfaction with candidates completing the program.

6. The professional education program shall develop and provide evidence of biennial accountability measures for partnerships and collaborations based on preK-12 school needs.

D. After submitting to the Department of Education the information contained in 8VAC20-543-40, education endorsement programs in Virginia shall receive one of the following three ratings:

1. Approved. The education endorsement program has met all standards set forth in 8VAC20-543-40.

2. Approved with stipulations. The education endorsement program has met standards in subsections A and B of this section and is making documented progress toward meeting standards in subsection C of this section. Biennial passing rates that fall below the 80% requirement for program completers and noncompleters shall result in the education endorsement program receiving a rating of "approved with stipulations." The passing rate for program completers and noncompleters must meet the 80% passing rate requirement by the end of the next biennial period for the program to be approved; if the 80% pass rate is not achieved, the program will be denied.

3. Approval denied. Approval may be denied if:

a. The education endorsement program has not met standards in subsection A of this section;

b. The education endorsement program has met standards in subsection A of this section but has not met requirements in subsection B of this section for two consecutive biennial reporting periods. The program shall be denied and the public notified. The program may resubmit a request for approval at the end of the next biennial period.

8VAC20-543-60

Part VI

Professional Education Program Accountability

8VAC20-543-60. Biennial accountability measurement report.

The accredited professional education program shall report, every two years, in accordance with Virginia Department of Education procedures, those specific criteria set forth in 8VAC20-543-40 to meet the standards required to obtain or maintain education endorsement program approval status.

8VAC20-543-70

8VAC20-543-70. Annual report card.

The accredited professional education program shall submit to the Virginia Department of Education a yearly data report card on the preparation of professional school personnel. The report card shall be published on the department's website. The information required on the report card shall be approved by the Board of Education and will include the following:

1. Institution's accreditation status;
2. Education endorsement program status;
3. Number of candidates admitted in education endorsement programs;
4. Number of candidates admitted in education endorsement programs who are in the top quartile of the college or university population.
5. Number of program completers, including number of program completers in critical shortage teaching areas;
6. Number of program noncompleters;
7. Biennial accountability data results;
8. Number of candidates admitted into the program for the reporting year who did not meet the prescribed admission assessment requirement;
9. Number of program completers for the reporting year who were admitted without meeting the prescribed admission assessment requirement;
10. Number of program noncompleters for the reporting year who were admitted to the program without meeting the prescribed admission assessment requirement;
11. Satisfaction ratings by school administrators and clinical experience supervisors on student teachers;
12. Satisfaction ratings by employers of program completers;
13. Satisfaction ratings of program completers within two years of employment; and
14. Other data as required by the Board of Education.

8VAC20-543-80

Part VII

Competencies for Endorsement Areas

Article 1

General Competencies

8VAC20-543-80. Competencies and requirements for endorsement areas.

A. The professional education program develops, maintains, and continuously evaluates high quality education endorsement programs that are collaboratively designed and based on identified needs of the preK-12 community. Candidates in education endorsement programs shall demonstrate competence in the areas in which they plan to practice and complete professional studies requirements and applicable assessments, in addition to meeting requirements for specific licenses, pursuant to the Licensure Regulations for School Personnel (8VAC20-22). The Licensure Regulations for School Personnel set forth the required degrees from regionally accredited colleges or universities for licenses, endorsements, and prerequisite licenses or endorsements for add-on endorsements.

B. All education endorsement programs in early/primary education preK-3, elementary education preK-6, middle education 6-8, and history and social sciences must include local government and civics instruction specific to Virginia.

C. Candidates in education endorsement programs demonstrate an understanding of competencies, including the core concepts and facts of the disciplines and the Virginia Standards of Learning, for the content areas in which they plan to teach where required.

D. Candidates in early/primary education preK-3, elementary education preK-6, and special education complete a minimum of six semester hours of reading coursework as outlined in the reading competencies.

E. Candidates seeking an early/primary education preK-3 or an elementary education preK-6 endorsement must complete 12-15 semester hours each in English, history and social sciences, mathematics, and science addressing competencies set forth in this chapter or complete the following:

1. English: complete six semester hours in English and pass a rigorous assessment in elementary English prescribed by the Board of Education.

2. History and social sciences: complete six semester hours in history and social sciences and pass a rigorous assessment in elementary history and social sciences prescribed by the Board of Education.

3. Mathematics: complete six semester hours in mathematics, complete a methods of teaching elementary mathematics course, and pass a rigorous assessment in elementary mathematics prescribed by the Board of Education.

4. Science: complete six semester hours in laboratory sciences in two science disciplines, complete a methods of teaching elementary science course, and pass a rigorous assessment in elementary science prescribed by the Board of Education.

F. Candidates seeking an endorsement in special education-general curriculum K-12 must have one area of specialization in English, history and social sciences, mathematics, or science with 12-15 semester hours in the specialization area.

G. Candidates seeking a middle education endorsement must have an area of concentration in English, history and social sciences, mathematics, or science with 21-24 semester hours in the concentration area.

8VAC20-543-90

Article 2

Early/Primary Education, Elementary Education, and Middle Education Endorsements

8VAC20-543-90. Professional studies requirements for early/primary education, elementary education, and middle education.

Professional studies requirements for early/primary education, elementary education, and middle education:

1. Human development and learning (birth through adolescence).

a. Skills in this area shall contribute to an understanding of the physical, social, emotional, speech and language, and intellectual development of children and the ability to use this understanding in guiding learning experiences and relating meaningfully to students.

b. The interaction of children with individual differences - economic, social, racial, ethnic, religious, physical, and mental - should be incorporated to include skills contributing to an understanding of developmental disabilities and developmental issues related but not limited to low socioeconomic status, attention deficit disorders, developmental disorders, gifted education, including the use of multiple criteria to identify gifted students, substance abuse, child abuse, and family disruptions.

2. Curriculum and instruction.

a. Early/primary education preK-3 or elementary education preK-6 curriculum and instruction.

(1) Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; effective communication with and among students; selection and use of

materials, including media and contemporary technologies; selection, development, and use of appropriate curricula, methodologies, and materials that support and enhance student learning and reflect the research on unique, age-appropriate, and culturally relevant curriculum and pedagogy.

(2) Understanding of the principles of online learning and online instructional strategies and the application of skills to deliver online instruction must be included.

(3) Instructional practices that are sensitive to culturally and linguistically diverse learners, including limited English proficient students, gifted and talented students, and students with disabilities, and appropriate for the level of endorsement (preK-3 or preK-6) sought shall be included.

(4) Teaching methods shall be tailored to promote student engagement and student academic progress and effective preparation for the Standards of Learning assessments.

(5) Study in (i) methods of improving communication between schools and families, (ii) communicating with families regarding social and instructional needs of children, (iii) ways of increasing family involvement in student learning at home and in school, (iv) the Virginia Standards of Learning, and (v) Virginia Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds prepared by the department's Office of Humanities and Early Childhood shall be included.

(6) Early childhood educators must understand the role of families in child development and in relation to teaching educational skills.

(7) Early childhood educators must understand the role of the informal and play-mediated settings for promoting students' skills and development and must demonstrate knowledge and skill in interacting in such situations to promote specific learning outcomes as reflected in Virginia's Foundation Blocks for Early Learning.

(8) Demonstrated proficiency in the use of educational technology for instruction shall be included. Persons seeking initial licensure as teachers and persons seeking licensure renewal as teachers for the first time shall complete study in child abuse recognition and intervention in accordance with curriculum guidelines developed by the Virginia Board of Education in consultation with the Virginia Department of Social Services that are relevant to the specific teacher licensure routes. Pre-student teaching experiences (field experiences) should be evident within these skills.

b. Middle education 6-8 curriculum and instruction.

(1) Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; effective communication with and among students, selection and use of materials, including media and contemporary technologies; evaluation of pupil performance; and the relationships among assessment, instruction, and monitoring student progress to include student performance measures in grading practices, the ability to construct and interpret valid assessments using a variety of formats in order to measure student attainment of essential skills in a standards-based environment, and the ability to analyze assessment data to make decisions about how to improve instruction and student performance.

(2) Understanding of the principles of online learning and online instructional strategies and the application of skills to deliver online instruction must be included.

(3) Instructional practices that are sensitive to culturally and linguistically diverse learners including limited English proficient students, gifted and talented students, and students with disabilities, and must be appropriate for the middle education endorsement shall be included.

(4) Teaching methods shall be tailored to promote student engagement and student academic progress and effective preparation for the Standards of Learning assessments.

(5) Study in methods of improving communication between schools and families, ways of increasing family involvement in student learning at home and in school, and the Standards of Learning shall be included.

(6) Demonstrated proficiency in the use of educational technology for instruction shall be included.

(7) Persons seeking initial licensure as teachers and persons seeking licensure renewal as teachers for the first time shall complete study in child abuse recognition and intervention in accordance with curriculum guidelines

developed by the Virginia Board of Education in consultation with the Virginia Department of Social Services that are relevant to the specific teacher licensure routes. Pre-student teaching experiences (field experiences) should be evident within these skills.

3. Classroom and behavior management. Skills in this area shall contribute to an understanding and application of research-based classroom and behavior management techniques, classroom community building, positive behavior supports, and individual interventions, including techniques that promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment. This area shall address diverse approaches based upon behavioral, cognitive, affective, social, and ecological theory and practice. Approaches should support professionally appropriate practices that promote positive redirection of behavior, development of social skills, and self discipline. Knowledge and an understanding of various school crisis management and safety plans and the demonstrated ability to create a safe, orderly classroom environment must be included. The link between classroom management and students' ages must be understood and demonstrated in techniques used in the classroom.

4. Assessment of and for learning.

a. Skills in this area shall be designed to develop an understanding and application of creating, selecting, and implementing valid and reliable classroom-based assessments of student learning, including formative and summative assessments. Assessments designed and adapted to meet the needs of diverse learners must be addressed.

b. Analytical skills necessary to inform ongoing planning and instruction, as well as to understand, and help students understand their own progress and growth must be included.

c. Skills also include the ability to understand the relationships among assessment, instruction, and monitoring student progress to include student performance measures in grading practices; the ability to interpret valid assessments using a variety of formats in order to measure student attainment of essential skills in a standards-based environment; and the ability to analyze assessment data to make decisions about how to improve instruction and student performance.

d. Understanding of state assessment programs and accountability systems, including assessments used for student achievement goal setting as related to teacher evaluation and determining student academic progress, including knowledge of legal and ethical aspects of assessment.

e. Skills include developing familiarity with assessments used in preK-12 education (e.g., diagnostic, college admission exams, industry certifications, placement assessments).

5. The teaching profession.

a. Skills in this area shall be designed to develop an understanding of the historical, philosophical, and sociological foundations underlying the role, development, and organization of public education in the United States.

b. Attention must be given to the legal status of teachers and students, including federal and state laws and regulations; school as an organization and culture; and contemporary issues and current trends in education, including the impact of technology on education. Local, state, and federal governance of schools, including the roles of teachers and schools in communities, must be included.

c. Professionalism and ethical standards as well as personal integrity must be addressed.

d. Knowledge and understanding of Virginia's Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers must be included.

6. Reading.

a. Early/primary education preK-3 and elementary education preK-6 - language acquisition and reading and writing. Skills listed for these endorsement areas represent the minimum competencies that a beginning teacher must be able to demonstrate. These skills are not intended to limit the scope of a beginning teacher's program. Additional knowledge and skills that add to a beginning teacher's competencies to deliver instruction and improve student achievement should be included as part of a quality learning experience.

(1) Language acquisition: Skills in this area shall be designed to impart a thorough understanding of the Virginia English Standards of Learning as well as the complex nature of language acquisition as a precursor to literacy. Language acquisition shall follow the typical development of linguistic competence in the areas of phonetics, semantics, syntax, morphology, phonology, and pragmatics.

(2) Reading and writing: Skills in this area shall be designed to impart a thorough understanding of the Virginia English Standards of Learning as well as the reciprocal nature of reading and writing. Reading shall include phonemic awareness, concept of print, phonics, fluency, vocabulary development, and comprehension strategies. Writing shall include writing strategies and conventions as supporting the composing and writing expression and usage and mechanics domains. Additional skills shall include proficiency in understanding the stages of spelling development, the writing process as well as the ability to foster appreciation of a variety of fiction and nonfiction text and independent reading.

b. Middle education - language acquisition and reading development and literacy in the content areas.

(1) Language acquisition and reading development: Skills in this area shall be designed to impart a thorough understanding of the complex nature of language acquisition and reading, to include phonemic awareness, phonics, fluency, vocabulary development, and comprehension strategies for adolescent learners. Additional skills shall include proficiency in writing strategies, as well as the ability to foster appreciation of a variety of fiction and nonfiction text and independent reading for adolescent learners.

(2) Literacy in the content areas: Skills in this area shall be designed to impart an understanding of vocabulary development and comprehension skills in areas of English, mathematics, science, history and social science, and other content areas. Strategies include teaching students how to ask effective questions, summarize and retell both verbally and in writing, and to listen effectively. Teaching strategies include literal, interpretive, critical, and evaluative comprehension, as well as the ability to foster appreciation of a variety of fiction and nonfiction text and independent reading for adolescent readers.

7. Supervised clinical experiences. The supervised clinical experiences shall be continuous and systematic and comprised of early field experiences with a minimum of 10 weeks of full-time student teaching under the supervision of a cooperating teacher with demonstrated effectiveness in the classroom. The summative supervised student teaching experience shall include at least 150 clock hours spent in direct teaching at the level of endorsement. One year of successful full-time teaching experience in the endorsement area in any public school or accredited nonpublic school may be accepted in lieu of the supervised student teaching experience. A fully licensed, experienced teacher shall be available in the school building to assist a beginning teacher employed through the alternate route.

8VAC20-543-100

8VAC20-543-100. Early childhood for three-year-olds and four-year-olds (add-on endorsement).

The program in early childhood education for three-year-olds and four-year-olds shall ensure that the candidate holds an active license with an endorsement in elementary education (such as preK-3 or preK-6) or special education early childhood issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Understanding child growth and development from birth through age five, with a specific focus on three-year-olds and four-year-olds, including:

a. Knowledge of characteristics and developmental needs of three-year-olds and four-year-olds, including the ability to recognize indicators of typical and atypical development, in the domains of language, social, emotional, cognitive, physical, and gross and fine motor development;

b. Understanding of the multiple interacting influences on child development (biological and environmental), interconnectedness of developmental domains, the wide range of ages at which developmental skills are manifested, and the individual differences in behavioral styles; and

c. Knowledge of child development within the context of family, culture, and society.

2. Understanding principles of developmental practice, with a focus on three-year-olds and four-year-olds, including practices that are:

a. Appropriate to the child's age and stage of development;

b. Appropriate for children with a wide range of individual differences in abilities, interests, and learning styles; and

c. Appropriate for the child's cultural background and experience.

3. Understanding health and nutritional practices that impact early learning including:

a. Practices and procedures that support health status conducive to optimal development (e.g., health assessment, prevention of the spread of communicable disease, oral hygiene, reduction of environmental hazards, injury prevention, and emergency preparedness);

b. Indicators of possible child abuse or neglect and the appropriate response if such indicators are observed;

c. Nutritional and dietary practices that support healthy growth and development while remaining sensitive to each family's preferences, dietary restrictions, and culture;

d. Skills for communicating with families about health and dietary concerns;

e. Community resources that support healthy living; and

f. Practices that allow children to become independent and knowledgeable about healthy living.

4. Understanding and application of formal and informal assessment procedures for documenting development and knowledge of how to use assessment to plan curriculum, including:

a. Age-appropriate and stage-appropriate methods for documenting, assessing, and interpreting development and learning;

b. Identifying and documenting children's interests, strengths, and challenges; and

c. Communicating with families to acquire and to share information relevant to assessment.

5. Understanding effective strategies for (i) facilitating positive reciprocal relationships with children for teachers, families, and communities through mutual respect, communication strategies, collaborative linkages among families, and community resources and (ii) nurturing the capacity of family members to serve as advocates on behalf of children.

6. Understanding strategies for planning, implementing, assessing, and modifying physical and psychological aspects of the learning environment to support language, physical, cognitive, and social, as well as emotional, well-being in children with a broad range of developmental levels, special needs, individual interests, and cultural backgrounds, including the ability to:

a. Utilize learning strategies that stimulate curiosity, promote thinking, and encourage participation in exploration and play;

b. Provide curriculum that facilitate learning goals in content areas and provide opportunities to acquire concepts and skills that are precursors to academic content taught in elementary school;

c. Adapt tasks to the child's zone of proximal development;

d. Nurture children's development through firsthand experiences and opportunities to explore, examine, and investigate real materials in authentic context and engage in social interactions with peers and adults;

e. Select materials and equipment, arrange physical space, and plan schedules and routines to stimulate and facilitate development; and

f. Collaborate with families, colleagues, and members of the broader community to construct learning environments that promote a spirit of unity, respect, and service in the interest of the common good.

7. Understanding strategies that create positive and nurturing relationships with each child based on respect, trust, and acceptance of individual differences in ability levels, temperament, and other characteristics, including the ability to:

a. Emphasize the importance of supportive verbal and nonverbal communication;

b. Establish classroom and behavior management practices that are respectful, meet children's emotional needs, clearly communicate expectations for appropriate behavior, promote pro-social behaviors, prevent or minimize behavioral problems through careful planning of the learning environment, teach conflict resolution strategies, and mitigate or redirect challenging behaviors; and

c. Build positive, collaborative relationships with children's families with regard to behavioral guidance.

8VAC20-543-110

8VAC20-543-110. Early/primary education preK-3.

The program for early/primary education preK-3 shall ensure that the candidate has demonstrated the following competencies:

1. Methods.

a. Understanding of the knowledge, skills, and processes to support learners in achievement of Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning in English, mathematics, history and social science, science, and computer and technology;

b. The ability to integrate English, mathematics, science, health, history and social sciences, art, music, drama, movement, and technology in learning experiences;

c. The use of differentiated instruction and flexible groupings to meet the needs of learners at different stages of development, abilities, and achievement;

d. The use of appropriate methods including those in visual and performing arts, to help learners develop knowledge and basic skills, sustain intellectual curiosity, and problem-solve;

e. The ability to utilize effective classroom management skills through methods that build responsibility and self-discipline and maintain a positive learning environment;

f. The ability to modify and manage learning environments and experiences to meet the individual needs of children, including children with disabilities, gifted children, children with limited proficiency in English, and children with diverse cultural needs;

g. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress;

h. A commitment to professional growth and development through reflection, collaboration, and continuous learning;

i. The ability to analyze, evaluate, and apply quantitative and qualitative research; and

j. The ability to use technology as a tool for teaching, learning, research, and communication.

2. Knowledge and skills.

a. Reading and English. Understanding of the content, knowledge, skills, and processes for teaching Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning for English including oral language (speaking and listening), reading, and writing, and how these standards provide the core for teaching English in grades preK-3 (early/primary licensure).

(1) Assessment and diagnostic teaching. The individual shall:

(a) Be proficient in the use of both formal and informal assessment as screening, diagnostic, and progress monitoring measures for the component of reading: phoneme awareness, letter recognition, decoding, fluency, vocabulary, reading levels, and comprehension; and

(b) Be proficient in the ability to use diagnostic data to inform instruction for acceleration, intervention, remediation, and differentiation.

(2) Oral communication. The individual shall:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching oral language (speaking and listening);

(b) Be proficient in developing students' phonological awareness skills;

(c) Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects; and

(d) Demonstrate the ability to promote creative thinking and expression, such as through storytelling, drama, and choral and oral reading, etc.

(3) Reading and literature. The individual shall:

(a) Be proficient in explicit phonics instruction, including an understanding of sound and symbol relationships, syllables, phonemes, morphemes, word analysis, and decoding skills;

(b) Be proficient in strategies to increase vocabulary and concept development;

(c) Be proficient in the structure of the English language, including an understanding of syntax;

(d) Be proficient in reading comprehension strategies for (i) fiction and nonfiction text predicting, retelling, and summarizing and (ii) guiding students to make connections beyond the text;

(e) Demonstrate the ability to develop comprehension skills in all content areas;

(f) Demonstrate the ability to foster the appreciation of a variety of literature;

(g) Understand the importance of promoting independent reading by selecting fiction and nonfiction texts of appropriate yet engaging topics and reading levels; and

(h) Demonstrate effective strategies for teaching students to view, interpret, analyze, and represent information and concepts in visual form with or without the spoken or written word.

(4) Writing. The individual shall:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching writing, including the domains of composing, written expression, and usage and mechanics and the writing process of planning, drafting, revising, editing, and publishing;

(b) Understand the stages of spelling development, promoting the generalization of spelling study to writing, and be proficient in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling"; and

(c) Demonstrate the ability to teach students to write cohesively for a variety of purposes and to provide instruction on the writing process: planning, drafting, revising, editing, and publishing in the narrative, descriptive, persuasive, and explanative modes.

(5) Technology. The individual shall demonstrate the ability to guide students in their use of technology for both process and product as they work with reading and writing.

b. Mathematics.

(1) Understanding of the mathematics relevant to the content identified in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning and how the standards provide the foundation for teaching mathematics in grades preK-3. Experiences with practical applications and the use of appropriate technology and manipulatives should be used within the following content:

(a) Number systems and their structure, basic operations, and properties;

(b) Elementary number theory, ratio, proportion, and percent;

(c) Algebra: fundamental idea of equality; operations with monomials and polynomials; algebraic fractions; linear and quadratic equations and inequalities and linear systems of equations and inequalities; radicals and

exponents; arithmetic and geometric sequences and series; algebraic and trigonometric functions; and transformations among graphical, tabular, and symbolic forms of functions;

(d) Geometry: geometric figures, their properties, relationships, the Pythagorean Theorem; deductive and inductive reasoning; perimeter, area, and surface area of two-dimensional and three-dimensional figures; coordinate and transformational geometry; and constructions; and

(e) Probability and statistics: permutations and combinations; experimental and theoretical probability; prediction; data collection and graphical representations including box-and-whisker plots; and measures of center, spread of data, variability, range, and normal distribution.

(2) Understanding of the sequential nature of mathematics and vertical progression of mathematical standards.

(3) Understanding of the multiple representations of mathematical concepts and procedures.

(4) Understanding of and the ability to use the five processes - reasoning mathematically, solving problems, communicating mathematics effectively, making mathematical connections, and using mathematical models and representations at different levels of complexity.

(5) Understanding of the contributions of different cultures toward the development of mathematics and the role of mathematics in culture and society.

(6) Understanding of the appropriate use of calculators and technology in the teaching and learning of mathematics, including virtual manipulatives.

(7) Understanding of and the ability to use strategies to teach mathematics to diverse learners.

c. History and social sciences.

(1) Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning and how the standards provide the necessary foundation for teaching history and social sciences, including in:

(a) History.

(i) The contributions of ancient civilizations to American social and political institutions;

(ii) Major events in Virginia history from 1607 to the present;

(iii) Key individuals, documents, and events in United States history; and

(iv) The evolution of America's constitutional republic and its ideas, institutions, and practices.

(b) Geography.

(i) The use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;

(ii) The relationship between human activity and the physical environment in the community and the world; and

(iii) Physical processes that shape the surface of the earth.

(c) Civics.

(i) The privileges and responsibilities of good citizenship and the importance of the rule of law for the protection of individual rights;

(ii) The process of making laws in the United States and the fundamental ideals and principles of a republican form of government;

(iii) The understanding that Americans are a people of diverse ethnic origins, customs, and traditions, who are united by the basic principles of a republican form of government and a common identity as Americans; and

(iv) Local government and civics instruction specific to Virginia.

(d) Economics.

(i) The basic economic principles that underlie the United States market economy;

(ii) The role of the individual and how economic decisions are made in the market place; and

(iii) The role of government in the structure of the United States economy.

(2) Understanding of the nature of history and the social sciences, and how the study of the disciplines assists students in developing critical thinking skills in helping them to understand:

(a) The relationship between past and present;

(b) The use of primary sources such as artifacts, letters, photographs, and newspapers;

(c) How events in history are shaped both by the ideas and actions of people;

(d) Diverse cultures and shared humanity;

(e) Civic participation in a democracy; and

(f) The relationship between history, literature, art, and music.

d. Science.

