# VIRGINIA regulatory Town Hall 

## Final Regulation <br> Agency Background Document

| Agency name | Virginia Board of Education |
| ---: | :--- |
| Virginia Administrative Code <br> (VAC) citation(s) | 8 VAC20-543 |
| Regulation title(s) | Regulations Governing the Review and Approval of Education <br> Programs in Virginia |
| Action title | Revise the Regulation Governing the Review and Approval of <br> Education Programs in Virginia. |
| Date this document |  |
| prepared |  | June 7,2016 $\quad$

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 17 (2014) and 58 (1999), and the Virginia Register Form, Style, and Procedure Manual.

## Brief summary

Please provide a brief summary of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

A comprehensive review and examination of the regulations was conducted. Substantive elements of the proposed new regulations focus on revision of selected definitions to conform with changes in the proposed new regulations; modifications in administration and application of the proposed regulation revisions, including a new appeal process for programs falling below biennial standards to address areas of stipulation; addition of new education program endorsement areas in mathematics, engineering, special education, and increased rigor in competencies and requirements for selected education program endorsement areas.

## Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

No new acronyms, definitions, or technical terms have been included that have not been provided in the "Definition" section of the regulations.

## Statement of final agency action

Please provide a statement of the final action taken by the agency including:1) the date the action was taken;2) the name of the agency taking the action; and 3) the title of the regulation.

On May 26, 2016, the Virginia Board of Education approved final review of the recommendation of the Advisory Board on Teacher Education and Licensure (ABTEL) to revise the Regulations Governing the Review and Approval of Education Programs in Virginia (8VAC20-543-10).

## Legal basis

Please identify the (1) the agency (includes any type of promulgating entity) and (2) the state and/or federal legal authority for the proposed regulatory action, including the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable. Your citation should include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency's overall regulatory authority.

Constitution of Virginia (Article VIII, Section 4): "The general supervision of the public school system shall be vested in a Board of Education....

Code of Virginia, Section 22.1-298.2. Regulations governing education preparation programs.
[The Board of Education regulations shall provide for education preparation programs offered by institutions of higher education, Virginia public school divisions, and certified providers for alternate routes to licensure.]

Code of Virginia, Section 22.1-305.2. Advisory Board on Teacher Education and Licensure.
[The Advisory Board on Teacher Education and Licensure shall advise the Board of Education and submit recommendations on policies applicable to the qualifications, examination, licensure, and regulation of school personnel including revocation, suspension, denial, cancellation, reinstatement, and renewals of licensure, fees for processing applications, standards for the approval of preparation programs, reciprocal approval of preparation programs, and other related matters as the Board of Education may request or the Advisory Board may deem necessary. The final authority for licensure of school personnel shall remain with the Board of Education.]

Code of Virginia, Section 22.1-16. The Board of Education may adopt bylaws for its own government and promulgate such regulations as may be necessary to carry out its powers and duties and the provisions of this title.

## Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Describe the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

The proposed regulatory action is essential to protect the health, safety, or welfare of citizens as the regulations set forth the requirements for college and university programs that prepare instructional personnel to be accredited and approved. The completion of an approved program prepares an individual to be licensed by the Virginia Board of Education.

Section 22.1-298.2 of the Code of Virginia, states, in part, the following: "Education preparation programs shall meet the requirements for accreditation and program approval as prescribed by the Board of Education in its regulations...."

The Regulations Governing the Review and Approval of Education Programs in Virginia set forth the requirements for the accreditation and approval of programs preparing teachers, administrators, and other instructional personnel requiring licensure. These regulations will establish policies and standards for the preparation of instructional personnel, further ensuring educational quality for Virginia public school students.

The Board of Education has the statutory authority to prescribe requirements for the approval of education preparation programs. Section 22.1-298.2 of the Code of Virginia, states, in part, the following:

The Board of Education is authorized by the Code of Virginia to promulgate regulations governing the review and approval of education programs. The regulations have undergone a comprehensive review, and revisions are proposed.

## Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both.

The proposed changes in the regulations are outlined in detail under the "Changes made since the proposed stage."

Highlighted below are the major proposed revisions to the Regulations Governing the Review and Approval of Education Programs (Proposed Stage) recommended in 2013.

8VAC20-543-20 Accreditation and administering this chapter. (page 7)

- Required professional education accreditation by the Council for the Accreditation of Educator Preparation (CAEP) and discontinued the Board of Education accreditation process.
- Eliminated the professional studies coursework cap for undergraduate programs.
- Required education programs to ensure candidates have completed training or certification in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators

8VAC20-543-90 Professional studies requirements for early/primary education, elementary education, and middle education and 8VAC20-543-140 Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education (pages 21 and 65)

- Revised professional studies requirements. Competencies in "Assessment of and for Learning" must be addressed in programs, and "Foundations of Education" was proposed to be changed to "The Teaching Profession." [Note: In the final stage, ABTEL has recommended that that "Foundations of Education" be changed to "Foundations of Education and the Teaching Profession" and "Reading" be changed to "Language and Literacy" based on public comment.]

8VAC20-543-30 Application for new education endorsement programs (page 10)

- Set forth documents to be submitted for new education endorsement programs.

8VAC20-543-40 Standards for biennial approval of education endorsement programs (page 11)

- Revised the biennial standard for candidate progress and performance on Board of Education licensure assessments.
- Stipulated 10 weeks of a summative clinical student teaching experience under the supervision of a cooperating teacher with demonstrated effectiveness in the classroom.
- Added an indicator for biennial reporting: "Employer job satisfaction documentation must address teachers' performance, including student academic progress."

8VAC20-543-70 Annual report card (page 18)

- Required an Annual Report Card

8VAC20-543-80 Competencies and requirements for endorsement areas (page 19)

- Added a requirement of six semester hours of reading coursework for elementary education and special education endorsements.
- Provided a testing option to reduce hours required for elementary endorsements and added elementary methods for mathematics and science.

8VAC20-543-280. Engineering. (page 102)

- Established a new endorsement.

8VAC20-543-510. Special education - general curriculum K-6 (add-on endorsement);
8VAC20-543-520. Special education - general curriculum middle grades 6-8 (add-on endorsement); 8VAC20-543-530. Special education - general curriculum secondary grades 6-12 (add-on endorsement). (pages 183, 188, and 192)

- Established new add-on endorsements.

8VAC20-543-580. Mathematics specialist for elementary education. (page 206)
8VAC20-543-590. Mathematics specialist for middle education. (page 208)

- Established separate endorsements specific to the population of students being served. [In the final stage, ABTEL is recommending the establishment of the mathematics specialist for elementary education endorsement and maintaining the mathematics specialist for elementary and middle education endorsement.]

Special education: speech language pathologist preK-12.

- Discontinued issuing an initial license with an endorsement in speech/language pathology. Individuals will seek a license from the Virginia Board of Examiners for Audiology and Speech Pathology.

Major revisions made since the proposed stage of the regulations, as well as, those revision proposed changes since the first review of the ABTEL recommendations by the Board of Education are noted below:

- Renamed the "Annual report card" the "Annual education preparation program profile" in Sections 8VAC20-543-10, 8VAC20-543-20, and 8VAC20-543-70. (pages 4, 9, and 18)
- Changed the following text in Section 8VAC20-543-130 of one of the history and social sciences competencies for the middle education 6-8 endorsement. (page 59)
(i) The global influence of European ideologies of the 19th and 20th centuries [(liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism); ; and
- Changed the following text in Section 8VAC20-543-340 of one of the competencies for the history and social sciences endorsement. (page 122)
(9) The influence of global ideologies of the 19th and 20th centuries [(liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, Nazism, and post-colonialism)];


## Issues

Please identify the issues associated with the proposed regulatory action, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please indicate.

A major revision to the regulations found in section 8VAC20-543-20 (Accreditation and Administration) requires professional education accreditation by the Council for the Accreditation of Educator Preparation (CAEP) and discontinued the Board of Education accreditation process for institutions of higher education (IHE).

The implementation of required national accreditation will provide advantages benefiting individual college students, college educator providers, and the Commonwealth. National accreditation provides all Virginia IHEs with a consistent quality assurance system including rigorous standards and external peer review. Furthermore, CAEP serves as a strong partner with the state to ensure alignment of national consensus on educator preparation to state-level policy and provides support for the state's
accountability system.
The new requirement may be a challenge to 8 of 36 IHEs that are accredited by the Board of Education. The primary disadvantage is greater resources (personnel and financial) needed.

## Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which is more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

No applicable federal requirements or no requirements that exceed applicable federal requirements will be proposed in the revised regulations for approved education programs.

## Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

No locality will be particularly affected by the proposed regulation.

## Family impact

Please assess the impact of this regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The Regulations Governing the Review and Approval of Education Programs in Virginia set forth the requirements for the accreditation and approval of programs to prepare instructional personnel. The review of the regulations will have a positive impact on the family since the requirements will address the quality preparation of instructional personnel in the Commonwealth.

Changes made since the proposed stage

Please list all changes that made to the text of the proposed regulation and the rationale for the changes; explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation. *Please put an asterisk next to any substantive changes.

For changes to existing regulation(s), use this chart:

| Section number | Requirement at proposed stage | What has changed | Rationale for change |
| :---: | :---: | :---: | :---: |
| *8VAC20-543-10. Definitions. | Provides definitions of technical terms that are used in the regulations. | *Revises the following definitions: [accredited program; field experiences; professional studies; and program noncompleters]. | Revises the definitions section of these regulations to align with proposed revisions throughout the Regulations Governing the Review and Approval of Education Programs in Virginia. |
| *8VAC20-543-10, 8VAC20-543-20, and 8VAC20-543-70. | Describes in detail the submission criteria for the yearly report. | Renames the "Annual report card" the "[Annual education preparation program profile]" | Revises text as recommended by the Board of Education. |
| *8VAC20-543-20. Accreditation and administering this chapter. | Professional education programs in Virginia shall, obtain and maintain national accreditation from the Council for the <br> Accreditation of Educator Preparation (CAEP), including CAEP/National Council for the Accreditation of Teacher Education (NCATE) and CAEP/Teacher Education Accreditation Council (TEAC)]. | Deletes reference to the previously approved national organization; NCATE and TEAC. <br> 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)]. | As of July 1, 2013 consolidation of the National Council for the Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC) created the Council for the Accreditation of Educator Preparation (CAEP). <br> Requires Professional education programs in Virginia to obtain and maintain national accreditation from the Council for the Accreditation of Educator Preparation (CAEP). |
|  | E. Professional studies coursework and methodology, including field experiences, | Revises to reference approved programs (rather than approved baccalaureate degree program). <br> E. Professional studies coursework and methodology, including field experiences, required in this | Revises the text to clarify that professional studies are required by both graduate and undergraduate |


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|  | required in this chapter shall be designed for completion within an approved baccalaureate degree program. | chapter shall be designed for completion within a[n approved baccalaureate degree]program. | programs as suggested by public comment. |
|  | 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. | Adds the following text to support competencies in alignment with core concepts, Virginia Standards of Learning and the college and career readiness standards. <br> [Candidates in education endorsement programs must demonstrate an understanding of competencies, including the core concepts and facts of the disciplines and the Virginia Standards of Learning, for the content areas they plan to teach. Professional education programs shall ensure that candidates demonstrate skills needed to help preK-12 students achieve college and career performance expectations.] | Establishes an expectation for approved teacher preparation programs that candidates demonstrate skills and commitment that afford all P-12 students access to rigorous college and career-ready standards. |
| N/A | N/A | Adds administrative support with reference to the Licensure Regulations for School Personnel (iVAC20-23) <br> [O. In administering these regulations, licensure requirements for Virginia are outlined in the Licensure Regulations for School Personnel (iVAC20-23). This document should be referenced for detailed information regarding requirements for Virginia licensure.] | Informs institutions and candidates of licensure requirements to cross reference the Licensure Regulations for School Personnel. |
| *8VAC20-543-40. Standards for biennial approval of education | Describes evidence of education endorsement program | Revises the definition for noncompleter as the following: Program noncompleters are those individuals who have been officially admitted into the education program | Revises text in response to public comment. |


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|  | achievement biennially of Board of Education prescribed accountability measures. | and who have taken, regardless of whether the individual passed or failed, required licensure assessments, [have successfully completed all coursework, but who have not completed supervised student teaching or required internship.] |  |
|  | Diverse school settings that provide experiences with populations that include racial, economic, linguistic, and ethnic diversity throughout the program experiences. | Revises the definition. <br> 4. Evidence of opportunities for candidates to participate in diverse school settings that provide experiences with populations that include racial, [gender, exceptionality, religion, geographic,] economic, linguistic, and ethnic diversity throughout the program experiences. | Revises definition to clarify diverse school setting and provides consistent language throughout the regulations. |
|  | Describes evidence of education endorsement program achievement biennially of Board of Education prescribed accountability measures. | Revises item and indicator to reflect graduate level and not candidate. <br> 6. Evidence of employer job satisfaction with [graduatescandidates] completing the program. | Proposes technical edit. |
| *8VAC20-543-50 Application of the standards | Describes how standards for biennial approval of education endorsement programs will be put into operation. | Amends to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. <br> Section D. [Institutions with education endorsements programs that fall below the $80 \%$ biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review | Amends in response to public comment. The changes provide clarification to language regarding the application of the standards for biennial approval of education endorsement programs described in this section of the regulations. |


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|  |  | period.] <br> [However, if the education <br> endorsement program has less than <br> 10 program completers and <br> noncompleters, the institution must <br> submit an annual report attesting to <br> continued progress in meeting the <br> requirements.] |  |
| *8VAC20-543-70. <br> Annual education <br> preparation <br> program profile | Describes in <br> detail the <br> submission <br> criteria for the <br> yearly report <br> card. | Revises comparison of candidates <br> admitted in top quartile and number <br> of program completers for each <br> endorsement. | Revises text in <br> response to public <br> comment. |


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|  |  | relationships among assessment, instruction, and monitoring student progress to include student performance measures in gradimg practices, the ability to eonstruet and interpret valid assessments using a variety of formats in order to measure student attainment of essential skills in a standards -based envirenment, and the ability to analyze assessment data to make decisions about how to improve instruction and student performance. $]$ |  |
| *8VAC20-543-90 <br> *8VAC20-543-140 <br> Professional studies courses | Describes in detail the competencies to be included in all professional studies courses. | Amends the following professional studies requirements: <br> -Reading; renamed "Language and Literacy"; <br> -The Teaching Profession; renamed "[Foundations of Education and the Teaching Profession]" <br> -adds "cultural responsiveness" | Amends professional studies requirements in response to public comment. |
| $\begin{aligned} & \text { 8VAC20-543-90 } \\ & \text { through } \\ & \text { 8VAC-543-640 } \end{aligned}$ | Describes in detail the competencies to be included in all education endorsement programs. | Revises the language to include the following: <br> -limited English proficient students to English learners; <br> -family involvement revised to <br> "family engagement"; and <br> -effective communication revised to "varied and effective communication" | Revises language in response to public comment. |
| *8VAC20-543-100. Early childhood for three-year-olds and four-year-olds (addon endorsement) | Describes in detail the competencies to be included in education endorsement programs. | Adds a practicum requirement with children from three years old to age five. | Adds a practicum requirement in response to public comment. |
| *8VAC20-543-110. Early/primary education preK-3 | Describes in detail the competencies to be included in education endorsement programs. | Adds the following: <br> 1. Methods <br> k. Adapt task and interactions to maximize language development, conceptual understanding, and skill competence within each | Amends competencies in endorsement area to align with the newly approved standards of learning. |


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|  |  | child's zone of proximal development. <br> Revises or deletes the language to include the following: <br> 2. Knowledge and skills. <br> c. History and social sciences. <br> (2) Understanding of the nature of history and the social sciences, and how the study of the disciplines assists students in developing [historical thinking, geographical analysis, economic decision making, and responsible citizenship by:] <br> (a) Using artifacts and primary and secondary sources to understand events in history; <br> (b) [Using geographic skills to explain the interaction of people, places, and events to support an understanding of events in [history The use of primary sources such as artifacts, letters, photographs, and nowspapers]; <br> (c) [Using charts, graphs, and pictures to determine characteristics of people, places, or events in history[How events in history are shaped both by the ideas and actions of people]; <br> (d) [Asking appropriate questions and summarizing points to answer a questionDiverse cultures and shared humanity]; <br> (e) [Comparing and contrasting people, places, and events in historyCivic participation in a democracy]; <br> (f) [Recognizing direct cause and effect relationships in historyThe relationship between history, literature, art, and music. <br> (g) Explaining connections across time and place; <br> (h) Using a decision-making |  |


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|  |  | model to identify costs and benefits of a specific choice made; <br> (i) Practicing good citizenship skills and respect for rules and laws, and participating in classroom activities; and (j) Developing fluency in content vocabulary and comprehension of verbal, written and visual sources.] |  |
| 8VAC20-543-120 <br> Elementary education preK-6 | Describes in detail the competencies to be included in education endorsement programs. | Adds the following: <br> 1. Methods <br> [k. Adapt task and interactions to maximize language development, conceptual understanding, and skill competence within each child's zone of proximal development.] <br> Revises the following: <br> 2. Knowledge and skills. <br> b. Mathematics. <br> [7. Understanding of and the ability to use strategies to teach mathematics to diverse learners.] <br> c. History and social sciences. <br> (2) Understanding of the nature of history and the social sciences, and how the study of the disciplines assists students in developing historical thinking, geographical analysis, economic decision making, and responsible citizenship by: <br> [(a) Using artifacts and primary and secondary sources to understand events in history The relationship between past and present; <br> (b) Using geographic skills to explain the interaction of people, places, and events to support an understanding of events in historyThe use of primary sources such as artifacts, letters, photographs, | Aligns competencies with standards and current requirements. |


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|  |  | and newspapers; <br> (c) Using charts, graphs, and pictures to determine characteristics of people, places, or events in historyHow ovents in history are shaped both by the ideas and actions of poople; <br> (d) Asking appropriate questions and summarizing points to answer a question. Diverse cultures and shared humanity; <br> (e) Comparing and contrasting people, places, and events in history; <br> (f) Recognizing direct cause and effect relationships in history; <br> (g) Explaining connections across time and place; <br> (h) Using a decision-making model to identify costs and benefits of a specific choice made; <br> (i) Practicing good citizenship skills and respect for rules and laws, and participating in classroom activities; and <br> (j) Developing fluency in content vocabulary and comprehension of verbal, written and visual sources.] <br> Deletes [computer science: terminology, simple programming, and software applications.] |  |
| 8VAC20-543-130 <br> Middle education 6-8 | Describes in detail the competencies to be included in education endorsement programs. | Adds and Revises the following: <br> The program in middle education 68 with at least one area of academic preparation shall ensure that the candidate has demonstrated the following competencies: <br> 2. English. <br> a. [Be proficient in the knowledge, skills, and processes necessary for teaching writing, including the | Aligns competencies with standards and current requirements. |


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|  |  | domains of composing and written expression, and usage and mechanics and the writing process of planning, drafting, revising, editing, and publishing;] <br> 3. History and social sciences. <br> (i) The global influence of European ideologies of the 19th and 20th centuries [(liboralism, ropublicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism)]; and <br> 5. Science. <br> b. Understanding of the nature of science and scientific inquiry, including: <br> [(3) Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, argumentation with evidence, and constructing explanations; <br> (4) Reliability of scientific knowledge and its constant scrutiny and refinement; <br> (5) Self-checking mechanisms used by science to increase objectivity including peer review; and <br> (6) Assumptions, influencing conditions, and limits of empirical knowledge.] <br> c. Understanding of the knowledge, skills, and [practicesprocesses] for an active middle school science program, including the ability to: <br> [(3) Conduct research projects and experiments including applications of the design process and technology; <br> (4) Conduct systematic field | Amends text as recommended by the Board of Education. |


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|  |  | investigations using the school grounds, the community, and regional resources;] <br> [(8) Conduct formative and summative assessments of student learning]; <br> (97]) Incorporate instructional technology to enhance student performance [in science; and] <br> [(10) Ensure student competence in middle school science.] <br> e. Understanding of the core scientific disciplines to ensure: <br> [(3) The application of key principles in science to solve practical problems; and <br> (4) A "systems" understanding of the natural world.] <br> Deletes the following: <br> - Science skills of data analysis, measurement, observation, prediction, and experimentation; - Conduct research projects and experiments; <br> - Student achievement in science. |  |
| $\begin{aligned} & \text { 8VAC20-543-130 } \\ & \text { Middle education } \\ & 6-8 \end{aligned}$ | Describes in detail the competencies to be included in education endorsement programs. | Deletes the example in item (i) of one of the history and social sciences competencies for the middle education 6-8 endorsement. <br> (i) The global influence of European ideologies of the 19th and 20th centuries [lliberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism)]; and | Amends text as recommended by the Board of Education. |
| 8VAC20-543-150. <br> Adult education | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: The program in adult education shall ensure that the candidate has demonstrated the following competencies: <br> 3. Understanding of the knowledge, skills, and processes needed for the selection, evaluation, and instructional applications of the methods and materials for [adult basic skillsadults to become college | Aligns competencies with standards and current requirements. |


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|  |  | and career ready] including: <br> a. Curriculum development in adult basic education or [high school equivalency (HSE)general educational development (GED) instruction; <br> b. [Literacy skills for adultsBeginning reading for adults]; <br> c. [Numeracy skills for adultsBeginning mathomatics for adultst; [and] <br> d. [Workforce skills for adults. Reading comprehonsion for adult education]; <br> Deletes the following: <br> [ $e$. Foundations of adult education; and <br> f. Other adult basic skills instruction.] |  |
| 8VAC20-543-160. Adult English as a second language (add-on endorsement) | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: <br> 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: <br> 2[.Knowledge of teaching methods and materials in adult English as a second language K Knowledge in methods and materials in the teaching of English to adult speakers of other languages; <br> 3. [Knowledge in adult language acquisition]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 | Aligns competencies with standards and current requirements. |


| Section number | Requirement at <br> proposed stage | What has changed | Rationale for <br> change |
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|  |  | balanced literacy approach; <br> 4.[ Knowledge of assessment <br> methods in adult English as a <br> second language <br> instructionKnowledge in adult <br> second language acquisition; <br> 5. Knowledge of assessment <br> methods in instruction of English to <br> adult speakers of other languages;] |  |
| 8VAC20-543-160. <br> Adult English as a <br> second language <br> (add-on <br> endorsement) | Describes in <br> detail the <br> competencies to to <br> be included in <br> education <br> endorsement <br> programs. | Revises the following: <br> The program in adult English as a <br> second language shall ensure that <br> the candidate holds an active | Aligns competencies <br> license with a teaching <br> endorsement or endorsements <br> issued by the Virginia Board of <br> Education and has demonstrated <br> current requirds and <br> the following competencies: |


| Section number | Requirement at proposed stage | What has changed | Rationale for change |
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|  | programs. |  |  |
| 8VAC20-543-270. <br> Driver education (add-on endorsement) | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: <br> 2. Understanding of knowledge, skills, and processes of classroom driver education instruction including: <br> a. Traffic laws, signs, signals, pavement markings, and right-ofway rules; <br> b. Licensing procedures and other legal responsibilities associated with the driving privilege and vehicle ownership; <br> c. [TheAbility to explain the] effect of speed and steering on vehicle balance and control; <br> d. [Knowledge of performance characteristics ofCommunicating and interacting with] other highway users, [and ability to apply problemsolving skills to minimize risks with] (pedestrians, animals, motorcycles, bicycles, trucks, buses, trains, trailers, motor homes, ATVs, and other recreational users) [in a positive manner; <br> e. Facilitating students' ability to manage Managing of time, space, and visibility, and using perceptual skills [and a in the risk management process; <br> f. Ability to identify and analyze the physiological, psychological, cognitive, and economic consequences associated with aAlcohol] and other drug use; <br> g. [Understanding of proper use of vehicle occupantPassive] protective devices and [analyzing how they can reduce injury severity and increase collision survivalactive restraint systems; <br> h. Recognizing how regular preventive maintenance reduces Vehicle controls, vehicle maintenance, vehicle functions, and] vehicle malfunctions[, and the warning signs that indicate the need for maintenance, repair, or | Aligns competencies with standards and current requirements. |


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|  |  | replacement; <br> i. Recognizing the c[C]onsequences of aggressive driving, [foad rage,] fatigue, distracted driving, and other physical, social, and psychological influences that affect [the] driver behavior and performance; <br> j. Understand the effects of momentum, gravity, and inertia on vehicle control and balance, and the relationship between kinetic energy and force of impact[Natural taws and environmental factors that influence the decision-making process;; <br> k. Ability to evaluate emergencyresponse strategies to avoid or reduce the severity of a collision in high-risk driving situations, and how technological advancements in intelligent handling and stability control systems affect driving [practicesAdverse driving conditions and handling emergencies;; <br> [I. Knowledge about map-reading and trip pPlanning technologies and evaluating personal transportation needs and their impact on the environment a safe trip]; |  |
| 8VAC20-543-300. <br> English as a second language preK-12. | Describes in detail the competencies to be included in education endorsement programs. | The program in English as a second language shall ensure that the candidate has demonstrated the following competencies: <br> 2. Skills in [designing and administering formative or classroom-based assessments and interpreting results of both formative and summative assessments, including the WIDA Access test. Using the results of a variety of formative assessments, including performance-based assessments of oral language and writing, to direct instruction. Ensuring that formative assessments reflect high validity and reliability for the purposes for | Aligns competencies with standards and current requirements. |


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|  |  | which they are used and are appropriate for the targeted students. Teaching test-taking skills in preparation for standardized tests. [student assessment for English as a second language to include the Assessing Comprehension and Communication in English State-toState for English Language Learners (Access for ELLs®) test]; <br> 3. Skills in the teaching of reading [and writinglto include [ $(i)$ the five areas of reading instruction]: phonemic awareness[ $[$;pre-reading, during-reading, and post-reading strategies; vocabulary development; and guided reading. Ability to structure interactive tasks that engage students in using oral language to develop reading skills. Ability to determine students' reading levels and design instruction for multi-level classrooms by incorporating appropriate scaffolding or language supportsphonics, fluency, vocabulary and toxt comprehension; (ii) similarities and differences between reading in a first language and reading in a second language; and (iii) a balanced literacy approach; <br> 4. Skills in teaching grammar and syntax in the context of writing. Ability to model and teach editing skills and organization of writing using predominant text structures in the content areas.] <br> [54]. Knowledge of the effects of sociocultural variables in the instructional setting; <br> [65]. Proficiency in spoken and written English; <br> [76. Skills in providing language and cognitive support or scaffolding bases on the various stages of the second language acquisition process Understanding of second language acquisition]; |  |


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| 8VAC20-543-320. <br> Gifted education <br> (add-on <br> endorsement) | Describes in <br> detail the <br> competencies to <br> be included in <br> education <br> endorsement <br> programs. | Revises the following: <br> The program in gifted education <br> shall ensure that the candidate <br> holds an active license with a <br> teaching endorsement or <br> endorsements issued by the <br> Virginia Board of Education and has <br> demonstrated the following <br> competencies: | Aligns competencies <br> with standards and <br> current requirements. |


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|  |  | attitude, and skills to lead responsible, fulfilling, and respectful lives; and <br> d. Understand the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease.] <br> [5. Understanding of the knowledge, skills, and processes of health education as defined in the Virginia Standards of Learning, including; <br> a. Demonstrate the knowledge and skills to make healthy decisions that reduce health risks and enhance the health of self and others; <br> b. Demonstrate the ability to access, evaluate, and use health information, products, and services that influence health and wellness in a positive manner; and <br> c. Demonstrate the use of appropriate health practices and behaviors to promote a safe and healthy community when alone, with family, at school, and in other group settings.] |  |
| 8VAC20-543-340 <br> History and social <br> sciences endorsement |  | Deletes the following text of one of the competencies for the history and social sciences endorsement. <br> (i) The global influence of European ideologies of the 19th and 20th centuries [(liberalism, republicanism, social democracy, Marxism, nationalism, Communism, Fascism, and Nazism)]; | Amends text as recommended by the Board of Education |
| *8VAC20-543-380. <br> Mathematics | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: <br> The program in mathematics shall ensure that the candidate has demonstrated the following competencies: <br> [12. Knowledge of programming in at least two widely used programming languages, including definition, structure, and comparison; | Aligns competencies with standards and current requirements. |


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|  |  | 13. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and fUnderstanding 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 <br> 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. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing.] |  |
| *8VAC20-543-510. <br> Special education general curriculum elementary education K-6 (addon endorsement) <br> *8VAC20-543-520. <br> Special education general curriculum middle education grades 6-8 (add-on endorsement) <br> *8VAC20-543-530. <br> Special education general curriculum secondary education grades 6-12 (add-on endorsement) | Describes in detail the competencies to be included in education endorsement programs. | Adds a practicum <br> [5. The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with students with disabilities accessing the general curriculum in a public or accredited nonpublic school.] | Adds a practicum requirement in response to public comment |
| *8VAC20-543-580. <br> Mathematics specialist for elementary education. <br> *8VAC20-543-590. Mathematics specialist for | Currently, Virginia offers one mathematics specialist endorsement -mathematics specialist for elementary and | Amends the mathematics specialist proposed endorsements. In the final stage, the following endorsements are recommended: [mathematics specialist for elementary education and mathematics specialist for elementary and middle education.] | Allows another option for the mathematics specialist to seek an endorsement focusing on mathematics at the elementary level or mathematics specialist for |


| Section number | Requirement at <br> proposed stage | What has changed | Rationale for <br> change |
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| [elementary and <br> middle education] | middle <br> education. In <br> the proposed <br> regulatory <br> process, the one <br> endorsement <br> was <br> recommended <br> to be changed to <br> two <br> endorsements, <br> mathematics <br> specialist for <br> elementary <br> education and <br> mathematics <br> specialist for <br> middle <br> education. | elementary and <br> middle education. |  |


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|  | endorsement <br> programs. | [9. The candidate shall have earned <br> a master's of social work degree <br> from a regionally accredited college <br> or university school of social work <br> with a minimum of 60 graduate <br> semester hours [or earned an <br> advanced standing master's of <br> social work degree from a regionally <br> accredited college or university with <br> a minimum of 30 graduate-level <br> semester hours.] |  |

## Public comment

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate. Please distinguish between comments received on Town Hall versus those made in a public hearing or submitted directly to the agency or board.

| Commenter | Section | Comment | Agency <br> Response |
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| Elizabeth <br> Langran, <br> Marymount <br> University <br> (Town Hall) |  | I am concerned with the expectations for <br> implementation of the new regulations. <br> Just as VDOE took time to thoughtfully <br> develop these proposed regulations, it <br> will take university faculty time to revamp <br> existing courses and programs. Any new <br> course or program revisions will need to <br> be sent through several rounds of review <br> and voting before it can even reach our <br> Curriculum Committees, and this <br> process takes at a minimum one year. | A period of <br> transition will be <br> considered for the <br> regulations. |
| There is additional concern for how this |  |  |  |
| would affect our students currently in the |  |  |  |
| pipeline to have changes requiring a |  |  |  |
| quick turnaround. In short, we need at a |  |  |  |
| minimum one year to implement these |  |  |  |$\quad$| new regulations. |
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|  |  | effective will also require notification and additional time. |  |
| Beth Ackerman, VACTE <br> President <br> (Town Hall) | 8VAC20-543-20 Accreditation and administering this chapter. | While members of VACTE support the encouragement of four-year programs for teacher licensure, there was concern expressed that there was not enough support in the wording of this regulation to continue to support licensure graduate programs. | The text was revised to reference approved program (rather than approved baccalaureate degree program). |
| Heather Schoffstall, Liberty University <br> (Town Hall) | 8VAC20-543-20 <br> Accreditation and administering this chapter. | Does 8VAC20-543-20 allow for master's level programs as well, or is it limited to baccalaureate level only? |  |
| Donna Watson, Ph.D. Bluefield College <br> (Town Hall/Public Comment) | 8VAC20-543-20 Accreditation and administering this chapter. | Requiring all programs to be nationally accredited could create additional demands in terms of data collection and reporting on colleges and universities with teacher education programs. Requiring national accreditation must be tied to an agreement between the Commonwealth of Virginia and CAEP that seeks to minimize duplicate reporting of data and requiring data that teacher education programs have no authority or means to collect. | The Department of Education will enter into a partnership agreement with the Council for the Accreditation of Education Preparation (CAEP). |
| Dr Karrin Lukacs, Shenandoah University <br> (Town Hall) | 8VAC20-543-20 Accreditation and administering this chapter. | I would ask why graduate programs are not included as well. | The text was revised to reference approved programs (rather than approved baccalaureate degree program). |
| Mary Bowser, Shenandoah University <br> (Town Hall) | 8VAC20-543-20 Accreditation and administering this chapter. | Does 8VAC20-543-20 allow for master's level programs as well, or is it limited to baccalaureate level only? "academic degrees in the arts and sciences, or equivalent" | The text was revised to reference approved programs (rather than approved baccalaureate degree program). |
| Jean Roth Hawk, Bridgewater College <br> (Town Hall) | 8VAC20-543-20 Accreditation and administering this chapter. | I support lifting of the professional studies coursework cap. This change will better allow schools of education to address the many needs of the profession. | The comments support removing the limit (cap) on professional studies at the undergraduate level. <br> The text was |


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|  |  |  | revised to <br> reference <br> approved program <br> (rather than |
|  |  |  | approved <br> baccalaureate <br> degree program). |
| Karrin Lukacs, <br> Shenandoah | 8VAC20-543-20 <br> Accreditation and <br> administering this <br> chapter. | I support the elimination of the <br> professional studies coursework cap. | The comments <br> support removing <br> the limit (cap) on |
| (Town Hall) |  | As the parent of a child receiving special <br> education services through his LEA, I <br> also applaud the proposal to require 3 | professional <br> studies at the <br> undergraduate |
| courses for the Provisional License in |  |  |  |
| level. |  |  |  |


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|  |  |  | approved baccalaureate |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/ Town Hall) | VAC520-543-20 Accreditation and administering this chapter. | Clarification needed on the role of SPA Standards with alignment to InTASC and State Standards. For CAEP, all units must do InTASC. There is a lack of clarity in terms of implementation (SPAs as an option, CAEP/State agreement). | The proposed regulations do require that institutions of higher education must be accredited by CAEP; however, program approval will be the responsibility of the Board of Education. CAEP Standard 1, in part, does require, <br> Candidate Knowledge, Skills, and Professional Dispositions <br> 1.1 Candidates demonstrate an understanding of the 10 InTASC standards at the appropriate progression level(s) in the following categories: the learner and learning; content; instructional practice; and professional responsibility." <br> The Department of Education will enter into a state partnership agreement with CAEP. |
| Mark Ginsberg, Ellen Rodgers; George Mason | $\begin{aligned} & \hline \text { 8VAC-20-543-20- } \\ & \text { F } \\ & \text { Accreditation and } \end{aligned}$ | Strong concern (Section F). <br> Faculty are not in agreement with the following being the responsibility of the | The requirement that individuals must complete |


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| University | administering this <br> chapter. | EEPs, and strongly suggest that this <br> information be handled by schools <br> (Agency and <br> Town Hall) |  |
| districts/employers who can ensure that |  |  |  |
| it renewed periodically "complete |  |  |  |
| training or certification in emergency first |  |  |  |
| aid, cardiopulmonary resuscitation, and |  |  |  |
| the use of automated external |  |  |  |
| defibrillators." |  |  |  | | training or |
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| certification in |
| emergency first |
| aid, CPR, and the |
| use of AEDs is a |
| statutory |
| requirement. The |
| requirement must |
| be completed prior |
| to the issuance of | \right\rvert\,


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| Schoffstall, Liberty University (Town Hall) | Accreditation and administering this chapter. | an option. | (endorsement) programs must be approved by the Board of Education. Institutions of higher education may still seek SPA approval. |
| Robert N. Corley III, Virginia State University <br> (Town Hall) | 8VAC20-543-20 Accreditation and administering this chapter. | Revise to read as follows: <br> B. Professional education programs in Virginia shall obtain and maintain national accreditation from a national accrediting body recognized by the U.S. Department of Education or the Council for Higher Education Accreditation (CHEA), Professional education programs in Virginia seeking national accreditation through a recognized accrediting body shall adhere to procedures and timelines established by such body and the established 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. <br> Rationale: Language is revised to align with proposed definition for "Accredited program" in 8VAC20-543-10 and text in 8VAC20-543-40 through 60. <br> Question: When will this take effect based on relationship to CAEP requirements and standards, especially as pertaining to the current Department of Education/CAEP schedule for approved professional education seven year reviews? <br> Consider including this information as part of the State/CAEP Partnership Agreement. <br> D. What is an "earned major"; what does "equivalent in the area sought" actually mean? To | The proposed regulations recommend that all programs must be accredited by CAEP. <br> An earned major means to acquire a major through the institution. The equivalent is listed because individuals may have earned credits equal to a major, but the institution has not officially declared the individual has a "major." <br> A period of transition will be considered for the regulations. <br> The text is revised to reference approved programs (rather than approved baccalaureate degree program). <br> The proposed regulations recommend a biennial reporting period. <br> The timeline to submit new endorsement |


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|  |  | ensure clarity of intent, please provide a couple of examples within the text of this section. These terms are not used consistently across universities (and even within some departments). Check with SCHEV for guidelines on how to define for Virginia programs. <br> Revise to read as follows: <br> E. Professional studies coursework and methodology, including field experiences, required in this chapter shall be designed for completion within a baccalaureate or graduate degree program. <br> Rationale: Programs may be offered at both graduate and undergraduate levels of study. <br> Revise the last sentence to read as follows: <br> G. "... These procedures shall result in recommendations to the Board of Education every three years (triennial basis) for one of the following three ratings: "approved," "approved with stipulations," or "approval denied." <br> Rationale: This language aligns with the notion of assessing program endorsement areas on a triennial basis (is similar to that required for accreditation designations for Virginia's school divisions). Also, deletion of biennial approval of programs will reduce the amount of reporting, paperwork, etc. required by the state for review and approval of professional education programs. <br> Revise to read as follows: <br> H. Education endorsement programs shall be approved under this chapter based on compliance with the criteria described in 8VAC20-543-40, 8VAC20-543-50, and 8VAC20-543-60. <br> Board of Education program | programs is a process outside of the approved program regulations. Due to the review process timeline, requests for new endorsement programs are submitted once a year. In addition to the review of the programs, each must be reviewed by the <br> Advisory Board on Teacher <br> Education and Licensure and then presented to the Board in two consecutive meetings. |


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|  |  | endorsement area approval every two <br> years is burdensome and redundant. A <br> three year approval process is more |  |
| reasonable. This language aligns with |  |  |  |
| the notion of assessing program |  |  |  |
| endorsement areas on a triennial basis |  |  |  |
| (somewhat similar to that required by |  |  |  |$\quad$.


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|  |  | submitted with the next Biennial Report. | must be accredited by CAEP; however, program approval will be the responsibility of the Board of Education. The biennial reporting is part of education (endorsement) approval. |
| Heather Schoffstall, Liberty University <br> (Town Hall) | 8VAC20-543-30 Application for new education endorsement programs. | At the end of this process of Approved Program Regulations Revision, the revisions of the matrices, the back-andforth third party process of "approving" them, the separate university internal curricular change systems, and the time consumed by all of these processes equates to an overwhelming burden on faculty and staff, and often removes us from our primary duties as teacher educators. That is not a good side-effect. | The proposed regulations do require that institutions of higher education must be accredited by CAEP; however, program approval will be the responsibility of the Board of Education. The biennial reporting is part of education (endorsement) approval. |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency and Town Hall) | 8VAC20-543-40 <br> Standards for biennial approval of education endorsement programs. | General support for increasing standards (Standards for Biennial approval of education endorsement programs). <br> General support for the field experiences, but clarification is needed with regard to how the state is defining "clinically-based" field experiences. <br> Item \#3: General support for the emphasis on field experiences in "diverse" school settings <br> Item \#4: General support and suggestion for the item addressing diverse settings; however, working with students with disabilities should also be included. <br> Clarification. Faculty questioned the implications of FERPA when gathering post-graduation data | The definition of clinical experience is found in the definition section 8VAC20 543-10 of the Regulations. <br> All EPPs must follow respective University |


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|  |  | (e.g., obtaining employer job satisfaction, evaluations and impact of performance on $\mathrm{k}-12$ student outcomes). The state will need to clarify how this will be obtained. Will IHEs be required to obtain permission/consent from candidates upon graduation? <br> Item \#6: Concern that the biennial reporting requirement is excessive and does not fully align with CAEP. | research policies and procedures for gathering data. <br> The data required for the biennial report can be used to address CAEP standards. |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs | Evidence that supervised clinical experiences are continuous and systematic and comprised of early field experience with a minimum of 10 weeks of full-time student teaching... <br> It's not clear from the regulation whether a student teaching internship has to be at least 10 weeks in length or whether (2) eight-week placements (for a total of 16 weeks) will satisfy the requirement. Please clarify. | The proposed regulations require 10 weeks of fulltime student teaching. Due to school calendars, adjustments may need to be considered. |
| Dr Karrin Lukacs, Shenandoah University <br> (Town Hall) | 8VAC20-543-40 \#3b: <br> Standards for biennial approval of education endorsement programs | The definition of "full-time student teaching" needs to be clearer. | The proposed regulations require 10 weeks of fulltime student teaching. |
| Malcolm Lively, Hilve Firek, Mary Jo Karlis, Virginia Wesleyan College <br> (Town Hall) | 8VAC20-543-40 Standards for biennial approval of education endorsement program. <br> 8VAC20-543-50 Application of the standards. | Concerns: <br> First, Regarding Standards for Biennial Approval of Education Endorsement Programs: <br> The revision to 8VAC20-543-40 (also in 8VAC20-543-50) continues to penalize teacher education programs for counseling out admitted candidates who, as they progress, show poor potential or lack the dispositions to be good teachers, and especially those who decide for personal/career reasons to pursue other fields of study and have taken the Virginia Communication and Literacy Assessment early in the program. This measure also continues to penalize smaller undergraduate institutions with teacher education endorsement programs with small numbers-it takes only three completers | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation |


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|  |  | or non-completers to fail one of the licensure assessments (Virginia Communication and Literacy Assessment, Reading for Virginia Educators, or Praxis Subject Area Assessment, and most likely the Praxis Subject Area Assessment) when you reach the 10 required for reporting on the Biennial Report, to lose a program, which totally discounts the success of the rest, especially if those failing an assessment have already exited the program and are non-completers. | including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Robert N. Corley III, Virginia State University <br> (Town Hall/ <br> Public <br> Comment) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs. | 1. Change to triennial reporting. Keep the other wording in the standard. This would allow application of a three year running tally procedure similar to Standard of Learning accreditation standards in Virginia's PreK-12 schools. <br> 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. <br> Written clarification is needed in the approved program regulations regarding how this requirement may be met for program endorsement areas such as Administration and supervision PreK-12 and School counselor preK-12 endorsement areas. | The proposed regulations continue reporting biennially. <br> Assessment of basic skills is not required for program entry for Administration or Counseling endorsement programs. |


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|  |  | The Code of Virginia states, in part, the following: <br> "B. As provided in § 22.1-298.2, the Board of Education shall prescribe an assessment of basic skills for individuals seeking entry into an approved education program and shall establish a minimum passing score for such assessment. The Board also may prescribe other requirements for admission to Virginia's approved education programs in its regulations...." <br> Administration and supervision and Support Personnel" represent approved education programs. However, no entry level assessment of basic skills is required. Language in the Code is neither explicit nor implicit regarding whether or not these endorsement areas are exempt from this requirement. <br> Indicators of the achievement of this standard shall include the following: <br> "a. Results on Board of <br> Education prescribed entry-level assessments;" <br> Written clarification is needed in the approved program regulations regarding how this requirement is met for program endorsement areas such as Administration and supervision PreK-12 and School counselor PreK-12 endorsement areas. <br> Rationale: Same as that provided for the previous item. <br> "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 with demonstrated effectiveness in the classroom..." <br> Clarify how this language relates to program requirements of Administration and Supervision and Support Personnel requirements (e.g., for Virginia State University School counselor PreK-12 and School Administration and supervision |  |


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|  |  | PreK-12 program endorsements.) <br> Regulations need to clearly define requirements for teachers and administrators, school counselors, etc. Consider the use of a designation such as "Advanced Programs" to align with language used by CAEP. |  |
| Harvey Klamm, Liberty University <br> (Town Hall) | 8VAC20-543-40 <br> Standards for biennial approval of education endorsement programs. | Program non-completers should not be included in candidate passing rates. The required $80 \%$ passing rate should only include program completers. Exceptions should be considered when negative program approval decisions are based on fewer than 10 program completers, especially when small numbers are reported for critical shortage areas within our K-12 schools. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the <br> Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are amended to add a process to allow |