(1) Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Science Standards of Learning and how these standards provide a sound foundation for teaching science in the early/primary grades.

(2) Understanding of the nature of the theory and scientific inquiry, including the following:

(a) Function of research design and experimentation;

(b) Role and nature of science in explaining and predicting events and phenomena;

(c) Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, argumentation with evidence, and constructing explanations;

(d) Reliability of scientific knowledge and its constant scrutiny and refinement;

(e) Self-checking mechanisms used by science to increase objectivity, including peer review; and

(f) Assumptions, influencing conditions, and limits of empirical knowledge.

(3) Understanding of the knowledge, skills, and practices for conducting an active elementary science program, including the ability to:

(a) Design instruction reflecting the goals of the Virginia Science Standards of Learning;

(b) Implement classroom and laboratory safety rules and procedures, and ensure that students take appropriate safety precautions;

(c) Conduct research projects and experiments, including applications of the design process and technology;

(d) Conduct systematic field investigations using the school grounds, the community, and regional resources;

(e) Organize key science content, skills, and practices into meaningful units of instruction that actively engage students in learning;

(f) Design instruction to meet the needs of diverse learners using a variety of techniques;

(g) Evaluate instructional materials, technologies, and teaching practices;

(h) Conduct formative and summative assessments of student learning;

(i) Incorporate instructional technology to enhance student performance in science; and

(j) Ensure student competence in science.

(4) Understanding of the content, processes, and skills of the four core science areas, including Earth sciences, biology, chemistry, and physics supporting the teaching of elementary school science as defined by the Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and Virginia Science Standards of Learning and equivalent to academic course work in each of these four core science areas.

(5) Understanding of the core scientific disciplines of Earth science, biology, chemistry, and physics to ensure:

(a) The placement of the four core scientific disciplines in an appropriate interdisciplinary context;

(b) The ability to teach the processes and crosscutting concepts common to the natural and physical sciences;

(c) The application of key science principles to solve practical problems; and

(d) A "systems" understanding of the natural world.

(6) Understanding of the contributions and significance of science, including:

(a) Its social, cultural, and economic significance;

(b) The relationship of science to mathematics, the design process, and technology; and

(c) The historical development of scientific concepts and scientific reasoning.

8VAC20-543-120

8VAC20-543-120. Elementary education preK-6.

The program in elementary education preK-6 may require that the candidate has completed an undergraduate major in interdisciplinary studies (focusing on the areas of English, mathematics, history and social sciences, and science) or in Virginia's core academic areas of English, mathematics, history and social sciences (i.e., history, government, geography, and economics), or science and demonstrated the following competencies:

1. Methods.

a. Understanding of the needed knowledge, skills, and processes to support learners in achievement of Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning in English, mathematics, history and social science, science, and computer and technology;

b. Understanding of current research on the brain, its role in learning, and implications for instruction;

c. The ability to integrate English, mathematics, science, health, history and social sciences, art, music, drama, movement, and technology in learning experiences;

d. The use of differentiated instruction and flexible groupings to meet the needs of learners at different stages of development, abilities, and achievement;

e. The use of appropriate methods, including those in visual and performing arts, to help learners develop knowledge and basic skills, sustain intellectual curiosity, and problem-solve;

f. The ability to utilize effective classroom and behavior management skills through methods that build responsibility and self-discipline and maintain a positive learning environment;

g. The ability to modify and manage learning environments and experiences to meet the individual needs of children, including children with disabilities, gifted children, and children with limited proficiency in English, and children with diverse cultural needs;

h. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress;

i. A commitment to professional growth and development through reflection, collaboration, and continuous learning;

j. The ability to analyze, evaluate, and apply quantitative and qualitative research; and

k. Understanding of the Virginia Standards of Learning for Computer Technology and the ability to use technology as a tool for teaching, learning, research, and communication.

2. Knowledge and skills.

a. Reading and English. Understanding of the content, knowledge, skills, and processes for teaching Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning for English including communication (speaking, listening, and media literacy), reading, writing, and research and how these standards provide the core for teaching English in grades preK-6 (elementary licensure).

(1) Assessment and diagnostic teaching. The individual shall:

(a) Be proficient in the use of both formal and informal assessment as screening diagnostic, and progress monitoring measures for the components of reading: phoneme awareness, letter recognition, decoding, fluency, vocabulary, reading level, and comprehension; and

(b) Be proficient in the ability to use diagnostic data to inform instruction for acceleration, intervention, remediation, and differentiation.

(2) Communication: speaking, listening, and media literacy. The individual shall:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching communication (speaking, listening, and media literacy);

(b) Be proficient in developing students' phonological awareness skills;

(c) Demonstrate the ability to teach students to identify the characteristics of and apply critical thinking to media messages and to facilitate students' proficiency in using various forms of media to collaborate and communicate;

(d) Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects; and

(e) Demonstrate the ability to promote creative thinking and expression, such as through storytelling, drama, choral and oral reading, etc.

(3) Reading and literature. The individual shall:

(a) Be proficient in explicit and systematic phonics instruction, including an understanding of sound and symbol relationships, syllables, phonemes, morphemes, word analysis, and decoding skills;

(b) Be proficient in strategies to increase vocabulary and concept development;

(c) Be proficient in the structure of the English language, including an understanding of syntax and semantics;

(d) Be proficient in reading comprehension strategies for both fiction and nonfiction text, including questioning, predicting, inferencing, summarizing, clarifying, evaluating, and making connections;

(e) Demonstrate the ability to support students to read with fluency, accuracy, and meaningful expression (prosody);

(f) Demonstrate the ability to develop comprehension skills in all content areas;

(g) Demonstrate the ability to foster appreciation of a variety of literature;

(h) Understand the importance of promoting independent reading by selecting fiction and nonfiction texts of appropriate yet engaging topics and reading levels; and

(i) Demonstrate effective strategies for teaching students to view, interpret, analyze, and represent information and concepts in visual form with or without the spoken or written word.

(4) Writing. The individual shall:

(a) Be proficient in the knowledge, skills, and processes necessary for teaching writing, including the domains of composing and written expression, and usage and mechanics and the writing process of planning, drafting, revising, editing, and publishing;

(b) Understand the stages of spelling development, promoting the generalization of spelling study to writing, and be proficient in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling";

(c) Demonstrate the ability to teach students to write cohesively for a variety of purposes and to provide instruction on the writing process: planning, drafting, revising, editing, and publishing in the narrative, descriptive, persuasive, and explanative modes; and

(d) Demonstrate the ability to facilitate student research and related skills such as accessing information, evaluating the validity of sources, citing sources, and synthesizing information.

(5) Technology. The individual shall demonstrate the ability to guide students in their use of technology for both process and product as they work with reading, writing, and research.

b. Mathematics.

(1) Understanding of the mathematics relevant to the content identified in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning and how the standards provide the foundation for teaching mathematics in grades preK-6. Experiences with practical applications and the use of appropriate technology and concrete materials should be used within the following content:

(a) Number systems and their structure, basic operations, and properties;

(b) Elementary number theory, ratio, proportion, and percent;

(c) Algebra: operations with monomials and polynomials; algebraic fractions; linear and quadratic equations and inequalities and linear systems of equations and inequalities; radicals and exponents; arithmetic and geometric sequences and series; algebraic and trigonometric functions; and transformations among graphical, tabular, and symbolic forms of functions;

(d) Geometry: geometric figures, their properties, relationships, the Pythagorean Theorem; deductive and inductive reasoning; perimeter, area, and surface area of two-dimensional and three-dimensional figures; coordinate and transformational geometry; and constructions;

(e) Probability and statistics: permutations and combinations; experimental and theoretical probability; prediction; graphical representations including box-and-whisker plots; and measures of center, range, and normal distribution; and

(f) Computer science: terminology, simple programming, and software applications.

(2) Understanding of the sequential and developmental nature of mathematics.

(3) Understanding of the multiple representations of mathematical concepts and procedures.

(4) Understanding of and the ability to use the five processes - reasoning mathematically, solving problems, communicating mathematics effectively, making mathematical connections, and using mathematical representations - at different levels of complexity.

(5) Understanding of the contributions of different cultures toward the development of mathematics and the role of mathematics in culture and society.

(6) Understanding of the role of technology and the ability to use calculators and computers in the teaching and learning of mathematics.

c. History and social sciences.

(1) Understanding of the knowledge, skills, and processes of history and the social sciences disciplines as defined in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning and how the standards provide the necessary foundation for teaching history and social sciences, including in:

(a) History.

(i) The contributions of ancient civilizations to modern social and political institutions;

(ii) Major events in Virginia history from 1607 to the present;

(iii) Key individuals, documents, and events in United States history; and

(iv) The evolution of America's constitutional republic and its ideas, institutions, and practices.

(b) Geography.

(i) The use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;

(ii) The relationship between human activity and the physical environment in the community and the world; and

(iii) Physical processes that shape the surface of the earth.

(c) Civics.

(i) The privileges and responsibilities of good citizenship and the importance of the rule of law for the protection of individual rights;

(ii) The process of making laws in the United States and the fundamental ideals and principles of a republican form of government;

(iii) The understanding that Americans are a people of diverse ethnic origins, customs, and traditions, who are united by basic principles of a republican form of government and a common identity as Americans; and

(iv) Local government and civics instruction specific to Virginia.

(d) Economics.

(i) The basic economic principles that underlie the United States market economy;

(ii) The role of the individual and how economic decisions are made in the market place; and

(iii) The role of government in the structure of the United States economy.

(2) Understanding of the nature of history and social sciences and how the study of the disciplines assists students in developing critical thinking skills in helping them to understand:

(a) The relationship between past and present;

(b) The use of primary sources such as artifacts, letters, photographs, and newspapers;

(c) How events in history are shaped both by the ideas and actions of people;

(d) Diverse cultures and shared humanity;

(e) Civic participation in a democracy; and

(f) The relationship between history, literature, art, and music.

d. Science.

(1) Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Science Standards of Learning and how these standards provide a sound foundation for teaching science in the elementary grades.

(2) Understanding of the nature of science and scientific inquiry, including the:

(a) Function of research design and experimentation;

(b) Role and nature of the theory in explaining and predicting events and phenomena;

(c) Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, argumentation with evidence, and constructing explanations;

(d) Reliability of scientific knowledge and its constant scrutiny and refinement;

(e) Self-checking mechanisms used by science to increase objectivity, including peer review; and

(f) Assumptions, influencing conditions, and limits of empirical knowledge.

(3) Understanding of the knowledge, skills, and processes for an active elementary science program including the ability to:

(a) Design instruction reflecting the goals of the Virginia Science Standards of Learning;

(b) Implement classroom and laboratory safety rules and procedures and ensure that students take appropriate safety precautions;

(c) Conduct research projects and experiments, including applications of the design process and technology;

(d) Conduct systematic field investigations using the school grounds, the community, and regional resources;

(e) Organize key science content, skills, and practices into meaningful units of instruction that actively engage students in learning;

(f) Design instruction to meet the needs of diverse learners using a variety of techniques;

(g) Evaluate instructional materials, technologies, and teaching practices;

(h) Conduct formative and summative assessments of student learning;

(i) Incorporate instructional technology to enhance student performance in science; and

(j) Ensure student competence in science.

(4) Understanding of the content, processes, and skills of the four science areas, including Earth sciences, biology, chemistry, and physics supporting the teaching of preK-6 science as defined by the Virginia Science Standards of Learning and equivalent course work reflecting each of the four core science areas.

(5) Understanding of the core scientific disciplines of Earth science, biology, chemistry, and physics to ensure:

(a) The placement of the four core scientific disciplines in an appropriate interdisciplinary context;

(b) The ability to teach the processes and crosscutting concepts common to the natural and physical sciences;

(c) The application of key science principles to solve practical problems; and

(d) A "systems" understanding of the natural world.

(6) Understanding of the contributions and significance of science including:

(a) Its social, cultural, and economic significance;

(b) The relationship of science to mathematics, the design process, and technology; and

(c) The historical development of scientific concepts and scientific reasoning.

8VAC20-543-130

8VAC20-543-130. Middle education 6-8.

The program in middle education 6-8 with at least one area of academic preparation shall ensure that the candidate has demonstrated the following competencies:

1. Methods.

a. Understanding of the required knowledge, skills, and processes to support learners in achievement of the Virginia Standards of Learning for grades 6-8;

b. The use of appropriate methods, including direct instruction and inquiry-based instructional methods, to help learners develop knowledge and skills, sustain intellectual curiosity, and solve problems;

c. The ability to plan and teach collaboratively to facilitate interdisciplinary learning;

d. The use of differentiated instruction and flexible groupings to meet the needs of preadolescents at different stages of development, abilities, and achievement;

e. The ability to utilize effective classroom and behavior management skills through methods that build responsibility and self-discipline and maintain a positive learning environment;

f. The ability to modify and manage learning environments and experiences to meet the individual needs of preadolescents, including children with disabilities, gifted children, and children with limited proficiency in the English language;

g. The ability to use formal and informal assessments to diagnose needs, plan and modify instruction, and record student progress;

h. A commitment to professional growth and development through reflection, collaboration, and continuous learning;

i. The ability to analyze, evaluate, apply, and conduct quantitative and qualitative research;

j. The ability to use technology as a tool for teaching, learning, research, and communication;

k. An understanding of how to apply a variety of school organizational structures, schedules, groupings, and classroom formats appropriately for middle level learners;

l. Skill in promoting the development of all students' abilities for academic achievement and continued learning; and

m. The ability to use reading in the content area strategies appropriate to text and student needs.

2. English.

a. Possession of the skills necessary to teach the writing process, to differentiate among the forms of writing (narrative, descriptive, informational, and persuasive), and to use computers and other available technology;

b. Understanding of and knowledge in grammar, usage, and mechanics and its integration in writing;

c. Understanding and the nature and development of language and its impact on vocabulary development and spelling;

d. Understanding of and knowledge in techniques and strategies to enhance reading comprehension and fluency;

e. Understanding of and knowledge in the instruction of speaking, listening, collaboration, and media literacy;

f. Knowledge of varied works from current and classic young adult literature appropriate for English instruction of fiction, nonfiction, and poetry; and

g. Skills necessary to teach research techniques, including evaluating, organizing, crediting, and synthesizing information.

3. History and social sciences.

a. Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined by the Virginia History and Social Sciences Standards of Learning and how the standards provide the foundation for teaching history and social sciences, including in:

(1) United States history.

(a) The evolution of the American constitutional republic and its ideas, institutions, and practices from the colonial period to the present; the American Revolution, including ideas and principles preserved in significant Virginia and United States historical documents as required by § 22.1-201 of the Code of Virginia (the Declaration of American Independence; the general principles of the Constitution of the United States; the Virginia Statute of Religious Freedom; the charters of The Virginia Company of April 10, 1606, May 23, 1609, and March 12, 1612; and the Virginia Declaration of Rights); and historical challenges to the American political system (i.e., slavery, the Civil War, emancipation, and civil rights);

(b) The influence of religious traditions on the American heritage and on contemporary American society;

(c) The changing role of America around the world; the relationship between domestic affairs and foreign policy; and the global political and economic interactions;

(d) The influence of immigration on American political, social, and economic life;

(e) Origins, effects, aftermath and significance of the two world wars, the Korean and Vietnam conflicts, and the post-Cold War era;

(f) Social, political, and economic transformations in American life during the 20th century; and

(g) Tensions between liberty and equality, liberty and order, region and nation, individualism and the common welfare, and cultural diversity and civic unity.

(2) World history.

(a) The political, philosophical, and cultural legacies of ancient, American, Asian, African, and European civilizations;

(b) Origins, ideas, and institutions of Judaism, Christianity, Hinduism, Confucianism and Taoism, and Shinto, Buddhist, and Islamic religious traditions;

(c) Medieval society and institutions, relations with Islam, feudalism, and the evolution of representative government;

(d) The social, political, and economic contributions of selected civilizations in Africa, Asia, Europe, and the Americas;

(e) The culture and ideas of the Renaissance and the Reformation, European exploration, and the origins of capitalism and colonization;

(f) The cultural ideas of the Enlightenment and the intellectual revolution of the 17th and 18th centuries;

(g) The sources, results, and influence of the American and French revolutions;

(h) The social consequences of the Industrial Revolution and its impact on politics and culture;

(i) The global influence of European ideologies of the 19th and 20th centuries (liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism); and

(j) The origins, effects, aftermath, and significance of the two world wars.

(3) Civics and economics.

(a) Essential characteristics of limited and unlimited governments;

(b) Importance of the rule of law for the protection of individual rights and the common good;

(c) Rights and responsibilities of American citizenship;

(d) Nature and purposes of constitutions and alternative ways of organizing constitutional governments;

(e) American political culture;

(f) Values and principles of the American constitutional republic;

(g) Structures, functions, and powers of local and state government;

(h) Importance of citizen participation in the political process in local and state government;

(i) Local government and civic instruction specific to Virginia;

(j) Structures, functions, and powers of the national government; and

(k) The structure and function of the United States market economy as compared with other economies.

b. Understanding of the nature of history and social sciences and how the study of these disciplines helps students go beyond critical thinking skills to help them appreciate:

(1) The significance of the past to their lives and to society;

(2) Diverse cultures and shared humanity;

(3) How things happen, how they change, and how human intervention matters;

(4) The interplay of change and continuity;

(5) Historical cause and effect;

(6) The importance of individuals who have made a difference in history and the significance of personal character to the future of society;

(7) The relationship among history, geography, civics, and economics; and

(8) The difference between fact and conjecture, evidence and assertion, and the importance of framing useful questions.

4. Mathematics.

a. Understanding of the knowledge and skills necessary to teach the Virginia Mathematics Standards of Learning and how curriculum may be organized to teach these standards to diverse learners;

b. Understanding of a core knowledge base of concepts and procedures within the discipline of mathematics, including the following strands: number and number sense; computation and estimation; geometry and measurement; statistics and probability; and patterns, functions, and algebra;

c. Understanding of the mathematics relevant to the content identified in the Virginia Standards of Learning and how the standards provide the foundation for teaching mathematics in the middle grades. Experiences with practical applications and the use of appropriate technology and manipulatives should be used within the following content:

(1) Number systems and their structure, basic operations, and properties;

(2) Elementary number theory, ratio, proportion, and percent;

(3) Algebra: fundamental idea of equality; operations with monomials and polynomials; algebraic fractions; linear and quadratic equations and inequalities and linear systems of equations and inequalities; radicals and

exponents; arithmetic and geometric sequences and series; algebraic and trigonometric functions; and transformations among graphical, tabular, and symbolic forms of functions;

(4) Geometry: geometric figures, their properties, relationships, the Pythagorean Theorem; deductive and inductive reasoning; perimeter, area, and surface area of two-dimensional and three-dimensional figures; coordinate and transformational geometry; and constructions;

(5) Probability and statistics: permutations and combinations; experimental and theoretical probability; data collection and graphical representations, including box-and-whisker plots; data analysis and interpretation for predictions; measures of center; spread of data, variability, range, standard deviation, and normal distributions.

d. Understanding of the sequential nature of mathematics, the vertical progression of mathematical standards, and the mathematical structures inherent in the content strands;

e. Understanding of and the ability to use the five processes - becoming mathematical problem solvers, reasoning mathematically, communicating mathematically, making mathematical connections, and representing, modeling and describing mathematical ideas, generalizations, and relationships using a variety of methods - at different levels of complexity;

f. Understanding of the contributions of various individuals and cultures toward the development of mathematics and the role of mathematics in culture and society;

g. Understanding of the major current curriculum studies and trends in mathematics;

h. Understanding of the appropriate use of calculators and technology and the ability to use graphing utilities in the teaching and learning of mathematics, including virtual manipulatives;

i. Understanding of and the ability to select, adapt, evaluate and use instructional materials and resources, including professional journals and technology;

j. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors; and

k. Understanding of and the ability to use strategies to teach mathematics to diverse adolescent learners.

5. Science.

a. Understanding of the knowledge, skills, and processes of the Earth, life, and physical sciences as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching science in the middle grades.

b. Understanding of the nature of science and scientific inquiry, including:

(1) Function of research design and experimentation;

(2) Role of science in explaining and predicting events and phenomena; and

(3) Science skills of data analysis, measurement, observation, prediction, and experimentation.

c. Understanding of the knowledge, skills, and processes for an active middle school science program, including the ability to:

(1) Design instruction reflecting the goals of the Virginia Science Standards of Learning;

(2) Conduct research projects and experiments;

(3) Implement safety rules and procedures and ensure that students take appropriate safety precautions;

(4) Organize key science content into meaningful units of instruction;

(5) Adapt instruction to diverse learners using a variety of techniques;

(6) Evaluate instructional materials, instruction, and student achievement; and

(7) Incorporate instructional technology to enhance student performance in science.

d. Understanding of the content, processes, and skills of the Earth sciences, biology, chemistry, and physics supporting the teaching of middle school science as defined by the Virginia Science Standards of Learning and equivalent to academic course work in each of these core science areas.

e. Understanding of the core scientific disciplines to ensure:

(1) The placement of science in an appropriate interdisciplinary context;

(2) The ability to teach the processes and organize concepts common to the natural and physical sciences; and

(3) Student achievement in science.

f. Understanding of the contributions and significance of science to include:

(1) Its social and cultural significance;

(2) The relationship of science to technology; and

(3) The historical development of scientific concepts and scientific reasoning.

8VAC20-543-140

Article 3

PreK-12 Endorsements, Special Education, Secondary Grades 6-12 Endorsements, and Adult Education

8VAC20-543-140. Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education.

Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education:

1. Human development and learning (birth through adolescence).

a. Skills in this area shall contribute to an understanding of the physical, social, emotional, speech and language, and intellectual development of children and the ability to use this understanding in guiding learning experiences and relating meaningfully to students.

b. The interaction of children with individual differences - economic, social, racial, ethnic, religious, physical, and mental - should be incorporated to include skills contributing to an understanding of developmental disabilities and developmental issues related but not limited to low socioeconomic status, attention deficit disorders, developmental disabilities, gifted education including the use of multiple criteria to identify gifted students, substance abuse, child abuse, and family disruptions.

2. Curriculum and instruction.

a. Skills in this area shall contribute to an understanding of the principles of learning; the application of skills in discipline-specific methodology; effective communication with and among students; selection and use of materials, including media and contemporary technologies; selection, development, and use of appropriate curricula, methodologies, and materials that support and enhance student learning and reflect the research on unique, age-appropriate, and culturally relevant curriculum and pedagogy.

b. Understanding of the principles of online learning and online instructional strategies and the application of skills to deliver online instruction must be included.

c. Instructional practices that are sensitive to culturally and linguistically diverse learners, including limited English proficient students, gifted and talented students, and students with disabilities, and appropriate for the level of endorsement sought shall be included.

d. Teaching methods shall be tailored to promote student academic progress and effective preparation for the Standards of Learning assessments.

e. Methods of improving communication between schools and families and ways of increasing family involvement in student learning at home and in school and the Virginia Standards of Learning shall be included.

f. Demonstrated proficiency in the use of educational technology for instruction shall be included.

g. Persons seeking initial licensure as teachers and persons seeking licensure renewal as teachers for the first time shall complete study in child abuse recognition and intervention in accordance with curriculum guidelines developed by the Virginia Board of Education in consultation with the Virginia Department of Social Services that are relevant to the specific teacher licensure routes.

h. Curriculum and instruction for secondary grades 6-12 endorsements shall include middle and secondary education. Pre-student teaching experiences (field experiences) should be evident within these skills. For preK-12, field experiences shall be at the elementary, middle, and secondary levels.

3. Assessment of and for learning.

a. Skills in this area shall be designed to develop an understanding and application of creating, selecting, and implementing valid and reliable classroom-based assessments of student learning, including formative and summative assessments. Assessments designed and adapted to meet the needs of diverse learners must be addressed.

b. Analytical skills necessary to inform ongoing planning and instruction, as well as to understand and help students understand their own progress and growth must be included.

c. Skills also include the ability to understand the relationships among assessment, instruction, and monitoring student progress to include student performance measures in grading practices, the ability to interpret valid assessments using a variety of formats in order to measure student attainment of essential skills in a standards-based environment, and the ability to analyze assessment data to make decisions about how to improve instruction and student performance.

d. Understanding of state assessment programs and accountability systems, including assessments used for student achievement goal setting as related to teacher evaluation and determining student academic progress, including knowledge of legal and ethical aspects of assessment.

e. Skills include developing familiarity with assessments used in preK-12 education (e.g., diagnostic, college admission exams, industry certifications, placement assessments).