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|  |  |  | an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Jane Bray (Dean) and Leigh Butler, Old Dominion University <br> (Public Comment) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs. | We are concerned about the biennial standard for candidate progress and performance on BOE assessment. This approach does not align with program improvement efforts and will worsen the effect of critical teacher shortage in hard-to-staff schools and hard-to-fill positions. We propose that programs be given the opportunity to submit a corrective action plan for one biennial cycle before the program is closed for poor performance. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are |


| Commenter | Section | Comment | Agency Response |
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|  |  |  | amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs. | We oppose including the scores of program non-completers in the calculation for determining the 80\% passing rate. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. |


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|  |  |  | The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| M. Lively, Hilve Firek, J. <br> Sullivan, MJ <br> Karlis; Virginia <br> Wesleyan College <br> (Town Hall) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs. | While the faculty and staff of the Teacher Education Program at Virginia Wesleyan College support the revision to 8VAC20-543-40 indicated in \#6 [employer job satisfaction], we would ask that the Virginia Department of Education assist education program providers in the collection of this data. The data are very beneficial to education programs in order to track the success of graduates and also to determine if there are areas of weakness (or strength) that should be addressed. In the past, requests for such data from local school systems have resulted in very low return rates and in some circumstances, questions about the legitimacy of, or outright refusal to honor the request of this data based on privacy issues. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the $80 \%$ biennial requirement shall submit to the <br> Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. |


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|  |  |  | The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Radford University Professional Education Committee: C. Bland <br> (Town Hall) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs. | We applaud this attention to preparing candidates for diverse school settings, however we ask the Board to consider the following barriers to the effective implementation of this regulation: <br> 1. Geographic limitations Teacher preparation programs in the western, southwestern, and rural regions of Virginia have limited access to diverse, urban settings. Distance, economic, and travel time considerations are all barriers to providing quality learning opportunities in diverse schools. The few diverse school settings within a reasonable drive of the home institution will likely be overwhelmed with requests for field placements. Will these schools be able to accommodate all the requests? <br> 2. Quality of placements - If the geographic limitations are overcome, will the Board require that diverse school placements occur in accredited schools with fully licensed, proficient, or exemplary teachers? Such a requirement may further limit allowable placements while underscoring the high needs of urban, diverse schools. <br> 3. Faculty leadership/supervision Placing teacher candidates in a variety of schools across a wide | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the <br> Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the |


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|  |  | geographic area presents significant challenges for existing faculty to direct and supervise field experiences, while maintaining teaching and scholarly work. Relegating field work to graduate students and adjunct faculty may limit the quality of field supervision. <br> 4. Rural schools - rural schools with limited racial and ethnic diversity present a different set of teaching challenges including high poverty, students at risk of school failure, and schools facing economic hardship. We assume the requirement for diverse school settings will be applied to this population. <br> We also ask for clarification concerning the expectations of diverse school setting placements: <br> 1. Recommendations for type and duration of placements in "diverse schools" - What level of engagement will be required for the "diverse school setting" placement? Will observation or assisting hours meet the requirement or is full time teaching required in this setting? <br> 2. Alignment with the definition of "diversity" as listed in 8VAC20-543-10 (repealed 542-10) <br> These questions in no way diminish the value of experiences in a variety of school settings. We raise these concerns to highlight the challenges implicit in the new regulations and ask for the Board's assistance in defining the terms and considering the mediating barriers to implementation. | next biennial review period. <br> The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Samuel J. Smith, VERA President <br> (Town Hall) | 8VAC20-543-40 Standards for biennial approval of education endorsement programs. | Only scores of actual program completers should be included in the candidate passing rates. Noncompleters' scores should be excluded. <br> Programs with small numbers of candidates enrolled should be granted an exception to the $80 \%$ pass rate. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with |


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below the 80\%\end{array}\right\}\)

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|  | 8VAC20-543-50 <br> Application of the standards. | not taken the Praxis II test, and (2) because both completers and noncompleters count in the $80 \%$ pass rate mandate for the program. We have to be given credit for both keeping good candidates in, and counseling out the non-successful ones before completion. <br> With 8VAC20-543-40-6, colleges will need state assistance to obtain student achievement data from the P-12s for our completers employed in their schools. | Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Heather Schoffstall, Liberty University | 8VAC20-543-50 Application of the standards. | With small programs it can take several years to accumulate the 10 completers needed to "officially count" in the pass rate for the $80 \%$ requirement. Small | The proposed regulations were amended to recommend a |


| Commenter | Section | Comment | Agency Response |
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| (Town Hall) |  | numbers means that the effect of one or two students has an inordinately huge impact on small programs as compared to larger programs. Also, the "sudden death" clause does not allow for programs to fix the problem and revise their training processes, which seems out of line when failing P-12 schools are given time to remediate and provided assistance to improve. | change as noted below: |
|  |  |  | Institutions with education |
|  |  |  | endorsements programs that fall |
|  |  |  | below the $80 \%$ biennial |
|  |  |  | requirement shall submit to the |
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|  |  |  | Board of |
|  |  |  | Education for approval an |
|  |  |  | improvement plan to address the |
|  |  |  | area(s) of stipulation including |
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|  |  |  | measurable goals and timelines. |
|  |  |  | Semi-annual reports must be submitted to the |
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|  |  |  | Director of Teacher |
|  |  |  | Education to document the |
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|  |  |  | progress in addressing the |
|  |  |  | goals toward elimination of the stipulation until the |
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|  |  |  | next biennial review period. |
|  |  |  | The proposed regulations are |
|  |  |  | amended to add a process to allow |
|  |  |  | an institution of higher education |
|  |  |  | that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
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| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-50 Application of the standards. | C4 and 5 - Concern with this regulation. Clarification is needed regarding the timeframe for such assessments. Is this only during clinical experiences for students on a path to program completion or is this collected in longitudinal studies of program completers? | Approved program requirements are aligned with program completion. |
| Radford University PEC: K. Colley and T. Wallace <br> (Town Hall) | 8VAC20-543-50, D Application of the standards. | This part of the regulations discusses the requirements for approval of education endorsement programs. In the proposed regulations (Section D), education endorsement programs may receive one of the following three ratings: approved, approved with stipulations, and approval denied. We are particularly concerned with the approval denied rating. According to the proposed regulations, an endorsement program may be denied approval if it does not have national accreditation or if its candidates' passing rates on Board required licensure assessments fall below $80 \%$ for two consecutive biennium. <br> We are very concerned about the unintended consequences of denying approval to an education endorsement program. Programs that are denied approval are not permitted to admit students for two years. Measures that are punitive do not result in program improvement nor do they motivate programs to take proactive corrections. It is extremely difficult for programs to rebound and come back after being gone for two years. <br> It is a critical time in education. We are desperately trying to address the declining number of teacher education candidates and the national teacher shortage. It is not the time to close education preparation programs. <br> As an alternative solution to closing programs for two years, we suggest placing programs on corrective plans. Programs could continue to serve students and the school divisions in their region while addressing any concerns. In addition, programs could | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the $80 \%$ biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are amended to add a |


| Commenter | Section | Comment | Agency Response |
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|  |  | be required to submit annual reports to document improvement and that demonstrate the support of their college and university. | process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Donna Watson, <br> Ph.D. Bluefield College <br> (Town Hall/Agency) | 8VAC20-543-50 Application of the standards. | Considering that college and university teacher education programs provide the majority of high quality teachers for the Commonwealth of Virginia and are the most heavily regulated and scrutinized entities who prepare teachers, any regulation that serves to deny approval on the basis of a single test score of its teaching candidates should be reconsidered. The proposed regulations have added an additional category "Approved with stipulations" which should help the teacher education programs maintain their endorsements and continue to provide high quality teachers for critical shortage areas. <br> I affirm this addition: 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. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed |


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|  |  |  | regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Clara Hauth, Ph.D. <br> Marymount University <br> (Town Hall) | 8VAC20-543-50 <br> Application of the standards. | Additional clarity is necessary regarding required licensure assessments. For example, students may drop their educational programs due to failure of licensure exams; this should be a caveat in the discussion. In addition, students who pass these exams but move (many of our VA higher education students may be military spouses etc.) these students who depart the program should not be counted against the University. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the next biennial review period. |


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|  |  |  | The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Jean Roth Hawk, Bridgewater College <br> (Town Hall) | 8VAC20-543-50 Application of the standards. | Reporting pass rates as specified for program non-completers presents some difficulties for small teacher education programs. If a candidate leaves our program, it can be for several reasons. <br> 1.) Candidates -- especially in high-need areas-are being recruited by school divisions before they complete our program. School divisions offer provisional licenses and the candidate is teaching but is still counted as a noncompleter. This should, I believe, be seen as a tribute to our preparation, but is instead, a threat to our required $80 \%$ pass rate. 2.) After admission to the program, candidates may exhibit dispositions or traits which are not compatible with excellence in teaching. These candidates are counseled out of the program prior to student teaching. Again, this appears to be a responsible and prudent action by the program, but can put it in jeopardy of falling below $80 \%$. A better definition of noncompleters for purposes of accountability is needed. With these two accounted for, a program could still be fairly evaluated on pass rates | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the <br> Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the goals toward elimination of the stipulation until the |


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|  |  |  | next biennial review period. <br> The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Robert N. Corley III, Virginia State University <br> (Town Hall) | 8VAC20-543-50 Application of the standards. | Revise entire section to align with language suggested for 8VAC20-543-10, 40, and 60. Consistency in language is needed throughout the document. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the progress in addressing the |


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|  |  |  | goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Cathy Smeltzer Erb, Ph.D., Eastern Mennonite University <br> (Town Hall) | 8VAC20-543-50 Application of the standards. | 8VAC20-543-50. Application of the standards. The proposed change to "passing rates, reported by percentages, shall not fall below $80 \%$ percent biennially for program completers and program non-completers" is likely to create outcomes inconsistent with its intended purpose. If the purpose of this regulation is accountability, then institutions cannot be penalized for the decisions of students who exit prior to program completion, sometimes to take a position in a critical shortage area, and then be counted in the institution's "noncompleters" data. In the event that an institution determines that a candidate should be counseled out of teacher education, for whatever reason discovered after s/he has been admitted, this reporting requirement will encourage institutions to play the numbers game to keep candidates enrolled in order to maintain accreditation against the intention of preparing high quality teachers. Accreditation/program approval should not be tied to candidates' decisions to exit a program. Programs with small Ns are particularly vulnerable in losing accreditation status if this regulation is approved. These small Ns programs are often the same programs on the critical shortage lists. | The proposed regulations were amended to recommend a change as noted below: <br> Institutions with education endorsements programs that fall below the 80\% biennial requirement shall submit to the Board of Education for approval an improvement plan to address the area(s) of stipulation including measurable goals and timelines. Semi-annual reports must be submitted to the Director of Teacher Education to document the |


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|  |  | We cannot continue to set standards that then lead to teacher shortages. | progress in addressing the goals toward elimination of the stipulation until the next biennial review period. <br> The proposed regulations are amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| Heather Schoffstall, Liberty University (Town Hall) | 8VAC20-543-50, B Application of the standards. | When we are in a time of teacher shortages, why are we raising so many requirements for candidates? Many of the new requirements (such as specific SAT/ACT/GRE scores) have not been well-researched to prove their efficacy as meaningful selection criteria for effective teachers. <br> Since SACS already accredits college programs in the content areas of English, mathematics, history, etc., why does the state need to follow behind and "reaccredit" or "re-approve" those same programs a second time? It costs taxpayers for each process and each report. | SACS is responsible for the accreditation of the University and not specific endorsement programs. Furthermore, SACS does not evaluate licensure programs for alignment with Virginia regulations and statutory codes. |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | 8VAC20-543-50, C4 Application of the standards. | The professional education program shall provide evidence of contributions to PreK-12 student achievement by candidates completing the program. <br> The state has a role/responsibility to provide EPPs information about where graduates are employed within Virginia's school divisions. <br> Additionally, it should provide to the EPPs performance/annual evaluation data (particularly for Standard 7 Student | The division of teacher education and licensure began collaborating with Virginia EPPs in summer 2015 to provide locations within Virginia's school divisions of graduate employment. |


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|  |  | Academic Progress of the Uniform <br> Performance Standards and Evaluation <br> Criteria for Teachers) so that EPPs may |  |
| report/provide evidence of graduates' |  |  |  |
| contributions to PreK-12 student |  |  |  |
| achievement. The state should also |  |  |  |
| share the responsibility for encouraging |  |  |  |
| P-12 division and school administrators |  |  |  |
| to cooperate fully with data gathering, |  |  |  |
| completion of employer surveys, etc. |  |  |  |$\quad$.


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|  |  |  | amended to add a process to allow an institution of higher education that has an education (endorsement) program falling below 80 percent to submit a correction action plan. |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | 4. Number of candidates admitted in education endorsement programs who are in the top quartile of the college of university population. <br> The proposed requirement will present a resource demand on the university data management system. This is not information that the university data management system is currently designed to collect, particularly given the large number of majors represented by all teacher education candidates in our approved programs. | Edits are recommended to the annual report card. |
| Jane Bray (Dean) and Leigh Butler, Old Dominion University <br> (Public Comment) | 8VAC20-543-70 <br> Annual report card. | The proposal to include an annual report card places an additional burden on the teacher preparation programs who are already reporting the requested data in annual Title II reporting, CAEP, along with the state biennium reports. The focus for teacher preparation will be data reporting and compliance, instead of using the data to improve teacher excellence. | Edits are recommended to the annual report card. |
| Robert N. Corley III, Virginia State University <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | Clarify 1. Institution's accreditation status (i.e., is this asking for the university regional or the professional education program accreditation status?) If both are needed, add the appropriate category. <br> Change 2. To 2. Education endorsement program approval status; <br> Change 7. Biennial to 7. Triennial Change 13. "... within two years of employment..." to "within three years of employment..." <br> Rationale: Changes provide consistency of language used throughout the document. | Edits are recommended to the annual report card. |
| Harvey Klamm, Liberty | 8VAC20-543-70 <br> Annual report | If CAEP accreditation is required for all institutions, then additional reporting | Edits are recommended to |


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| University <br> (Town Hall) | card. | should not be necessary. Additional reporting is time-consuming, costly, and does not improve the quality of schools beyond already state recognized CAEP assessments. All CAEP institutions must submit a comprehensive annual report that should provide all data needed to document program success. A copy of this report can be provided to the state and should be sufficient in meeting any report card regulation. | the annual report card. |
| Malcolm Lively, Hilve Firek, J. Sullivan, MJ Karlis; Virginia Wesleyan College <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | Concern: <br> Regarding Annual Report Card: The faculty and staff of the Teacher Education Program do not support the revision indicated in 8VAC20-543-70 that requires the VDOE "to produce an annual report card," especially as the language in the proposed Regulations does not specify how such a "grade" would be calculated or what guidelines would be used to determine the "grade." This data could penalize small, high quality programs that have lesser numbers of program completers if just a very few candidates became non-completers. Also, using the criterion of "number of candidates admitted in education endorsement programs who are in the top quartile of the college/university population" to rate a teacher education program supplies no legitimate indication of the quality of the graduates (teachers) produced by the program. This statistic could vary wildly depending on the reporting period and the time at which students seek admission to the education program. Very little educational research supports this specific criterion, and to date, little to no research has shown a positive correlation between undergraduate student rank and success and effectiveness of teachers. | Edits are recommended to the annual report card. |
| Heather Schoffstall, Liberty University <br> (Town Hall) | 8VAC20-543-70 Annual report card. | 8VAC20-543-70 - This mandate for an Annual Report for the state raises a workload issue. In order to be compliant with the regulation to have CAEP accreditation, we already have to compile an Annual Report. We already have to do a Title II report annually. We already have a VA Biennial Report. So | Edits are recommended to the annual report card. |


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|  |  | much of the data we report for these 3 is redundant. To require a 4th report is overkill. <br> It would make better sense if the annual report card could be designed based on data from the CAEP report since CAEP accreditation is required for all institutions. |  |
| Michelle Goodwin, Liberty University <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | If CAEP accreditation is required for all institutions, then additional reporting should not be necessary. All CAEP institutions must submit a comprehensive annual report that should provide all data needed to document program success. The annual report card should be designed based on data from the CAEP annual report. The CAEP annual report is quite comprehensive and should be able to provide sufficient documentation of the effectiveness of the programs. | Edits are recommended to the annual report card. |
| Cathy Smeltzer Erb, Ph.D. <br> Eastern Mennonite University <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | Annual Report Card. The reporting requirements for teacher education programs is extensive and duplicates other reporting requirements (Biennial Accountability Measurement Report stated in 8VAC20-543-70, Title II, CAEP Annual Report, PEDS for AACTE institutions, etc.). Items \#1-8 listed in this section duplicate many of the items also required in the regulatory item 8VAC20-543-70 Biennial Accountability Measurement Report, listed just prior to this item in the proposed regulations. Streamlining of reports seems plausible | Edits are recommended to the annual report card. |
| James Madison University - Phil Wishon, Maggie Kyger, and Steve Purcell <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | Annual report cards should not be required. Educator preparation programs are already among the most aggressively regulated of all professions. The reports that institutions must already submit to the Council for Accreditation of Educator Preparation (CAEP), SPAs in many instances, Title II, and SACS should more than satisfy what the proposed annual report cards are designed to accomplish. | Edits are recommended to the annual report card. |
| Karrin Lukacs, Shenandoah University <br> (Town Hall) | 8VAC20-543-70 <br> Annual report card. | "Other data as requested by the Board" needs to be defined. | Edits are recommended to the annual report card. |


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| $\begin{array}{l}\text { Kristi S. Fowler, } \\ \text { Hollins } \\ \text { University }\end{array}$ | $\begin{array}{l}\text { 8VAC20-543-80 } \\ \text { Competencies and } \\ \text { requirements for } \\ \text { endorsement } \\ \text { areas. }\end{array}$ | $\begin{array}{l}\text { I'd like to offer that I am greatly } \\ \text { concerned by the fact that in the } \\ \text { section 8VAC20-543-80, both science } \\ \text { and math require six semester hours in } \\ \text { the discipline, a methods course, } \\ \text { and passing a rigorous assessment } \\ \text { while history and social } \\ \text { sciences requires only six hours in the } \\ \text { discipline and passing a rigorous } \\ \text { assessment; a methods course is } \\ \text { equally critical for effective preparation } \\ \text { of early/primary educators. I hope a }\end{array}$ | $\begin{array}{l}\text { A methods course } \\ \text { in teaching } \\ \text { elementary history } \\ \text { and social } \\ \text { sciences is } \\ \text { recommended. }\end{array}$ |
| methods course will be added to the |  |  |  |$]$| requirements for history and social |
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| sciences. |


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|  |  | the VDOE from the IHEs. If required for graduate level programs, then this would be overly limiting to recruitment and admission of candidates. | been proposed to be stricken. |
| M. Lively, Hilve Firek, J. <br> Sullivan, MJ <br> Karlis; Virginia <br> Wesleyan <br> College <br> (Town Hall) | 8VAC20-543-80 Competencies and requirements for endorsement areas. | Regarding Competencies for <br> Endorsement Areas: Elementary <br> Education <br> The faculty and staff of the Teacher Education Program are hesitant to support the proposed revisions to 8VAC20-543-80 that require completion of "12-15 semester hours each in English, history and social sciences, mathematics, and science." This revision essentially requires candidates seeking endorsement in early/primary education preK-3 or elementary education preK-6 to pursue a prescribed 48-60 hour major in addition to college/university general studies program requirements and other graduation requirements, plus the required professional studies coursework. The hesitancy stems from the fact that it would seem to counter the revisions in 8VAC20-543-20 to support the achievement of requirements for recommendation for a teaching license within a baccalaureate program. This revision would more or less require potential candidates to decide to be teachers within the first semester of college. Such requirements would also severely impact the ability of education candidates in undergraduate institutions to pursue study abroad opportunities. We would be more supportive if the option to complete a lesser number of courses and pass a "rigorous assessment... prescribed by the Board of Education" were made clearer. <br> Please note that on the whole, we strongly support making sure that potential elementary teachers are knowledgeable across these discipline areas, but the specification of minimum credit hours does not credibly ensure such knowledge. <br> Additional Requirements for Special Education: General Curriculum K-12 | 8VAC20 543-80. Item F, referencing a requirement of a specialization for a special educationgeneral curriculum endorsement has been proposed to be stricken. |