4. The teaching profession.

a. Skills in this area shall be designed to develop an understanding of the historical, philosophical, and sociological foundations underlying the role, development, and organization of public education in the United States.

b. Attention must be given to the legal status of teachers and students, including federal and state laws and regulations; school as an organization and culture; and contemporary issues and current trends in education, including the impact of technology on education. Local, state, and federal governance of schools, including the roles of teachers and schools in communities, must be included.

c. Professionalism and ethical standards, as well as personal integrity must be addressed.

d. Knowledge and understanding of Virginia's Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers must be included.

5. Classroom and behavior management.

a. Skills in this area shall contribute to an understanding of and application of research-based classroom and behavior management techniques, classroom community building, positive behavior supports, and individual interventions, including techniques that promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment.

b. This area shall address diverse approaches based upon behavioral, cognitive, affective, social, and ecological theory and practice.

c. Approaches should support professionally appropriate practices that promote positive redirection of behavior, development of social skills, and self-discipline.

d. Knowledge and an understanding of various school crisis management and safety plans and the ability to create a safe, orderly classroom environment must be included. The link between classroom management and the students' ages must be understood and demonstrated in techniques used in the classroom.

6. Reading.

a. Adult education, preK-12, and secondary grades 6-12 - literacy in the content areas. Skills in this area shall be designed to impart an understanding of vocabulary development and comprehension skills in English, mathematics, science, history and social sciences, and other content areas. Strategies include teaching students how to ask effective questions, summarize and retell both verbally and in writing, and listen effectively. Teaching strategies include literal, interpretive, critical, and evaluative comprehension, as well as the ability to foster appreciation of a variety of fiction and nonfiction texts and independent reading for adolescent learners.

b. Special education - language acquisition and reading and writing. Skills listed for these endorsement areas represent the minimum competencies that a beginning teacher must be able to demonstrate. These skills are not intended to limit the scope of a beginning teacher's program. Additional knowledge and skills that add to a beginning teacher's competencies to deliver instruction and improve student achievement should be included as part of a quality learning experience.

(1) Language acquisition: Skills in this area shall be designed to impart a thorough understanding of the Virginia English Standards of Learning as well as the complex nature of language acquisition as a precursor to literacy. Language acquisition shall follow the typical development of linguistic competence in the areas of phonetics, semantics, syntax, morphology, phonology, and pragmatics.

(2) Reading and writing: Skills in this area shall be designed to impart a thorough understanding of the Virginia English Standards of Learning as well as the reciprocal nature of reading and writing. Reading shall include phonemic awareness, concept of print, phonics, fluency, vocabulary development, and comprehension strategies. Writing shall include writing strategies and conventions as supporting the composing and written expression and usage and mechanics domains. Additional skills shall include proficiency in understanding the stages of spelling development, the writing process, and the ability to foster appreciation of a variety of fiction and nonfiction texts and independent reading.

7. Supervised clinical experiences. The supervised clinical experiences shall be continuous and systematic and comprised of early field experiences with a minimum of 10 weeks of full-time student teaching under the supervision of a cooperating teacher with demonstrated effectiveness in the classroom. The summative supervised student teaching experience shall include at least 150 clock hours spent in direct teaching at the level of endorsement.

If a preK-12 endorsement is sought, teaching activities shall be at the elementary and middle or secondary levels. Individuals seeking the endorsement in library media shall complete the supervised school library media practicum in a school library media setting. Individuals seeking an endorsement in an area of special education shall complete the supervised student teaching experience requirement in the area of special education for which the endorsement is sought. One year of successful full-time teaching experience in the endorsement area in any public school or accredited nonpublic school may be accepted in lieu of the supervised student teaching experience. A fully licensed, experienced teacher shall be available in the school building to assist a beginning teacher employed through the alternate route.

8VAC20-543-150

8VAC20-543-150. Adult education.

The program in adult education shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the nature or psychology of the adult learner or adult development;

2. Understanding of the knowledge, skills, and processes needed for the selection, evaluation, and instructional applications of the methods and materials for adult basic skills including:

a. Curriculum development in adult basic education or general educational development (GED) instruction;

b. Beginning reading for adults;

c. Beginning mathematics for adults;

d. Reading comprehension for adult education;

e. Foundations of adult education; and

f. Other adult basic skills instruction.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes; and

5. One semester of supervised successful full-time, or an equivalent number of hours of part-time, experience teaching adults.

8VAC20-543-160

8VAC20-543-160. Adult English as a second language (add-on endorsement).

The program in adult English as a second language shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Knowledge in the growth and development of the adult learner;

2. Knowledge of teaching methods and materials in adult English as a second language;

3. Knowledge in adult language acquisition;

4. Knowledge of assessment methods in adult English as a second language instruction;

5. Skills in teaching the adult learner;

6. Understanding of the effects of sociocultural variables in the instructional setting;

7. Skills in teaching a variety of adult learning styles;

8. Proficiency in cross-cultural communication;

9. Proficiency in speaking, listening, and reading;

10. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and

11. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-170

8VAC20-543-170. Career and technical education – agricultural education.

The program in agricultural education shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the importance and relationship of and contribution to the agricultural industry to the community, state, nation, and global economy including:

a. Knowledge of the fundamental historical foundation of the state and national agricultural industry;

b. Knowledge of contemporary components of the United States food and fiber system; and

c. Knowledge of the career opportunities in agriculture and related fields.

2. Applying the knowledge, skills, and processes involved in plant and soil sciences, including:

a. Production, use, and marketing of row crops, specialty crops, forage crops, fruits, small grains, vegetables, and cereal crops; and

b. Soil and water management.

3. Applying the knowledge, skills, and processes involved in the production, management, and marketing of animals, including:

a. Production of cattle, swine, poultry, dairy cows, sheep, aquaculture species, goats, and horses; and

b. Care and management of horses and small companion animals.

4. Applying knowledge, skills, and processes involved in agricultural mechanics and technology, including:

a. Set up safe operation, repair, and maintenance of equipment, tools, and measuring devices used in agriculture;

b. Knowledge of energy transfer systems used in agriculture;

c. Knowledge of properties of metals used in tools and equipment; and

d. Knowledge of alternative energy sources, fuels, and lubricants from agricultural and natural resources.

5. Understanding of agricultural economics, including the various markets, international trade, government policies, and the operation and management of various agricultural businesses.

6. Applying the knowledge, skills, and processes involved in natural resources, including:

a. Care, management, and conservation of soil, air, water, energy, and wildlife; and

b. Production and management of the forest.

7. Understanding the relationship of agriculture to community resource and partnership development, including:

a. Local agricultural program advisory committees;

b. Adult education programs;

c. Agricultural enterprises;

d. Student work-based learning opportunities;

e. Public and private programs and resources; and

f. Civic organizations.

8. Implementing classroom management techniques and pedagogical knowledge necessary to:

a. Understand the biological, physical, chemical, and applied sciences to practical solutions of agricultural problems;

b. Teach agricultural competencies needed by secondary students to be successful in continuing their education and entering a related career pathway;

c. Develop effective leadership skills through the Future Farmers of America (FFA) student organization as an integral part of instruction; and

d. Apply knowledge and skills for the administration of the agricultural program, including managing budgets, maintaining student performance records and equipment inventories.

9. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

10. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

11. Understanding of and proficiency in the use of instructional technologies.

12. Demonstrating and integrating workplace readiness skills in the classroom and real-world activities.

13. Ability to plan, deliver, and manage work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

8VAC20-543-180

8VAC20-543-180. Career and technical education – business and information technology.

The program in business and information technology shall ensure that the candidate has demonstrated the following competencies:

1. Knowledge, skills, and principles of manual and automated accounting, including:

a. Accounting concepts, terminology, and applications;

b. Accounting systems;

c. The basic accounting cycle of source documents, verifications, analyzing, recording, posting, trial balances, and preparing financial statements; and

d. Use of accounting computer software to automate accounting tasks.

2. Knowledge and skills in economics, including:

a. Basic economic concepts and structures;

b. The role of producers and consumers in a market economy;

c. The price system;

d. The many factors that may affect income;

e. A nation's economic goals, including full employment, stable prices, and economic growth;

f. The nation's finance system;

g. How monetary and fiscal policy influence employment, output, and prices;

h. The role of government in a market economy;

i. The global economy; and

j. Distinguishing between trade deficit and trade surplus.

3. Knowledge of the foundations of business selected from the following areas:

a. Business law.

(1) Ability to recognize the legal requirements affecting business organization; and

(2) Ability to apply legal principles to business situations.

b. Business principles.

(1) Ability to identify, explain, and apply contemporary business principles;

(2) Ability to identify and explain the advantages and disadvantages of various business organizational structures; and

(3) Knowledge of the foundations of international business, the global business environment, international business communications, and global business ethics.

c. Management. Understanding and analyzing of basic management functions, tools, theories, and leadership styles to explore and solve problems in business organizations, economics, international business, and human relations issues.

d. Marketing and entrepreneurship.

(1) Understanding of basic marketing concepts in sales techniques, advertising, display, buying, wholesale and retail, distribution, service occupations, market analysis, warehousing, and inventory control; and

(2) Understanding of the unique characteristics of an entrepreneur and the knowledge and skills necessary for an entrepreneurial venture.

e. Finance.

(1) Knowledge about and skills in the areas of managing personal finance and budgeting, saving and investing, buying goods and services, banking and financial institutions, and earning and reporting income needed for sound financial decision making; and

(2) Understanding of the basic concepts of economics, insurance, credit, consumer skills, and other related topics.

4. Knowledge and skills in all of the following communications and information technologies:

a. Communications.

(1) Ability to communicate in a clear, courteous, concise, and correct manner for personal and professional purposes through the foundations of listening, writing, reading, speaking, nonverbal cues, and following written and oral directions;

(2) Ability to use information systems and technology to expedite and enhance the effectiveness of communications and telecommunications; and

(3) Ability to gather, evaluate, use, and cite information from information technology sources.

b. Impact of technology on society and the individual (digital citizenship). Knowledge to assess the impact of information technology on society.

c. Computer architecture. Ability to describe current and emerging computer architecture; configure, install, and upgrade hardware; and diagnose and repair hardware problems.

d. Operating systems, environments, and utilities. Ability to identify, evaluate, select, install, use, upgrade, customize, and diagnose and solve problems with various types of operating systems, environments, and utilities.

e. Application software (e.g., word processing; database; spreadsheet; graphics; web design; desktop, presentation, multimedia, and imaging; and emerging technologies).

(1) Ability to identify, evaluate, select, install, use, upgrade, and customize application software; and

(2) Ability to diagnose and solve problems resulting from an application software's installation and use.

f. Input technologies. Ability to use input devices and technologies (e.g., touch keyboarding, speech recognition, handwriting recognition, hand-held devices, touch screen or mouse, scanning, and other emerging input technologies) to enter, manipulate, and format text and data.

g. Database management systems. Ability to use, plan, develop, and maintain database management systems. Ability to diagnose and solve problems using database management systems.

h. Programming and application development. Ability to help students design, develop, test, and implement multi-platform (e.g., mobile, different operating systems) programs that solve business problems.

i. Networking and communications infrastructures.

(1) Facilitate students' development in the skills to design, deploy, and administer networks and communications systems;

(2) Facilitate students' ability to use, evaluate, and deploy communications and networking applications; and

(3) Facilitate students' ability to analyze networks for security vulnerabilities and develop and deploy appropriate security plans and applications.

j. Information management.

(1) Ability to plan the selection and acquisition of information technologies (hardware and software):

(2) Ability to instruct students in the development of technical and interpersonal skills and knowledge to support the user community; and

(3) Ability to describe, analyze, develop, and follow policies for managing privacy and ethical issues in organizations and in a technology-based society.

k. Web development and multimedia:

(1) Ability to instruct students in the design and development of web applications based on industry standards and principles of good design;

(2) Ability to instruct students in the design and development of multimedia applications; and

(3) Ability to design and develop multimedia and web-based applications for multiple operating systems and environments (mobile, desktop, cloud).

l. Project management.

(1) Understand the components of project management and its importance to business and information technology.

(2) Use project management tools to coordinate information technology, business, or related projects and manage teamwork.

5. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization, and implement the organization's activities as an integral part of instruction.

6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

7. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8. Knowledge and skills necessary to apply basic mathematical operations to solve business problems.

9. Demonstration and integration of workplace readiness skills in the classroom and real-world activities.

10. Ability to plan, deliver, evaluate, and manage work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

8VAC20-543-190

8VAC20-543-190. Career and technical education – family and consumer sciences.

The program in family and consumer sciences shall ensure that the candidate has demonstrated the following competencies:

1. Knowledge of the human growth and developmental processes throughout the lifespan, including infancy, childhood, preadolescence, adolescence, adulthood and aging, and in creating and maintaining an environment in which family members develop and interact as individuals and as members of a group;

2. Knowledge of the decision-making processes related to housing, furnishings, and equipment for individuals and families with attention given to special needs and the diversity of individuals;

3. The ability to plan, purchase, and prepare food choices that promote nutrition and wellness and safety and sanitation;

4. Knowledge of the management of resources to achieve individual and family goals at different stages of the life span and the family life cycle;
5. Knowledge of the sociological, psychological, and physiological aspects of apparel and textiles for individuals and families;
6. Knowledge of the management of families, community, work, and their interrelationships;
7. Knowledge of occupational skill development and career planning;
8. Knowledge of the use of critical science and creative skills to address problems in diverse family, community, and work environments;
9. Knowledge and skills necessary to teach leadership, communication, interpersonal problem-solving, and ethical decision-making skills;
10. The ability to plan, develop, teach, supervise, and evaluate programs in occupational programs at the secondary, postsecondary, and adult levels;
11. The ability to organize and implement Family, Career, and Community Leaders of America (FCCLA) programs as an integral part of classroom instruction;
12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;
13. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes;
14. Demonstrate and integrate workplace readiness skills in the classroom and real-world activities; and
15. Ability to plan, deliver, and manage work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

8VAC20-543-200

8VAC20-543-200. Career and technical education – health and medical sciences.

The program in health and medical sciences shall ensure that the candidate has demonstrated the following competencies:

1. Knowledge of teaching methods.

- a. Instructional planning - ability to determine the needs and interests of students;
- b. Organizing instruction - ability to prepare teacher-made instructional materials for clinical laboratory experience;
- c. Instructional execution - ability to use techniques for simulating patient care and demonstrating manipulative skills;
- d. Application of technology in the classroom; and
- e. Instructional evaluation - ability to determine grades for students in classroom and clinical settings.

2. Knowledge of program management.

- a. Planning - ability to organize an occupational advisory committee;
- b. Curriculum development - ability to keep informed of current curriculum content and patient care practices;
- c. Planning and organizing teaching and occupational laboratory for laboratory simulations and demonstrations;
- d. Understanding of the process for issuing credentials for health workers;
- e. Understanding of the health care industry; and

f. Evaluation - ability to conduct a student follow-up study.

3. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization, and implement the organization's activities as an integral part of instruction.

4. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

5. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

6. Demonstrate and integrate workplace readiness skills in the classroom and real-world activities.

7. Ability to plan, deliver, evaluate, and manage work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

8VAC20-543-210

8VAC20-543-210. Career and technical education – marketing education.

The program in marketing shall ensure that the candidate has demonstrated the following competencies:

1. Knowledge of marketing processes and the environment; management and supervision; economics; merchandising and operations; advertising and promotion; sales and selling; communication theory and techniques; consumer behavior; international (global) marketing; finance; accounting or marketing mathematics; and technology applications through a variety of educational and work experiences;

2. Knowledge of skills and principles common across the marketing pathways: channel management; marketing-information management; market planning; pricing; product and service management promotion; and selling;

3. Ability to plan, develop, and administer a comprehensive marketing program for high school students and adults;

4. Ability to organize and use a variety of instructional methods and techniques for teaching youths and adults;

5. Ability to conduct learning programs that include a variety of career objectives and recognize and respond to individual differences in students;

6. Ability to assist learners of different abilities in developing skills needed to qualify for further education and employment;

7. Knowledge of occupational skill development and career planning for opportunities in marketing, merchandising, hospitality, and management;

8. Knowledge and skills necessary to teach leadership skills, organize and manage an effective co-curricular student organization (DECA) and implement the organization's activities as an integral part of instruction;

9. Application of and proficiency in grammar, usage, and mechanics and their integration in writing;

10. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes;

11. Application of and proficiency in instructional technology and current technological applications as these relate to marketing functions;

12. Demonstration and integration of workplace readiness skills in the classroom and real-world activities;

13. Ability to plan, deliver, and manage work-based learning methods of instruction, such as: internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship; and

14. Ability to apply mathematical operations to solve marketing problems.

8VAC20-543-220

8VAC20-543-220. Career and technical education – technology education.

The program in technology education shall ensure that the candidate has demonstrated the following competencies:

1. Understanding the nature of technology, including knowledge of the:
 - a. Characteristics and scope of technology;
 - b. Core concepts of physical, biological, and informational technologies; and
 - c. Relationships among technologies, including the natural intersects between science, technology, engineering, and mathematics (STEM) and other fields.
2. Understanding the relationships between technology and society, including the:
 - a. Sociocultural, political, and economic influences of technology;
 - b. Local and global effects of technological products and systems on the environment; and
 - c. Role that society plays in the use and development of technology; and
 - d. Influence of technology on human history.
3. Comprehension and utilization of engineering design, including the:
 - a. Attributes of technological design;
 - b. Role of constraints, optimization, and predictive analysis in engineering design;
 - c. Requirement of problem-solving, critical thinking, and technical writing skills; and
 - d. Intentional integration of mathematics and science concepts and practices.
4. Ability to succeed in a technological world, including a capacity to:
 - a. Employ the design process in the engineering of technological products and systems;
 - b. Determine and control the behavior of technological products and systems;
 - c. Use and maintain technological products and systems; and
 - d. Assess the impacts and consequences of technological products and systems.
5. Ability to select and use the major physical, biological, and informational technologies of the designed world, including the:
 - a. Principles and processes characteristic of contemporary and emerging transportation, manufacturing, and construction technologies, inclusive of research, engineering design and testing, planning, organization, resources, and modes of distribution;
 - b. Range of enabling technologies that utilize fundamental biological principles and cellular processes characteristic of traditional and modern biotechnical technologies, including research, design-based engineering and testing of agricultural products, biotechnical systems, and associated medical technologies;
 - c. Purpose, processes, and resources involved with creating, encoding, transmitting, receiving, decoding, storage, retrieval, and understanding of information data using communication systems in a global information society; and
 - d. Concept, laws, forms, and characteristics of energy as a fundamental requirement of the technological world, inclusive of the resultant power and work requisites, both renewable and nonrenewable, of the tools, machines, products, and systems within.
6. Knowledge, skills, and processes required for teaching in a STEM laboratory environment, including:

- a. Laboratory safety rules, regulations, processes, and procedures;
 - b. Ability to organize content and practices into effective instructional units;
 - c. Ability to deliver instruction to diverse learners;
 - d. Ability to evaluate student achievement, curriculum materials, instructional strategies, and teaching practices;
 - e. Ability to incorporate new and emerging instructional technologies to enhance student performance across the varied domains of knowledge - cognitive, affective, and psychomotor; and
 - f. Ability to convey the concepts and procedures for developing a learner's technological literacy specifically and integrative STEM literacy in general.
7. Demonstration of the knowledge, abilities, and capacity necessary to teach leadership skills, organize and manage an effective co-curricular student organization, and implement the organization's activities as an integral part of instruction.
 8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in formal technical writing.
 9. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.
 10. Demonstrate and integrate workplace readiness skills in the classroom and real-world activities.
 11. Ability to plan, deliver, evaluate, and manage work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

8VAC20-543-230

8VAC20-543-230. Career and technical education – trade and industrial education.

The program in trade and industrial education shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of industrial education and its role in the development of technically competent, socially responsible, and culturally sensitive individuals with potential for leadership in skilled technical work and professional studies;
2. Understanding of and the ability to relate experiences designed to develop skills in the interpretation and implementation of industrial education philosophy in accordance with changing demand;
3. The knowledge and experience of systematically planning, executing, and evaluating individual and group instruction;
4. Knowledge of the competencies necessary for effective organization and management of laboratory instruction;
5. Knowledge of the competencies necessary for making physical, social, and emotional adjustments in multicultural student-teacher relationships;
6. Knowledge of the competencies necessary for developing and utilizing systematic methods and instruments for appraising and recording student progress in the career and technical educational classroom;
7. Knowledge of the ability to provide technical work experience through cooperative education or provide a method of evaluating previous occupational experience commensurate with the minimum required standard;
8. Knowledge of the competencies and industry credentials necessary to assist students in job placement and in otherwise bridging the gap between education and work;

9. Understanding of the awareness of the human relations factor in industry, with emphasis on the area of cooperation among labor, management, and the schools;

10. Knowledge of the teacher's role in the school and community;

11. Understanding of the content, skills, and techniques necessary to teach a particular trade area;

12. Knowledge of the competencies necessary to organize and manage an effective student organization;

13. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;

14. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes;

15. Demonstration and integration of work place readiness skills in the classroom and real-world activities; and

16. Understanding of the planning, delivery, and management of work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

8VAC20-543-240

8VAC20-543-240. Career and technical education – transition and special needs (add-on endorsement).

The transition and special needs (add-on endorsement) shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Knowledge of special needs and transition programs and services, characteristics of students who are disadvantaged, disabled, gifted, and individuals with barriers to educational achievement and employment, including individuals with limited English proficiency.

2. Knowledge of program development, implementation, and evaluation.

3. Basic understanding of cultural issues pertaining to employment and postsecondary education and training.

4. Understanding of the federal and state laws and regulations pertaining to special education, rehabilitation, and the American with Disabilities Act (42 USC § 12101 et seq.).

5. Understanding and demonstration of the integration of instructional methods, resources, and transition programs for targeted populations in career and technical education, including:

a. Use of learning and teaching styles to plan and deliver differentiated instruction and differentiated assessment;

b. Knowledge of age appropriate assessments;

c. Use of assessment results to plan individual instruction strategies and assist with long-range and short-term planning;

d. Understanding of required skills that demonstrate college and career readiness;

e. Ability to plan and manage a competency-based education system;

f. Ability to adapt and modify curriculum materials and utilize Universal Design for Learning Principles to meet special student needs;

g. Use of a variety of classroom and behavior management techniques to develop an enhanced learning environment, behavior change techniques, and individual and group instruction;

h. Use of different processes to improve collaboration and develop partnerships with colleagues, parents, and the community to include service agencies and businesses; and

- i. Ability to plan learning experiences that prepare individuals for transition to more advanced education and career development options.
- 6. Ability to develop, plan, deliver, and manage work-based learning methods of instruction such as community-based instruction, internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.
- 7. Understanding and application of strategies for enabling students to learn all aspects of particular industries - planning, management, finances, technical and production skills, labor and community issues, health and safety, environmental issues, and the technology associated with the specific industry.
- 8. Ability to articulate career and life planning procedures, transitioning processes and procedures, and career-search techniques.
- 9. Application of and proficiency in grammar, usage, and mechanics and their integration in writing.
- 10. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.
- 11. Ability to use a variety of technologies to deliver instruction and media to students, parents, teachers, and community partners.
- 12. Demonstration and integration of workplace readiness skills in the classroom and real-world activities.
- 13. Demonstrate person-centered planning skills.

8VAC20-543-250

8VAC20-543-250. Computer science.

The program in computer science shall ensure that the candidate has demonstrated the following competencies:

- 1. Understanding of mathematical principles that are the basis of many computer applications;
- 2. Knowledge of the functions, capabilities, and limitations of computers and computer systems;
- 3. Knowledge of the ethical, moral, and legal issues associated with applications in programming and computer science;
- 4. Knowledge of programming in at least two widely used programming languages, including definition, structure, and comparison;
- 5. Knowledge of programming languages including definition, design, comparison, and evaluation;
- 6. Knowledge of computers and computer systems and their applications;
- 7. Knowledge of data structures and algorithms;
- 8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and
- 9. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-260

8VAC20-543-260. Dance arts preK-12.