| Commenter | Section | Comment | Agency Response |
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|  |  | Endorsement Areas: Special Education General Curriculum K-12 <br> The faculty and staff of the Teacher Education Program at Virginia Wesleyan College are hesitant to support the proposed revisions to 8VAC20-543-80 that require "one area of specialization in English, history and social sciences, mathematics, or science." This revision essentially requires candidates seeking endorsement in Special Education General Curriculum K-12 to pursue an additional 2 to 3 courses (half to a full semester in the 4-credit curriculum at VWC) in addition to their liberal studies major, college/university general studies program requirements and other graduation requirements, plus the required professional studies coursework, to which potentially one course has been added. The hesitancy stems from the fact that it would seem to counter the revisions in 8VAC20-543-20 to support the achievement of requirements for recommendation for a teaching license within a baccalaureate program. The additional coursework likely will cause candidates in our program to extend their program to a ninth semester. This revision would more or less require potential Special Education General Curriculum K12 candidates to decide to be teachers within the first semester of college. Such requirements would also severely impact the ability of education candidates in undergraduate institutions to pursue study abroad opportunities. Please note that on the whole, we strongly support making sure that potential special education teachers are knowledgeable across all discipline areas, but the specification in one area might actually limit the ability to achieve that goal. |  |
| Robert N. Corley III, Virginia State University <br> (Town Hall/ <br> Public <br> Comment) | 8VAC20-543-80 Competencies and requirements for endorsement areas. | Clarify the following language in " A . The professional education program develops, maintains, and continuously evaluates high quality education endorsement programs....Candidates in education endorsement programs shall demonstrate competence in the areas in which they plan to practice and complete | Professional studies are required for instructional personnel. Administrators and supervisors are required to have |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | professional studies requirements and applicable assessments, in addition to meeting requirements for specific licenses, pursuant to the Licensure Regulations for School Personnel (8VAC20-22)...." <br> Comment: This section is unclear and needs some revising. For example, the language implies that all education endorsement programs must complete professional studies requirements. This is not the case for some of the Administration and Supervision and selected Support Personnel endorsement programs. | instructional personnel experience; therefore, individuals seeking an administration and supervision endorsement should have met professional studies requirements. |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Suggested Revisions <br> 8VAC20-543-90: Professional Studies Requirements for Early/Primary Education, Elementary Education and Middle Education <br> 1b. 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 processes and 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. [Comment: The concern with this regulation is that "developmental disabilities" are spelled out and noted multiple times, yet there is not attention to other relevant disabilities. Suggestion is for a broader wording taking into account developmental processes and issues and various disabilities (e.g., twice exceptional.] <br> 2a (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 | The Professional Studies competencies are revised based on the suggestions as noted below: <br> *incorporated the revision suggested in $2 \mathrm{a}(1)$; <br> *changed the word <br> "involvement" to "engagement" in 2a(5) |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | technologies; selection, development, and use of appropriate curricula, methodologies, and materials that support and enhance student learning and reflect the research on unique, ageappropriate, and culturally relevant curriculum and pedagogy. [Comment: What is meant by effective communication with and among students? Is the reference to "Varied and effective methods of communication with and among students."?] <br> 2a (2). Understanding of the principles of blended learning and online instructional strategies and the application of skills to deliver online instruction must be included. <br> 2a (5). Study in (i) methods of improving communication between schools and families, (ii) communicating partnering with families regarding their social and instructional needs of children's development, (iii) ways of increasing family engagement 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. <br> 2a (6). Early childhood educators must understand the role of families in children's development and education. in relation to teaching educational skills. <br> 2 b (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 |  |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | 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. [What is meant by effective communication with and among students? Is the reference to "Varied and effective methods of communication with and among students."?] <br> 6. Reading Language and Literacy. <br> 6a. Early/primary education preK-3 and elementary education preK-6 - language acquisition and reading and writing. Skills Knowledge 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. <br> 8VAC20-543-140. Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. <br> 2a. 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, ageappropriate, and culturally relevant curriculum and pedagogy. <br> 5b. This area shall address diverse approaches based upon behavioral, |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | ecological theory and practice developmentally appropriate ways to respond to children and their needs. [What is meant by effective communication with and among students? Is the reference to "Varied and effective methods of communication with and among students."?] <br> 5b. This area shall address diverse approaches based upon culturally responsive behavioral, cognitive, affective, social, and ecological theory and practice. <br> 6b (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. <br> 6 b (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 and other phonological awareness, concept of print, phonics, fluency, vocabulary development, and comprehension strategies. |  |
| Jane Bray (Dean) and . Leigh Butler, Old Dominion University <br> (Public Comment) | 8VAC20-543-80 Accreditation and administering this chapter. | There is a disconnect between the focus on competency alignment and credit hour requirements. ODU supports the use of competencies, which will allow interdisciplinary approaches to teacher preparation that integrate content and pedagogy. Specifically, the requirement for six credits of Reading (early/primary education, preK-3, pk-6, and special education endorsements) does not align with a competency-based approach, and eliminates the ability to truly integrate reading across the curriculum. There is a jarring disconnect between competencies in the approved program | The competences are set forth in the proposed regulations. Minimum requirements in reading, English, history and social sciences, mathematics, and sciences are required; however, the regulations provide some flexibility for |


| Commenter | Section | Comment | Agency <br> Response |
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|  |  | regulations and mandated credit hours in <br> the proposed licensure regulations. | individuals who <br> have passed a <br> rigorous |
|  |  | Further, it states that "Candidates <br> seeking an early/primary, prek-3, and <br> prek-6 endorsement shall complete 12- <br> 15 semester hours each in English, <br> history and social sciences, <br> content <br> assessment. |  |
|  |  | mathematics, and science addressing <br> competencies set forth in these <br> regulations ..." What happened to the |  |
| competencies? |  |  |  |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  | endorsements, and adult education. |  |  |
| Laura Gariepy (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Do not remove 'Foundations of Education' from teachers' professional requirements <br> While this may seem like a trivial change, I believe that it is actually a very significant and detrimental change. Foundations of Education has been a requirement in Virginia for at least the last 30 years and the content of such courses is still called for, even in the proposed regulation change. In the proposed regulation change, the title of the course changes from Foundations of Education to The Teaching Profession, yet the content of the course remains essentially the same. <br> The proposed regulation appears below: <br> - 5. The teaching profession. 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. Attention must be given to the legal status of teachers and students, including federal and state laws and regulations, school as an organization/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. <br> Professionalism and ethical standards, as well as personal integrity must be addressed. Knowledge and understanding of Virginia's Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  |  | must be included. <br> The Foundations of Education field deals directly with teaching students not only the historical, philosophical, and sociological Foundations of education, but also with what it means to be an ethical professional of education who has examined issues of personal integrity, especially as related to how one successfully remains in the teaching field and how one equitably serves and understands our increasingly diverse student population (the field of multicultural education is a sub-field of the Foundations of Education). In essence, the Foundations of Education courses around the state are already doing what the new regulations seem to want, thus why change the name? <br> This proposed change from <br> "Foundations of Education" to "The Teaching Profession" will needlessly cut the course off from the discipline/field of Social Foundations of Education - a distinct field of study with graduate programs across the nation <br> (e.g. University of Virginia; Virginia Tech; University of North Carolina Greensboro; University of South Carolina; and the University of Michigan to name a few). <br> The faculty who teach these courses have had specific training in the Foundations fields, and if the name is changed in the new regulations, I worry that this particular professional studies requirement may not end up being taught by the faculty best prepared to do the course justice. <br> Foundations of Education coursework provides a unique and critically important component of teacher education, bringing perspective and meaning to the task of teaching and fostering consideration of the role of public schools in our democracy. Study in Foundations of Education plays a key role in the development of reflective, |  |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | thoroughly professional, and ultimately effective teachers for the Commonwealth because it places day-to-day classroom practice within wider contexts, providing time and space for consideration of such activities in light of the overall aims of education; such as education's role in supporting freedom of thought, social fairness, care for others, democratic selfgovernment; and the role of schooling in students' and teachers' assumptions, beliefs, and attitudes surrounding diverse communities. In other words, <br> Foundations of Education's focus on the "whys" of education-from societal goals to cultural and social trends affecting all aspects of education-are critical to effective implementation of the "hows" of classroom practice. Historically, Virginia has served as a point of origin for many of the realizations of the crucial role education plays in our democratic society and Foundations of Education study serves to help Virginia's teachers continue to understand, appreciate, and maintain these connections. |  |
| Cathy Smeltzer Erb, Ph.D., Eastern Mennonite University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education | 8VAC20-543-890 and 8VAC20-543- <br> 1340. In the Professional Studies requirements, maintain the name "Foundations of Education" to emphasize the importance of philosophical and foundational underpinnings of a democratic education system, and the ethical framework that comprises teachers' work. <br> I appreciate strengthening the competencies focused on Assessment in the Professional Studies requirements. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Kathleen Daly, Virginia Commonwealth University | 8VAC20-543-90 Professional studies requirements for early/primary | Ensuring that pre-service teachers come to the teaching profession with an understanding of the sociological forces at work in education is an essential part of their ability to positively impact | The Professional Studies requirement of "The Teaching Profession" is |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
| (Town Hall) | education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | students' lives in a range of settings. Changing the title of this course leaves this essential component as a possible implication, a footnote, rather than an integral part of teacher training. The course title "The Teaching Profession" reflects a belief that the educational system is a one-size-fits-all approach, when we know this is not the case. Consider the importance of the social and philosophical elements of education and retain the title <br> "Foundations" so that professors who are experienced in this field can continue to teach these courses and impart a broader understanding of the nature of the field of education to new teachers. | proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Michael Broda, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | I'm writing to stress the importance of maintaining the title "Foundations of Education" (proposed to be changed to "The Teaching Profession") in the professional studies requirements of Virginia's teacher licensure regulations. This word change is not trivial- the term Foundations signals a broader and more contextual understanding of the historical, philosophical, and sociological underpinnings of our education system in a way that the proposed title does not. <br> Foundations, as a distinct discipline, is critical to helping new teachers contextualize their roles and responsibilities as educators- it is a must-have and a powerful body of knowledge to instill in our future educational leaders. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Donna Dockery, VCU <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies | Foundations of Education coursework provides a unique and critically important component of teacher education, bringing perspective and meaning to the task of teaching and fostering consideration of the role of public schools in our democracy. Students in our counselor education program enrolled in these courses gain a deeper understanding of the role of education historically and currently, collaborate with future teachers and leaders in ways that forge connections for their future | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  | requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | professional roles, and develop wider lenses through which to understand and critically reflect on the issues and concerns in current schools. It is important that student preparing for roles in schools consider the overall aims of education; such as education's role in supporting freedom of thought, social fairness, care for others, and democratic self-government as they prepare for effective and ethical practice. Keep Foundations of Education as a name and requirement. |  |
| Gabriel A. Reich, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | I would like to register my support for maintaining language in the regulations for VA schools of education that emphasizes the importance of standalone courses in the social foundations of education. It is in classes such as these that students learn to hone their judgment and ethical decision making skills by exploring professional dilemmas and making decisions informed by knowledge of the lives of their students both in and outside of schools, as well as the history of education in this country. To short this opportunity can cause major problems for pre-service teachers. I teach students history/social studies methods. While we may discuss issues that come up in social foundations classes, I would have to curtail their instruction in pedagogical methods if I had to include the teaching of foundations in my courses. The schools of education around this state take their cue from you. What you value ends up guiding decisions about programs, hiring, and budgets at our schools. Maintaining a strong support for the social foundations will directly support our ability to graduate teachers who are ready to be successful in Virginia schools. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Donia Spott (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. | As a veteran teacher with over 20 years' experience, I am concerned that Virginia is considering changing the "Foundations of Education" course title to "The Teaching Profession". We need to make sure that our teacher preparation programs continue to provide the historical, philosophical, and social context necessary for developing | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  | 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements special education, secondary grades 6-12 endorsements, and adult education. | effective and innovative educational programs and decisions. Changing the name is unnecessary and gives the impression that a teacher's professionalism is more important than the education they plan to help provide to our children. Our state's children deserve teachers who seek to develop and implement learning opportunities through thoughtful reflection and continuing analysis of their practice. Foundations in Education courses are a critical starting point for new teachers to begin this process. | Teaching Profession." |
| Kurt Stemhagen <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | As a former public middle school math teacher in Virginia and, as a current associate professor of education at VCU, I urge the board to reconsider the change in language in the proposed teacher licensure regulations from "Foundations of Education" to "The Teaching Profession." <br> Foundations of Education is a welldeveloped field of study. Its coursework provides a unique and critically important component of teacher education, bringing perspective and meaning to teaching and fostering consideration of the role of public schools in our democracy. Study in Foundations of Education plays a key role in the development of reflective, professional, wise, and ultimately effective teachers for the Commonwealth because it places day-to-day classroom practice within its wider contexts, providing time and space for consideration of such activities in light of the overall aims of education. In other words, Foundations of Education's focus on the "whys" of education-from societal goals to cultural and social trends affecting all aspects of education-helps teachers to carry out the "hows" effectively. <br> Removing the wording "Foundations of Education" from the professional studies requirement in the regulations would have the effect of cutting off this professional studies area from its disciplinary mooring. Professional studies requirements for licensure need | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | to be linked to an academic field/area so that the coursework in teacher preparation is informed by research and discussion that comes from disciplinary communities. For example, Ethics and integrity are two areas included in the proposed category of "The Teaching Profession." Ethics and integrity devoid of the focus on values and context that comes with study in the Foundations will likely lead to classes that focus on narrow compliance and a vision of a good teacher as one who merely does what she is told. It might seem counterintuitive, but replacing "Social Foundations" with the "Teaching Profession" is a blow to the idea of teacher as professional, at least in any robust sense of the term "professional." <br> In addition to being an educational researcher and a former teacher, I am also a parent of elementary school-aged children. When I think of the kinds of teachers I want for my children, I am certain that in addition to teachers with knowledge and skills, they need reflective, passionate teachers who have thought long and hard about why they teach and how the work they do matters beyond the walls of the classroom, both for the children they teach and for wider society. Foundations of Education is a key component of the preparation of these sorts of teachers. |  |
| Thomas H . Hartman, Ph.D. <br> (Town Hall/ Agency) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades | Re: the proposed course name change from "social foundations" to" the teaching profession." I am strongly opposed, failing sufficient explanation. <br> I understand the described course content remains essentially the same but I must presume this is temporary, else why change the name? What can be a foot? I have no personal investment in the matter: I have no professional connection to any school of education. I am afraid what I suspect is a move away from the estimable tradition of John Dewey and progressive educational philosophy. Dewey held public education to be a prime engine of social responsibility, social progress, and social | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  | 6-12 endorsement, and adult education. | justice. To leave that to one side in favor of an emphasis on teaching as a semiisolable function would be parallel to a seminary's ditching courses in the social context of ministry in favor of a " just preach the gospel; leave social concerns to others" approach. I am not suggesting -- nor did Dewey -- that the k -12 classroom is an appropriate place for social "preaching." Of course it is not. But the teacher needs to be aware of the profound social implications of what he or she does or does not do, and what the educational system itself does or does not prioritize. To somehow discount "social foundations" would actually disempower the classroom by pretending a distance from social context that cannot possibly be valid. |  |
| Valerie Robnolt, VCU <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Keep the Foundations Requirement in Initial Teacher Licensure <br> As a teacher educator, I believe the Foundations requirement is a valuable part of our pre-service teachers' preparation. Please do not change the requirement! | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Audra Parker, George Mason University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. | I am writing in response to the proposed changes to the Initial Teacher Licensure Regulations for elementary educators. <br> As program coordinator and an instructor for the current required course (Foundations of Education), I would like to encourage the board to consider keeping the focus on social/political/economic/cultural contexts of education as a requirement for preservice teachers. I teach this course | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  | studies requirements for preK-12 endorsement, special education, secondary grades 6-12 endorsements, and adult education. | fairly regularly at Mason in our introductory semester, and I find that exploring with these topics allows preservice teachers to unpack their preconceived notions of schooling and to grapple with the idea that not all students experience school in the same way that they did. Their learning curve in this course is tremendous, and their openness to understanding how diverse learners school experiences vary across contexts. This is particularly important as our population continues to become more diverse and as our students attain teaching positions in the vastly different areas of Virginia. <br> Similarly, I would also encourage the board to reconsider removing the Social Studies Methods course requirements from elementary teacher preparation. Social Studies is a critical content area that is often the center of opportunities for content integration--a key instructional approach in elementary schools and one that is supported by a wealth of research in elementary student learning. |  |
| Alexa Fox, Loudoun County Public Schools <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Keep the Foundations Requirement in Initial Teacher Licensure. <br> This class shaped who I am as a teacher. Without this class I would not be able to make every day informed educational decisions for my ECSE classroom. If you let just anyone teach this class, you might as well let anyone teach. It takes a special professor, with the educational background to teach this class. Keep it the way it is. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Jessica, Teacher | 8VAC20-543-90 <br> Professional studies | Hearing that foundations of education may no longer be a requirement for students going into education is very | The Professional Studies requirement of |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
| (Town Hall) | requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | concerning to me. In this class I learned so much that helped shaped the teacher I am. I still use materials from this class in my classroom today. The name foundation says it all. It is the foundation that crates a well-rounded and knowledgeable teacher! We would not stop teaching students the foundation of math like numbers and adding. So why would we send teachers out into the world without giving them the foundation they need. | "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Kristan Morrison, Radford University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | I am a teacher educator at Radford University, specializing in teaching the Foundations of Education. My Ph.D. coursework is in this field and it disturbs me that the state of Virginia is looking to change the title of one of the professional studies courses from "foundations of education" to "the teaching profession." Doing so will separate the course from its disciplinary roots, and the courses thus might not be taught by those who specialized in the foundations of education in their graduate coursework. <br> Many people have commented at this site: <br> https://www.townhall.virginia.gov/L/com ments.cfm?stageid=6643 regarding this title change (regarding Licensure Regulations for School Personnel [8 VAC 20-22]) and those comments are relevant to this section of the town hall comments as well, so please do look there to see what was posted regarding the Foundations of Education. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as <br> "Foundations of Education and the Teaching Profession." |
| Kristan <br> Morrison, <br> Radford <br> University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and | An online petition was created and can be accessed at the following Web site: https://www.change.org/p/virginia-department-of-education-retain-the-foundations-of-education-title-in-virginia-teacher-preparationregulations?recruiter=406290682\&utm_s ource=share petition\&utm medium=fac | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as <br> "Foundations of |


| Commenter | Section | Comment | Agency Response |
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| Aida Manning <br> Sidney Green <br> Barry Morrison <br> Taylor Magda <br> Alexa Fox <br> Carmel Vaccare <br> Courtney <br> Cavendish <br> Matthew Akers <br> Cheri Morton <br> Kim Gerette <br> Cynthia <br> Stinnette <br> Laura Rowlett <br> Emily Treadway <br> Megha Behl <br> Kalley <br> Thompson <br> Cody Jones <br> Nicole Hancock <br> Annie Blackburn <br> Abby Thomas <br> Martin De Anda <br> Amanda <br> Shrewsberry <br> Brenda Tyler <br> Laura Noll <br> Wendy Burcham <br> Charles Brady <br> Rebecca Philips <br> Susie Loeffler <br> Taylor Downey <br> Shawn <br> Sthreshley <br> Maike Philipsen <br> Heather <br> Nunnally <br> David Naff <br> Marta Montiel <br> Jordan Smith <br> Deborah Marks <br> Teri Johnson <br> Micol Hutchison <br> Melanie <br> Buffington <br> Lara Coggin <br> Donald Belt <br> Lawrence <br> Golonka <br> Lianna Moss- <br> Everhart <br> Bill Muth <br> Colleen | middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | ebook\&utm_campaign=share_facebook_ responsive\&utm_term=des-lg- <br> share_for_starters-no_msg. <br> Petition: <br> The Virginia Department of Education has proposed to eliminate the title of Foundations of Education from one of the professional studies requirements in the teacher licensure regulations and rename the requirement "The Teaching Profession." While this may seem like a trivial change, we, the undersigned, believe that it is actually a very significant and detrimental change. Foundations of Education has been a requirement in Virginia for at least the last 30 years and the content of such courses is still called for, even in the proposed regulation change. In the proposed regulation change, the title of the course changes from Foundations of Education to The Teaching Profession, yet the content of the course remains essentially the same. The proposed regulation appears below: <br> - 5. The teaching profession. 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. Attention must be given to the legal status of teachers and students, including federal and state laws and regulations, school as an organization/culture, and contemporary issues and current trends in education, including the impact of technology on education. Local, state, and federal governance of schools, | Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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| Connolly <br> Kurt Stemhagen Aaron Garber Susan Watson Elisabeth Rigsby Gabriel Reich Kathleen Daly Tamara Sober Antonio <br> Espinoza <br> Aubrey Duke Michael Broda John Broome Kathleen Cauley Shannon Huff Christine Taylor Teresa Coffman Jocelina Santos Molly Allen Krista Johnston Andrew Gilbert Jordyn Jones Stephanie Wasta |  | including the roles of teachers and schools in communities must be included. <br> Professionalism and ethical standards, as well as personal integrity must be addressed. Knowledge and understanding of Virginia's Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers must be included. <br> The Foundations of Education field deals directly with teaching students not only the historical, philosophical, and sociological Foundations of education, but also with what it means to be an ethical professional of education who has examined issues of personal integrity, especially as related to how one successfully remains in the teaching field and how one equitably serves and understands our increasingly diverse student population (the field of multicultural education is a sub-field of the Foundations of Education). In essence, the Foundations of Education courses around the state are already doing what the new regulations seem to want, thus why change the name? <br> This proposed change from <br> "Foundations of Education" to "The Teaching Profession" will needlessly cut the course off from the discipline/field of Social Foundations of Education - a distinct field of study with graduate programs across the nation (e.g. <br> University of Virginia; Virginia Tech; <br> University of North Carolina Greensboro; <br> University of South Carolina; and <br> the University of Michigan to name a few). <br> The faculty who teach these courses have had specific training in the Foundations fields, and if the name is changed in the new regulations, we worry that this particular professional |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | studies requirement may not end up being taught by the faculty best prepared <br> to do the course justice. <br> Foundations of Education coursework provides a unique and critically important component of teacher education, bringing perspective and meaning to the task of teaching and fostering consideration of the role of public schools in our democracy. Study in Foundations of Education plays a key role in the development of reflective, thoroughly professional, and ultimately effective teachers for the Commonwealth because it places day-to-day classroom practice within wider contexts, providing time and space for consideration of such activities in light of the overall aims of education; such as education's role in supporting freedom of thought, social fairness, care for others, democratic selfgovernment; and the role of schooling in students' and teachers' assumptions, beliefs, and attitudes surrounding diverse communities. In other words, Foundations of Education's focus on the "whys" of education-from societal goals to cultural and social trends affecting all aspects of education-are critical to effective implementation of the "hows" of classroom practice. Historically, Virginia has served as a point of origin for many of the realizations of the crucial role education plays in our democratic society and Foundations of Education study serves to help Virginia's teachers continue to understand, appreciate, and maintain these connections. <br> We, the undersigned, hereby petition the Virginia Department of Education to return the title Foundations of Education to its list of prescribed professional studies courses. Foundations of Education scholars will thus be ensured a place in continuing to equip Virginia's teachers not only with the practical methods and techniques needed to be successful, but also with the frameworks to understand how, when, and why to apply those tools in light of the broader contexts of education. |  |