The program in dance arts shall ensure that the candidate has demonstrated the following competencies:

- 1. Understanding of the knowledge, skills, and processes of the dance arts discipline as defined in the Virginia Standards of Learning and how they provide a foundation needed to teach dance arts.

2. Understanding of the knowledge, skills, and processes for teaching dance arts to meet the developmental levels and academic needs of students in preK-12, including the following:

a. Knowledge of and experience in planning, developing, administering, and evaluating a program of dance arts education;

b. Knowledge and understanding for teaching dance arts, including performance, creation, and production; dance history and cultural context; analysis, evaluation, and critique; and aesthetics;

c. Ballet, folk, jazz, and modern dance with an area of concentration in one of these areas;

d. Scientific foundations, including human anatomy, kinesiology, and injury prevention and care for dance arts;

e. The relationship of dance arts and culture and the influence of dance on past and present cultures;

f. Knowledge and understanding of technological and artistic copyright laws;

g. Knowledge and understanding of classroom management and safety, including performance and studio;

h. Knowledge of a variety of instructional and assessment strategies to foster, support, and enhance student dance arts learning;

i. Knowledge and understanding of technology, with applications for instruction, resources, artistic expression, administration, assessment, and communication;

j. Knowledge and understanding of appropriate and sensitive attention to diversity and cultural understanding;

k. Knowledge of related areas of the fine arts, such as music, theatre arts, and the visual arts; and

l. Observation and student teaching experiences at the elementary, middle, and secondary levels.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-270

8VAC20-543-270. Driver education (add-on endorsement).

The program in driver education shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Basic understanding of the administration of a driver education program as required by § 22.1-205 of the Code of Virginia and the Administrative Guide for Driver Education in Virginia 2010 (http://www.doe.virginia.gov/instruction/driver_education/curriculum_admin_guide/index.shtml) including:

a. Coordination and scheduling of classroom and in-car instruction;

b. The Board of Education and the Department of Motor Vehicle's regulations governing driver education programs;

c. Student safety and other legal liability issues;

d. The juvenile licensing process;

e. Highway traffic safety and the driver licensing laws in the Code of Virginia;

f. Vehicle procurement maintenance and safety equipment requirements;

g. The Department of Education's and the Department of Motor Vehicle's juvenile licensing forms;

h. Monitoring and oversight procedures that ensure the approved program meets state curriculum objectives, goals, and learning outcomes; the classroom and in-car hour requirements; and teachers have valid Virginia

driver's licenses, acceptable driving records, and meet teacher licensure and/or in-car instructor training requirements;

i. Promoting parent involvement;

j. Providing opportunities for ongoing professional development; and

k. Integrating classroom and in-car instruction when possible to maximize transfer of skills.

2. Understanding of knowledge, skills, and processes of classroom driver education instruction including:

a. Traffic laws, signs, signals, pavement markings, and right-of-way rules;

b. Licensing procedures and other legal responsibilities associated with the driving privilege and vehicle ownership;

c. The effect of speed and steering on vehicle balance and control;

d. Communicating and interacting with other highway users (pedestrians, animals, motorcycles, bicycles, trucks, buses, trains, trailers, motor homes, ATVs, and other recreational users) in a positive manner;

e. Managing of time, space, and visibility, and using perceptual skills in the risk management process;

f. Alcohol and other drug use;

g. Passive protective devices and active restraint systems;

h. Vehicle controls, vehicle maintenance, vehicle functions, and vehicle malfunctions;

i. Consequences of aggressive driving, road rage, fatigue, distracted driving, and other physical, social, and psychological influences that affect the driver;

j. Natural laws and environmental factors that influence the decision-making process;

k. Adverse driving conditions and handling emergencies;

l. Planning a safe trip;

m. Differentiating instruction based on a continuous learning cycle;

n. Using assessments that foster student learning to inform decisions about instruction; and

o. Using new and emerging instructional technology and media effectively to enhance learning.

3. Understanding of knowledge, skills, and processes of the laboratory phase of instruction including:

a. Simulation and other instructional technologies;

b. Multiple-car range;

c. Route planning and preparing for sequential instructional performances that lead to effective habit formation;

d. Providing clear, concise instructions when describing the critical elements of a driving skill;

e. Correctly using occupant restraints and protective devices;

f. The role of the driver and the observer;

g. Using commentary driving to determine visual search skills needed to identify and make risk-reducing decisions for safe speed and position;

h. Using reference points to gauge vehicle position and execute maneuvers with precision;

i. Selecting vehicle position to communicate or establish line of sight to targets;

- j. Balancing vehicle movement through precise and timely steering, braking, and accelerating to manage vehicle weight transfer;
 - k. Applying visual search skills to manage risks in low, moderate, and high-risk driving environments;
 - l. Adjusting speed and space to communicate and reduce risks to avoid conflicts;
 - m. Preventing, detecting, and managing vehicle traction loss in simulated and adverse driving conditions;
 - n. Using vehicle braking, traction, and stability technologies;
 - o. Recognizing environmental factors that influence vehicle control;
 - p. Applying space management strategies to the front and sides and monitoring space to the rear;
 - q. Understanding the consequences of speed selection;
 - r. Dividing mental attention between intended path of travel and other tasks;
 - s. Demonstrating basic and evasive maneuvers and off-road recovery;
 - t. Recognizing understeer and oversteer, and the effects of traction, gravity, inertia and momentum on vehicle handling and control;
 - u. Controlling vehicle from instructor's seat;
 - v. Interacting with other roadway users in a positive manner;
 - w. Using manual transmission;
 - x. Developing precision in the use of skills, processes, and habits for approach to intersection, curves, turns, parking, turnabouts, backing, lane change, passing and being passed, getting on and off highways, and responding to emergencies;
 - y. Administering the driver's license road skills test and issuing the six-month temporary provisional license; and
 - z. Completing a debriefing with a parent or guardian that includes a reminder that the parent must ultimately determine readiness for a driver's license.
4. Guiding parents to provide meaningful guided practice including:
- a. Understanding the juvenile licensing laws and the parents' role in the juvenile licensing process;
 - b. Determining the readiness of the child to begin learning how to drive in a car;
 - c. Planning and supervising the learner's permit experience;
 - d. Keeping a record of the meaningful supervised driving hours; and
 - e. Adopting a written agreement with the child that reflects expectations, defines rules and consequences, and allows the parents to progressively grant broader driving privileges.
5. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.
6. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-280

8VAC20-543-280. Engineering.

The program in engineering shall ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the engineering discipline as defined in Virginia's high school engineering courses and how these provide a sound foundation for teaching engineering.

2. Understanding the nature of engineering design and analysis, including the:

a. Function of the engineering design process;

b. Methods used by engineers to generate, develop, and test ideas to meet design requirements;

c. Role of failure in the engineering design process.

3. Understanding of the knowledge, skills, and processes for teaching engineering, including the ability to:

a. Formulate instruction reflecting the goals of the engineering courses that are taught in Virginia high schools;

b. Design, prototype, test, analyze, and operate solutions to engineering challenges;

c. Implement laboratory and field safety rules and procedures and ensure that students take appropriate safety precautions;

d. Organize key engineering content and skills into meaningful units of instruction;

e. Adapt instruction to diverse learners using a variety of techniques;

f. Evaluate student achievement, instructional materials, and teaching materials; and

g. Incorporate instructional technology to enhance student performance.

4. Understanding of content, processes, and skills of engineering, equivalent to an undergraduate degree in engineering, with course work in principles of engineering, engineering design, statics and dynamics, circuits, fluid mechanics, thermodynamics, materials, ordinary differential equations, and linear algebra.

5. Understanding of basic chemistry, biology, Earth and space sciences, physics, and mathematics, including statistics and calculus, to ensure:

a. The placement of engineering in an appropriate science, technology, engineering, and mathematics (STEM) and interdisciplinary context;

b. The ability to teach the processes and organizing concepts of the natural and physical sciences to analyze successful and failed engineering designs; and

c. Student achievement in engineering.

6. Understanding of the contributions and significance of engineering, including:

a. Its social and cultural significance;

b. The relationship of engineering and its sub-fields (e.g., electrical engineering, mechanical engineering, bio-engineering, etc.) to the sciences, mathematics and technology; and

c. The historical development of engineering concepts and reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing, oral, and multi-media presentations.

8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-290

8VAC20-543-290. English.

The program in English shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of English as defined in the Virginia Standards of Learning;
2. Skills necessary to teach the writing process and the different modes of writing (narrative, descriptive, expository, persuasive, and analytical) and to employ available technology;
3. Knowledge of grammar, usage, and mechanics and their integration in writing;
4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes;
5. Understanding of the nature and development of language including vocabulary appropriate to the topic, audience, and purpose;
6. Knowledge of reading strategies and techniques used to enhance reading comprehension skills in both fiction and nonfiction texts;
7. Knowledge of communication skills including speaking and listening skills and media literacy;
8. Knowledge of varied fiction and nonfiction from young adult, British, American, world, and ethnic and minority texts appropriate for English instruction;
9. The ability to provide experiences in communication arts, such as journalism, dramatics, debate, forensics, radio, television, films, and other media production;
10. Skills necessary to teach the analysis and production of media literacy;
11. Skills necessary to teach research including ethical accessing, evaluating, organizing, crediting, and synthesizing information; and
12. Knowledge of the Computer Technology Standards of Learning and their integration into English Language Arts.

8VAC20-543-300

8VAC20-543-300. English as a second language preK-12.

The program in English as a second language shall ensure that the candidate has demonstrated the following competencies:

1. Skills in methods of teaching English as a second language to include the understanding of the World-Class Instructional and Design Assessment (WIDA) English Language Development (ELD) Standards;
2. Skills in student assessment for English as a second language to include the Assessing Comprehension and Communication in English State-to-State for English Language Learners (Access for ELLs®) test;
3. Skills in the teaching of reading and writing to include (i) the five areas of reading instruction: phonemic awareness, phonics, fluency, vocabulary and text comprehension; (ii) similarities and differences between reading in a first language and reading in a second language; and (iii) a balanced literacy approach;
4. Knowledge of the effects of sociocultural variables in the instructional setting;
5. Proficiency in spoken and written English;
6. Understanding of second language acquisition;
7. Knowledge of another language and its structure;
8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;
9. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes; and

10. Knowledge of English linguistics.

8VAC20-543-310

8VAC20-543-310. Foreign language preK-12.

A. The specific language of the endorsement shall be noted on the license.

B. Foreign language preK-12 - languages other than Latin. The program in the foreign language shall ensure that the candidate has:

1. Demonstrated the following competencies:

a. Understanding of authentic speech at a normal tempo;

b. Ability to speak with a command of vocabulary, pronunciation, and syntax adequate for expressing thoughts to a native speaker not used to dealing with foreigners;

c. Ability to read and comprehend authentic texts of average difficulty and of mature content;

d. Ability to write a variety of texts including description and narration with clarity and correctness in vocabulary and syntax;

e. Knowledge of geography, history, social structure, and artistic and literary contributions of the target societies;

f. Ability to interpret contemporary lifestyles, customs, and cultural patterns of the target societies;

g. Understanding of the application of basic concepts of phonology, syntax, and morphology to the teaching of the foreign language;

h. Knowledge of the national standards for foreign language learning, current proficiency-based and performance-based objectives of the teaching of foreign languages at the elementary and secondary levels, elementary and secondary methods and techniques for attaining these objectives, the use of technology and media in teaching languages, current curricular developments, the relationship of language study to other areas of the curriculum, and the professional literature of foreign language teaching;

i. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;

j. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes;

k. Knowledge of the assessment of foreign language skills in listening, speaking, reading, and writing, and the differing types of assessments and their uses, including portfolio-based assessments, integrated performance assessments, and oral proficiency interviews; and

l. Knowledge of the characteristics of effective foreign language teaching, including the standards and key elements related to foreign language teaching as outlined in the Virginia Standards for the Professional Practice of Teachers.

2. Participated in opportunities for significant foreign language study or living experiences in this country or abroad, or both.

C. Foreign language preK-12 - Latin. The program in Latin shall ensure that the candidate has demonstrated the following competencies:

1. Ability to read and comprehend Latin in the original;

2. Ability to pronounce Latin with consistent classical, or ecclesiastical, pronunciation;

3. Knowledge of the vocabulary, phonetics, morphology, and syntax of Latin and the etymological impact of Latin;

4. Ability to discuss the culture and civilization of Greco-Roman society, including history, daily life, art, architecture, and geography;

5. Ability to explain the relationship of Greco-Roman culture and civilization to subsequent cultures and civilizations;

6. Knowledge of major literary masterpieces and their relationship to the historical and social context of the society;

7. Competency in current methodologies for teaching Latin at the elementary and secondary levels; lesson planning; scope and sequencing of material; instructional strategies and assessment under the guidance of an experienced Latin teacher;

8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;

9. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes; and

10. Knowledge of the characteristics of effective foreign language teaching, including the standards and key elements related to foreign language teaching as outlined in the Virginia Standards for the Professional Practice of Teachers.

D. Foreign language preK-12 - American Sign Language. The program in American Sign Language shall ensure that the candidate has:

1. Demonstrated the following competencies:

a. Understanding of native users of American Sign Language at a normal tempo;

b. Ability to sign with a command of vocabulary, nominal behaviors, and syntax adequate for expressing thoughts to an American Sign Language user not accustomed to dealing with individuals who do not use American Sign Language;

c. Knowledge of history, social structure, and artistic and literary contributions of the deaf culture;

d. Ability to interpret contemporary lifestyles, customs, and cultural patterns of the deaf culture;

e. Understanding of the application of basic concepts of phonology (e.g., hand shapes, location, palm orientation, and sign movements), syntax, and morphology to the teaching of the American Sign Language;

f. Knowledge of the national standards for foreign language learning, current proficiency-based and performance-based objectives of the teaching of foreign languages at the elementary and secondary levels, elementary and secondary methods and techniques for attaining these objectives, the assessment of foreign language skills, the use of technology and media in teaching languages, current curricular developments, the relationship of language study to other areas of the curriculum, and the professional literature of foreign language teaching;

g. Understanding of and proficiency in English grammar, usage, and mechanics and their integration in writing;

h. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes; and

i. Knowledge of the characteristics of effective foreign language teaching, including the standards and key elements related to foreign language teaching as outlined in the Virginia Standards for the Professional Practice of Teachers.

2. Participated in opportunities for significant study of the linguistics of American Sign Language and immersion experiences in the deaf culture.

8VAC20-543-320

8VAC20-543-320. Gifted education (add-on endorsement).

The program in gifted education shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Understanding of principles of the integration of gifted education and general education, including:

a. Strategies to facilitate the interaction of gifted students with students of similar and differing intellectual and academic abilities;

b. Development of activities to encourage parental and community involvement in the education of the gifted;

c. Strategies to encourage collaboration among professional colleagues, especially in the areas of curriculum and professional development; and

d. Strategies to collaborate and consult with general education teachers and other resource specialists on behalf of gifted students.

2. Understanding of the characteristics of gifted students, including:

a. Varied expressions of advanced aptitudes, skills, creativity, and conceptual understandings;

b. Varied expressions of the affective (social-emotional) needs of gifted students; and

c. Gifted behaviors in special populations (i.e., those who are culturally and linguistically diverse, economically disadvantaged, highly gifted, or have special needs or disabilities, including twice-exceptional students).

3. Understanding of specific techniques to identify gifted students using diagnostic and prescriptive approaches to assessment, including:

a. The selection, use, and interpretation of multiple standardized, norm-referenced aptitude and achievement assessment instruments;

b. The selection, use, and evaluation of multiple identification criteria and strategies;

c. The use of both formal and informal nonbiased measures to provide relevant information regarding the aptitude and ability or achievement of potentially gifted students;

d. The use of authentic assessment tools such as portfolios to determine performance, motivation, interest, and other characteristics of potentially gifted students;

e. The use and interpretation of reliable rating scales, checklists, and questionnaires by parents, teachers, and others;

f. The evaluation of data collected from student records such as grades, honors, and awards;

g. The use of case study reports providing information concerning exceptional conditions; and

h. The roles and responsibilities of the identification and placement committee.

4. Understanding and application of a variety of curricular and instructional models, methodologies, and strategies that ensure:

a. The use of the Virginia Standards of Learning as a foundation to develop a high level of proficiency, academic rigor, and complexity for gifted learners in all curricular academic areas;

b. The acquisition of knowledge and development of products that demonstrate creative and critical thinking as applied to student learning both in and out of the classroom, including inquiry-based instruction, questioning strategies, and problem-solving skills;

c. The development of learning environments that guide students to become self-directed, reflective, independent learners;

d. The acquisition of tools to enable students to contribute to a multicultural, diverse society, including preparation for college and careers; and

e. The development of learning environments that recognize and support the affective needs of the gifted students.

5. Understanding and application of theories and principles of appropriately differentiating curriculum specifically designed to accommodate the accelerated learning aptitudes of gifted students, including:

a. Accelerated and enrichment opportunities that recognize gifted students' needs for advanced content and pacing of instruction, original research or production, problem-finding and problem-solving, higher level thinking that leads to the generation of products, and a focus on issues, themes, and ideas integrated within and across disciplines;

b. Opportunities for students to explore, develop, and research their areas of interest, talent, or strength using varied modes of expression;

c. Emphasis on advanced and complex content that is paced and sequenced to respond to gifted students' persistent intellectual, artistic, or technical curiosity; exceptional problem-solving abilities; rapid acquisition and mastery of information; conceptual thinking processes; and imaginative expression across a broad range of disciplines;

d. Evaluation of student academic growth and learner outcomes through appropriate multiple criteria, including a variety of pre-assessments and post-assessments; and

e. Use of current and advanced technologies to enhance student performance and academic growth.

6. Understanding of contemporary issues and research in gifted education, including:

a. The systematic gathering, analyzing, and reporting of formative and summative data from local, state, and national perspectives; and

b. Current local, state, and national policies, trends, and issues.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in all forms of communication.

8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

9. The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with gifted students.

8VAC20-543-330

8VAC20-543-330. Health and physical education preK-12.

The program in health and physical education preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of health and physical education as defined in the Virginia Standards of Learning.

2. Understanding basic human anatomy, physiology, and kinesiology needed to apply discipline-specific biomechanical concepts critical to the development of physically educated individuals.

3. Understanding of the basic scientific principles of human movement as they apply to:

a. Health-related fitness (flexibility, muscular strength and endurance, cardio respiratory endurance, and body composition);

b. Skill-related fitness (coordination, agility, power, balance, speed, and reaction time); and

c. Analyzing and correcting critical elements of motor skills and performance concepts related to skillful movement and fitness.

4. Basic understanding of the administration and planning for a health and physical education program, including:

a. Differentiated instruction based on a continuous learning cycle;

b. Student safety, classroom management, injury prevention, and liability issues;

c. Standards-based curriculum and assessments that foster student learning and inform decisions about instruction;

d. The role of coordinated school and community health.

e. Utilizing school health advisory boards, local health departments, and other representative stakeholders for support for best practice; and

f. Increasing physical activity behaviors before, during, and after school.

5. Understanding of the essential health knowledge, skills, and processes for teaching developmentally and culturally appropriate health education content standards, including:

a. Health promotion and chronic disease prevention;

b. Mental, social, and emotional health;

c. Nutrition, body image, eating disorders, energy balance, and weight management;

d. Tobacco, alcohol, and other drug use prevention;

e. Safety and emergency care (first aid, CPR, AED, universal precautions);

f. Injury and violence prevention;

g. Consumer health and information access;

h. Communicable and noncommunicable diseases prevention and treatment;

i. Environmental health;

j. Personal, family, and community health;

k. Bullying prevention, resistance skills, and conflict mediation; and

l. Theories and models of behavior change and goal-setting.

6. Understanding of the knowledge, skills, and processes for teaching physical education, including:

a. Articulated, sequential preK-12 instruction in a variety of movement forms that include:

(1) Functional fitness;

(2) Developmentally appropriate movement skills; and

(3) Movement principles and concepts.

b. Activities that meet the needs of the diverse learner;

c. Design learning activities to help students understand, develop, value and achieve personal fitness;

d. Knowledge of human growth, development, and motor learning;

e. The relationship between a physically active lifestyle and health;

f. Knowledge of the cognitive, social, and emotional development through physical activity;

g. Incorporate strategies that promote effective physical activity learning environments;

h. Use of authentic, traditional, psychomotor, and fitness assessment methods;

i. The cultural significance of dance, leisure, competition, and sportsmanship; and

j. Demonstrate personal competence in motor skill performance for a variety of movement patterns, modeling healthy behaviors, and maintaining health-enhancing level of fitness.

7. Understanding of and ability to design developmentally appropriate curriculum, instruction, and performance-based assessment that is aligned with the Virginia Standards of Learning for Health and Physical Education:

a. Develop a developmentally appropriate scope and sequence plan of essential health and physical education concepts, information, and skills based on the Virginia Standards of Learning;

b. Use the scope and sequence plan to develop performance indicators that describe the essential concepts and skills;

c. Use new and emerging instructional technology and media effectively to enhance learning;

d. Use research-based educational strategies to meet diverse learning styles and needs;

e. Adapt and create strategies best suited for delivering instruction in diverse settings;

f. Employ individual and cooperative group learning strategies;

g. Connect instruction to prior student learning, and to other curricular areas; and

h. Use evaluation to plan a continuous cycle of learning strategies that reinforce mastery of performance indicators.

8. Obtaining, analyzing and applying health-related and fitness-related data to meet the cultural, social, growth, and development needs of the students and community:

a. Select valid and current sources of information and data;

b. Use computerized sources of information and appropriate data-gathering instruments; and

c. Analyze and interpret data and determine priority areas of focused instruction.

9. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

10. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-340

8VAC20-543-340. History and social sciences.

The program in history and social sciences shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of history and the social science disciplines as defined by the Virginia History and Social Sciences Standards of Learning and how the standards provide the foundation for teaching history and the social sciences, including in:

a. United States history.

(1) The evolution of the American constitutional republic and its ideas, institutions, and practices from the philosophical origins in the Enlightenment through the debates of the colonial period to the present; the American Revolution, including ideas and principles preserved in significant Virginia and United States historical documents as required by § 22.1-201 of the Code of Virginia (the Declaration of American Independence; the general principles of the Constitution of the United States; the Virginia Statute of Religious Freedom; the charters of The Virginia Company of April 10, 1606, May 23, 1609, and March 12, 1612; and the Virginia Declaration of Rights); Articles of Confederation; and historical challenges to the American political system;

- (2) The influence of religious traditions on American heritage and contemporary American society;
- (3) The influence of immigration on American political, social, cultural, and economic life;
- (4) The origins, effects, aftermath, and significance of the two world wars, the Korean and Vietnam conflicts, and the post-Cold War era;
- (5) The social, political, and economic transformations in American life during the 20th century;
- (6) The tensions between liberty and equality, liberty and order, region and nation, individualism and the common welfare, and cultural diversity and national unity; and
- (7) The difference between a democracy and a republic and other types of economic and political systems.

b. World history.

- (1) The political, philosophical, and cultural legacies of ancient American, Asian, African, and European civilizations;
- (2) The origins, ideas, and institutions of Judaism, Christianity, Hinduism, Confucianism and Taoism, and Shinto, Buddhist, and Islamic religious traditions;
- (3) Medieval society, institutions, and civilizations; feudalism; and the evolution of representative government;
- (4) The social, political, cultural, and economic innovations of selected civilizations in Africa, Asia, Europe, and the Americas;
- (5) The ideas of the Renaissance and the Reformation, European exploration, and the origins of capitalism and colonization;
- (6) The cultural ideas of the Enlightenment and the intellectual and political revolution of the 17th and 18th centuries;
- (7) The sources, results, and influences of the American, French, and Latin American revolutions;
- (8) The social and economic consequences of the Industrial Revolution and its impact on politics, culture, and the lives of everyday people;
- (9) The influence of global ideologies of the 19th and 20th centuries (liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, Nazism, and post-colonialism);
- (10) The origins, effects, aftermath, and significance of the two world wars, the Korean and Vietnam conflicts, and the post-Cold War era; and
- (11) The development of globalization and the growing interdependence and inter-relationship among countries and cultures in the world.

c. Civics, government, and economics.

- (1) The essential characteristics of governments;
- (2) The importance of the rule of law for the protection of individual rights and the common good;
- (3) The rights and responsibilities of American citizenship;
- (4) The nature and purposes of constitutions and alternative ways of organizing constitutional governments;
- (5) American political culture;
- (6) Principles of the American constitutional republic;
- (7) The idea of federalism and states' rights;
- (8) The structures, functions, and powers of local and state government;

- (9) Importance of citizen participation in the political process in local and state government;
- (10) Local government and civics instruction specific to Virginia;
- (11) The structures, functions, and powers of the national government;
- (12) The role of the United States government in foreign policy and national security;
- (13) The structure of the federal judiciary;
- (14) The structure and function of the United States market economy as compared with other economies;
- (15) Knowledge of the impact of the government role in the economy and individual economic and political freedoms;
- (16) Knowledge of economic systems in the areas of productivity and key economic indicators;
- (17) The analysis of global economic trends; and
- (18) Knowledge of international organizations, both political and economic, such as the United Nations, International Court in the Hague, and the International Monetary Fund.

d. Geography.

- (1) Relationship between human activity and the physical environment, the ways in which geography governs human activity, and the effects of human activity on geographic features;
- (2) Use of maps and other geographic representations, tools, and technologies to acquire, process, and report information;
- (3) Physical and human characteristics of places;
- (4) Physical processes that shape the surface of the earth;
- (5) Characteristics, distribution, and migration of human populations;
- (6) Patterns and networks of economic interdependence;
- (7) Processes, patterns, and functions of human settlement;
- (8) How the forces of conflict and cooperation influence the division and control of the earth's surface;
- (9) Changes that occur in the meaning, use, distribution, and importance of resources;
- (10) Applying geography to interpret the past and the present and to plan for the future; and
- (11) Impact of geospatial technologies on the study of geography, physical and human.

2. Understanding of history and social sciences to appreciate the significance of:

- a. Diverse cultures and shared humanity;
- b. How things happen, how they change, and how human intervention matters;
- c. The interplay of change and continuity;
- d. How people in other times and places have struggled with fundamental questions of truth, justice, and personal responsibility;
- e. The importance of individuals and groups who have made a difference in history and the significance of personal character to the future of society;
- f. The relationship among history, geography, civics, and economics;
- g. The difference between fact and conjecture, evidence and assertion, and the importance of framing useful questions;

h. How ideas have real consequences; and

i. The importance of primary documents and the potential problems with second-hand accounts.

3. Understanding of the use of the content and processes of history and social sciences instruction, including:

a. Fluency in historical thinking and geographic analysis skills;

b. Skill in debate, discussion, and persuasive writing;

c. The ability to organize key social science content into meaningful units of instruction based on historical thinking skills;

d. The ability to provide instruction using a variety of instructional techniques;

e. The ability to evaluate primary and secondary instructional resources, instruction, and student achievement;

f. The ability to incorporate appropriate technologies into social science instruction; and

g. The development of digital literacy skills while recognizing the influence of the media.

4. Understanding of the content, processes, and skills of one of the social sciences disciplines at a level equivalent to an undergraduate major, along with proficient understanding of the three supporting disciplines to ensure:

a. The ability to teach the processes and organizing concepts of social science;

b. An understanding of the significance of the social sciences; and

c. Student achievement in the social sciences.

5. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing and communications.

6. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

7. Skills necessary to teach research including use of primary and secondary sources, ethical accessing, evaluating, organizing, crediting, and synthesizing information.

8VAC20-543-350

8VAC20-543-350. Journalism (add-on endorsement).

The program in journalism (add-on endorsement) shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Understanding the history and functions of journalism in American culture including the value of freedom of speech and of the press and the complexity of legal and ethical issues;

2. Understanding press law and ethics as it applies to scholastic media, including First Amendment-related rights and responsibilities;

3. Understanding of and experience in theory and practice of both print and nonprint media including design and layout production and the use of technology;

4. Possession of skills in teaching journalistic writing, interviewing, and editing for a variety of purposes, audiences, and formats;

5. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing and communications;

6. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes; and

7. Skills to lead student media and production, including an understanding of fiscal responsibility, conflict resolution, and time management.

8VAC20-543-360

8VAC20-543-360. Keyboarding (add-on endorsement).

The program in keyboarding (add-on endorsement) shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Possession of skills in fingering and keyboard manipulation techniques to model and provide touch keyboarding instruction;

2. Ability to provide instruction that allows students to develop touch fingering techniques in a kinesthetic response to the keyboard required for rapid, accurate entry of data and information;

3. Ability to provide instruction for current procedures in formatting documents;

4. Ability to provide instruction that allows students to develop proper keyboarding techniques based on ergonomics research to minimize future repetitive strain injuries;

5. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing and communications; and

6. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-370

8VAC20-543-370. Library media preK-12.

The program in library media preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Proficiency in teaching for learning, including knowledge of learners and learning; effective and knowledgeable teaching; collaborative instructional partners; integration of 21st century skills, learning standards, and technologies; assessment of and for student learning; and the design and implementation of instruction that engages students' interests and develops their ability to inquire, think critically, and gain and share knowledge.

2. Proficiency in literacy and reading, including familiarity with children's, young adult, and professional literature in multiple formats; use of a variety of strategies to promote reading for enjoyment and information; collection development to support diverse learning needs; and collaboration to reinforce reading instructional strategies.

3. Proficiency in information and knowledge, including efficient and ethical information-seeking behavior, ethical and equitable access to information, design and delivery of authentic learning through current and emerging technology, and the use of evidence-based action research to create and share knowledge.

4. Proficiency in advocacy and leadership, including networking with the library community, commitment to professional development, leadership in articulating the role of the school library program in the educational community and in student learning, and advocacy for school library programs, resources, and services.

5. Proficiency in program management and administration, including planning, developing, implementing, and evaluating library programs, collections, and facilities; personnel; funding; organization of materials; professional ethics; and strategic planning and program assessment.

6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing in multiple formats.

7. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-380

8VAC20-543-380. Mathematics.

The program in mathematics shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the Virginia Mathematics Standards of Learning and how curriculum may be organized to teach these standards to diverse learners;

2. Understanding of a core knowledge base of concepts and procedures within the discipline of mathematics, including the following strands: number systems and number theory, geometry and measurement, analytic geometry, statistics and probability, functions and algebra, multivariate calculus, discrete mathematics, and linear and abstract algebra;

3. Understanding of the sequential and interrelated nature of mathematics, the vertical progression of mathematical standards, and the mathematical structures inherent in the content strands;

4. Understanding of the connections among mathematical concepts and procedures and their practical applications;

5. Understanding of and the ability to use the five processes - becoming mathematical problem-solvers, reasoning mathematically, communicating mathematically, making mathematical connections, and using mathematical models and representations - at different levels of complexity;

6. Understanding of the history of mathematics, including the contributions of different individuals and cultures toward the development of mathematics and the role of mathematics in culture and society;

7. Understanding of major current curriculum studies and trends in mathematics;

8. Understanding how to utilize appropriate technologies for teaching and learning mathematics, including graphing utilities, dynamic software, spreadsheets, and virtual manipulatives;

9. Understanding of and the ability to select, adapt, differentiate, evaluate, and use instructional materials and resources, including professional journals and technology;

10. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors;

11. Understanding of and the ability to use strategies to teach mathematics to diverse learners;

12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and

13. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-390

8VAC20-543-390. Mathematics – Algebra I (add-on endorsement).

The program in Algebra I shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Understanding of the mathematics relevant to the content identified in the Mathematics Standards of Learning and how the standards provide the foundation for teaching middle level mathematics through Algebra I, including:

a. The structure of real numbers and subsets, basic operations, and properties;

b. Elementary number theory, ratio, proportion, and percent;

c. Algebra, trigonometry, and analytic geometry: operations with monomials and polynomials; rational expressions; linear, quadratic, and higher degree equations and inequalities; linear systems of equations and inequalities; nonlinear systems of equations; radicals and exponents; complex numbers; arithmetic and geometric sequences and series; algebraic, trigonometric, logarithmic, exponential, absolute value, and step functions; domain and range of functions; composite and inverse functions; one-to-one mapping; transformations between graphical, tabular, and symbolic forms of functions; direct and inverse variation; line and curve of best fit; conics; and recognition and application of trigonometric identities;

d. Calculus: applications of limits, differentiation, and integration;

e. Linear algebra: matrices, vectors, and linear transformations;

f. Geometry: geometric figures, their properties, relationships, and application of the Pythagorean Theorem; using deductive axiomatic methods of proof and inductive reasoning; perimeter, area, and surface area of two-dimensional and three-dimensional figures; coordinate and transformational geometry; constructions and applications of algebra in geometry;

g. Probability and statistics: experimental and theoretical probability; prediction; graphical representations, including box-and-whisker plots; and measures of center, range, standard deviation, z-scores, and simple and normal distributions; and

h. Discrete mathematics: symbolic logic, sets, permutations and combinations, functions that are defined recursively, and linear programming.

2. Understanding of varied pedagogical approaches to teaching algebraic concepts and their connected procedures.

3. Understanding of the connections among algebraic concepts, procedures, models, and practical applications.

4. Understanding of the sequential and interrelated nature of mathematics and the mathematical structures inherent in algebra.

5. Understanding of and the ability to use the five processes - becoming mathematical problem-solvers, reasoning mathematically, communicating mathematically, making mathematical connections, and using mathematical models and representations - at different levels of complexity.

6. Understanding how to utilize appropriate technologies for teaching and learning algebra, including graphing utilities, dynamic software, spreadsheets, and virtual manipulatives.

7. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors.

8. Understanding of and the ability to use strategies to teach algebra to diverse learners.

9. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

10. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-400

8VAC20-543-400. Music education – instrumental preK-12.

The program in music education - instrumental preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the music discipline as defined in the Virginia Standards of Learning and how they provide a necessary foundation integral to teaching instrumental music.

2. Understanding of the common elements of music - rhythm, melody, harmony, timbre, texture, dynamics, and form - and their relationship with each other and student academic needs and employing this understanding in the analysis of music.

3. Effective musicianship through the development of:

a. Basic skills in conducting, score reading, teaching musical courses, and rehearsal techniques for choral and instrumental music;

b. Skills in composing, arranging, and adapting music to meet the classroom needs and ability levels of school performing groups;

c. Skills in providing and directing creative experiences and improvising when necessary;

d. Proficiency, sufficient for classroom instruction, on keyboard or other accompanying instrument; and

e. The ability to perform in ensembles.

4. Knowledge and understanding of teaching music, including music theory; performance; music history and cultural context; analysis, evaluation, and critique; and aesthetics.

5. Knowledge of music history and literature with emphasis on the relationship of music to culture and the ability to place compositions in historical and stylistic perspective.

6. Knowledge of a comprehensive program of music education based upon sound philosophy, content, and methodology for teaching in elementary, middle, and secondary schools.

7. Specialization on a musical instrument and functional teaching knowledge on each of the string, brass, woodwind, and percussion instruments.

8. Competency in teaching rehearsing and conducting combined instrumental and vocal groups. In addition, the program shall provide instruction in business procedures, organization, and management of large and small instrumental ensembles.

9. Knowledge of vocal techniques in teaching, rehearsing, and conducting combined instrumental and vocal groups.

10. Knowledge and understanding of technological and artistic copyright laws.

11. Knowledge and understanding of classroom management and safety, including performance and studio.

12. Knowledge of a variety of instructional and assessment strategies to foster, support, and enhance student music learning.

13. Knowledge and understanding of technology, with applications for instruction, resources, artistic expression, administration, business procedures, assessment, and communication.

14. Knowledge and understanding of appropriate and sensitive attention to diversity and cultural understanding.

15. Knowledge of related areas of the fine arts, such as dance arts, theatre arts, and the visual arts.

16. Observation and professional laboratory experiences with pupils in elementary, middle, and secondary schools, including instruction of instrumental groups.

17. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

18. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-410

8VAC20-543-410. Music education – vocal/choral preK-12.

A. The program in music education - vocal/choral preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the music discipline as defined in the Virginia Standards of Learning and how they provide a necessary foundation integral to teaching instrumental music.

2. Understanding of the common elements of music - rhythm, melody, harmony, timbre, texture, dynamics, and form - and their relationship with each other and student academic needs and to employ this understanding in the analysis of music.

3. Effective musicianship through the development of:

a. Basic skills in conducting, score reading, teaching musical courses, and rehearsal techniques for choral and instrumental music;

b. Skills in composing, arranging, and adapting music to meet the classroom needs and ability levels of school performing groups;

c. Skills in providing and directing creative experiences and improvising when necessary;

d. Proficiency, sufficient for classroom instruction, on keyboard or other accompanying instrument; and

e. The ability to perform in ensembles.

4. Knowledge and understanding of teaching music, including music theory; performance; music history and cultural context; analysis, evaluation, and critique; and aesthetics.

5. Knowledge of music history and literature with emphasis on the relationship of music to culture and the ability to place compositions in historical and stylistic perspective.

6. Knowledge of a comprehensive program of music education based upon sound philosophy, content, and methodology for teaching in elementary, middle, and secondary schools.

7. Specialization in the methods, materials, and media appropriate to the teaching of vocal/choral and general music at elementary, middle, and secondary levels.

8. Competency in teaching, rehearsing, and conducting choral ensembles and combined vocal and instrumental school groups. In addition, the program shall provide instruction in business procedures, organization, and management of large and small choral ensembles.

9. Knowledge of instrumental techniques in teaching, rehearsing, and conducting combined vocal and instrumental school groups.

10. Knowledge and understanding of technological and artistic copyright laws.

11. Knowledge and understanding of classroom management and safety, including performance and studio.

12. Knowledge of a variety of instructional and assessment strategies to foster, support, and enhance student music learning.

13. Knowledge and understanding of technology, with applications for instruction, resources, artistic expression, administration, business procedures, assessment, and communication.

14. Knowledge and understanding of appropriate and sensitive attention to diversity and cultural understanding.

15. Knowledge of related areas of the fine arts, such as dance arts, theatre arts, and the visual arts.

16. Observation and professional laboratory experiences with pupils at elementary, middle, and secondary levels, including instruction of choral groups.

17. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

18. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-420

8VAC20-543-420. Science – biology.

The program in biology shall ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching biology.
2. Understanding of the nature of science and scientific inquiry, including the:
 - a. Function of research design and experimentation;
 - b. Role and nature of the theory in explaining and predicting events and phenomena;
 - c. Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, augmentation with evidence, and constructing explanations;
 - d. Reliability of scientific knowledge and its constant scrutiny and refinement;
 - e. Self-checking mechanisms used by science to increase objectivity including peer review; and
 - f. Assumptions, influencing conditions, and limits of empirical knowledge.
3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:
 - a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;
 - b. Implement laboratory safety rules and procedures and ensure that students take appropriate safety precautions;
 - c. Conduct research projects and experiments including applications of the design process and technology;
 - d. Conduct systematic field investigations using the school grounds, the community, and regional resources;
 - e. Organize key biological content, skills, and practices into meaningful units of instruction that actively engage students in learning;
 - f. Design instruction to meet the needs of diverse learners using a variety of techniques;
 - g. Evaluate instructional materials and teaching practices;
 - h. Conduct formative and summative assessments of student learning;
 - i. Incorporate instructional technology to enhance student performance; and
 - j. Ensure student competence in biology.
4. Understanding of the content, processes, and skills of biology, equivalent to an undergraduate degree in biology, with course work in genetics, biochemistry/molecular biology, cell biology, botany, zoology, anatomy/physiology, ecology, and evolutionary biology.
5. Understanding of basic physics, chemistry (including organic chemistry), the Earth sciences, and mathematics (including statistics) to ensure:
 - a. The placement of biology in an appropriate interdisciplinary context;
 - b. The ability to teach the processes and crosscutting concepts common to the natural and physical sciences;
 - c. The application of key principles in biology to solve practical problems; and
 - d. A "systems" understanding of the natural world.
6. Understanding of the contributions and significance of biology, including:
 - a. Its social, cultural, and economic significance;
 - b. The relationship of biology and other sciences to mathematics, the design process, and technology; and
 - c. The historical development of scientific concepts and scientific reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-430

8VAC20-543-430. Science – chemistry.

The program in chemistry shall ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how they provide a sound foundation for teaching chemistry.

2. Understanding of the nature of science and scientific inquiry including the:

a. Function of research design and experimentation;

b. Role and nature of the theory in explaining and predicting events and phenomena;

c. Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, augmentation with evidence, and constructing explanations;

d. Reliability of scientific knowledge and its constant scrutiny and refinement;

e. Self-checking mechanisms used by science to increase objectivity including peer review; and

f. Assumptions, influencing conditions, and limits of empirical knowledge.

3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:

a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;

b. Implement laboratory safety rules and procedures and ensure that students take appropriate safety precautions;

c. Conduct research projects and experiments including applications of the design process and technology;

d. Conduct systematic field investigations using the school grounds, the community, and regional resources;

e. Organize key chemistry content, skills, and practices into meaningful units of instruction that actively engage students in learning;

f. Design instruction to meet the needs of diverse learners using a variety of techniques;

g. Evaluate instructional materials and teaching practices;

h. Conduct formative and summative assessments of student learning;

i. Incorporate instructional technology to enhance student performance; and

j. Ensure student competence in chemistry.

4. Understanding of content, processes, and skills of chemistry, equivalent to an undergraduate degree in chemistry, with course work in biochemistry, inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry.

5. Understanding of basic physics, Earth science, biology, and mathematics to ensure:

a. The placement of chemistry in an appropriate interdisciplinary context;

b. The ability to teach the processes and crosscutting concepts common to the natural and physical sciences;

c. The application of key principles in chemistry to solve practical problems; and

d. A "systems" understanding of the natural world.

6. Understanding of the contributions and significance of chemistry, including:

a. Its social, cultural, and economic significance;

b. The relationship of chemistry and other sciences to mathematics, the design process and technology; and

c. The historical development of scientific concepts and scientific reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-440

8VAC20-543-440. Science – Earth science.

The program in Earth science shall ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching Earth science.

2. Understanding of the nature of science and scientific inquiry, including the:

a. Function of research design and experimentation;

b. Role and nature of the theory in explaining and predicting events and phenomena;

c. Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, augmentation with evidence, and constructing explanations;

d. Reliability of scientific knowledge and its constant scrutiny and refinement;

e. Self-checking mechanisms used by science to increase objectivity including peer review; and

f. Assumptions, influencing conditions, and limits of empirical knowledge.

3. Understanding of the knowledge, skills, and practices for teaching laboratory science, including the ability to:

a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;

b. Implement laboratory safety rules and procedures and ensure that students take appropriate safety precautions;

c. Conduct research projects and experiments including applications of the design process and technology;

d. Conduct systematic field investigations using the school grounds, the community, and regional resources;

e. Organize key Earth science content, skills, and practices into meaningful units of instruction that actively engage students in learning;

f. Design instruction to meet the needs of diverse learners using a variety of techniques;

g. Evaluate instructional materials and teaching practices;

h. Conduct formative and summative assessments of student learning;

i. Incorporate instructional technology to enhance student performance; and

j. Ensure student competence in Earth science.

4. Understanding of the content, processes, and skills of Earth science, equivalent to an undergraduate degree in geology, or a related area, with course work in structural geology, paleontology, petrology, oceanography, meteorology, and astronomy/space science.

5. Understanding of basic physics, chemistry (including organic chemistry), biology, and mathematics to ensure:

a. The placement of Earth science in an appropriate interdisciplinary context;

b. The ability to teach the processes and crosscutting concepts common to the natural and physical sciences;

c. The application of key principles in Earth science to solve practical problems; and

d. A "systems" understanding of the natural world.

6. Understanding of the contributions and significance of Earth science, including:

a. Its social, cultural, and economic significance;

b. The relationship of Earth science and other sciences to mathematics, the design process, and technology; and

c. The historical development of scientific concepts and scientific reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-450

8VAC20-543-450. Science – physics.

The program in physics shall ensure that the candidate demonstrates the following competencies:

1. Understanding of the knowledge, skills, and processes of the four core science disciplines as defined in the Virginia Science Standards of Learning and how these provide a sound foundation for teaching physics.

2. Understanding of the nature of science and scientific inquiry, including the

a. Function of research design and experimentation;

b. Role and nature of the theory in explaining and predicting events and phenomena;

c. Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, augmentation with evidence, and constructing explanations;

d. Reliability of scientific knowledge and its constant scrutiny and refinement;

e. Self-checking mechanisms used by science to increase objectivity including peer review; and

f. Assumptions, influencing conditions, and limits of empirical knowledge.

3. Understanding of the knowledge, skills, and processes for teaching laboratory science, including the ability to:

a. Design instruction reflecting the goals of the Virginia Science Standards of Learning;

b. Implement laboratory safety rules and procedures and ensure that students take appropriate safety precautions;

c. Conduct research projects and experiments including applications of the design process and technology;

d. Conduct systematic field investigations using the school grounds, the community, and regional resources;

e. Organize key physics content, skills, and practices into meaningful units of instruction that actively engage students in learning;

f. Design instruction to meet the needs of diverse learners using a variety of techniques;

g. Evaluate instructional materials and teaching practices;

h. Conduct formative and summative assessments of student learning;

i. Incorporate instructional technology to enhance student performance; and

j. Ensure student competence in physics.

4. Understanding of content, processes, and skills of physics, equivalent to an undergraduate degree in physics, with course work in mechanics, electricity and magnetism, optics, and modern physics.

5. Understanding of basic Earth science, chemistry (including organic chemistry), biology, and mathematics to ensure:

a. The placement of physics in an appropriate interdisciplinary context;

b. The ability to teach the processes and crosscutting concepts common to the natural and physical sciences; and

c. A "systems" understanding of the natural world.

6. Understanding of the contributions and significance of physics, including:

a. Its social, cultural, and economic significance;

b. The relationship of physics and other sciences to mathematics, the design process, and technology; and

c. The historical development of scientific concepts and scientific reasoning.

7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-460

8VAC20-543-460. Special education adapted curriculum K-12.

A. The program in special education is designed to ensure through coursework and field experiences in a variety of settings that the candidate has demonstrated the core competencies in this section to prepare children and youth for participation in the general education curriculum and within the community to the maximum extent possible. The candidate also shall complete the competencies in at least one of the endorsement areas of Special Education Adapted Curriculum K-12, in addition to those required under professional studies, including reading and language acquisition.

1. Foundations. Characteristics, legal, and medical aspects.

a. Knowledge of the foundation for educating students with disabilities, including:

(1) Historical perspectives, models, theories, philosophies, and trends that provide the basis for special education practice;

(2) Characteristics of children and youth with disabilities relative to age, varying levels of severity, and developmental differences manifested in cognitive, linguistic, physical, psychomotor, social, or emotional functioning;

(3) Normal patterns of development (i.e., physical, psychomotor, cognitive, linguistic, social, and emotional development) and their relationship to the various disabilities;

(4) Medical aspects of disabilities;

(5) The dynamic influence of the family system and cultural and environmental milieu and related issues pertinent to the education of students with disabilities;

(6) Educational implications of the various disabilities; and

(7) Understanding of ethical issues and the practice of accepted standards of professional behavior.

b. An understanding and application of the legal aspects, regulatory requirements, and expectations associated with identification, education, and evaluation of students with disabilities, including:

(1) Legislative and judicial mandates related to education and special education (e.g., the Individuals with Disabilities Education Act, § 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, the No Child Left Behind Act of 2001, etc.);

(2) Current regulations governing special education (e.g., individualized education program (IEP) development; disciplinary practices, policies, and procedures; and alternative placements and programs in schools); and

(3) Rights and responsibilities of parents, students, teachers, and schools as they relate to individuals with disabilities and disability issues.

2. Assessments and evaluation.

An understanding and application of the foundation of assessment and evaluation related to best special education practice, including:

a. Ethical issues and responsibilities in the assessment of individuals with disabilities;

b. Procedures for screening, prereferral, referral, and eligibility determinations;

c. Factors that may influence assessment findings such as cultural, behavioral, and learning diversity;

d. A general knowledge of measurement theory and practice, including validity, reliability, norming, bias, sensitivity, and specificity;

e. Administration, scoring, and interpretation of commonly used individual and group instruments, including norm-referenced, criterion-referenced, and curriculum-based measures as well as task analysis, observation, portfolio, and environmental assessments;

f. Synthesis and interpretation of assessment findings for eligibility, program planning, and program evaluation decisions; and

g. Knowledge of the Virginia Accountability System, assessment options, and procedures for participation for students with disabilities.