| Commenter | Section | Comment | Agency Response |
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| Thomas Hartman, Ph.D. <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | I am strongly opposed, failing sufficient explanation. I understand the described course content remains essentially the same but I must presume this is temporary, else why change the name? What can be afoot I have no personal investment in the matter: I have no professional connection to any school of education. I am afraid what I suspect is a move away from the estimable tradition of John Dewey and progressive educational philosophy. Dewey held public education to be a prime engine of social responsibility, social progress, and social justice. To leave that to one side in favor of an emphasis on teaching as a semi-isolable function would be parallel to a seminary's ditching courses in the social context of ministry in favor of a " just preach the gospel; leave social concerns to others" approach. The classroom of course is not a place for preaching but teachers themselves need to be aware. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Lisa Abrams Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Understanding social foundations is essential to developing teachers that will be effective is a variety of school settings. Teachers need to understand how social and cultural contexts and issues influence their daily work with the learners. The core tenants of social foundations encourage thoughtful, reflective practice and encourage flexibility in instructional planning and delivery in order to meet the growing diversity among VA's school-age population. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Maike Philipsen, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary | "Foundations of education" denotes a specific field of study with its own knowledge base and graduate programs. Well prepared faculty teach foundations of education courses and enhance teacher preparation by providing in-depth information about professional ethics and | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  | education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | the meaning of education in a democracy. They teach preparing teachers the rich history of public education in our country and how to learn from the past, shaping meaningful and rich educational systems now and for the future. Foundations of Education's focus on the "whys" of education-from societal goals to cultural and social trends affecting all aspects of education-is critical to effective implementation of the "hows" of classroom practice. All of that gets lost if the name "Foundations of education" is dropped and replaced by a term without history or disciplinary tradition, such as "the teaching profession." It is not a wise move. | "Foundations of Education and the Teaching Profession." |
| Jose Alcaine, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Keep the foundations of education language in the regulations governing education programs in the Commonwealth. Foundations of education is a unique and vital field of study in graduate programs across the nation. <br> In addition, the dedicated faculty who teach these courses are uniquely trained in the field and are passionate about the course material and its impact in the development of well-rounded, effective, and compassionate teachers. As the term implies, this course work provides the foundation for everything meaningful that follows and allows for a deeper appreciation and understanding of the vital role education plays in our society. Please keep the foundations of education language. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Paula Katz, Third-grade Teacher (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies | Foundations of education" should not be eliminated. Universities are the gatekeepers of the teaching profession. This class is about why we teach. This class involves the ethics and importance of teaching. Teachers need this class to evolve into the professionals we want caring for our children. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  | requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. |  |  |
| Radford University PEC: K. Morrison and S. Schneider <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | We are writing to express our concerns with some changes proposed in the Teacher Licensure Regulations for the commonwealth of VA. Specifically, our concerns are in these areas: <br> 8VAC20-23-130. Professional studies requirements, item 5 <br> 8VAC20-23-190. Professional studies requirements, Item 4 <br> In essence, the changes proposed in these sections seem to be doing four things: <br> 1. Removing the title "Foundations of Education" and replacing it with "The Teaching Profession." <br> 2. Moving the assessment content out of the foundations course into a separate course. <br> 3. Explicitly adding in content on professionalism, ethical standards, and personal integrity <br> 4. Adding in content on Virginia's Guidelines for Uniform Performance Standards and Evaluation Criteria for Teachers <br> While we certainly agree with item number 2 above, that the assessment content is important enough to be moved out and made a professional studies requirement of its own, we do have some strong concerns about item 1. <br> Our primary concern rests with changing the title of the professional studies requirement of "Foundations of Education" to "The Teaching Profession." While it might seem minor, such a title change represents something | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  |  | very significant to the field of educational foundations. <br> Perhaps the writers of the proposed regulations are unaware that there is a field called the Foundations of Education (also referred to as the Social Foundations of Education), which is served, among others, by a national organization called the Council for Social Foundations of Education (CFSE). The CFSE has developed a set of professional standards purposed with informing state regulatory agencies on initial teacher certification requirements in the field of the foundations of education (http://csfeonline.org/about/csfestandards/). Removing the wording of "Foundations of Education" from the professional studies requirement in the licensure regulations would, in effect, divorce this professional studies area from its disciplinary mooring. <br> All professional studies requirements for licensure should be linked to an academic field/area because there is a need for a united professional voice to help articulate what happens in this course (especially when it concerns such a broad statement as "the historical, philosophical, and sociological foundations of education"). How the Commonwealth of Virginia titles a professional studies requirement (regardless of how an IHE ultimately titles the course) is important. By using the title "Foundations of Education," the commonwealth is affirming the value of a particular professional field as well as helping an IHE understand who has the expertise to teach such courses (e.g. people who have graduated from PhD programs specializing in the Foundations of Education). The state regulations regarding teaching licensure are legal documents, and thus semantics DO matter. <br> Additionally, as relates to items 3 and 4 in the listing above, the disconnection of |  |


| Commenter | Section | Comment | Agency <br> Response |
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|  |  | seems inconsistent with the wording that <br> follows the title change in the proposed <br> regulations. The Foundations of <br> Education field deals directly with <br> teaching students not only the historical, <br> philosophical, and sociological <br> foundations of education, but also with <br> what it means to be an ethical |  |
| professional of education who has |  |  |  |
| examined issues of personal integrity, |  |  |  |
| especially as related to how one |  |  |  |
| successfully remains in the teaching field |  |  |  |
| and how one equitably serves and |  |  |  |
| understands our increasingly diverse |  |  |  |$\quad$.


| Commenter | Section | Comment | Agency Response |
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|  | 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | students are interested in understanding the social foundations and goals of education to aid them in a broader understanding of working with adults in a learning environment. I fear the change to "The Teaching Profession" would force courses to be more focused on PK12, and not provide the foundations for those wishing to provide learning experiences to our state's growing adult population. KEEP FOUNDATIONS OF EDUCATION! | Profession." |
| Nora Alder <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Social Foundations courses are key to the depth of teacher understandings of the importance of social context in schooling. Most Social Foundations courses include a history of American education, overviews of funding, changes in demographics and tax basis, some understanding of education law, Supreme Court rulings that have effected discipline, special education and desegregation, some of the major curriculum and instruction movements over time and some of the major philosophical underpinnings of education. I have taught pre-service teachers in Nevada who were not required to have this class and the depth of their understandings did not hold a candle to that of the Virginia students I work with. Please keep this requirement! | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| James McMillan, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 | As former Chair of our Foundations of Education Department at VCU, and current Interim Associate Dean of Academic Affairs for the School of Education, I wanted to indicate my strong support for continuation of required social foundations for teacher licensure. Social foundations is the one course that effectively integrates multiple perspectives related to the history and cultural underpinnings of schooling, as well as providing students with essential coverage of ethics. Our School of Education faculty as a whole supports inclusion of these competencies, and believe that removal from the regulations will lead to less informed, less critically reflective teachers who will not have appropriate and needed professional | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  | endorsements, and adult education. | knowledge. |  |
| Sharon <br> Zumbrunn, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | As a former educator and as a current assistant professor of educational psychology at VCU, I strongly support the continuation of the social foundations requirement for teacher licensure. It is essential that our pre-service teachers are equipped with an understanding of the historical and cultural underpinnings of education to make critically informed decisions as practitioners. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Adai Tefera, Virginia Commonwealth University <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | As a new faculty member in the Foundations Department at Virginia Commonwealth University's School of Education, I am writing to ask that you keep "Foundations of Education" and not replace it with "the teaching profession." Courses in the foundations of education bring perspective and meaning to the task of teaching and fostering the role of public schools in our U.S. democracy. In fact, the course offerings in the Foundations of Education Department are one of the primary reasons why I was drawn to VCU's School of Education while searching for a faculty position. Furthermore, the study of Foundations of Education plays a key role in the development of reflective, thoroughly professional, and ultimately effective teachers for the Commonwealth because it places day-to-day classroom practice within wider contexts, providing time and space for consideration of the overall aims of education, including education's role in supporting freedom of thought, social fairness, care for others, and democratic selfgovernment, to name a few. For these | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  |  | reasons and many more, I ask that you keep Foundations of Education as a key course offered in Virginia. |  |
| Jill Jones, Teacher, Mary Munford Elementary School <br> (Town Hall) | 8VAC20-543-90 <br> Professional <br> studies <br> requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | Please keep the "Foundations of Education" wording in teacher licensure regulations. It is important to me that we continue to encourage our teachers to be people with integrity who will stand up for what they believe in (including: caring for students, their students' parents, the community in which they teach, and the profession). | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Tom Hartman (Town Hall) | 8VAC20-543-90 <br> Professional <br> studies <br> requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | I am strongly opposed, failing sufficient explanation. <br> I understand the described course content remains essentially the same but I must presume this is temporary, else why change the name? What can be afoot? <br> I have no personal investment in the matter: I have no professional connection to any school of education. <br> I am afraid what I suspect is a move away from the estimable tradition of John Dewey and progressive educational philosophy. Dewey held public education to be a prime engine of social responsibility, social progress, and social justice. To leave that to one side in favor of an emphasis on teaching as a semiisolable function would be parallel to a seminary's ditching courses in the social context of ministry in favor of a " just preach the gospel; leave social concerns to others" approach. <br> Of course I hope I am wrong as to what is afoot. If there is material explaining the | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency <br> Response |
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|  |  | proposed change, would you forward it <br> to me by mail or email? |  |
|  |  | I am not suggesting --nor did Dewey-- <br> that the k-12 classroom is an appropriate <br> place for social "preaching." Of course it <br> is not. But the teacher needs to be aware <br> of the profound social implications of |  |
|  |  | what he or she does or does not do, and <br> what the educational system itself does |  |
|  |  | or does not prioritize. To somehow <br> discount "social foundations" would |  |
| actually disempower the classroom by |  |  |  |$\quad$.


| Commenter | Section | Comment | Agency Response |
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|  | 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. |  |  |
| Harvey Klamm, Liberty University <br> (Town Hall) | 8VAC20-543-90 and 8VAC20-543140 <br> 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 endorsements, special education, secondary grades 6-12 endorsements, and adult education. | I ask that you reconsider and keep the foundations course requirement. I have worked in the field of education in Virginia for 43 years. During that time, I have observed a growing pragmatic desire within education to reflect less on the foundations of why schools function as they do, in preference to just preparing teachers pedagogically. To decrease the amount of time focused on the philosophical, theoretical, and historical aspects of the foundations of education, from a full course to an element within a course as advocated in this change, will significantly impact teacher preparation by minimizing understandings of the roots of education that are fundamental to the thrust and values within pedagogy. May we not sacrifice the teaching of who we are and how we came to be as schools and as teachers for the sake of streamlining regulations? | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Tracey Pritchard, Liberty University <br> (Town Hall) | $\begin{aligned} & 8 V A C 20-543-90 \\ & \text { and 8VAC20-543- } \\ & 140 . \end{aligned}$ | It is critical that our teacher education programs continue to offer and provide a course in the historical, philosophical, and social contexts of education. Changing the name indicates that these aforementioned areas are not a part of the material for this course and instead teacher professionalism is the focus. While teacher professionalism is important, we need well-rounded educators who learn to be thoughtful practitioners through the study of past experiences and reflective practitioners of their current practices. A foundational | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  |  | course, at the start of an education program, assists students in being thoughtful and reflective practitioners. |  |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | 8VAC20-543-90 <br> Professional <br> studies <br> requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-140 <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | We support including instruction related to personal character, professional integrity, ethical decision-making, and professionalism in Foundations of Education coursework. We also support continuing to include the study of social foundations as a foundational aspect of this instruction. Changing "Foundations of Education" to "The Teaching Profession" seems arbitrary, and although we do not oppose, we would appreciate understanding the rationale for this proposed change. | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |
| Radford University Professional Education Committee: Greg Sherman <br> (Town Hall) | 8VAC20-543-90 <br> Professional studies requirements for early/primary education, elementary education, and middle education. <br> 8VAC20-543-90 <br> Online Instruction reference | This section describes recommendations for early/primary education, elementary education, and middle education teacher preparation that include "Understanding of the principles of online learning and online instructional strategies and the application of skills to deliver online instruction..." As worded, these recommendations are far too vague and may not be applicable to most teachers at this level. More specifically, "principles of online learning" are essentially no different than "principles of book learning" (or any other mediated environment). Modality does not meaningfully affect learning principles. Similarly, effective "online instructional strategies" are no different from effective classroom instructional strategies in general. The only difference is that a teacher may need to learn how to manipulate an online system, such as a Learning Management System (LMS), to implement and deliver a discussion board or provide access to a video lecture. The principles of good discussions, or effective presentations are the same whether =such strategies | The Professional Studies requirement of "The Teaching Profession" is proposed to be amended as "Foundations of Education and the Teaching Profession." |


| Commenter | Section | Comment | Agency Response |
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|  |  | take place in the classroom or online. But if the intention is to promote the "...application of skills to deliver online" then a certain degree of specificity seems in order. Does "online" refer to synchronous or asynchronous technology and delivery (or both)? Should all teachers learn how to set up a course in an LMS? If so, which system....any? And most importantly, how relevant are these skills for the target teachers (early/primary education, elementary education, and middle education)? <br> From an instructional design perspective, "online" is just another form of technology-supported instruction. It might be best to remove the references to "online" and just keep the revised portion of the existing wording earlier in the paragraph: <br> "...selection and use of materials, including media and contemporary technologies." |  |
| Tracey Pritchard, Liberty University <br> (Town Hall) | 8VAC20-543-100. <br> Early childhood (add-on). | 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 <br> Candidates who hold an active license in special education general curriculum K12 should also be eligible for the add-on endorsement. Special education preparation is related to many early childhood competencies. Upon completion of the additional 9 hours of graduate coursework in early childhood that is requirement for the endorsement, all competencies would be met for candidates who hold the special education general curriculum endorsement. <br> Practicum experience should be required for the early childhood add-on endorsement. Compare to 45 hours | A practicum requirement is recommended to be added to the regulations. |


| Commenter | Section | Comment | Agency Response |
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|  |  | required in the corresponding licensure regulations: 8VAC20-23-140. Early childhood for three-year-olds and four-year-olds (add-on endorsement). 3. Completed a supervised practicum of at least 45 instructional hours in a preschool setting (i.e., three-year-olds and four-year-olds <br> Also compare to 45 hours required in approved programs for gifted add-on: 8VAC20-543-320. Gifted education (addon endorsement). 9. The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with gifted students. |  |
| Radford University Professional Education Committee: SPED faculty <br> (Town Hall) | 8VAC20-543-100. Early childhood for three-year-olds and four-year-olds (add-on). | We give the VDOE kudos for adding the ECSE license to those that can add the 3-4 year old endorsement. This is especially important as many school systems are providing inclusive Virginia Preschool Initiative (VPI) classrooms, and having both endorsements available to candidates in ECSE programs will qualify them to teach in these classrooms. However, we do have a question/need for clarification about this add-on endorsement for ECSE initial licensure pre-service candidates. Will pre-service initial licensure candidates who take coursework for both ECSE and the 3-4 year old add-on endorsement simultaneously in their programs be able to apply for the add-on when they apply for initial licensure in ECSE, or is the requirement that they receive their ECSE license first, then apply for the add-on endorsement? | The early childhood for three-year-olds and four-year-olds add-on endorsement is proposed as an add-on for individuals who hold an elementary education endorsement or an early childhood special education endorsement. <br> The early childhood endorsement was added because this endorsement does cover prekindergarten. <br> A practicum requirement is recommended to be added to the regulations |
| Karen Parker, Liberty University <br> (Town Hall) | 8VAC20-543-100. Early childhood for three-year-olds and four-year-olds (add-on). | Candidates who hold an active license in special education general curriculum K12 should also be eligible for the add-on endorsement. Special education preparation is related to many early childhood competencies. Upon completion of the additional 9 hours of | The early childhood for three-year-olds and four-year-olds add-on endorsement is proposed as an |


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|  |  | $\begin{array}{l}\text { graduate coursework in early childhood } \\ \text { that is required for the endorsement, all } \\ \text { competencies would be met for } \\ \text { candidates who hold the special } \\ \text { education general curriculum } \\ \text { endorsement. }\end{array}$ | $\begin{array}{l}\text { add-on for } \\ \text { individuals who } \\ \text { hold an } \\ \text { elementary } \\ \text { education } \\ \text { endorsement or } \\ \text { an early childhood } \\ \text { special education }\end{array}$ |
| endorsement. |  |  |  |$\}$


| Commenter | Section | Comment | $\begin{array}{c}\text { Agency } \\ \text { Response }\end{array}$ |
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|  |  | $\begin{array}{l}\text { the knowledge, skills, and competencies } \\ \text { identified by research to contribute to } \\ \text { learning and development of young } \\ \text { children. In contrast to the current } \\ \text { language the proposed language is a } \\ \text { major improvement and will strengthen } \\ \text { Virginia's early education } \\ \text { system. Moving toward a competency- } \\ \text { based system positions Virginia as a } \\ \text { leader nationally. And there is } \\ \text { considerable interest and promise in a } \\ \text { four-year degree focused on teaching in } \\ \text { early education programs that could lead } \\ \text { to initial licensure. }\end{array}$ |  |
| $\begin{array}{ll}\text { Beth Ackerman, }\end{array}$ |  |  |  |
| $\begin{array}{ll}\text { VACTE }\end{array}$ | $\begin{array}{l}\text { 8VAC20-543-100. } \\ \text { Early childh-od for } \\ \text { three-year-olds } \\ \text { and four-year-olds } \\ \text { (add-on). }\end{array}$ | $\begin{array}{l}\text { experience to the add-on endorsement. }\end{array}$ |  |
| $\begin{array}{ll}\text { (Town Hall) }\end{array}$ | $\begin{array}{l}\text { A practicum } \\ \text { requirement is } \\ \text { recommended to } \\ \text { be added to the }\end{array}$ |  |  |
| regulations |  |  |  |$\}$


| Commenter | Section | Comment | Agency Response |
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| Certified 2015 Northern Region VTEEA Middle School Technology and Engineering Education <br> (Town Hall) | Education. | made to the present Technology <br> Education teacher certification <br> procedure, please consider the words written by the commenter, George D. <br> Bishop, VACTE <br> Representative/Governmental Relations <br> Chair, VTEEA. He said it so very <br> well. Classroom management skills are a <br> very important part of the teaching- <br> learning process. Please re-consider what will be required for engineers to become teachers. Please, stay with what we presently do to prepare our CTE educators for the classroom. | engineering will be required to meet professional studies requirements, including classroom and behavior management. |
| Jessie White, Hampton, Virginia <br> (Agency/ Town Hall) | 8VAC20-543-220 <br> Technology Education. | I am a proponent of STEM learning for all children. I have worked with the Virginia STEM Learning Network, the STEM Innovation Network, and have brought a Governor's STEM Academy to your attention in addition to my job. <br> When I think of the collaboration that can and should occur among the many disciplines that make up our education system, I feel confident in your leadership and ability to make the right decisions. As a Technology teacher and Career and Technical Education Director in Hampton, I advocated that all children, whether first generation STEM learners, children from environmentally challenged homes, or Governor's School candidates should learn STEM and seek to improve not only their economy, but to contribute to local, regional, and the Virginia Economy. I ask that you direct the parties involved in this proposed endorsement to work together to improve the system that has been developing, improving, and providing good results for almost 30 years. <br> I have witnessed proponents of this endorsement heckle K-12 teachers in public and at conferences and conventions, saying "That is not engineering." This finger shaking is the epitome of the ills that plague public education; those who lack the research and practice attempt to shame good teachers into submission rather than collaborate. Children must learn at developmentally appropriate levels. | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses with an endorsement $n$ technology education may teach engineering courses. |


| Commenter | Section | Comment | Agency Response |
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|  |  | Engineers are created at the postsecondary level. It is up to K -12 educators to get them there. <br> Virginia has quite a number of STEM and particularly good Technology and Engineering programs. This current proposed endorsement ignores this work and the people who brought engineering to Virginia as far back as the 1980's. Dr. Cannaday, as the Superintendent in Hampton, you saw the work of Robert Johnson and others develop the Center for High Technology. Today, that is a Project Lead the Way program and a Robotics program taught by engineers who are Technology teachers. Their students have won engineering awards. <br> In close, I hope that Virginia continues with its current K-12 engineering system, based in good research and practice that works for all children, and allow improvement rather than replacement. As engineering changes in the next century, the purposes of creating a STEM literate society are the same and collaboration among its disciplines is the key. While there may be a prima facie logic to creating a new endorsement, history proves that education reform without due process or research leads to faulty logic and less student ability. Please do not allow this endorsement to continue as submitted. |  |
| Dee A. B. Weikle <br> (Town Hall) | 8VAC20-543-250 Computer Science. | Overall the changes to the computer science guidelines are positive. <br> I especially like the addition of $3 \#$. Knowledge of the ethical, moral and legal issues associated with applications in programming and computer science. Understanding the implications of our use of computers is especially important to bring to the K-12 environment where students are forming life-time habits around the use and possible misuse of computing applications of all kinds. <br> I am also pleased to see the update of item six to eliminate the dated terms of mainframe, minicomputer and microcomputer along with the removal of | The comment supports the revisions to the computer science competencies with one exception. No revisions are recommended for Item 5. |


| Commenter | Section | Comment | Agency Response |
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|  |  | 7. An ability to use basic applications, as those specific applications of interest will be changing with the times. Another improvement is the removal of the word "structured" in the specification of which languages should be learned, as there are those that are useful today that may not be considered structured. <br> I do have some concern about the addition of design into the new item number 5. I think this gives the impression that students with a bachelor's degree who are going out to teach in K-12 need to know how to design a programming language and this is a topic more appropriate to a graduate program. |  |
| Jim Batterson (Public Comment/ Agency/Town Hall) | $\begin{aligned} & \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | For a teaching license endorsement in mathematics or a science, Virginia requires high school teachers to have either a major in the subject or significant coursework in that subject. For example, to be endorsed in chemistry, one must, in part: <br> "...Complete a major in chemistry or 32 semester hours in chemistry, including inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry and other preparation consistent with the competencies required for the endorsement; or <br> Earned an endorsement in another science discipline and at least 18 credits in chemistry, including preparation in each of the following areas: inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry.' <br> However there is no similar requirement to teach engineering in VA, but, instead, a high school teacher must get a technology education endorsement. There is no endorsement for engineering in VA and, thus, there is currently no guarantee that a high school engineering teacher has either a major or significant coursework in the engineering discipline. College preparation for technology education involves knowing about a very broad range of technologies, how to use them, how to repair them, and to some | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements |


| Commenter | Section | Comment | Agency Response |
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|  |  | extent the engineering design process. It is aimed at preparing students to go directly into the workforce with a national certification or to go to a community college or apprentice program for additional formal coursework. Though using some technologies, engineering majors do not learn about the breadth of technologies that technology education majors learn, but learn more advanced mathematics, advanced science, and specific advanced engineering analysis and design coursework that technology education majors do not take. Evidence of these differences can be found in the requirement that engineering majors take an additional 12 hours of specific technology education coursework to qualify for a technology education endorsement (proposed to be raised to 15 additional hours) and in the currently proposed engineering endorsement which is the subject of this paper which provides for twelve specific hours that a science or technology education major should take to be endorsed in engineering. Simply put technology and engineering are not equivalent. Technology is a result of applying scientific knowledge and engineering knowledge and processes to solve a problem or societal need. <br> Since 2010, a team of high school engineering teachers and professional engineering subject matter experts from academe, government labs, and industry, have worked with ABTEL and the VDOE to create an appropriate set of engineering content area knowledge requirements for an engineering endorsement to address the Board of Education Goal 5 of "highly qualified and effective educators". This paper provides details on the differences and relationships between the $\mathrm{S}, \mathrm{T}$, and E of STEM, some of the differences in formal preparation of engineering and technology education college graduates, and finally a history of activities that led to the proposed engineering endorsement 8VAC20-23-330 and the proposed competencies for an approved | individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | teacher preparation program in engineering, 8VAC20-543-280 in the proposed licensure packages before you today. <br> BACKGROUND AND STEM DEFINITIONS <br> Numerous reports ${ }^{1}$ over the past decade have spoken to the link between innovation and STEM (Science, Technology, Engineering, and Mathematics) education. Science, technology, and mathematics all serve innovation but innovation itself is born of the engineering design process (the "E" of STEM) - not the scientific method. And engineering is not equivalent to technology. In short: <br> - Science discovers the principles of the natural world - the world that is; <br> - Engineering produces the human-designed world - the world we want; <br> - Technology is the result of applying scientific and engineering knowledge and processes to solve a problem <br> The Commonwealth requires significant mathematics and science coursework of all children for successful completion of and graduation from the $\mathrm{K}-12$ program. Very little is required in technology and nothing is required in engineering for graduation. A number of Virginia's schools participate in excellent extracurricular engineering activities such as FIRST Lego, Tec, and Robotics ${ }^{2}$. A relatively small number of Virginia schools participate in curriculum-based engineering programs such as Virginia Children's Engineering in K-5 and Project Lead The Way in high school. The locus for the limited K-12 |  |