3. Management of instruction and behavior.

An understanding and application of classroom and behavior management techniques and individual interventions, including techniques that:

a. Promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment;

b. Address diverse approaches and classroom organization based upon behavioral, cognitive, affective, social, and ecological theory and practice;

c. Provide positive behavioral supports; and

d. Are based on functional assessment of behavior.

4. Collaboration.

a. Skills in consultation, case management, and collaboration, including:

Coordination of service delivery with related service providers, general educators, and other professions in collaborative work environments to include:

(1) Understanding the Standards of Learning (SOL), structure of the curriculum, and accountability systems across K-12;

(2) Understanding and assessing the organization and environment of general education classrooms across the K-12 setting;

(3) Implementation of collaborative models, including collaborative consultation, co-teaching with co-planning, and student intervention teams;

(4) Procedures to collaboratively develop, provide, and evaluate instructional and behavioral plans consistent with students' individual needs;

(5) Understanding of the roles and responsibilities of each member of the collaborative team; and

(6) Knowledge and application of effective communication strategies and culturally responsive strategies with a variety of stakeholders in the collaborative environment;

b. Training, managing, and monitoring paraprofessionals;

c. Involving of families in the education of their children with disabilities;

d. Understanding the standards of professionalism;

e. Cooperating with community agencies and other resource providers; and

f. Models and strategies for promoting students' self-advocacy skills.

B. The program in special education adapted curriculum K-12 shall ensure through coursework and field experiences in a variety of settings that the candidate seeking endorsement in special education adapted curriculum has the special education core competencies and the specific competency requirements specified in this section. The candidate shall demonstrate the following competencies to prepare children and youth to acquire the functional, academic, and community living skills necessary to reach an appropriate level of independence and be assessed in progress toward an aligned curriculum while participating in programs with nondisabled peers to the fullest extent possible:

1. Characteristics.

a. Demonstrate knowledge of the definitions; characteristics, including medical and health conditions; and learning and behavioral support needs of students with disabilities (K-12) whose cognitive impairments or adaptive skills require adaptations to the general curriculum and whose functional skills are significantly different from typically developing peers, and therefore require adaptations to the general curriculum for an appropriate education, including, but not limited to, students with:

(1) Autism spectrum disorders;

(2) Developmental delay;

(3) Intellectual disability;

(4) Traumatic brain injury; and

(5) Multiple disabilities, including sensory, deaf-blindness, speech-language, orthopedic and/or health impairments as an additional disability to those referenced in subdivision 1 a of this subsection.

b. Knowledge of characteristics shall include:

(1) Medical needs, sensory needs, and position and handling needs of children with multiple disabilities;

(2) Speech and language development and communication and impact on educational, behavioral, and social interactions;

(3) Impact of disability on self-determination and self-advocacy skills; and

(4) Historical and legal perspectives, models, theories, philosophies, and trends related to specific student populations.

2. Individualized education program (IEP) development and implementation.

a. Demonstrate knowledge of the eligibility process and legal and regulatory requirements for IEP development including timelines, components, team composition, roles, and responsibilities.

b. Apply knowledge of content standards, assessment, and evaluation throughout the K-12 grade levels to:

(1) Construct, use, and interpret a variety of standardized and nonstandardized data collection techniques, such as task analysis, observation, portfolio assessment, and other curriculum-based measures;

(2) Make decisions about student progress, instruction, program, modifications, adaptations, placement, teaching methodology, and transitional services and activities for students with disabilities who are accessing the general education curriculum and the standards of learning through an aligned curriculum;

(3) Be able to write educationally relevant IEP goals and objectives that address self-care and self-management of student physical, sensory, and medical needs that also enhance academic success in the adapted curriculum.

3. Instructional methods and strategies for the adapted curriculum.

An understanding and application of service delivery, curriculum, and instruction of students with disabilities, including:

a. Curriculum development that includes a scope and sequence, lesson plans, instructional methods, and assessments that are based on grade level content standards;

b. Foundational knowledge of reading and writing that includes an understanding of the complex nature of language acquisition and reading (reading competencies in professional studies requirements in 8VAC40-543-140). Skills in this area include phonemic awareness, an understanding of sound and symbol relationships, explicit phonics instruction, syllables, phonemes, morphemes, decoding skills, word attack skills, and knowledge of how phonics, syntax, and semantics interact. Additional skills shall include proficiency in a wide variety of comprehension strategies and writing, as well as the ability to foster appreciation of a variety of literature and independent reading; and reading and writing across the content areas;

c. Foundational knowledge of the complex nature of numeracy acquisition and the sequential nature of mathematics including mathematical concepts, mathematical thinking, calculation, and problem-solving;

d. Alternative ways to teach content material including curriculum adaptation and curriculum modifications;

e. Procedures to develop, provide, and evaluate instruction consistent with students' individual needs;

f. Strategies to promote successful integration of students with disabilities with their nondisabled peers;

g. Use of technology to promote student learning;

h. Structure and organization of general education classrooms and other instructional settings representing the continuum of special education services, to include field experiences;

i. Demonstrate the ability to implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum and Standards of Learning through an aligned curriculum across the K-12 grade levels, including the ability to:

(1) Identify and apply differentiated instructional methodologies including systematic instruction, multisensory approaches, learning cognitive strategies, diverse learning styles, and technology use;

(2) Implement a blended curriculum that includes teaching academic skills using the aligned standards of learning and incorporating functional and essential life skills into instruction;

(3) Provide explicit instruction of reading, writing and mathematics at appropriate developmental and grade level in a cumulative manner to students with disabilities accessing the general education curriculum through an aligned curriculum;

(4) Conduct and analyze results of functional behavior assessment;

(5) Implement behavioral intervention plans incorporating positive behavioral supports;

(6) Promote the potential and capacity of individual students to meet high functional, academic, behavioral, and social expectations;

(7) Design alternative ways to teach content material including modifying and adapting the general education curriculum;

(8) Develop appropriate transition between grade levels, setting, and environments;

(9) Use assistive and instructional technology, including augmentative and alternative communication methods and systems;

(10) Implement and evaluate group management technique and individual interventions that teach and maintain emotional, behavioral, and social skills;

(11) Implement and monitor IEP specified modifications and adaptations within the general education classroom; and

(12) Integrate students in the community through collaboration with community service systems.

4. Individualized supports and specialized care of students with significant disabilities.

a. An understanding and application of service delivery for students with significant disabilities and their unique care needs, including the ability to identify the physical, sensory, and health and medical needs of students with significant disabilities and understand how these needs impact the educational program including:

(1) Understanding of typical physical development of children and application of this knowledge in developing learning experiences for students with significant disabilities;

(2) Basic understanding of the most common medical diagnoses associated with students with significant disabilities and the impact on their functioning in school and community settings;

(3) Understanding of the role muscle tone plays in the positioning and handling of students and familiarity with common positioning equipment used in the classroom; and

(4) Understanding of alternative and augmentative communication systems and the ability to identify an appropriate communication system based on the needs of the student.

b. Understanding of the roles and responsibilities of related and support staff working in a collaborative setting and the process and procedures related to initiating a related service request.

c. Ability to develop lesson plans that blend and incorporate the academic, functional, and behavioral goals and objectives, while integrating positioning, self-help, feeding, grooming, sensory, and toileting programs into the instructional delivery.

5. Transitioning.

Demonstrate the ability to prepare students and work with families to provide successful student transitions throughout the educational experience to include postsecondary education, training, employment, and independent living that addresses an understanding of long-term planning, age-appropriate transition assessments, career development, life skills, community experiences and resources, and self-determination to include goal setting, decision-making, problem-solving, self-awareness and self-advocacy, guardianship, and other legal considerations.

a. Skills in consultation, case management, and collaboration for students with varying degrees of disability severity.

(1) Coordinate service delivery with general educators including career and technical educators and school counselors, related services providers, and other providers;

(2) Awareness of community resources agencies and strategies to interface with community agencies when developing and planning IEPs;

(3) Knowledge of related services and accommodations that pertain to postsecondary transitions that increase student access to postsecondary education and community resources; and

(4) Ability to coordinate and facilitate meetings involving parents, students, outside agencies, and administrators to include the understanding of consent to share information, including confidentiality and disability disclosure.

b. Understand the difference between entitlement and eligibility for agency services as students move to the adult world, including a basic understanding of Social Security Income benefits planning, work incentive, Medicaid, community independent living, and waivers.

c. Recognize uses of technology and seek out technology at postsecondary settings that shall aid the student in their education, work, and independent living.

d. Recognize and plan for individual student potential and their capacity to meet high academic, behavioral, and social expectations and the impact of academic and social success on personal development.

e. Knowledge of person-centered planning strategies to promote student involvement in planning.

f. Knowledge of generic skills that lead to success in school, work, and community, including time management, preparedness, social interactions, and communication skills.

g. Understand social skill development and the unique social skills deficits and challenges associated with disabilities:

(1) Assesses social skill strengths and needs; and

(2) Plans and uses specialized social skills strategies.

h. Knowledge of use and implementation of vocational assessments to encourage and support students' advocacy and self-determination skills.

i. Knowledge of legal issues surrounding age of majority and guardianship.

j. Knowledge of graduation requirements, diploma options and legal issues surrounding age of majority, and guardianship.

6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

7. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

C. Completion of supervised classroom experiences with students with disabilities and an adapted curriculum K-12.

8VAC20-543-470

8VAC20-543-470. Special education blindness and visual impairments preK-12.

The program in special education visual impairments preK-12 is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following competencies:

1. Understanding of the characteristics of individuals with disabilities, including:

a. Developmental and cognitive characteristics of children and youth with disabilities, particularly blindness or visual impairment;

b. Language development and the effects of blindness, visual impairment, and other disabling conditions and cultural and linguistic diversity on language development;

c. Characteristics of individuals with visual impairments, including impact of visual impairment on children's social and emotional development, and family interaction patterns; and

d. Understanding of psychosocial aspects of visual impairment and cultural identity.

2. Understanding of the foundation of the legal aspects associated with students with disabilities and students with visual impairments, including:

a. Legislative and judicial mandates related to education and special education;

b. The Individuals with Disabilities Education Act (IDEA), § 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act;

c. Legal decisions related to persons with disabilities;

d. Current regulations and procedures governing special education, including individualized education program (IEP) development, individualized family service plan (IFSP), and transition services; and

e. Disciplinary practices, policies, and procedures and alternative placements and programs in schools.

3. Understanding of the foundation of assessment and evaluation with an emphasis on individuals with visual impairments, including:

a. Administering, scoring, and interpreting assessments, including norm-referenced, criterion-referenced, and curriculum-based individual and group assessments;

b. Administration and interpretation of a functional vision assessment (FVA), learning media assessment (LMA), and assistive technology assessment and assessment in the areas of the expanded core curriculum (ECC);

c. Interpreting assessments for eligibility, placement, and program decisions and to inform instruction;

d. Techniques to collect, record, and analyze information;

e. Diagnostic instruction using ongoing assessment data;

f. Techniques for recognizing capacity and diversity and its influence on student assessment and evaluation;

g. Using data from student program evaluation to inform curriculum development, instructional practice, and accommodations; and

h. Low vision practices and procedures, including assessment and instructional programming for functional vision.

4. Understanding of service delivery, classroom and behavior management, and instruction for students who are blind and visually impaired, including:

a. The application of current research and evidence-based practice;

b. Classroom organization and curriculum development;

c. Curriculum adaptations and accommodations;

d. The development of language and literacy skills;

e. The use of technology in teaching and instructing students to use assistive technologies to promote learning and provide access to the general education curriculum;

f. Classroom management, including behavior support systems and individual planning;

g. Methods and procedures for teaching students with visual impairments;

h. Instructional programming and modifications of curriculum to facilitate inclusion of students with blindness and visual impairment in programs and services with sighted and typically developing peers;

i. Individual and group behavior management techniques;

j. Career and vocational aspects of individuals with disabilities, including persons with visual impairments, including knowledge of careers, vocational opportunities, and transition from school to work; and

k. Social and recreational skills and resources for individuals with visual impairments, including methods and materials for assessing and teaching activities of daily living.

5. Understanding of consultation, case management, and collaboration including:

a. Coordinating service delivery with other professionals in collaborative work environments;

b. Training, managing, and monitoring paraprofessionals;

c. Involving families in the education of their children with blindness or visual impairment;

d. Implementation of collaborative models, including collaborative consultation, co-teaching, and student intervention teams; and

e. Interfacing with community agencies and resources.

6. Understanding of the foundations of Braille reading and writing, including:

a. Teaching reading and writing of grade 2 Braille on both a Braille writer and a "slate and stylus"; and

b. Knowledge of other codes, including Nemeth, foreign language code, music code, and computer Braille.

7. Understanding of anatomy, physiology, and diseases of the eye and the educational implications.

8. Understanding principles and how to instruct in human guide techniques and pre-cane orientation and mobility instruction.

9. Understanding of the standards of professionalism, including ethical and professional practice.

10. Completion of supervised classroom experiences at the elementary and secondary levels with students who have visual impairments, to include those with blindness and low vision, and with individuals who may have additional disabilities.

11. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

12. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-480

8VAC20-543-480. Special education deaf and hard of hearing preK-12.

The program in special education deaf and hard of hearing preK-12 is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following competencies:

1. Understanding of the characteristics of individuals with disabilities, including the following:

a. Developmental and cognitive characteristics of children and youth with disabilities;

b. Characteristics of individuals who are deaf or hard of hearing, including sociocultural influences and possible health-related or genetically-related problems; and

c. Foundations of the education and culture of persons who are deaf or hard of hearing.

2. Understanding of the foundation of the legal aspects associated with students with disabilities and students who are deaf or hard of hearing including:

- a. Legislative and judicial mandates related to education and special education:
- b. The Individuals with Disabilities Education Act (IDEA), § 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act;
- c. Legal decisions related to persons with disabilities;
- d. Current regulations and procedures governing special education, including individualized education program (IEP) development, individualized family service plan (IFSP), and transition services; and
- e. Disciplinary practices, policies, and procedures and alternative placements or programs in schools.
- 3. Understanding of the foundation of assessment and evaluation with an emphasis on individuals who are deaf or hard of hearing, including:
 - a. Administering, scoring, and interpreting assessments, including norm-referenced, criterion-referenced, and curriculum-based individual and group assessments;
 - b. Interpreting assessment results for eligibility, placement, and to inform instruction (i.e., linking assessment results to classroom interventions);
 - c. Techniques to collect, record, and analyze information from observing students;
 - d. Data-based decision-making skills using assessment data to inform diagnostic instruction;
 - e. Techniques for recognizing capacity and diversity and its influence on student assessment and evaluation.
- 4. Understanding of service delivery, classroom and behavior management, and instruction, including:
 - a. The application of current research in practice;
 - b. Classroom organization and curriculum development;
 - c. Curriculum adaptations and accommodations;
 - d. The development of language and literacy skills;
 - e. The use of technology to promote student learning;
 - f. Classroom and behavior management, including behavior support systems and individual planning;
 - g. Evidence-based strategies and procedures for teaching persons who are deaf or hard of hearing;
 - h. Instructional programming and modifications of curriculum to facilitate inclusion of students with disabilities into the continuum of programs and services with peers without disabilities;
 - i. Strategies to promote successful socialization of students who are deaf or hard of hearing with their hearing peers; and
 - j. Career and vocational skill development of individuals with disabilities, including persons who are deaf or hard of hearing and who may have additional needs.
- 5. Skills in consultation, case management, and collaboration, including:
 - a. Coordinating service delivery with other professionals in collaborative work environments;
 - b. Training, managing, and monitoring paraprofessionals;
 - c. Implementation of collaborative models, including collaborative consultation, co-teaching, and student intervention teams;
 - d. Involving families in the education of their children with disabilities; and
 - e. Cooperating with community agencies and resources.

6. Understanding of speech, hearing, and language development, including:

a. Speech, hearing, and language development and the effects of sensory loss and cultural diversity on typical language development;

b. How to promote development of listening and spoken language skills in children who are deaf or hard of hearing; how to promote development of American Sign Language skills in children who are deaf or hard of hearing;

c. Anatomy of speech structures, auditory and visual mechanisms, production, transmission, and psychophysical characteristics of sound; and

d. General and specific effects of having partial or no hearing on production and reception of speech and on English language development.

7. Understanding of audiology, including:

a. Diagnostic evaluation, testing procedures, and interpreting audiology reports to inform instruction in and expectations for development of listening and spoken language skills; and

b. Characteristics of individual, group amplification and assistive listening devices (e.g., cochlear implant systems, hearing aids, FM systems, sound field systems, etc.) with emphasis on utilization in educational environments.

8. Understanding of communication modalities to include various modalities of communication, including cued speech, speech reading, listening, signed language, and spoken language.

9. Demonstrated proficiency in expressive and receptive sign language, to include American Sign Language and contact varieties.

10. Understanding of the standards for professionalism.

11. Completion of supervised classroom experiences at the elementary and secondary levels with students who are deaf or hard of hearing, including those with additional disabilities.

12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

13. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-490

8VAC20-543-490. Special education early childhood (birth through age five).

The program in special education early childhood (birth through age five) is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the following competencies:

1. Understanding of the nature and characteristics of major disabling and at-risk conditions, including:

a. Trends for service delivery to the birth-through-age-five population;

b. An overview of early intervention and early childhood special education;

c. Historical perspective of special education; and

d. Awareness of the issues surrounding cultural and linguistic diversity.

2. Understanding of the foundation of the legal aspects associated with students with disabilities, including:

a. Legislative and judicial mandates related to education and special education;

b. The Individuals with Disabilities Education Act (IDEA), § 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act;

- c. Legal decisions related to persons with disabilities;
 - d. Current regulations and procedures governing special education to include individualized education program (IEP) development and individualized family service plan (IFSP); and
 - e. Disciplinary practices, policies, and procedures and alternative placements and programs in schools.
3. Knowledge of the selection, administration, and interpretation of formal and informal assessment techniques for young children with disabling and at-risk conditions and their families, including:
- a. Eligibility and diagnosis of disabling and at-risk conditions;
 - b. Progress monitoring for growth compared to same age, typically developing peers and functioning in environments where same age peers would normally attend (to include, but not be limited to, settings that the families choose);
 - c. Program development and improvement; and
 - d. Curriculum-based assessments for instructional planning.
4. Understanding of the methods for providing instructional programs for early intervention, including:
- a. Service delivery options;
 - b. Development of individualized education programs (IEPs) and individualized family service plans (IFSPs);
 - c. Curriculum development and implementation to ensure developmentally appropriate intervention techniques in the areas of self-help, motor, cognitive, social and emotional, and language; and
 - d. Service delivery to support success and functionality in all settings where same age, typically developing peers would be located.
5. Understanding of teaching social and emotional skills to assist with behavior management and the application of principles of learning and child development to individual and group management using a variety of techniques that are appropriate to the age of that child.
6. Understanding of speech and language development and intervention methods, including the effects of disabling and at-risk conditions on young children, including:
- a. Developmental stages of language acquisition;
 - b. Cultural and linguistic diversity;
 - c. English language learner language acquisition; and
 - d. Use of language to get needs and wants met and for social interaction.
7. Understanding of and experiences with the medical aspects of young children with disabling and at-risk conditions and the management of neuro-developmental and motor disabilities, including:
- a. Emergency care and the role of health care professionals in the lives of individuals with disabilities; and
 - b. Use and effects of medications.
8. Skills in consultation, case management, collaboration, coaching, mentoring, and co-teaching, including techniques in working with children, families, educators, related service providers, and other human service professionals that include:
- a. Service coordination;
 - b. Interagency coordination;
 - c. Inclusive practices;
 - d. Transition facilitation; and

e. Training, managing, and monitoring paraprofessionals.

9. Understanding of the theories and techniques of family-centered intervention, including:

a. Cultural and linguistic differences influences; and

b. Family issues.

10. Understanding of the standards of professionalism.

11. Completion of supervised experiences at the early childhood level in a variety of settings, including but not limited to early intervention, home-based, school-based, and community-based settings.

12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

13. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-500

8VAC20-543-500. Special education general curriculum K-12.

A. The program in special education is designed to ensure through course work and field experiences in a variety of settings that the candidate has demonstrated the core competencies in this section to prepare children and youth for participation in the general education curriculum and within the community to the maximum extent possible. The candidate also shall complete the competencies in at least one of the endorsement areas of Special Education General Curriculum K-12, in addition to those required under professional studies in 8VAC40-543-140, including reading and language acquisition.

1. Foundations - Characteristics, legal, and medical aspects.

a. Knowledge of the foundation for educating students with disabilities, including:

(1) Historical perspectives, models, theories, philosophies, and trends that provide the basis for special education practice;

(2) Characteristics of children and youth with disabilities relative to age, varying levels of severity, and developmental differences manifested in cognitive, linguistic, physical, psychomotor, social, or emotional functioning;

(3) Normal patterns of development (i.e., physical, psychomotor, cognitive, linguistic, social, or emotional development) and their relationship to the various disabilities;

(4) Medical aspects of disabilities;

(5) The dynamic influence of the family system and cultural and environmental milieu and related issues pertinent to the education of students with disabilities;

(6) Educational implications of the various disabilities; and

(7) Understanding of ethical issues and the practice of accepted standards of professional behavior.

b. An understanding and application of the legal aspects, regulatory requirements, and expectations associated with identification, education, and evaluation of students with disabilities, including:

(1) Legislative and judicial mandates related to education and special education (e.g., the Individuals with Disabilities Education Act, § 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, the No Child Left Behind Act of 2001, etc.);

(2) Current regulations governing special education (e.g., individualized education program (IEP) development; disciplinary practices, policies, and procedures; and alternative placements and programs in schools); and

(3) Rights and responsibilities of parents, students, teachers, and schools as they relate to individuals with disabilities and disability issues.

2. Assessments and evaluation.

An understanding and application of the foundation of assessment and evaluation related to best special education practice, including:

- a. Ethical issues and responsibilities in the assessment of individuals with disabilities;
- b. Procedures for screening, pre-referral, referral, and eligibility determinations;
- c. Factors that may influence assessment findings such as cultural, behavioral, and learning diversity;
- d. A general knowledge of measurement theory and practice, including validity, reliability, norming, bias, sensitivity, and specificity;
- e. Administration, scoring, and interpretation of commonly used individual and group instruments, including norm-referenced, criterion-referenced, and curriculum-based measures as well as task analysis, observation, portfolio, and environmental assessments;
- f. Synthesis and interpretation of assessment findings for eligibility, program planning, and program evaluation decisions; and
- g. Knowledge of the Virginia Accountability System, assessment options, and procedures for participation for students with disabilities.

3. Management of instruction and behavior.

An understanding and application of classroom and behavior management techniques and individual interventions, including techniques that:

- a. Promote emotional well-being and teach and maintain behavioral conduct and skills consistent with norms, standards, and rules of the educational environment;
- b. Address diverse approaches to classroom organization and set-up based upon behavioral, cognitive, affective, social, and ecological theory and practice;
- c. Provide positive behavioral supports; and
- d. Are based on functional assessment of behavior.

4. Collaboration.

a. Skills in consultation, case management, and collaboration, including coordination of service delivery with related service providers, general educators, and other professions in collaborative work environments to include:

(1) Understanding the Standards of Learning, the structure of the curriculum, and accountability systems across K-12;

(2) Understanding and assessing the organization and environment of general education classrooms across the K-12 setting;

(3) Implementation of collaborative models, including collaborative consultation, co-teaching with co-planning, and student intervention teams;

(4) Procedures to collaboratively develop, provide, and evaluate instructional and behavioral plans consistent with students' individual needs;

(5) Understanding the roles and responsibilities of each member of the collaborative team; and

(6) Knowledge and application of effective communication strategies and culturally responsive strategies with a variety of stakeholders in the collaborative environment;

b. Training, managing, and monitoring paraprofessionals;

c. Involvement of families in the education of their children with disabilities;

d. Understanding the standards of professionalism;

e. Cooperating with community agencies and other resource providers; and

f. Models and strategies for promoting students' self-advocacy skills.