[^0]| Commenter | Section | Comment | Agency Response |
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|  |  | engineering activity in Virginia since its introduction in the late 1980's has been in Career and Technical Education where these important initiatives were first taken and have been sustained. <br> The accompanying PowerPoint graphic shows the STEM "continuum" from mathematics on the left to the trades on the right. At the top of the chart, on the left, one sees that mathematics is taught as primarily theory while trades, at the other end of the spectrum, on the far right, is almost all hands-on with very little theory. In the middle of the chart, we find engineering - the " $E$ " of STEM. Engineering is an even blend of handson and theory and, while the trades focus on teaching students how to build and repair existing systems, engineering focuses on the design and fabrication new systems - innovation. These columns should not be seen as isolated "stovepipes" but rather blending one into the other universe) forward. Sheldon must develop theories about matter and the universe that are either validated or disproven via Leonard's experiments which of course are done with machines and instruments designed by Howard and built and maintained by skilled technologists and craftsmen (who we unfortunately do not see on the show). The skills represented by each of the columns are equally important. <br> Furthermore, Leonard must have trades and crafts people (technicians) to manufacture, operate, monitor, and repair when necessary, the machines that carry out his experiments. <br> A couple of specific examples to further understand the chart: <br> Engineering and the trades (the righthand three columns): Let's look at an example in which a car is brought into a garage with some unexplained problem. In the far right-hand "trades" column, a traditional automobile-repair CTE course teaches the student how to repair a car identifying a problem with an automobile |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | replacement part. This trade's graduate can identify the problem with the car, go to the parts supply room, get a replacement part, install it, and send the fixed car on its way. For the same situation, an engineering technologist (next column to the left) would be trained to do the same problem diagnosis and repair, but, also, in a case where the part was not available in the supply room, would be able to manufacture a replacement part using computer aided design and manufacturing or fabrication - often known as a "middle skill". Moving one more column to the left, the engineer may not be able to do the problem diagnosis, but once given the failed part and its location in the car system, would be able to combine her additional knowledge of science theory, perhaps in materials chemistry, and engineering analysis of the vehicle requirements to analyze why the original part failed and then innovate the design of a totally new part from an alloy or polymer or composite or different alloy that is maybe stronger, lighter, safer, cheaper, or more environmentally sound than the standard part on the shelf. <br> Science and engineering (the left-hand three columns): In a second example, consider a NASA mission objective such as the one that led to the design and incredibly successful mission of the NASA Mars Rover and Science Lab, Curiosity: is there now or was there ever life on Mars? NASA scientists must determine what needs to be measured and how well it has to be measured. Engineers must then take these requirements and design an instrument to meet them. But also they must meet requirements and constraints from project managers regarding the size, mass, energy consumption, and cost of the instrument. These constraints often lead to the engineers and scientists working closely together to find compromises in the original measurement requirements in order to meet mission constraints. The engineering designs are taken by |  |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | engineering technologists and skilled crafts and trades people, who then fabricate this novel instrument within the specifications and stringent requirements dictated by the planetary science mission and the hostile space environment. Furthermore, engineers must design and technicians must fabricate the rocket, descent vehicle, and the rover vehicle, and engineers must design the guidance trajectory from Earth to Mars, and a very complex descent through an unknown Martian atmosphere to a safe landing at a specified location on the incompletelyknown Martian surface. <br> So, as mentioned earlier, the knowledge and skills represented by any column are not better or worse or more or less important than those represented in any other column - they are just different. A synthesis of ALL of them are required to move our knowledge of the universe forward and provide technological advances to safely satisfy human needs in society. <br> TEACHER PREPARATION <br> But we have a "gap" in Virginia. Until just recently, while mathematics and science were found in the VDOE Instruction Division, the trades and engineering were found in the separate Technology, Career, and Adult Education Division. <br> Thus, in Virginia, we have had a culture of an "either-or" dichotomy of curriculum with hands-on instruction for those traditionally going directly into the workplace or to community college, removed from the more theoretical curriculum that is aimed at the collegebound. The State Superintendent has recently corrected this mid- $20^{\text {th }}$ century organizational paradigm by bringing CTE into organizational alignment with mathematics and science. However the endorsement requirement for engineering teachers, which developed in CTE over the years, continues to be that of technology education. |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | The purpose the proposed engineering endorsement, 8VAC20-23-330, is to provide for engineering teachers with an appropriate background and formal training in science, math, and engineering. <br> The close relationship with science and the importance of engineering has been recognized by several statewide and national reports including: <br> - The 2007 science \& engineering panels sponsored jointly by NASA and Virginia's Secretary of Education ${ }^{3}$ <br> - The 2011 National Research Council "Framework for K-12 Science Education" <br> - The 2011 National Academies of Engineering Report on K12 Engineering Education ${ }^{4}$ <br> - The 2012 Next Generation Science Standards <br> In 2013, on recommendation from ABTEL, the VBOE approved a change to the 8VAC20-22 teaching licensure package which did include both a recommended engineering endorsement (now 8VAC20-23-330) and a set of competencies required for K-12 teacher preparation programs in engineering (8VAC20-543-280) in Virginia. These are the subject of today's public hearing. If the endorsement does not become regulation, things will remain as they are today, with, for example, a chemical |  |

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|  |  | get a provisional teaching license to teach engineering in Virginia's high school without completing twelve (to be increased to fifteen hours in the technology education proposal also before you today) additional hours of technology education courses to satisfy requirements for a technology education endorsement. <br> There are, in general, three major degrees offered by universities in the area of technology and engineering: <br> - Technology Education ${ }^{5}$ (schools of education) <br> - Engineering Technology ${ }^{6}$ (schools of engineering) <br> - Engineer ${ }^{7}$ (schools of engineering) <br> The formal post-secondary education for the science, engineering, and technology disciplines reflects the needs of the graduate practitioners - often containing significant coursework from the neighboring discipline. Thus scientists have significant mixes of math and engineering depending on their theoretical or applied bent, while engineers must have significant math, science and hands-on engineering technology training to carry out their profession. Technology education majors, while having extraordinary hands-on experience across a very broad array of technologies, lack the indepth science and math theory as well as engineering analysis and design coursework to teach legitimate |  |

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|  |  | engineering courses....just as engineering majors often lack hands-on skills in a significant number of areas to teach high school technology education courses. <br> While not the same as coursework taken by science majors, an engineering major does have significant coursework in advanced science. All engineers must know a significant amount of physics. Chemical engineering majors generally will take a significant number of chemistry theory and lab courses. This will lead to a new paradigm for filling out the teaching schedule for high school engineering teachers as Virginia allows for adding additional endorsements via passing the Praxis 2 content knowledge exams. Thus with the addition of knowledge of Modern Physics, any engineering major would likely be prepared to pass Praxis 2 in physics; chemical engineering majors should easily qualify to teach chemistry; geo engineering majors qualify to teach earth science; and bio engineering majors to teach biology. Of course, engineering majors can also opt for the traditional process of taking 15 technology education hours and teach technology education along with engineering. <br> Just as math and science teachers are required to have degrees or a significant number of hours in their content area, so have we reached the point in high school (pre-college) engineering, wherein, engineering teachers should have a degree in engineering (or at least significant career experience in an engineering field following a mathematics, science, technology education, or engineering technology degree). <br> INDUSTRY SUPPORT AND HISTORY OF THE PROPOSED REGULATIONS <br> In 2011, a presentation was made to |  |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | ABTEL on behalf of ten technology and academic leaders ${ }^{8}$ from across the Commonwealth, requesting "that ABTEL investigate the establishment of an engineering licensure endorsement for high school teachers and recommend that such investigation substantially involve a panel of practicing engineers (subject matter experts) drawn from university engineering schools, national laboratories, and industry". In 2012 a five-person ${ }^{9}$ panel of engineers from universities, a government laboratory, and industry, in collaboration with a senior technology education coordinator from a large urban school division, developed and submitted to ABTEL a draft set of requirements for a high school engineering teacher endorsement. The requirements offered five separate options or pathways to the endorsement in an effort to accommodate as many backgrounds as possible while still assuring that students taking engineering courses have appropriately qualified engineering teachers. Thus there were pathways for science majors, engineering majors, and technology education majors with each pathway simply assuring that the prospective licensee have a proper mix of math, science, and hands-on engineering coursework or professional experience. For example, while an engineering major would qualify straightaway, technology education and science majors would be required to have completed 12 hours of specified |  |

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|  |  | engineering coursework. <br> In 2011, Senate Joint Resolution SJ308 ${ }^{10}$ was passed requesting the VDOE: <br> "....to establish shared goals for an engineering program of study, and assign a shared responsibility for this program between the existing science, mathematics, and technology disciplines...and... that K-12 engineering not be subsumed by just one curriculum domain, but only taught in conjunction with science, mathematics, and technology education by teachers with appropriate training in the engineering design process, the scientific method, science, and manufacture to specifications and constraints." |  |

[^4]| Commenter | Section | Comment | Agency Response |
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|  |  | The intent of SJ308 was NOT to limit the outcome to the "current departments of technology, math, and science", but rather (and because there was and still is not an engineering department) to force a meeting between these existing elements to see what might be the right approach for developing engineering skills for the Commonwealth's students <br> .by teachers with appropriate training....". This resolution led to the appointment of an "Engineering Education Advisory Committee" by the VDOE which met in late 2011 and was composed of 16 citizen participants from across the Commonwealth with a pretty good skill mix led and facilitated by VDOE senior staff in instruction, science, and technology education. There were three engineers including me, a number of education school personnel including two technology education faculty members from ODU's School of Education, a chemistry professor, and science museum personnel. The workshop was led and facilitated by the VDOE assistant superintendents who were responsible for science and math and for technology education. The final report draft from the VDOE to the Governor and General Assembly was not sent out to the sixteen members of the advisory committee for editorial comment and corrections. There were several misinterpretations in the report that could have been caught by such a step, but, rather, it was publicly released as SD-13 in December of 2011. The VDOE had for years been severely (even structurally) stove-piped with respect to technology education and science/math education with engineering assigned to technology education. SJ308 was an attempt by its sponsors to get the three existing departments to work together to develop an appropriate position on addressing engineering education - it was not intended to restrict the result to the existing departments. It was meant to be enabling - not restrictive. |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | teacher licensure regulations, two of Virginia's leading and largest engineering and technology professional organizations, the Virginia Manufacturers Association (VMA) and the American Council of Engineering Companies-VA (ACEC-VA), submitted a recommendation that the state create an engineering endorsement with two clear purposes in mind: <br> - Ensuring that high school engineering teachers are highly qualified in engineering content education <br> - Removing barriers to bringing engineering majors from universities into the Virginia teaching workforce <br> To this end, these industry leaders submitted a specific recommendation for the wording of such an endorsement...wording that was very close to the wording of 8VAC20-23-330 before you today. In addition to the joint ACEC-VA/VMA submittal, letters of support for the submittal were sent by several individual engineering and technology leaders from industry and academe. <br> In addition to the proposed endorsement wording, the team of five engineering and technology education professionals developed and submitted to VDOE a proposed set of competencies for a teacher preparation program in engineering. This proposal was modeled on the template already in use for a physics teacher preparation program in Virginia colleges and universities. <br> Both proposed regulations were approved by ABTEL in May of 2013 and recommended to the VBOE, which approved them on June 27, 2013. They then underwent scoring and vetting in the executive branch as the first part of Stage 2 of the VA Regulatory Town Hall Process and have come before you today after that vetting and scoring. |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | SUMMARY <br> Unlike a physics, biology, earth science, chemistry, or math major, an engineering major cannot get a provisional teachers license upon college graduation with a content area degree. The engineering major must take an additional 12 hours of technology education courses to be endorsed in technology education and begin teaching. Moreover, there is no requirement that engineering teachers in Virginia have significant formal coursework of the type taken by engineering majors, thus depriving high school engineering students of a teacher with significant engineering content knowledge. 8VAC20-23-330 was developed in collaboration of practicing engineers from academe, government labs, and industry and technology education professionals and is aimed at assuring that (1) high school engineering teachers have an adequate background in engineering knowledge and (2) removing barriers to engineering majors entering the Virginia teaching workforce. In addition, 8VAC20-543-280 defines the competencies that Virginia's colleges should meet as a guideline in creating an engineering teacher preparation program. <br> See Chart: |  |


| Commenter | Section | Comment | Agency Response |
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| Donald Williams, Professional engineer and CTE teacher, Phoebus High School Hampton <br> (Town Hall and Public Comment) | $\begin{aligned} & \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | I support the proposed 8VAC20-543280and 8VAC20-543-330. If passed, I believe these changes will improve engineering education in Virginia. The rationale for endorsing a new engineering program and licensing includes the following: <br> 1. Engineering is a separate subject. It is NOT science, math or even technology. We have a wide assortment of technology education courses for those students who are interested in the broad study of technology. Many of these serve the purpose of teaching technological literacy. Our country recognizes the importance of engineering, but it is a near fatal flaw to think a science, math or technology teacher can teach engineering. Placing engineering in the Technology Education curriculum may have seemed appropriate in the past, but it should now evolve to the distinct discipline that it really is. <br> 2. Technology Education (TE) teachers are well trained for many of the general courses in technology education. They are not trained as engineers or even possess rudimentary levels of knowledge in the physics and engineering topics involved in courses such as Project Lead the Way (PLTW). PLTW attempts to train teachers in their courses, but an 80-hour summer training is insufficient time to expect a candidate teacher to actually understand statics, dynamics, kinematics, thermodynamics, electricity/electromagnetics, electronics, fluid mechanics, etc. I have watched teachers in these summer trainings who don't know the subject matter even when the training concludes. It must be realized, but it is rarely explained, that the PLTW summer training courses ONLY require the teacher to DO the same content that the student will do in the school year. It doesn't teach anything beyond the course itself. Shouldn't the teacher have knowledge beyond the course he/she is teaching? | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. <br> Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | 3. Virginia's engineering courses are taught by any TE teacher available to teach the course, with no training in any formal or informal engineering program. Any engineer could identify these teachers when they see them teach a topic that they only know superficially. Imagine a class where a student asks a reasonable question that is "just beyond" what is covered in their high school textbook. Most TE teachers won't have a clue. Teachers don't have to know everything, but they should be competent in their subject. Engineering subject matter is still "taught" by the teacher with the aid of a textbook. We don't expect students in math and science courses to "discover" the answers to all their questions. <br> 4. The current status of TE teachers standing in the classroom teaching engineering does a disservice to both students and engineering. Students see mildly competent or incompetent adults in the role of engineering expert. Students are taught that building mousetrap cars, CO2 cars, paper airplanes, balsa bridges, etc., is engineering. Many of these "projects" are poorly conceived because students are hardly taught the connection between the science and math (i.e. no calculations) to their design. That's not engineering! We aren't preparing students well enough to pass engineering school in college. I'm not sure currently whether curriculum for high school engineering courses like PLTW are more limited by the student's or the teacher's abilities. This should never be the case! <br> 5. We could verify this lack of knowledge in those who are teaching our students engineering. Ask the teachers of engineering courses to pass an AP Physics test. Physics is the science associated with most of the applications of engineering taught in high school engineering courses. I doubt many of them would pass a combined Algebra, Geometry, Trigonometry, and Statistics |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | test. I am certain the majority of those teachers who would not meet the licensing requirements of the proposed engineering endorsement (as outlined in 8VAC20-23-330 [proposed licensure regulations]) would fail the test. Why do we let them teach a subject that they don't understand? <br> 6. The arguments made for keeping engineering in TE are simplistic: <br> a. One argument made for keeping engineering in TE is that they're already doing it. This is the logical fallacy of circular reasoning. b. Another argument is that they teach the engineering design process (practically a mantra for state TE and VTEEA representatives). That flow chart is taught in the first week. But TE teachers don't know how to do the FULL engineering design process because they can't teach the required math and science and its application. Watch an engineering class and see how little (if any) calculations are done as part of a project. We are misleading students. <br> c. We won't be able to find the teachers to teach higher performing engineering classes. But this is actually an admission that current teacher are weak or incompetent. d. TE teacher colleges can't use the word "engineering" in the title of their courses. This is because the school of engineering knows the sharp differences in what is taught in college TE courses versus what is taught in actual engineering courses. So if we recognize that TE doesn't really teach engineering in college, why do we pretend that it's sufficient for high school? <br> e. But TE courses currently teach "design". Just because you have the word design in the curriculum, doesn't make the course equal to engineering. Fashion Marketing and Art teach design. I don't think anyone confuses these courses with engineering. TE design is just primitive size and shape creativity at |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | the most. Again, it misleads students into thinking engineering can be divorced from math and science, calculations, and the depth of engineering discipline. <br> 7. The turf war is really about money. Perkins funds are designated for CTE courses. So the current TE colleges and CTE directors use the scare tactic that engineering won't get money from Perkins Act. If the Perkins funds are currently being properly spent on TE "engineering like "courses now, then can't they be used for engineering courses after these proposals are implemented? In the past, CTE has morphed from its roots in Industrial Arts and Vocational Education, absorbed ROTC, and includes the wide variety of endorsements that currently fall under CTE. Couldn't CTE accept that the engineering endorsement is required to teach any course with engineering in the title (similar to what the colleges do with courses titles)? This would be a SIMPLE SOLUTION THAT JUST REQUIRES THE WILL TO DO IT. IT IS A CLEAR CHOICE TO IMPROVE THE QUALITY OF ENGINEERING EDUCATION IN VIRGINIA. <br> Virginia will provide better education in engineering by raising the standards. Education and society call it STEM not STeM. Let's make Virginia fulfill the "E" for engineering. Let's make the discipline real. |  |
| Valdis Edward Ozols, Bath County High School <br> (Town Hall) | $\begin{aligned} & \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | As a Virginia K-12 educator for the past eight years, I am writing to express my deep concern regarding proposed changes to the Regulations Governing the Review and Approval of Education Programs in Virginia. Specifically, my concerns target the proposed 8VAC20-543-280, Engineering as a new program of study and 8VAC20-23-330, the addition of an engineering teaching license. If passed, this will affect the current high school pre-engineering programs and teachers. One significant issue in attracting CTE teachers in Virginia is the low rate of pay compared | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses |


| Commenter | Section | Comment | Agency Response |
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|  |  | to private industry. Having a separate engineering program will eliminate classes for some students. <br> Virginia led the Nation in 1988 in developing the first high school engineering courses within the subject area of Technology Education, and later incorporated nationally recognized engineering courses developed by Project Lead The Way (PLTW) that align with post-secondary engineering programs. As a result the Virginia Technology Education programs have produced students who successfully completed post-secondary 4-year Engineering programs not only through Virginia universities, but others across our nation. <br> The Technology Education curriculum is nationally recognized by the NSF, NASA, NAE, and other credible organizations as addressing the K-12 technology and engineering content and practices. My associations and their members have advocated for STEM partnerships for many decades. At the K-12 level in Virginia that partnership was specified in 2011 with the passing of Senate Joint Resolution 308, which established a shared responsibility among the existing science, technology, and mathematics subjects. <br> Rationale for NOT endorsing a new engineering program includes the following: <br> 1. As submitted to the VA DOE in 2013 the proposed revisions to the Virginia Technology Education Regulations infuses engineering in a manner that aligns with the ITEEA national Standards for Technological Literacy and the National Assessment of Educational Progress (NAEP) for Technology and Engineering Literacy. <br> 2. $\mathrm{K}-12$ engineering education nationally, and in Virginia, is focused on the engineering design process, | with an endorsement $n$ technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | as specified by the American Society of Engineering Education (ASEE), ITEEA, and the Next Generation Science Standards. <br> 3. Technology Education is an approved subject area in Virginia K12 education that teaches the engineering design process. <br> 4. Engineering courses, including Project Lead the Way, are currently taught in Technology Education. <br> I ask that the infrastructure for STEM education, inclusive of program regulations, funding, and professional development, remain directed at the existing science, technology, and mathematics education programs in Virginia. |  |
| Mike Piccione, VTEEA and ITEEA Member and Technology Educator Thomas Jefferson High School for Science and Technology <br> (Town Hall) | 8VAC20-543-280 Engineering. <br> 8VAC20-543-220 <br> Technology Education. | As a high school educator for the past 15 years, and a member of the Virginia Technology and Engineering Education Association (VTEEA) and International Technology and Engineering Educators Association, (ITEEA), I am writing to express my deep concern regarding proposed changes to the Regulations Governing the Review and Approval of Education Programs in Virginia. Specifically, my concerns target the proposed 8VAC20-543-280, Engineering as a new program of study and 8VAC20-23-330, the addition of an engineering teaching license. If passed, this will affect the current state high school preengineering programs and teachers. We are the top high school in the country according to Newsweek and this licensure change would adversely impact the teachers in our program. <br> The Technology Education curriculum is nationally recognized by the NSF, NASA, NAE, and other credible organizations as addressing the K-12 technology and engineering content and practices. My associations and their members have advocated for STEM partnerships for many decades. At the K-12 level in Virginia that partnership was specified in 2011 with the passing of Senate Joint | The endorsement in "engineering" is recommended to be established. <br> The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional |


| Commenter | Section | Comment | Agency Response |
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|  |  | Resolution 308, which established a shared responsibility among the existing science, technology, and mathematics subjects. <br> Rationale for NOT endorsing a new engineering program includes the following: <br> 1. As submitted to the VA DOE in 2013 the proposed revisions to the Virginia Technology Education Regulations already infuses engineering in a manner that aligns with the ITEEA national Standards for Technological Literacy and the National Assessment of Educational Progress (NAEP) for Technology and Engineering Literacy. <br> 2. K-12 engineering education nationally, and in Virginia, is already focused on the engineering design process, as specified by the American Society of Engineering Education (ASEE), ITEEA, and the Next Generation Science Standards. <br> 3. Technology Education is an approved subject area in Virginia K12 education that already teaches the engineering design process. <br> 4. Engineering courses, such as Engineering Design, Energy Systems, Robotics, and Prototyping are currently taught in our Technology Education department. <br> Please keep the current structure for STEM education, inclusive of program regulations, funding, and professional development. Permit the content to remain directed at the existing science, technology, and mathematics education programs in Virginia, if change needs to be made then direct more resources to the teachers that are currently teaching, not away from them. | studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |
| D.E. Shapiro, President, VA Technology \& | $\begin{aligned} & \hline \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | On behalf of the Virginia Technology and Engineering Education Association, I request that changes not be made to | The endorsement in "engineering" is recommended to |


| Commenter | Section | Comment | Agency Response |
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| Engineering Education Association <br> (Town Hall/Public Comment) |  | the Regulations Governing the Review and Approval of Education Programs in Virginia. Specifically, the proposed repealing of the current 8VAC20-542 (items 8VAC20-542-10 through 8VAC20-542-600) and replacement with 8VAC20543 , with the associated additions of items 8VAC20-543-10 through 8VAC20-543-640. I offer the following to support our request: <br> - In 1988, the Virginia was the first Commonwealth/State to add Engineering courses to the existing Technology Education Program. <br> - In 2011 the Senate Joint Resolution 308' Establishing Shared Goals for an Engineering Program of Study with Shared Responsibility Among the Science, Mathematics, and Technology Disciplines was passed which specifies a partnership between our existing science, technology, and mathematics subjects to teach Engineering. <br> - In 2011, the Virginia Technology Education Association changed their name to Virginia Technology and Engineering Education Association to reflect the Engineering Education (VTEEA) taught within our Technology Education Programs. This also mirrors the addition of engineering in our parent organization the International Technology and Engineering Educators Association. <br> - Engineering Education is already included in our Science, Technology, and Math Programs. Our schools are already teaching STEM in our K-12 courses. It is unnecessary to make further provisions for Engineering Education or Engineering Education Licensure. <br> - The VTEEA includes staff development in Engineering Education in their Summer Staff Development to assist in preparing all Technology and Engineering Education programs. Our Project Lead the Way (PLTW) instructors all | be established. <br> The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | have had in-depth instruction on teaching engineering in the required PLTW courses. <br> - The Technology Education curriculum is nationally recognized by the National Science Foundation, NASA, National Academy of Engineering, and other credible organizations that address the K-12 technology and engineering content and practices. <br> - We already have a teacher shortage throughout education. Creating another endorsement requirement will only add to the number of teachers to be hired for these positions. <br> Please support the programs that are already offered and the licensure currently in place. Do not add to already strained budgets and shortages of teachers. Our current Technology Education program in Career and Technical Education does an excellent job of preparing students for both career and college opportunities. |  |
| Greg Pearson, Senior Program Officer National Academy of Engineering (Agency) | 8VAC20-543-280 Engineering. <br> 8VAC20-543-220 <br> Technology Education. | The Board is to be applauded for recognizing the importance of engineering education at the K-12 level. The National Academies, among other groups, have been following the evolution of more integrated forms of pre-college STEM education for many years, and the role of engineering in these efforts is significant. (See, for example, the 2014 report, STEM Integration in K-12 Education, and the 2009 report, Engineering in K-12 <br> Education). Engineering, through the engineering design process, provides application opportunities for math and science that are often missing in traditional instruction in these subjects. Its focus on concrete, real-world problem solving also has the potential to increase student motivation to learn. <br> As the Board is aware, the field of technology education has had a major role in early efforts to introduce engineering to the K -12 classroom, starting with the 2000 publication of the |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | Standards for Technological Literary, which devote considerable attention to engineering. The standards have informed technology education teacher training programs as well as the development of some of the most successful engineering curriculum projects in the country, such as Engineering is Elementary (Museum of Science, Boston), the Engineering by Design program (International Technology and Engineering Educators Association [ITEEA]), and coursework offered by Project Lead the Way. <br> As the Board also knows, the recently published Next Generation Science Standards put new demands on K-12 science teachers to incorporate engineering practices alongside those for science, and the College Board is in the early stages of designing an AP Engineering course. These developments, combined with the general uptick in more integrated forms of STEM education, suggest a growing demand for teachers familiar with engineering. <br> While there is no formal consensus on the exact skills and knowledge teachers need to effectively deliver engineering in the K-12 classroom, experience to date suggests a degree in engineering is not necessary. This is not to suggest that K12 education would not benefit by having more individuals with engineering background involved in teaching. However, at the current time, the bulk of those teaching engineering coursework in K-12 have training in technology education or science. There are efforts, such as the UTeach Engineering program in Texas, that are encouraging newly minted engineering grads to go into teaching. But these initiatives are producing teachers certified to teach K12 science and math, not engineering, per se. The pathways to a teaching career in K -12 engineering are not well mapped out, as this is still an evolving landscape. <br> Whatever actions the board ultimately |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | takes on this issue, I would hope that it does not inadvertently weaken the role of the technology education community in providing engineering experiences to K 12 students in the state. |  |
| Adam Frederick, Lake Ridge Middle School <br> (Town Hall) | 8 VAC 20-543-280 Engineering. | I concur with George Bishop: "I oppose the proposal ( 8 VAC 20-23) creating an additional path for engineers to gain teacher licensure. Virginia Code (8 VAC 20-22) currently offers options for certification that are based on sound reasoning. There is no need to reinvent the wheel for engineers who are simply seeking to escape the pedagogy requirement. Research shows that content knowledge is only 20 percent of what makes a good teacher. Engineers need to understand the ramifications of decisions they might make in a secondary classroom and be especially mindful of adolescent development. <br> Simply knowing how mathematics and science are applied to the engineering process is not enough to warrant placing engineers into a classroom without formal training. I certainly do not oppose having engineers in the Career and Technical education field, nor do I oppose having engineers teaching mathematics or science if that is their desire. What I do oppose is having a separate discipline for engineers and different licensing procedures for engineers to teach, especially procedures based upon faulty reasoning which, if followed to a logical conclusion, would say that only lawyers could teach criminal justice. Additionally, research shows that the science and engineering courses at the nation's colleges and universities lose students based not on student performance or secondary school preparation, but on the quality of college education, be it poor teaching resources or lack of pedagogy. Pedagogy training is absolutely necessary to develop effective educators. <br> Additionally, the current proposal (8 VAC 20-543), designed to create an engineering discipline is unnecessary | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | and redundant. Current Virginia Code (8VAC 20-543) already incorporates the instruction of engineering coursework within the Career and Technical Education umbrella. There is no statistical evidence that Virginia public schools are not meeting the needs of colleges and universities with regard to students continuing post-secondary study in the field of engineering. In fact, there is ample evidence cited by numerous studies that there are actually too many engineers graduating from our nation's colleges and universities each year. Furthermore, according to the United States Department of Labor's Bureau of Labor Statistics, the employment prediction for 2012-2022 job growth in mechanical, aerospace, and industrial engineering fields is slower than average. <br> In the majority of comments posted I see no actual statistics provided that support the need for a stand-alone engineering discipline. The following publications should be read and digested prior to making a determination to add engineering as a discipline or making any changes to the regulations for endorsement for Virginia. This effort to change the existing Virginia Code is unnecessary, arbitrary, and redundant. Such a change will weaken the standards already in place and by which Technology Education teachers demonstrate on a daily basis the application of mathematics and science (engineering) through the use of technology. Science, Technology, Engineering and Mathematics (STEM) education is alive and well in Virginia without the proposed changes." http://www.asee.org/papers-and-publications/publications/college-profiles/2011-profile-engineeringstatistics.pdf http://www.theatlantic.com/education/arc hive/2014/03/the-myth-of-the-science-and-engineering-shortage/284359/ http://www.tbp.org/pubs/Features/Su09B rown.pdf http://www.urban.org/research/publicatio |  |


| Commenter | Section | Comment | Agency Response |
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| Brenda D. Long, Ph.D. Executive Director, VA Assoc. for Career and Tech Ed <br> (Town Hall) | 8VAC20-543-280 Engineering. | I am opposed to the proposed <br> Engineering Endorsement and the Regulations Governing the Review and Approval of Education Programs in Virginia [8 VAC $20-543]$. The proposed engineering endorsement duplicates content that has long-been covered and continues to be a part of technology education. <br> Virginia is a national leader in secondary engineering education since the Technology Education Service created the first high school engineering courses in 1988. If the goal of the proposed engineering endorsement is to get more students to enter engineering, then, by definition that is Career and Technical Education. Such a program already exists in technology education and duplication of endorsements are not needed. Engineers already have an avenue to Virginia licensure thorough technology education (reference 8VAC20-23-270 Career and Technical Education--technology education], as well as, through the Career Switcher program, or through a provisional licensure program. <br> Engineering is an integral part of Virginia's technology education program. This statewide program is improved thorough existing channels such as the curriculum revision schedule and the DACUM panels used annually by the Department of Education's Office of Career and Technical Education. To have a separate engineering endorsement and an engineering program, are clearly a duplication of services. During a time of continued budget constraints at the local school division, funding a separate engineering program is a waste of valuable resources, when engineering concepts are already in place within the technology education curriculum. Senate Resolution 308 passed in 2011 specified engineering education within Virginia is the shared responsibilities of science, technology, | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | and mathematics and not the silo approach to STEM as proposed by the separate engineering endorsement. An engineering endorsement is already in place through technology education and engineer programs and concepts are already in place through the technology education curriculum |  |
| Sidney Arthur <br> Rader, DTE <br> Retired <br> (Town Hall) | 8VAC20-543-280 <br> Engineering. | I was completely taken aback when I received notification of the fact that a proposal has been made to offer a separate engineering course within the Virginia Public Schools. For the majority of my Technology Education teaching career, I was not only involved with the courses offered within my curriculum area, but also with the promotion and support of engineering education. I developed a close relationship with the JETS Organization at the National Level and was the advisor to several teams winning the Virginia State Competition of the National Engineering Design Challenge Competitions. I was able to broker relationships between the Technology Student Association and the JETS Organization where the National Engineering Design Challenge was concerned. When the JETS <br> Organization made its decision to cease operation due to lack of support and participation, Dr. Rosanne White, executive director of the Technology Student Association, reached out to the JETS Board and was able to negotiate the transfer of many of the programs and activities of the JETS Organization to the Technology Student Association. The TEAMS Program is alive and well today because of Dr. White and her dedicated staff at the Technology Student Association. The UNITE Program as well as the Engineering Design Competition within TSA are also providing students with opportunities for exposure to STEM integration activities that prepare them for career paths in the Engineering and Technical Fields. believe that this proposed course, separate from the courses already being offered to students here in the Commonwealth, would prove to be a mistake of paramount | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement $n$ technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | proportions. There is no denying the fact that research dictates that integrated Science, Technology, Engineering \& Mathematics, STEM education, is the most logical and successful approach to preparing students for Engineering and Technical fields. A separate course is unnecessary and would prove to be a step in the wrong direction. Through the Virginia Department of Education, Career \& Technical Education classes (CTE), Technology and Engineering education courses included, students in the commonwealth have and are being appropriately prepared for College and Careers. Our technology education classes and programs here in the commonwealth have consistently been recognized as national leaders in incorporating engineering courses and content since 1988, and in some cases as me, before. In 2011, Senate resolution 308 directed the shared responsibility for engineering content across Science, Technology \& Mathematics classes and the successes of this directive are evident across the commonwealth. It is essential and should be considered mandatory that this shared responsibility be sustained as an avenue to establishing a strong future workforce. The Engineering Design Process and a "Hands On" learning environment within Technology and Engineering classrooms within the commonwealth and across the nation will continue to be the preferred and most successful approach, with the support of math and science programs. Engineering is STEM. <br> The proposed added course is redundant, unnecessary, and a misdirection and waste of resources. Working within the framework of success that already exists is the best way to promote engineering within the commonwealth and the nation. |  |
| Philip A. Reed <br> (Town Hall/ Public Comment) | $\begin{aligned} & \hline \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | I am the program coordinator for a Virginia approved, nationally accredited technology teacher preparation program at a STEM intensive research university. I initially spoke to the Board of Education | The endorsement in "engineering" is recommended to be established. The engineering |


| Commenter | Section | Comment | Agency Response |
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|  |  | (BOE) and the Advisory Board on Teacher Education and Licensure (ABTEL) in 2014 regarding key clarifications of K-12 technology and engineering education at the state and national levels. The documents I cited form the foundation for Virginia's technology education program and include: <br> - Garmire, E. \& Pearson, G. (Editors). (2006). Tech Tally: Approaches to Assessing Technological Literacy. Washington, D.C.: National Academies Press. http://www.nap.edu <br> - International Technology \& Engineering Educators Association (ITEEA). (2000, 2002, 2007). Standards for Technological Literacy: Content for the Study of Technology. Reston, VA: Author. http://www.iteea.org <br> - Katehi, L., Pearson, G., \& Feder, M. (Editors). (2009). Engineering in K-12 Education: Understanding the Status and Improving the Prospects. Washington, D.C.: National Academies Press. http://www.nap.edu <br> - National Academy of Engineering. (2010). Standards for K-12 Engineering Education? Washington, DC: National Academies Press. http://www.nap.edu <br> - Pearson, G. \& Young, A. T. (Editors). (2002). Technically Speaking: Why all Americans Need to Know more about Technology. Washington, DC: National Academies Press. http://www.nap.edu <br> Technology education program information on the Virginia Department of Education's website (http://www.doe.virginia.gov/instruction/c areer_technical/technology/index.shtml) $\qquad$ | endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses with an <br> endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
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|  |  | Center website <br> (http://cteresource.org/about/) demonstrates that the program is aligned to national trends in K-12 technology and engineering education. In fact, some states (e.g. Missouri) and professional organizations (e.g. ITEEA, CTETE, and VTEEA) use the term technology and engineering education. A separate engineering education program in Virginia is not needed because the Virginia model covers technology and engineering education... but the name has not been changed to reflect this. There are additional issues and confounding questions with the proposed engineering program in the Regulations Governing the Review and Approval of Education Programs in Virginia [8 VAC 20-542]. <br> If the goal of the proposed engineering program is to get more students to enter engineering then, by definition, that is career and technical education. Such a program already exists in technology education and engineers already have a pathway to Virginia licensure through technology education (see 8VAC20-23270. Career and technical education technology education). Engineering (especially engineering design as outlined in Standards for Technological Literacy and the Next Generation Science Standards) is an integral part of Virginia's technology education program. The technology education program in Virginia is improved through existing channels such as the curriculum revision schedule and DACUM panels used annually by the Department of Education's Office of Career and Technical Education. These processes involve engineers and other professionals. Engineers wishing to improve the technology and engineering education program in Virginia should collaborate with the VTEEA and the Department of Education's Office of Career and Technical Education rather than propose a full program duplication through back doors. If the new engineering program regulations are |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | approved, will the state start fracturing all programs by specific professions? |  |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | $\begin{aligned} & \hline \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | We support adoption of this proposal. Engineering is a critical feature of progressive P-12 STEM programs, and this proposal will help increase the number of teachers who are highly qualified in the area of engineering education. | The endorsement in "engineering" is recommended to be established. <br> The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |
| Robert Hughes, Old Dominion University Mechanical Engineering Student | $\begin{aligned} & \text { 8VAC20-543-280 } \\ & \text { Engineering. } \end{aligned}$ | I am 25 years old and currently a student at Old Dominion University. I am on track to graduate Cum Laude with a Mechanical Engineering degree with a Concentration in Aerospace Engineering in May of 2016. I am currently, as my senior project, working | The endorsement in "engineering" is recommended to be established. The engineering endorsement is another pathway |


| Commenter | Section | Comment | Agency Response |
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| (Town Hall/Public Comment) |  | with NASA to help them improve their plane design for the GS-10, also known as the "Greased Lightning." For this project I am lead of the design and modeling portion of this project. During this project we are to build a thrust stand to experimentally find the thrust and acoustic tradeoffs of different types of propellers. This is an exciting study for not only my group but for the university, as well, because this area of study hasn't had much time invested in it as of this time. <br> Today, I am writing you today to express to you that I do not support the proposed regulation. I believe it's the exact opposite route that Virginia Publics Schools should be taking in regards to the opportunities that could be given to the future technology driven generation. <br> That being said, I fully support the Senate Joint Resolution 308 passed by the 2011 Virginia General Assembly. Being a future engineer myself, I can't help but being excited for a resolution that requires science, mathematics, and technology teachers to collaboratively teach engineering. I would like to explain to you that this isn't blind support on my behalf. Now that you know where I am going, I would like you to know where I've been. I hope that this can aid you with the understanding of how important the technology department is. <br> This track I have taken, though it seems like a long one, started when I reached 9th grade. Up until this point, though I always enjoyed math and would do it in my sleep, I never really connected to any of my classes. During this 9th grade year I took a class that finally gave me that spark and it was called "Basic Technical Drawing." In this class I was taught the engineering design process and how to draft blueprints and drawings by hand. Though we all went into this class thinking it was going to be easy we were quickly shown that it was not. That being said, I had a blast. That was the class that introduced me to Autodesk's | for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate Professional License. |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | AutoCAD program and my interest immediately skyrocketed. Finally, I found something that fully grabbed a hold of me. Yet, it was only the beginning. <br> The next year, my sophomore year, is when I would be introduced to the finest teacher I have ever had the privilege to meet and subsequently be taught by in a class called "Computing Systems." This course introduced me to computer operations and programming using the "Alice" program developed by Carnegie Mellon University. In my Junior year I took "Electronics Technology" where we used engineering to design and build circuit boards by hand. This class allowed me to learn a solid electrical foundation which still helps me with projects (such as the NASA project I mentioned above). Another class I took, expanding on the basic course mentioned above, was "Engineering Drawing" where I was introduced to my favorite program, Autodesk's Inventor. Once I was shown this program I instantly was hooked. This led to me, during my Senior year, to take "Architectural Drawing" and "Advanced Drafting." The latter is where I was introduced to 3D Max, by far the most powerful modeling program I have been introduced to. Though, to be honest, Inventor still had my heart, which without it I wouldn't have the opportunity to lead the portion of the project I am right now. Also, during this time, I participated in a program called Robotics, where my school was the first to do so in not only my school but the entire area. <br> I also now watch my 12 -year-old niece learning to use engineering design in real life situations in her middle school by taking classes like "Inventions and Innovations". She is also helping out with the Robotics divisions just as I did. I get the great pleasure of now seeing her come home with that same spark that was created in my heart and listening to her passion behind these courses. |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | these aren't just simple courses for students to take. In fact, they represent eye opening and life changing experiences that can't be withheld from the coming generations. So I write this letter in hopes that you understand the importance of engineering in technology education courses. This program forever changed my life and has the ability to change countless more. The coming generations depend on it. Thank you very much for your time |  |
| Bruce Watson Director of Career and Technical Education <br> (Town Hall/ Public Comment) | 8VAc20-543-280 Engineering. | I'm speaking in opposition to the proposed regulation item 8VAc20-543-28 0 (engineering endorsement). In many of our elementary schools, students are exposed to Children's Engineering programs where they "engineer" solutions to real-world problems and design challenges given to them by their teacher. This program is not designed to make every child an engineer, but to expose them to design process, problem-solving, creating thinking, analysis, and STEM activities. As students matriculate to secondary schools, they have an opportunity to expand on the engineering principles they have learned in elementary school as they participate in middle school technology education courses that we refer to as "pre-engineering" in nature. As students move to high school, their course choices greatly increase in the core subjects as well as in CTE courses. Certainly, one valid way to look at the purpose of secondary education focuses on two major points: <br> To expose students to as many different experiences as possible, including co-curricular or extra-curricular learning, and To help students find their passion for learning and possible post-secondary and career choices. <br> It is not responsibility of secondary education to ensure that students graduate with a marketable skill. To that point, secondary engineering teachers are not expected or required to create professional engineers, but to foster a student's interest in engineering through | The endorsement in "engineering" is recommended to be established. <br> The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. <br> Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. <br> The endorsement does require, among other requirements, at least a bachelor's degree from a regionally accredited college or university. Professional studies and assessments also are requirements individuals must meet to become eligible for a Collegiate Professional or a Postgraduate |


| Commenter | Section | Comment | Agency Response |
| :---: | :---: | :---: | :---: |
|  |  | the secondary courses, some of which may be dual-credit, and to guide each student to appropriate post-secondary education opportunities offered at our 2 and 4 year universities. According to Dr. James Lane, Superintendent of Goochland Schools: "Goochland County Public Schools are currently offering at least two engineering courses taught by current Career and Technical Education teachers; at least one of them is a dual enrollment course being offered through James Madison University. The purpose of these classes is to help expose students to engineering, while at the same time providing the necessary prerequisite engineering courses. The Commonwealth of Virginia, by offering an engineering teaching endorsement, could potentially create a problem in that most Engineering teachers also teach other courses. Whereas we have an excellent Engineering program now, we could not sustain a full time teacher without having them teach other courses. We would be comfortable if the Tech. Ed. endorsement could also continue to teach engineering." <br> To place additional requirements on school divisions, particularly small school divisions would create monetary and logistical challenges that would be difficult or impossible to overcome and ultimately may bring the demise of some engineering courses. <br> In summary, I reiterate that we do not need another engineering program, but rather, consideration of increased funding for further staff development for our Technology Education teachers and for renovation and updating of our engineering labs to reflect $21^{\text {st }}$ century technologies. | Professional License. |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-300 <br> English as a second language preK-12. | Revise as follows: <br> 8VAC20-543-300. English as a second language preK-12. <br> The program in English as a second language shall ensure that the candidate has demonstrated the following competencies: | Edits are incorporated into the proposed regulations. |


| Commenter | Section | Comment | Agency Response |
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|  |  | 1. Skills in methods of teaching English as a second language to include instruction based on the understanding of the WorldClass Instructional and Design and Assessment (WIDA) English Language Development (ELD) Standards; <br> 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(B) test; Designing and administering formative or classroombased assessments and interpreting results of both formative and summative assessments, including the WIDA ACCESS test. Using the results of a variety of formative assessments, including performancebased assessments of oral language and writing, to direct instruction. Ensuring that formative assessments reflect high validity and reliability for the purposes for which they are used and are appropriate for the targeted students. Teaching testtaking skills in preparation for standardized tests. <br> 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; |  |