B. The program in special education general curriculum K-12 shall ensure through coursework and field experiences in a variety of settings that the candidate seeking endorsement in special education general curriculum K-12 has the special education core competencies and the specific competency requirements specified in this section.

1. Characteristics.

a. Demonstrate knowledge of definitions, characteristics, and learning and behavioral support needs of students with disabilities whose cognitive and functional skills are not significantly different from typically developing peers and therefore require access to the general education curriculum for an appropriate education, including but not limited to, students with:

(1) Autism spectrum disorder;

(2) Deaf-blindness;

(3) Developmental delay;

(4) Emotional disability;

(5) Hearing impairment (or deaf and hard of hearing);

(6) Intellectual disability;

(7) Learning disability;

(8) Multiple disabilities;

(9) Orthopedic impairment;

(10) Other health impairment;

(11) Speech-language impairment;

(12) Traumatic brain injury; and/or

(13) Visual impairment (including blindness).

b. Knowledge of characteristics shall include:

(1) Age-span and developmental issues;

(2) Levels of severity;

(3) Cognitive functioning;

(4) Language development;

(5) Emotional and behavioral adjustment;

(6) Social development;

(7) Medical aspects; and

(8) Cultural, ethnic, and socioeconomic factors.

2. Individualized education program development and implementation.

a. Demonstrate knowledge of the eligibility process and legal and regulatory requirements for IEP development, including timelines, components, team composition, roles, and responsibilities.

b. Apply knowledge of content standards, assessment, and evaluation throughout the K-12 grade levels to:

(1) Construct, use, and interpret a variety of standardized and nonstandardized data collection techniques, such as task analysis, observation, portfolio assessment, and other curriculum-based measures;

(2) Make decisions about student progress, instruction, program, accommodations, placement, teaching methodology, and transition services and activities for students with disabilities who are accessing the general education curriculum and the Virginia Standards of Learning; and

(3) Develop an individualized education program (IEP) that addresses the academic and functional needs of the student with disabilities in the general education curriculum and meets regulatory requirements.

3. Instructional strategies for reading and writing.

An understanding and application of service delivery, curriculum, and instruction of students with disabilities, including:

a. Curriculum development that includes a scope and sequence, lesson plans, instructional methods, and assessments that are based on the general education curriculum standards of learning at the elementary, middle, and secondary levels;

b. Foundational knowledge of reading and writing that includes an understanding of the complex nature of language acquisition and reading (reading competencies in professional studies requirements). Skills in this area include: phonemic awareness, an understanding of sound and symbol relationships, explicit phonics instruction, syllables, phonemes, morphemes, decoding skills, word attack skills, and knowledge of how phonics, syntax, and semantics interact. Additional skills shall include proficiency in a wide variety of comprehension, vocabulary, and writing strategies, as well as the ability to foster appreciation of a variety of literature, independent reading, and reading and writing across content areas;

c. Alternative ways to teach content material including curriculum adaptation and curriculum modifications;

d. Procedures to develop, provide, and evaluate instruction consistent with students' individual needs;

e. Strategies to promote successful integration of students with disabilities with their nondisabled peers;

f. Use of technology to promote student learning;

g. Structure and organization of general education classrooms and other instructional settings representing the continuum of special education services, to include field experiences; and

h. Demonstrate the ability to implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum across the K-12 grade levels, including the ability to:

(1) Identify and apply differentiated instructional methodologies including systematic instruction, multisensory approaches, learning cognitive strategies, study skills, diverse learning styles, and technology use;

(2) Teach skills and remediate deficits in academic areas at the elementary, middle, and secondary levels;

(3) Provide explicit instruction of reading and writing at appropriate developmental and grade level in a systematic and cumulative manner to students with disabilities who are accessing the general education curriculum;

(4) Promote the potential and capacity of individual students to meet high academic, behavioral, and social expectations;

(5) Design alternative ways to teach content material including modifying curriculum in both directive and nondirective methodologies;

(6) Use assistive and instructional technology in order to access the general education curriculum;

(7) Implement and evaluate group management techniques and individual interventions that teach and maintain emotional, behavioral, and social skills; and

(8) Implement and monitor IEP specified accommodations within the general education classroom.

4. Instructional strategies for mathematics.

An understanding and application of service delivery, curriculum, and instruction of students with disabilities, including:

a. Curriculum development that includes a scope and sequence, lesson plans, instructional methods, and assessments that are based on the general education curriculum standards of learning at the elementary, middle, and secondary levels;

b. Foundational knowledge of the complex nature of numeracy acquisition and nature of mathematics including mathematical concepts, mathematical thinking, mathematics vocabulary, calculation, and problem-solving;

c. Alternative ways to teach content material including curriculum adaptation and curriculum modifications;

d. Procedures to develop, provide, and evaluate instruction consistent with students' individual needs;

e. Strategies to promote successful integration of students with disabilities with their nondisabled peers;

f. Use of technology to promote student learning;

g. Structure and organization of general education classrooms and other instructional settings representing the continuum of special education services, to include field experiences;

h. Demonstrate the ability to implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum across the K-12 grade levels, including the ability to:

(1) Identify and apply differentiated instructional methodologies including systematic instruction, multisensory approaches, learning cognitive strategies, study skills, diverse learning styles, and technology use;

(2) Teach skills and remediate deficits in academic areas at the elementary, middle, and secondary levels;

(3) Provide explicit instruction in mathematics at appropriate developmental and grade level in a systematic and cumulative manner to students with disabilities who are accessing the general education curriculum;

(4) Promote the potential and capacity of individual students to meet high academic, behavioral, and social expectations;

(5) Design alternative ways to teach content material including modifying curriculum in both directive and nondirective methodologies;

(6) Use assistive and instructional technology in order to access the general education curriculum;

(7) Implement and evaluate group management techniques and individual interventions that teach and maintain emotional, behavioral, and social skills; and

(8) Implement and monitor IEP specified accommodations within the general education classroom.

5. Transitioning.

Demonstrate the ability to prepare students and work with families to provide successful student transitions throughout the educational experience to include postsecondary education, training, employment, and independent living that addresses an understanding of long-term planning, transition assessments, career development, life skills, community experiences and resources, self-advocacy, and self-determination, guardianship, and legal considerations.

a. Skills in consultation, case management, and collaboration for students with varying degrees of disability severity;

(1) Coordinate service delivery with general educators, related service providers, and other providers;

(2) Awareness of community resources agencies and strategies to interface with community agencies when developing and planning IEPs;

(3) Knowledge of related services and accommodations that pertain to postsecondary transitions that increase student access to postsecondary education and community resources;

(4) Ability to coordinate and facilitate meetings involving parents, students, outside agencies, and administrators.

b. Understand the difference between entitlement and eligibility for agency services as students move to the adult world including a basic understanding of Social Security Income benefits planning, work incentive, Medicaid, and community independent living.

c. Recognize uses of technology and seek out technology at postsecondary settings that shall aid the student in their education, work, and independent living.

d. Recognize and plan for individual student potential and their capacity to meet high academic, behavioral, and social expectations and the impact of academic and social success on personal development:

(1) Knowledge of person-centered planning strategies to promote student involvement in planning; and

(2) Knowledge of generic skills that lead to success in school, work, and community, including time management, preparedness, social interactions, and communication skills.

e. Understand social skill development and the unique social skills deficits and challenges associated with disabilities:

(1) Assess social skill strengths and needs; and

(2) Plan and use specialized social skills strategies.

f. Knowledge of use and implementation of vocational assessments to encourage and support students' self-advocacy and self-determination skills.

g. Knowledge of graduation requirements, diploma options, and legal issues surrounding age of majority and guardianship.

6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

7. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

C. Completion of supervised classroom experiences with students with disabilities and the general curriculum K-12.

8VAC20-543-510

8VAC20-543-510. Special education – general curriculum elementary education K-6 (add-on endorsement).

The program in special education - general curriculum elementary education K-6 (add-on endorsement) shall ensure that the candidate holds an active license with an endorsement in elementary education (early/primary education preK-3/elementary education preK-6) issued by the Virginia Board of Education and has demonstrated the following competencies. The candidate must:

1. Hold a license issued by the Virginia Board of Education with an endorsement in elementary education (early/primary education preK-3/elementary education preK-6);

2. Have completed competencies in the education of students with disabilities distributed in each of the following areas:

a. Foundations. Characteristics that include knowledge of the foundation for educating students with disabilities; historical, ethical, and legal aspects that include an understanding and application of the federal

and state regulatory requirements; and expectations associated with identification, education, and evaluation of students with disabilities.

b. Individualized education program (IEP) development and implementation.

(1) Knowledge of the eligibility process, legal, and regulatory requirements of IEP development including timelines, components, team composition, roles, and responsibilities.

(2) Skills in this area include the ability to apply knowledge of assessment and evaluation throughout the K-12 grade levels to construct, use, and interpret a variety of standardized and nonstandardized data collection techniques; to make decisions about student progress, instructional, program, goal development, accommodations, placement, and teaching methodology for students with disabilities who are accessing the general education curriculum and the standards of learning; and to demonstrate the use of assessment, evaluation, and other information to develop and implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum across the K-12 grade levels.

c. Assessment and evaluation.

(1) Understanding and application of the foundation of assessment and evaluation related to best practice in special education; including types and characteristics of assessment, introduction to formal and informal assessment, and use of assessments and other information to determine special education eligibility, service delivery, curriculum, and instruction of students with disabilities.

(2) Understanding of the current legal and ethical issues related to assessment selection and use, including comprehensive evaluation requirements, students with disabilities participation in the state and local accountability systems, assessment options, appropriate grading and testing accommodations, and assessment of students from diverse backgrounds.

d. Instructional strategies in reading and writing.

(1) An understanding and application of service delivery, curriculum, and instruction of students with disabilities in reading and writing.

(2) Knowledge of the general curriculum, English requirements, and expectations, and how to provide access to the curriculum based on student characteristics and needs.

(3) Ability to assess, interpret data, and implement instructional practices to address the identified reading needs of the students. Skills in this area include the ability to identify, understand, and implement a range of specialized instructional strategies and research-based interventions that reflect best practice in reading and writing instruction for students with disabilities.

(4) Ability to align the instructional practices and intervention with the Standards of Learning and state assessments.

(5) Knowledge and ability to utilize current assistive and instructional reading and writing technologies to promote learning and independence for students with disabilities in the general curriculum and the ability to evaluate the effectiveness of the use of the technologies.

(6) Ability to develop and use curriculum-based and standardized reading and writing assessments to conduct ongoing evaluations of instructional materials and practices to determine effectiveness and assess student needs as it relates to the curriculum design and delivery.

(7) Ability to model and directly teach reading and writing instructional strategies in a variety of settings and collaborate and co-teach with general educators to develop and implement instructional practices that meet the needs of students with disabilities in the general curriculum and monitor student progress.

e. Instructional strategies in mathematics.

(1) An understanding and application of service delivery, curriculum, and instruction of students with disabilities in mathematics.

(2) Knowledge of the general curriculum mathematics requirements and expectations and how to provide access to the curriculum based on student characteristics and needs.

(3) Ability to assess, interpret data, and implement instructional practices to address calculations, reasoning, and problem-solving skills. Skills in this area include the ability to understand and use a range of specialized mathematics instructional strategies and research-based interventions that reflect best practice in mathematics instruction for students with disabilities.

(4) Ability to align the instructional practices and intervention with the Standards of Learning and state assessments.

(5) Knowledge of and ability to utilize current mathematics related assistive and instructional technologies to promote learning and independence for students with disabilities in the general curriculum and the ability to evaluate the effectiveness of the use of the technologies.

(6) Ability to develop and use curriculum-based and standardized mathematics assessments to conduct ongoing evaluations of instructional materials and practices to determine effectiveness and assess student needs as related to the mathematics curriculum design and delivery.

(7) Ability to model and directly teach mathematics instructional strategies in a variety of settings and collaborate and co-teach with general educators to develop and implement instructional practices that meet the needs of students with disabilities in the mathematics general curriculum and monitor student progress.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-520

8VAC20-543-520. Special education – general curriculum middle education grades 6-8 (add-on endorsement).

The program in special education - general curriculum middle education grades 6-8 (add-on endorsement) shall ensure that the candidate holds an active license with an endorsement in middle education (middle education 6-8 English, middle education 6-8 history and social sciences, middle education 6-8 mathematics, or middle education 6-8 sciences) issued by the Virginia Board of Education and has demonstrated the following competencies. The candidate must:

1. Hold a license issued by the Virginia Board of Education with an endorsement in middle education (middle education 6-8 English, middle education 6-8 history and social sciences, middle education 6-8 mathematics, or middle education 6-8 sciences).

2. Have completed competencies in the education of students with disabilities distributed in each of the following areas:

a. Foundations. Characteristics that include knowledge of the foundation for educating students with disabilities; historical, ethical, and legal aspects that include an understanding and application of the federal and state regulatory requirements; and expectations associated with identification, education, and evaluation of students with disabilities.

b. Individualized education program (IEP) development and implementation. Knowledge of the eligibility process and legal and regulatory requirements of IEP development including timelines, components, team composition, roles, and responsibilities. Skills in this area include the ability to apply knowledge of assessment and evaluation throughout the K-12 grade levels to construct, use, and interpret a variety of standardized and nonstandardized data collection techniques; to make decisions about student progress, instructional, program, goal development, accommodations, placement, and teaching methodology for students with disabilities who are accessing the general education curriculum and the standards of learning; and to demonstrate the use of assessment, evaluation, and other information to develop and implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum across the K-12 grade levels.

c. Transitioning. Skills in this area include the ability to prepare students and work with families and community agencies to provide successful student transitions throughout the educational experience to include postsecondary education training, employment, and independent living which addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy, and self-determination, guardianship, and legal considerations.

d. Instructional strategies in reading and writing.

(1) An understanding and application of service delivery, curriculum, and instruction of students with disabilities in reading and writing.

(2) Knowledge of the general curriculum, English requirements and expectations, and how to provide access to the curriculum based on student characteristics and needs.

(3) Ability to assess, interpret data, and implement instructional practices to address the identified reading needs of the students. Skills in this area include the ability to identify, understand, and implement a range of specialized instructional strategies and research-based interventions that reflect best practice in reading and writing instruction for students with disabilities.

(4) Ability to align the instructional practices and intervention with the Standards of Learning and state assessments.

(5) Knowledge and ability to utilize current assistive and instructional reading and writing technologies to promote learning and independence for students with disabilities in the general curriculum and the ability to evaluate the effectiveness of the use of the technologies.

(6) Ability to develop and use curriculum-based and standardized reading and writing assessments to conduct ongoing evaluations of instructional materials and practices to determine effectiveness and assess student needs as related to the curriculum design and delivery.

(7) Ability to model and directly teach reading and writing instructional strategies in a variety of settings, collaborate and co-teach with general educators to develop and implement instructional practices that meet the needs of students with disabilities in the general curriculum, and monitor student progress.

e. Instructional strategies in mathematics.

(1) An understanding and application of service delivery, curriculum, and instruction of students with disabilities in mathematics.

(2) Knowledge of the general curriculum mathematics requirements and expectations and how to provide access to the curriculum based on student characteristics and needs.

(3) Ability to assess, interpret data, and implement instructional practices to address calculations, reasoning, and problem-solving skills. Skills in this area include the ability to understand and use a range of specialized mathematics instructional strategies and research-based interventions that reflect best practice in mathematics instruction for students with disabilities.

(4) Ability to align the instructional practices and intervention with the Standards of Learning and state assessments.

(5) Knowledge of and ability to utilize current mathematics related assistive and instructional technologies to promote learning and independence for students with disabilities in the general curriculum and the ability to evaluate the effectiveness of the use of the technologies.

(6) Ability to develop and use curriculum-based and standardized mathematics assessments to conduct ongoing evaluations of instructional materials and practices to determine effectiveness and assess student needs as it relates to the mathematics curriculum design and delivery.

(7) Ability to model and directly teach mathematics instructional strategies in a variety of settings, collaborate and co-teach with general educators to develop and implement instructional practices that meet the needs of students with disabilities in the mathematics general curriculum, and monitor student progress.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-530

8VAC20-543-530. Special education – general curriculum secondary education grades 6-12 (add-on endorsement).

The program in special education - general curriculum secondary education grades 6-12 (add-on endorsement) shall ensure that the candidate holds an active license with an endorsement in English, history and social sciences, mathematics, biology, chemistry, Earth science, or physics issued by the Virginia Board of Education and has demonstrated the following competencies. The candidate must:

1. Hold a license issued by the Virginia Board of Education with an endorsement in English, history and social sciences, mathematics, biology, chemistry, Earth science, or physics.

2. Have completed competencies in the education of students with disabilities distributed in each of the following areas:

a. Foundations. Characteristics that include knowledge of the foundation for educating students with disabilities; historical, ethical, and legal aspects that include an understanding and application of the federal and state regulatory requirements; and expectations associated with identification, education, and evaluation of students with disabilities.

b. Individualized education program development and implementation. Knowledge of the eligibility process and legal and regulatory requirements of IEP development including timelines, components, team composition, roles, and responsibilities. Skills in this area include the ability to apply knowledge of assessment and evaluation throughout the K-12 grade levels to construct, use, and interpret a variety of standardized and nonstandardized data collection techniques; to make decisions about student progress, instructional, program, goal development, accommodations, placement, and teaching methodology for students with disabilities who are accessing the general education curriculum and the standards of learning; and to demonstrate the use of assessment, evaluation, and other information to develop and implement individual educational planning and group instruction with students with disabilities who are accessing the general education curriculum across the K-12 grade levels.

c. Transitioning. Skills in this area include the ability to prepare students and work with families and community agencies to provide successful student transitions throughout the educational experience to include postsecondary education training, employment, and independent living which addresses an understanding of long-term planning, career development, life skills, community experiences and resources, self-advocacy, and self-determination, guardianship, and legal considerations.

d. Instructional strategies in reading and writing.

(1) An understanding and application of service delivery, curriculum, and instruction of students with disabilities in reading and writing.

(2) Knowledge of the general curriculum, English requirements and expectations, and how to provide access to the curriculum based on student characteristics and needs.

(3) Ability to assess, interpret data, and implement instructional practices to address the identified reading needs of the students. Skills in this area include the ability to identify, understand, and implement a range of specialized instructional strategies and research-based interventions that reflect best practice in reading and writing instruction for students with disabilities.

(4) Ability to align the instructional practices and intervention with the Standards of Learning and state assessments.

(5) Knowledge and ability to utilize current assistive and instructional reading and writing technologies to promote learning and independence for students with disabilities in the general curriculum and the ability to evaluate the effectiveness of the use of the technologies.

(6) Ability to develop and use curriculum-based and standardized reading and writing assessments to conduct ongoing evaluations of instructional materials and practices to determine effectiveness and assess student needs as related to the curriculum design and delivery.

(7) Ability to model and directly teach reading and writing instructional strategies in a variety of settings, collaborate and co-teach with general educators to develop and implement instructional practices that meet the needs of students with disabilities in the general curriculum, and monitor student progress.

e. Instructional strategies in mathematics.

(1) An understanding and application of service delivery, curriculum, and instruction of students with disabilities in mathematics.

(2) Knowledge of the general curriculum mathematics requirements and expectations and how to provide access to the curriculum based on student characteristics and needs.

(3) Ability to assess, interpret data, and implement instructional practices to address calculations, reasoning, and problem-solving skills. Skills in this area include the ability to understand and use a range of specialized mathematics instructional strategies and research-based interventions that reflect best practice in mathematics instruction for students with disabilities.

(4) Ability to align the instructional practices and intervention with the Standards of Learning and state assessments.

(5) Knowledge of and ability to utilize current mathematics related assistive and instructional technologies to promote learning and independence for students with disabilities in the general curriculum and the ability to evaluate the effectiveness of the use of the technologies.

(6) Ability to develop and use curriculum-based and standardized mathematics assessments to conduct ongoing evaluations of instructional materials and practices to determine effectiveness and assess student needs as it relates to the mathematics curriculum design and delivery.

(7) Ability to model and directly teach mathematics instructional strategies in a variety of settings, collaborate and co-teach with general educators to develop and implement instructional practices that meet the needs of students with disabilities in the mathematics general curriculum, and monitor student progress.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-540

8VAC20-543-540. Speech communication (add-on endorsement).

The program in speech communication shall ensure that the candidate holds an active license with a teaching endorsement or endorsements issued by the Virginia Board of Education and has demonstrated the following competencies:

1. Understanding and knowledge of oral communication, including language acquisition involving the processes of expressive and receptive language and voice production involving the aesthetics of speech;

2. Understanding and knowledge of common speech production patterns, including articulation, pronunciation, and dialectal variances as these relate to standard English patterns;

3. Understanding the components of effective messages, including appropriate use of language, voice and diction, and nonverbal elements;

4. Understanding of and proficiency in effective communication, including interpersonal communication, small group communication, skills contributing to effective listening, the art of persuasion, oral interpretation, group discussion, mass communication, public speaking, and debate, verbal and nonverbal messages, and the ability to critique such communication interactions;

5. Understanding media, digital, and visual literacy and the skills to evaluate and utilize these literacies in presentations;

6. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing;

7. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes;

8. Skills necessary to teach research including ethical accessing, evaluating, organizing, crediting, and synthesizing information as needed for speech communication; and

9. Knowledge of the Computer Technology Standards of Learning and their integration into Speech Communication.

8VAC20-543-550

8VAC20-543-550. Theatre arts preK-12.

The program in theatre arts preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the theatre arts discipline as defined in the Virginia Standards of Learning and how these provide a necessary foundation integral to teaching theatre arts.

2. Understanding of the knowledge, skills, and processes for teaching theatre arts to the developmental levels and academic needs of students in preK-12, including the following:

a. Experience in planning, developing, administering, and evaluating a program of theatre arts education;

b. Knowledge and understanding for teaching theatre arts, including performance and production; theatre history and cultural context; analysis, evaluation, and critique; and aesthetics;

c. Directing;

d. Technical theatre, including lighting, set design, stage craft, costuming, makeup, and safety;

e. Performance, including acting and acting styles;

f. Dramatic literature;

g. The relationship of theatre and culture and the influence of theatre on past and present culture;

h. Knowledge and understanding of technological and artistic copyright laws;

i. Knowledge and understanding of classroom management and safety, including performance and studio;

k. Knowledge of instructional and assessment strategies to foster, support, and enhance student theatre arts learning;

l. Knowledge of related areas of theatre arts, such as art, dance arts, music, and the visual arts;

m. Knowledge and understanding of technology, with applications for instruction, resources, artistic expression, administration, assessment, and communication;

n. Knowledge and understanding of appropriate and sensitive attention to diversity and cultural understanding; and

o. Observation and student teaching experiences at the elementary, middle, and secondary levels.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-560

8VAC20-543-560. Visual arts preK-12.

The program in visual arts preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the visual arts discipline as defined in the Virginia Standards of Learning, and how they provide a necessary foundation for teaching the visual arts;

2. Understanding of the knowledge, skills, and processes for teaching art appropriate to the developmental levels and academic needs of students in preK-12 including the following areas:

a. Knowledge and experience in planning, developing, administering, and evaluating a program of visual arts education;

b. Two-dimensional media and concepts: basic and complex techniques and concepts in two-dimensional design, drawing, painting, printmaking, computer graphics, and other electronic imagery;

c. Three-dimensional media and concepts: basic and complex techniques and concepts in three-dimensional design, sculpture, ceramics, fiber arts, crafts, and computer and other electronic imagery;

d. Knowledge and understanding for teaching the visual arts, including visual communication and production, art history and cultural context, analysis, evaluation and critique, and aesthetics;

e. The relationship of visual arts and culture and the influence of visual arts on past and present cultures;

f. Related areas of visual arts, such as architecture, dance arts, music, theatre arts, photography, and other expressive arts;

g. Knowledge and understanding of technological and artistic copyright laws;

h. Knowledge and understanding of classroom management and safety, including use of toxic art material in various aspects of studio and classroom work;

i. Knowledge of a variety of instructional and assessment strategies to foster, support, and enhance student visual arts learning;

j. Knowledge and understanding of technology, with applications for instruction, resources, artistic expression, administration, assessment, and communication;

k. Knowledge and understanding of appropriate and sensitive attention to diversity and cultural understanding; and

l. Observation and student teaching experiences at the elementary, middle, and secondary levels.

3. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

4. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-570

Article 4

Administration and Supervision and Support Personnel

8VAC20-543-570. Administration and supervision preK-12.

A. The program in administration and supervision preK-12 shall ensure that the candidate has demonstrated the following competencies:

1. Knowledge, understanding, and application of planning, assessment, and instructional leadership that builds collective professional capacity, including:

a. Principles of student motivation, growth, and development as a foundation for age-appropriate and grade-appropriate curriculum, instruction, and assessment;

b. Collaborative leadership in gathering and analyzing data to identify needs to develop and implement a school improvement plan that results in increased student learning;

c. Planning, implementation, and refinement of standards-based curriculum aligned with instruction and assessment;

d. Collaborative planning and implementation of a variety of assessment techniques, including examination of student work, that yield individual, class, grade level, and school level data as a foundation for identifying existing competencies and targeting areas in need of further attention;

e. Incorporation of differentiated and effective instruction that responds to individual learner needs including appropriate response to cultural, ethnic, and linguistic diversity;

f. Knowledge, understanding, and application of the federal and state regulatory requirements, and expectations associated with identification, education, and evaluation of students with disabilities;

g. Collaboratively working with parents and school personnel to ensure that students with disabilities are included as a valued part of the school community, and that they receive effective and appropriately intensive instruction to assist them in meeting the standards set for all students as well as individual goals outlined in their individualized education plans (IEPs);

h. Integration of technology in curriculum and instruction to enhance learner understanding;

i. Identification, analysis, and resolution of problems using effective problem-solving techniques; and

j. Development, articulation, implementation, and stewardship of a vision of excellence linked to mission and core beliefs that promote continuous improvement consistent with the goals of the school division.

2. Knowledge, understanding, and application of leadership and organizations, including:

a. The change process of systems, organizations, and individuals using appropriate and effective adult learning models;

b. Aligning organizational practice, division mission, and core beliefs for developing and implementing strategic plans;

c. Information sources and processing, including data collection and data analysis strategies;

d. Using data as a part of ongoing program evaluation to inform and lead change;

e. Developing a change management strategy for improved student outcomes;

f. Developing distributed leadership strategies to create personalized learning environments for diverse schools; and

g. Effective two-way communication skills including consensus building, negotiation, and mediation skills.

3. Knowledge, understanding, and application of management and leadership skills that achieve effective and efficient organizational operations and sustain an instructional program conducive to student academic progress, including:

a. Alignment of curriculum and instruction and assessment of the educational program to achieve high academic success at the school and division or district level;

b. Principles and issues of supervising and leading others to ensure a working and learning climate that is safe, secure, and respectful of a diverse school community;

c. Management decisions that ensure successful teaching and learning including human resources management and development, theories of motivation, change in school culture, innovation and creativity, conflict resolution, adult learning, and professional development models;

d. Knowledge, understanding, and application of Virginia's Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers and the Guidelines for Uniform Performance Standards and Evaluation Criteria for Principals;

e. Principles and issues related to fiscal operations of school management;

f. Principles and issues related to school facilities and use of space and time for supporting high-quality school instruction and student learning;

g. Legal issues impacting school operations and management;

h. Technologies that support management functions; and

i. Application of data-driven decision-making to initiate and continue improvement in school and classroom practices and student achievement.

4. Knowledge, understanding, and application of the conditions and dynamics impacting a diverse school community, including:

a. Emerging issues and trends within school and community relations;

b. Working collaboratively with staff, families, and community members to secure resources and to support the success of a diverse population;

c. Developing appropriate public relations and public engagement strategies and processes for building and sustaining positive relationships with families, caregivers, and community partners; and

d. Integration of technology to support communication efforts.

5. Knowledge, understanding, and application of the purpose of education and the role of professionalism in advancing educational goals, including:

a. Philosophy of education that reflects commitment to principles of honesty, fairness, caring, and equity in day-to-day professional behavior;

b. Integration of high quality, content rich, job-embedded professional learning that respects the contribution of all faculty and staff members in building a diverse professional learning community;

c. Reflective understanding of potential moral and legal consequences of decision-making in the school setting;

d. Intentional and purposeful effort to model professional, moral, and ethical standards as well as personal integrity in all interactions; and

e. Intentional and purposeful effort to model continuous professional learning and to work collegially and collaboratively with all members of the school community to support the school's goals and enhance its collective capacity.

6. Knowledge, understanding, and application of basic leadership theories and influences that impact schools including:

a. Concepts of leadership including systems theory, change theory, learning organizations, and current leadership theory;

b. Identify and respond to internal and external forces and influences on a school;

c. Identify and apply the processes of educational policy development at the state, local, and school level; and

d. Identify and demonstrate ways to influence educational policy development at the state, local, and school level.

B. Complete a deliberately structured and supervised internship that is focused on student academic progress for all students and

1. Provides significant experiences within a school environment for candidates to synthesize and apply the content knowledge and develop professional skills through school-based leadership experiences;

2. Shall occur in a public or accredited nonpublic school;

3. Provides exposure to five different multiple sites (elementary, middle, high, central office, and agency) with diverse student populations; and

4. Documents a minimum of 320 clock hours, of which at least 120 clock hours are embedded as experiential field-based opportunities experienced during coursework.

C. Satisfy the requirements for the school leaders licensure assessment prescribed by the Board of Education. Individuals seeking an initial administration and supervision endorsement who are interested in serving as central office instructional personnel are not required to take and pass the school leaders assessment prescribed by the Board of Education.

8VAC20-543-580

8VAC20-543-580. Mathematics specialist for elementary education.

A. A mathematics specialist is a teacher in the elementary grades who has interest and special preparation in mathematics content, scientifically based research in the teaching and learning of mathematics, diagnostic and assessment methods, and leadership skills. The school-based mathematics specialist shall serve as a resource in professional development, instructing children who have learning difficulties in mathematics, curriculum development and implementation, mentoring new teachers, and parent and community education.

B. The mathematics specialist program shall ensure that the candidate has completed at least three years of successful classroom teaching experience in which the teaching of mathematics was an important responsibility and demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the Virginia Mathematics Standards of Learning and how curriculum may be organized to teach these standards to diverse learners;

2. Understanding of a core knowledge base of concepts and procedures within the discipline of mathematics, including the following strands: number systems and number theory; geometry and measurement; statistics and probability; and functions and algebra;

3. Understanding of the sequential nature of mathematics, the vertical progression of mathematical standards, and the mathematical structures inherent in the content strands;

4. Understanding of the connections among mathematical concepts and procedures and their practical applications;

5. Understanding of and the ability to use the five processes - becoming mathematical problem-solvers, reasoning mathematically, communicating mathematically, making mathematical connections, and using mathematical models and representations - at different levels of complexity;

6. Understanding of major current curriculum studies and trends in mathematics;

7. Understanding how to utilize appropriate technologies for teaching and learning mathematics including virtual manipulatives;

8. Understanding of and the ability to select, adapt, evaluate, and use instructional materials and resources, including professional journals and technology;

9. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors;

10. Understanding of and the ability to use strategies to teach mathematics to diverse learners;

11. Understanding of leadership skills needed to improve mathematics programs at the school and division levels, including the needs of high-achieving and low-achieving students and of strategies to challenge them at appropriate levels; child psychology, including personality and learning behaviors; educational measurement and evaluation; and effective professional development approaches;

12. Understanding of how to develop and lead appropriate professional development based on the needs of students and the school community;

13. Understanding of how to work with school-based administration for the improvement of mathematics teaching and learning;

14. Understanding of how to effectively mentor teachers for the improvement of mathematics teaching and learning;

15. Understanding of how to effectively work with parents and the at-large community to improve mathematics teaching and learning;

16. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and

17. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-590

8VAC20-543-590. Mathematics specialist for middle education.

A. A mathematics specialist is a teacher in the middle grades who has interest and special preparation in mathematics content, scientifically-based research in the teaching and learning of mathematics, diagnostic and assessment methods, and leadership skills. The school-based mathematics specialist shall serve as a resource in professional development, instructing children who have learning difficulties in mathematics, curriculum development and implementation, mentoring new teachers, and parent and community education.

B. The mathematics specialist program shall ensure that the candidate has completed at least three years of successful classroom teaching experience in which the teaching of mathematics was an important responsibility and demonstrated the following competencies:

1. Understanding of the knowledge, skills, and processes of the Virginia Mathematics Standards of Learning and how curriculum may be organized to teach these standards to diverse learners;

2. Understanding of a core knowledge base of concepts and procedures within the discipline of mathematics, including the following strands: number systems and number theory; geometry and measurement; statistics and probability; and functions and algebra;

3. Understanding of the sequential nature of mathematics, the vertical progression of mathematical standards, and the mathematical structures inherent in the content strands;

4. Understanding of the connections among mathematical concepts and procedures and their practical applications;

5. Understanding of and the ability to use the five processes - becoming mathematical problem-solvers, reasoning mathematically, communicating mathematically, making mathematical connections, and using mathematical models and representations - at different levels of complexity;

6. Understanding of major current curriculum studies and trends in mathematics;

7. Understanding how to utilize appropriate technologies for teaching and learning mathematics, including graphing utilities, dynamic software, spreadsheets, and virtual manipulatives;

8. Understanding of and the ability to select, adapt, evaluate, and use instructional materials and resources, including professional journals and technology;

9. Understanding of and the ability to use strategies for managing, assessing, and monitoring student learning, including diagnosing student errors;

10. Understanding of and the ability to use strategies to teach mathematics to diverse learners;

11. Understanding of leadership skills needed to improve mathematics programs at the school and division levels, including the needs of high-achieving and low-achieving students and of strategies to challenge them at

appropriate levels; child psychology, including personality and learning behaviors; educational measurement and evaluation; and effective professional development approaches;

12. Understanding of how to develop and lead appropriate professional development based on the needs of students and the school community;

13. Understanding of how to work with school-based administration for the improvement of mathematics teaching and learning;

14. Understanding of how to effectively mentor teachers for the improvement of mathematics teaching and learning;

15. Understanding of how to effectively work with parents and the at-large community to improve mathematics teaching and learning;

16. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and

17. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-600

8VAC20-543-600. Reading specialist.

The reading specialist program shall ensure that the candidate has demonstrated the following competencies:

1. Assessment and diagnostic teaching. The candidate shall:

a. Demonstrate expertise in the use of formal and informal screening, diagnostic, and progress monitoring assessment for language proficiency, concepts of print, phonemic awareness, letter recognition, decoding, fluency, vocabulary, reading levels, and comprehension; and

b. Demonstrate expertise in the ability to use diagnostic data to inform instruction for acceleration, intervention, remediation, and differentiation.

2. Communication: speaking, listening, media literacy. The candidate shall:

a. Demonstrate expertise in the knowledge, skills, and processes necessary for teaching communication, (speaking, listening, and media literacy);

b. Demonstrate expertise in developing students' phonological awareness skills;

c. Demonstrate effective strategies for facilitating the learning of standard English by speakers of other languages and dialects;

d. Demonstrate an understanding of the unique needs of students with language differences and delays;

e. Demonstrate the ability to promote creative thinking and expression, such as through storytelling, drama, and choral and oral reading, etc.; and

f. Demonstrate the ability to teach students to identify the characteristics of, and apply critical thinking to, media messages and to facilitate their proficiency in using various forms of media to collaborate and communicate.

3. Reading. The candidate shall:

a. Demonstrate expertise in explicit and systematic phonics instruction, including an understanding of sound and symbol relationships, syllables, phonemes, morphemes, decoding skills, word analysis, and word attack skills;

b. Demonstrate expertise in the morphology of English including inflections, prefixes, suffixes, roots, and word relationships;

c. Demonstrate expertise in strategies to increase vocabulary;

d. Demonstrate expertise in the structure of the English language, including and understanding of syntax, semantics, and vocabulary development;

e. Demonstrate expertise in reading comprehension strategies, including a repertoire of questioning strategies, understanding the dimensions of word meanings, teaching predicting, inferencing, summarizing, clarifying, evaluating, and making connections;

f. Demonstrate expertise in the ability to teach strategies in literal, interpretive, critical, and evaluative comprehension;

g. Demonstrate the ability to develop comprehension skills in all content areas;

h. Demonstrate the ability to foster appreciation of a variety of literature; and

i. Understand the importance of promoting independent reading and reading strategically through a variety of means including by selecting fiction and nonfiction texts of appropriate yet engaging topics and reading levels; and

j. Demonstrate effective strategies for teaching students to view, interpret, analyze, and represent information and concepts in visual form with or without the spoken or written word.

4. Writing. The candidate shall:

a. Demonstrate expertise in the knowledge, skills, and processes necessary for teaching writing, including the domains of composing and written expression and usage and mechanics and the writing process of planning, drafting, revising, editing, and sharing;

b. Demonstrate expertise in systematic spelling instruction, including awareness of the purpose and limitations of "invented spelling," orthographic patterns, and strategies for promoting generalization of spelling study to writing; and

c. Demonstrate expertise to teach the writing process: plan, draft, revise, edit, and share in the narrative, descriptive, and explanative modes.

5. Technology. The candidate shall demonstrate expertise in their use of technology for both process and product as they work to guide students with reading, writing, and research.

6. Leadership, coaching, and specialization. The candidate shall:

a. Demonstrate an understanding of developmental psychology, including personality and learning behaviors;

b. Demonstrate an understanding of the needs of high achieving students and of strategies to challenge them at appropriate levels;

c. Demonstrate an understanding of the significance of cultural contexts upon language;

d. Demonstrate an understanding of varying degrees of learning disabilities;

e. Demonstrate expertise with educational measurement and evaluation including validity, reliability, and normative comparisons in test design and selections;

f. Demonstrate expertise to interpret grade equivalents, percentile ranks, normal curve equivalents, and standards scores;

g. Demonstrate the ability to instruct and advise teachers in the skills necessary to differentiate reading instruction for both low and high achieving readers;

h. Demonstrate the ability to coach and support teachers through classroom observations, demonstrations, co-teaching, and other forms of job-embedded professional development;

i. Demonstrate the ability to organize and supervise the reading program within the classroom, school, or division;

j. Demonstrate effective communication skills in working with a variety of groups, including parents, teachers, administrators, community leaders, etc.;

k. Demonstrate knowledge of current research and exemplary practices in English and reading;

l. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and

m. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-610

8VAC20-543-610. School counselor preK-12.

The school counselor preK-12 program shall ensure that the candidate has demonstrated the following competencies:

1. The ability to support students by cooperatively working with parents and guardians and teachers.

2. Understanding of the principles and theories of human growth and development throughout the lifespan and their implications for school counseling.

3. Understanding of the social and cultural foundations of education and their implications for school counseling programs.

4. Understanding of lifespan career development.

5. Understanding of the skills and processes for counseling students to include:

a. Individual and group counseling for academic development;

b. Individual and group counseling for career development; and

c. Individual and group counseling for personal and social development.

6. Understanding of the knowledge, skills, and processes for providing developmental group guidance, including:

a. Academic development;

b. Career development; and

c. Personal and social development.

7. Understanding of the skills and processes related to the school counseling program at the elementary, middle, and secondary levels, including:

a. Characteristics of learners at the elementary, middle, and secondary levels;

b. Program planning;

c. Coordination; and

d. Consultation.

8. Understanding of the knowledge, skills, and processes of student appraisal and assessment relative to school guidance and counseling programs, including:

a. Individual assessment; and

b. Group assessment.

9. Understanding of the school counseling professional, including:

a. Legal considerations;

b. Ethical considerations; and

c. Professional issues and standards.

10. Understanding of the skills and processes of research and evaluation aimed at improving school counseling programs.

11. Understanding work-based learning methods of instruction such as internship, job shadowing, cooperative education, mentorship, service learning, clinical, and youth apprenticeship.

12. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

13. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

14. The program shall include at least 100 clock hours of internship and practicum experience in the preK-6 setting and 100 clock hours of internship and practicum experience in the grades 7-12 setting.

8VAC20-543-620

8VAC20-543-620. School psychology.

The school psychology program shall ensure that the candidate has demonstrated the following competencies:

1. Knowledge of basic teaching and learning principles and the conditions under which they operate maximally (academic environment and instructional match).

2. Knowledge and application of psychological foundations of human functioning including biological bases of behavior; cultural diversity; infant, child, and adolescent development; effects of poverty and lack of opportunity on learning; interplay between behavior, learning and motivation; personality theory; human learning; and social bases of behavior and mental health, to ensure student academic achievement, student growth and development, and mental health.

3. Knowledge of and skill at applying educational foundations of schooling, including education of exceptional learners; evidence-based instructional and remedial interventions, techniques, and strategies; formative and summative evaluation; evidence-based behavioral interventions; and organization and operations of schools, to ensure effective collaboration with other school professionals toward implementing school practices that promote learning and mental health.

4. Knowledge of various methods for assessing students' cognitive processes and abilities and skill in administering a variety of such methods; knowledge of various methods for assessing student academic strengths and weaknesses and skill in administering a variety of such methods; knowledge of various methods for assessing student interpersonal emotional and social and behavioral functioning and skill in administering a variety of such methods; and knowledge of universal screening measures designed for early and tiered academic and behavioral intervention. Knowledge of a variety of progress monitoring tools, especially student growth percentiles and skill in implementing at least two such tools.

5. Understanding and knowledge of direct and indirect methods of academic and behavioral intervention, and proficiency in delivering such interventions including:

a. Counseling on an individual, group, and family basis;

b. Consulting with administrators, teachers, parents, and other professionals about student problems and appropriate change strategies;

c. Designing and implementing individual and group behavior change programs; designing, implementing, and evaluating crisis intervention and threat (self-directed and other-directed) assessment programs; and

d. Designing and implementing academic and instructional interventions.

6. Statistics and research design, measurement, and program evaluation.

7. The profession of psychology applied to schools, including:

- a. Basic knowledge of the standards of practice promoted by the National Association of School Psychologists (NASP);
- b. Knowledge of and skill with several basic problem-solving schemes;
- c. Knowledge of and ability to identify the variety of mental health problems exhibited by infants, children, and adolescents through age 21, including the ability to collaborate with other community-based professionals and private practitioners in providing wraparound services to the extent possible (systems of care philosophy);
- d. History and foundations of school psychology;
- e. Legal and ethical issues of practicing in schools;
- f. Professional issues and standards related to practicing as a psychologist in a public school setting; and
- g. Knowledge of the roles of all individuals practicing and working in a public school setting.
- 8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.
- 9. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.
- 10. The candidate shall have earned a baccalaureate degree from a regionally accredited college or university and completed 60 graduate hours, 54 of which are academic coursework, exclusive of field-based experiences, that culminate in at least a master's degree.
- 11. The candidate shall complete an internship that is documented by the degree granting institution. The internship experience shall occur on a full-time basis over a period of one year or on a half-time basis over a period of two consecutive years. The internship shall occur under conditions of appropriate supervision (i.e., the school-based supervisor shall be licensed as either a school or clinical psychologist). The internship shall include experiences at multiple age levels, at least one half of which shall be in an accredited schooling setting.

8VAC20-543-630

8VAC20-543-630. School social worker.

The school social worker program shall ensure that the candidate has demonstrated the following competencies:

- 1. Understanding of the knowledge, skills, and processes for direct and indirect intervention, including:
 - a. Facilitating integrated intervention efforts that emphasize primary prevention, early screening, and multi-tiered interventions that target multiple risk factors in various settings;
 - b. Identifying approaches that seek to improve individual and system factors contributing to academic success and data-informed decision making and intervention fidelity;
 - c. Counseling on an individual, group, or family basis;
 - d. Consulting with administrators, teachers, parents, and other professionals about student problems and appropriate change strategies;
 - e. Networking and brokering with school programs and community agencies to provide essential services for families and children; and
 - f. Skills in collaborating with and facilitating collaboration among students, parents, members, administrators, teachers, and staff to identify ways to intervene early, reduce barriers to learning, and improve student outcomes.
- 2. Understanding of child development, psychopathology, social and environmental conditioning, cultural diversity, and family systems including:
 - a. Acknowledgment of the interrelatedness of various ecological systems such as education, juvenile justice, family and children's health, mental health, and child protective services; and

- b. Knowledge of social problem impact on student performance and behaviors.
- 3. Understanding of the knowledge, skills, and processes for effective casework practice:
 - a. Examine factors in home, school, and community that impact students' educational performance and success; and
 - b. Assist in reducing identified barriers to learning.
- 4. Specialized knowledge and understanding of the organization and operations of school systems including:
 - a. Historical and current perspectives of public school education at the local, state, and national levels, including educational reform and legislation; and
 - b. Identifying and conveying the impact social problems, within ecological systems of home, school, and community, have on student performance in the educational setting.
- 5. Understanding of the knowledge, skills, and processes involved with assessing and programming for exceptional students including:
 - a. Skills in implementing systematic assessment, data gathering and interpretation at multiple levels, and developing action plans to address the areas of need;
 - b. Identifying and utilizing research-based interventions to enhance the educational opportunities and school performance of vulnerable and at-risk populations;
 - c. Providing leadership in developing prevention programs and policies with administrators that impact school climate, student learning, and academic success; and
 - d. Ability to facilitate team decision-making and problem-solving strategies.
- 6. Understanding of the school social work profession, including:
 - a. History and foundations of school social work;
 - b. Legal and ethical issues;
 - c. Professional issues and standards; and
 - d. The role and function of the school social worker to include contextual variables influencing school social work roles and functions (e.g., political, legal, ethical, and value-based issues) that confront schools.
- 7. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.
- 8. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.
- 9. The candidate shall have earned a master's of social work degree from a regionally accredited college or university school of social work with a minimum of 60 graduate semester hours.
- 10. The candidate shall complete a minimum of six graduate semester hours in education to include six semester hours from two of the following courses:
 - a. The teaching profession (3 semester hours);
 - b. Characteristics of special education (3 semester hours);
 - c. Human development and learning (3 semester hours); or
 - d. Classroom and behavior management (3 semester hours).
- 11. The candidate shall complete a supervised practicum or field experience of a minimum of 400 clock hours in a public or accredited nonpublic school discharging the duties of a school social worker. One year of

successful, full-time experience as a school social worker in a public or accredited nonpublic school may be accepted in lieu of the school social work practicum.

8VAC20-543-640

8VAC20-543-640. Vocational evaluator.

The vocational evaluator program shall ensure that the candidate has demonstrated the following competencies:

1. Understanding of the foundations of vocational evaluation and career assessment, including philosophy and process of vocational evaluation and assessment, use of occupational and labor market information, and functional aspects of physical, mental and intellectual disabilities.

2. Understanding of the basic concepts and skills of planning for and delivering vocational evaluation and career assessment services, including the use of vocational interviewing, individualized service planning, report development and communication, and use of modifications and accommodations.

3. Ability to modify standard instruments and to develop new instruments to respond to labor markets or individual needs.

4. Understanding of the federal and state laws and regulations pertaining to special education (Individuals with Disabilities Education Act), rehabilitation (Rehabilitation Act and the Americans with Disabilities Act.)

5. Understanding of the content, processes, and skills necessary to administer and report findings of standardized testing, including knowledge of tests and measurements and selection and use of appropriate instruments.

6. Above average communication skills in order to explain assessment information to school personnel, parents, students, and other service providers

7. Understanding of natural supports and assistive technology.

8. Ability to select, administer, and interpret a wide assortment of evaluation instruments which includes commercial work sample systems, and situational assessments.

9. Understanding and knowledge of specific assessment techniques and skills and the processes for conducting vocational evaluation and career assessment, including:

a. Job and training analysis;

b. Work samples and systems;

c. Situational and community-based assessment;

d. Behavioral observation;

e. Learning and functional skills assessment; and

f. Work site assessment (ecological assessment).

10. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.

11. Understanding of and proficiency in pedagogy to incorporate writing as an instructional and assessment tool for candidates to generate, gather, plan, organize, and present ideas in writing to communicate for a variety of purposes.

8VAC20-543-9998

FORMS (8VAC20-543)

Request for New Education Program Endorsement Area (undated)