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|  |  | 3. Skills in the teaching of reading and writing to include phonemic awareness, pre-reading, during-reading, and postreading strategies, vocabulary development, and reading comprehension of a variety of genres or text structures, guided reading, organization of writing using predominant text structures in the content areas, and editing skills in writing. Ability to structure interactive tasks that engage students in using oral language to develop reading skills. Ability to determine students' reading levels and design instruction for multi-level classrooms by incorporating appropriate scaffolding or language supports. <br> 4. Knowledge of the effects of sociocultural variables in the instructional setting; <br> 5. Proficiency in spoken and written English; <br> 6. Understanding of second tanguago acquisition; Skills in providing language and cognitive supports or scaffolding based on the various states of the second language acquisition process. <br> 7. Knowledge of another language and its structure; <br> 8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; Replace with Skills in teaching grammar and syntax in the context of reading or writing and ability to model and teach editing |  |


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|  |  | skills.] <br> 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 <br> 10. Knowledge of both general linguistics and English linguistics. |  |
| James Wicks, Liberty University <br> (Town Hall) | VAC20-543-320 <br> Gifted education (add-on endorsement). | The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with gifted students. | A practicum is listed as a requirement for the endorsement. |
| Patty Griffin, Co-Chair Virginia Advisory Committee for the Education of the Gifted <br> (Town Hall) | 8VAC20-543-320 <br> Gifted education (add-on endorsement). | The competencies (8VAC20-543-320. Gifted education competencies) as outlined below are found to be suitable for ensuring that the coursework completed to earn an add-on endorsement in gifted education are comprehensive, cohesive and reflective of the current gifted education field. <br> Mastery of these competencies establishes a foundation for educators to have the necessary knowledge and skills to meet the needs of gifted learners throughout Virginia. <br> 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: <br> 1. Understanding of principles of the integration of gifted education and general education, including: Strategies to facilitate the interaction of gifted students with students of similar and differing intellectual and academic abilities; | The comment supports the proposed revisions, and the recommended proposed text (Item 6 in the comments in bold font) is incorporated into the regulations. |


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|  |  | Development of activities to encourage parental and community involvement in the education of the gifted; Strategies to encourage collaboration among professional colleagues, especially in the areas of curriculum and professional development; and Strategies to collaborate and consult with general education teachers and other resource specialists on behalf of gifted students. <br> 2. Understanding of the characteristics of gifted students, including: <br> Varied expressions of advanced aptitudes, skills, creativity, and conceptual understandings; Varied expressions of the affective (social-emotional) needs of gifted students; and 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 twiceexceptional students). <br> 3. Understanding of specific techniques to identify gifted students using diagnostic and prescriptive approaches to assessment, including: The selection, use, and interpretation of multiple standardized, norm-referenced aptitude and achievement assessment instruments; The selection, use, and evaluation of multiple identification criteria and strategies; <br> The use of both formal and informal nonbiased measures to provide relevant information regarding the aptitude and ability or achievement of potentially |  |


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|  |  | gifted students; The use of authentic assessment tools such as portfolios to determine performance, motivation, interest, and other characteristics of potentially gifted students; The use and interpretation of reliable rating scales, checklists, and questionnaires by parents, teachers, and others; The evaluation of data collected from student records such as grades, honors, and awards; The use of case study reports providing information regarding exceptional conditions; and The roles and responsibilities of the identification and placement committee. <br> 4. Understanding and application of a variety of curricular and instructional models, methodologies, and strategies that ensure: <br> 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; 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; The development of learning environments that guide students to become selfdirected, reflective, independent learners; <br> The acquisition of tools to enable students to contribute to a multicultural, diverse society, including preparation for college and careers; and |  |


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|  |  | The development of learning environments that recognize and support the affective needs of the gifted students. <br> 5. Understanding and application of theories and principles of appropriately differentiating curriculum specifically designed to accommodate the accelerated learning aptitudes of gifted students, including: 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; Opportunities for students to explore, develop, and research their areas of interest, talent, or strength using varied modes of expression; <br> Emphasis on advanced and complex content that is paced and sequenced to respond to gifted students' persistent intellectual, artistic, or technical curiosity; exceptional problemsolving abilities; rapid acquisition and mastery of information; conceptual thinking processes; and imaginative expression across a broad range of disciplines; <br> Evaluation of student academic growth and learner outcomes through appropriate multiple criteria, including a variety of pre-assessments and postassessments; and Use of current and advanced technologies to enhance student performance and academic growth. <br> 6. (NEW) Understanding the |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | fundamental principles of differentiated curricula for effective program planning and evaluation, including: Program design and development for gifted learners; <br> Research and topics for affective administrative arrangements, supervision, and program implementation; Activities to encourage parental and community involvement in gifted education; and Strategies for building an effective advisory committee. <br> 7. Understanding of contemporary issues and research in gifted education, including: The systematic gathering, analyzing, and reporting of formative and summative data from local, state, and national perspectives; and Current local, state, and national policies, trends, and issues. <br> 8. Understanding of and proficiency in grammar, usage, and mechanics and their integration in all forms of communication. <br> 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. <br> 10. The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with gifted students. <br> It is our pleasure to have the opportunity to weigh in on such an important topic that will continue to move gifted education forward in the State of |  |


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|  |  | Virginia. Without a doubt this collaborative work will allow gifted education in Virginia to be recognized nationally for meeting the needs of our gifted children. |  |
| Kristi S. Fowler <br> (Town Hall) | 8VAC20-543-340 History and social sciences. | I hope a methods course will be added to the requirements for history and social sciences. | Professional studies require curriculum and instructional procedures/ methods. |
| Barbara Alice Reisner, Professor of Chemistry James Madison University <br> These are my personal views, not necessarily those of my employer <br> (Town Hall) | 8VAC20-543-430 <br> Science chemistry. | Ideally, every chemistry teacher should have a B.S. in chemistry and education training, but I also think it's reasonable to have a B.S. in another science discipline and strong coursework in chemistry. The state has a pathway for this -- an endorsement in another science area and at least 18 semester hours in chemistry. This sounds like an excellent way to produce more certified science teachers until I go through the requirements. A student pursuing this path needs at least once course in each of the following areas: inorganic chemistry, organic chemistry, physical chemistry, biochemistry and analytical chemistry. All of these courses require general chemistry as prerequisite. To complete this coursework at JMU, a student would need to complete a minimum of 24 credits in chemistry. <br> - General Chemistry I \& Lab (CHEM 131 \& 131L) $=4$ credits <br> - General Chemistry II \& Lab (CHEM 132 \& 132L) $=4$ credits (This course requires General Chemistry I.) <br> - Organic Chemistry I (CHEM 241) $=3$ credits (This course requires General Chemistry II.) <br> - Inorganic Chemistry I (CHEM 270) $=3$ credits (This course requires General Chemistry II.) <br> - Analytical Chemistry (CHEM 351 - includes a lab) $=4$ credits (This course requires General Chemistry II.) <br> - Biochemistry I (CHEM 361) $=3$ credits (This course requires General Chemistry II and Organic Chemistry I.) | The ACS guidelines were reviewed and found to be congruent with the expectations contained in the proposed chemistry endorsement requirements. <br> Foundation course work provides breadth and lays the groundwork for the in-depth course work. <br> Approved program graduates must have completed competencies in each of the five traditional subdisciplines of chemistry: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, and physical chemistry. Typically, general chemistry courses are survey courses that do not provide the depth of instruction in a specific area of |


| Commenter | Section | Comment | Agency Response |
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|  |  | - Physical Chemistry I (CHEM 331) $=3$ credits (This course requires General Chemistry II. At JMU, this course also requires one semester of physics and two semesters of calculus.) <br> We also require that students take a class in lab safety which is 1 credit. A lab safety course is recommended by the American Chemical Society (ACS) but is not specifically mentioned in the VA requirements. While I think that this is commendable and ideal, I don't think that it is necessary for candidates seeking the chemistry endorsement if they have a $B S$ in another science discipline. <br> I think that there might be a mismatch between how the state defines the five required courses and how the American Chemical Society defines these courses. The current ACS guidelines for the undergraduate degree <br> (http://www.acs.org/content/dam/acsorg/ about/governance/committees/training/2 <br> 015-acs-guidelines-for-bachelors-degree-programs.pdf) describe the first course in analytical, biochemistry, inorganic, organic and physical as foundation course work. Foundation coursework is to be preceded by introductory or general chemistry. The ACS describes the introductory or general chemistry course(s) as an introduction to "basic chemical concepts such as stoichiometry, states of matter, atomic structure, molecular structure and bonding, thermodynamics, equilibria, and kinetics." (This would be the content of the AP course.) Foundation coursework uses specialized books or materials, not a general chemistry text. <br> My concern is that the state does not account for general chemistry in the development of the endorsement guidelines. Historically, general chemistry has been called inorganic chemistry; this has been incorrect since about World War II. Introductory analytical chemistry, physical chemistry, and inorganic chemistry are covered in | chemistry |


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|  |  | the general chemistry course. Depending on the institution, applications of organic chemistry and biochemistry might also be covered in the general chemistry course. A chemistry teacher needs more than two semesters of general chemistry, but I would argue that they don't need all 5 of these additional courses. <br> An eighteen credit hour requirement would require that a student take lecture and lab in 2-3 of these areas. I also think that chemical safety should be included in the requirements. <br> I think a better approach would be to use language similar to what is in the licensure regulations for physics. For their 18 credit hours, students should have preparation in specific subject areas rather than having specific courses. <br> I believe that the Virginia Licensure Regulations need to be updated in light of how professional chemists define chemistry and revised to reflect the modern chemistry curriculum. |  |
| Lisa McGee Policy and Planning Director, Dept. of Conservation and Recreation (Agency/Board) | $\begin{aligned} & \hline \text { 8VAC20-543- } \\ & 120,420,430,440, \\ & 450 \\ & \text { (Science } \\ & \text { endorsements) } \end{aligned}$ | DCR believes strongly in supporting nonformal education practitioners and preparing teachers for using the outdoors as an integrating context for education. We believe that a robust certification program for environmental educators should be paired with a formal endorsement in environmental education for classroom teachers. While the pathway forward for establishing an endorsement in environmental education for teachers continues to be complex, we are pleased to see the new language in the regulations calling for science, biology, chemistry, and physics teacher preparation programs to, "conduct systematic field investigations using the school grounds, the community, and regional resources. <br> DCR supports teacher in the access and use of the Virginia State Parks and National Area Preserve network for student instruction and inquiry. We are pleased to see this new language to | An endorsement in environmental education is not proposed. <br> Environmental studies are included in the sciences. |


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|  |  | better develop and prepare Virginia teachers for conducting field investigations and are eager to work with future cohorts of teachers and their students to explore and learn about Virginia's natural and cultural treasures! |  |
| G. Richard Whittecar, Geology Professor Old Dominion University <br> (Town Hall) | 8VAC20-543-440 <br> Science <br> Earth Science | A faculty member for the past 35 years, I now teach a variety of geology courses for our undergraduate program geomorphology, structural geology, hydrogeology, Quaternary geology, and research methods. Also, as the CoDirector of the MonarchTeach program, I am the lead faculty member from the College of Sciences working with the College of Education to increase the number of STEM majors who are equipped to teach science or math in secondary schools. I write as a concerned individual, and do not presume to speak for the University. <br> I applaud the tone of the new regulations which stress the rigor of understanding that our students must have in their content area. In the Earth Science recommendations for secondary schools (8VAC20-543-440. Science - Earth science) I support almost all of the changes proposed; these changes help future teachers have the background needed to address the Essential Understandings and Essential Skills presently listed on the Virginia Department of Education website. I am thus presuming that future lists of Essential Understandings and Essential Skills will be very similar. However, the new regulations left a course off of the list of prescribed courses that is absolutely essential for teachers - geomorphology. The list also contains a course that is only marginally useful to teachers - structural geology. If we add a single course to the list, it should be geomorphology, NOT structural geology. <br> Our students need specific background in order to teach the topics in the Standards of Learning ES 7. and ES.8. and they will only get a small part of that information in a structural geology | The comments support most of the revisions. The competencies were not revised to specifically add "geomorphology." |


| Commenter | Section | Comment | Agency Response |
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|  |  | course. Essential Understandings built upon ES. 7 include information about folded and thrust-faulted mountains, subduction zone volcanoes and trenches, mid-ocean ridges, rift valleys, fissure volcanoes, flood lavas, strike-slip faults, earthquake activity, magma, hot spots, faults, and the rock cycle. A structural geology course would cover many of these topics, a few of them in great detail. However, the topics covered by SOLs in ES.8. are soil, weathering, karst topography, carbonate rocks, caves, sinkholes, limestone solution acidic groundwater, permeability, waste disposal, pollution, regional watershed systems in Virginia, and the state's major physiographic features - Chesapeake Bay, Appalachian Plateau, Valley and Ridge, Blue Ridge, Piedmont, and Coastal Plain. These are not topics covered in structural geology. However, ALL of the SOLs listed in both ES.7. and ES.8. ARE covered routinely in geomorphology courses. In order to understand the processes that form landscapes, the rocks, sediments, water and soils that are present directly beneath our feet and surround us, and how they are components of the global systems that control them, teachers must understand geomorphic processes and systems. <br> Geomorphology should be on the required coursework list as much or more than any other course. <br> An easy fix might be to include both geomorphology and structural geology to the prescribed coursework list, but this change would add an unnecessary burden to the Earth Science curriculum. The typical Earth Science program already is difficult to complete in four years. Multidisciplinary fields such as geology are built from an understanding of many related sciences (chemistry, biology, physics, calculus), and so Earth Science students must take two semesters of all of these courses, as well as statistics. They take more introductory science and math courses than students in other science fields. In |  |


| Commenter | Section | Comment | Agency Response |
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|  |  | addition, they must take courses in meteorology, astronomy, and oceanography. If we add more specific courses to the Earth Science curriculum, we should add only what is truly necessary, and structural geology is not necessary. |  |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-460. <br> Special education adapted curriculum K-12. | Suggested Revision <br> 8VAC20-543-460. Special education adapted curriculum K-12. <br> 3b. Address diverse approaches and classroom organization based upon culturally responsive behavioral, cognitive, affective, social, and ecological theory and practice;... | The suggested edit was added to the proposed regulations. |
| Radford University Professional Education Committee: SPED faculty (Town Hall) | 8VAC20-543-460. <br> Special education adapted curriculum K-12. | We appreciate the changes under 34 Collaboration <br> The opening paragraph states, "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..." Please note, there is only one area of endorsement under Special Education Adapted Curriculum K-12 so this language is incorrect. <br> 8VAC20-543-460, A. 3 <br> 3. Management of instruction and behavior. We suggest the wording for " 3 2c. An understanding and application of classroom and behavior management techniques and individual interventions, including techniques that..." be changed to an understanding and application of the three tiers of behavioral interventions and support and management: Schoolwide, classroom and individual, including techniques that: ... <br> 8VAC20-543-460, B.3.b <br> 3. Instructional methods and strategies for the adapted curriculum. We suggest the wording for, "(2) Foundational knowledge...Additional skills shall include proficiency in a wide variety of | The language in the opening paragraph has been proposed to be stricken. The special education adapted curriculum k-12 endorsements is a stand-alone endorsement. <br> No additional revisions were proposed in the sections listed. |


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|  |  | 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." be changed to Foundational knowledge...Additional skills shall include evidence-based emergent and early literacy strategies for students with complex disabilities including students using gestural, alternative or augmentative communication. <br> 8VAC20-543-460, B.3.d <br> "Alternative ways to teach content material including curriculum adaptation and curriculum modifications," we suggest the addition of universal design for learning and assistive technology after "modifications." <br> 8VAC20-543-460, B.3.f <br> "Strategies to promote successful integration of students with disabilities with their nondisabled peers;" we suggest a change to Strategies to initiate and support successful inclusion of students with disabilities with their nondisabled peers in their schools and communities." <br> 8VAC20-543-460, B.3.g <br> "Use of technology to promote student learning" we suggest a change to Use of instructional and assistive technologies to promote student learning and independence |  |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-470 <br> Special education blindness and visual impairments preK-12. | General support for the regulation for SPED Blindness/VI PreK-12. <br> Suggested Revision <br> 8VAC20-543-470. Special education blindness and visual impairments preK-12. <br> 9. Professionalism. <br> 9a. Understanding of the standards of professionalism, including ethical and professional practice. <br> 9b11. Understanding of and proficiency <br> in grammar, usage, and mechanics and | Understanding of the standards of professionalism, including ethical and professional practice, is a proposed competency for the endorsement. |


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|  |  | their integration in writing. <br> 9c12. 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. |  |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-490. <br> Special education early childhood (birth through age five). | 8VAC20-543-490. Special education early childhood (birth through age five). <br> 1. Understanding of the nature and characteristics trends and issues regarding major disabling and at-risk conditions, including: <br> 1a. Pathways for service delivery to the birth-through-age-five population; <br> 1d. Awareness of the issues surrounding cultural and linguistic diversity. <br> 4c. Curriculum development and implementation to ensure developmentally appropriate intervention techniques in the areas of self-help, motor, cognitive, social and emotional, and language; and <br> 4d. Service delivery to support success and functionality in all settings where same age, typically developing peers would be located; and <br> 4e. Response and recognition and tiered instruction. <br> 5. Understanding social and emotional development and guiding behaviors 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. | Most of the suggested edits were made to the competencies based on the recommendations. (Refer to the Board of Education item for specific revisions.) |


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|  |  | 6. Understanding of speech and <br> language development and intervention <br> methods, considering the following <br> factors: |  |
|  |  | 6a. Developmental stages of language <br> acquisition and communication; |  |
|  |  | 6d. Use of language to get needs and <br> wants met and use of functional <br> communication for social interaction. |  |
|  |  | 7b. Use and effects of medications and |  |
| treatments. |  |  |  |$\quad$| 8c. Inclusive practices; natural and least |
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| restrictive environments; |$\quad$.


| Commenter | Section | Comment | Agency Response |
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|  |  | Clarify "endorsement area." Does this mean specialization area as earlier defined - 8VAC20-543-80? <br> Competencies and requirements for endorsement areas? -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. <br> Suggested Revision: <br> 8VAC20-543-500. Special education general curriculum K-12. <br> 3b. Address diverse approaches to classroom organization and set-up based upon_culturally responsive behavioral, cognitive, affective, social, and ecological theory and practice; |  |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-500 <br> Special education general curriculum K-12. | General support for the regulation, but the program (SPED general curriculum $\mathrm{K}-12$ ) will need to address the added emphasis in licensure courses for: math instruction, writing instruction, IEPs, assistive and instructional technology, and reading | This comment provides general support for the endorsement. The comments reference the licensure requirements. |
| Radford University Professional Education Committee: SPED faculty <br> (Town Hall) | 8VAC20-543-460. <br> Special education adapted curriculum K-12. | We appreciate the changes under 34 Collaboration <br> The opening paragraph states, "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..." Please note, there is only one area of endorsement under Special Education Adapted Curriculum K-12 so this language is incorrect. <br> 8VAC20-543-460, A. 3 <br> 3. Management of instruction and behavior. We suggest the wording for "3 2c. An understanding and application of classroom and behavior management techniques and individual interventions, | The language in the opening paragraph has been proposed to be stricken. The special education adapted curriculum k-12 endorsements is a stand-alone endorsement. <br> No additional revisions were proposed in the sections listed. |


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|  |  | including techniques that..." be changed to an understanding and application of the three tiers of behavioral interventions and support and management: Schoolwide, classroom and individual, including techniques that: ... <br> 8VAC20-543-460, B.3.b <br> 4. Instructional methods and strategies for the adapted curriculum. We suggest the wording for, "(2) Foundational knowledge...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." be changed to Foundational knowledge...Additional skills shall include evidence-based emergent and early literacy strategies for students with complex disabilities including students using gestural, alternative or augmentative communication. <br> 8VAC20-543-460, B.3.d <br> "Alternative ways to teach content material including curriculum adaptation and curriculum modifications," we suggest the addition of universal design for learning and assistive technology after "modifications." <br> 8VAC20-543-460, B.3.f <br> "Strategies to promote successful integration of students with disabilities with their nondisabled peers;" we suggest a change to Strategies to initiate and support successful inclusion of students with disabilities with their nondisabled peers in their schools and communities." <br> 8VAC20-543-460, B.3.g <br> "Use of technology to promote student learning" we suggest a change to Use of instructional and assistive technologies to promote student learning and independence |  |
| Dr Karrin Lukacs, Shenandoah | 8VAC20-543-500. <br> Special education - general | Asking students seeking a special education/general curriculum endorsement to have a | 8VAC20 543-80. Item F, referencing a |


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| University <br> (Town Hall) | curriculum K-12 | content area specialization will likely prevent these teachers -- many of whom do not have undergraduate degrees in English, history, mathematics, or science -- from entering a field that is most certainly understaffed. <br> In sum, and with all due respect, I would remind the Board to consider whether ALL of the Proposed Revisions are in the best interests of Virginia students. If there is not agreement among all parties involved as to whether or not these changes will result in quality teachers (and it seems that there might not be consensus on many of the issues), then I would urge -- for students' sake -- that they not be adopted. As a teacher educator, I see first-hand how current regulations often prevent prospective teachers from entering the field, so I fear that making it even more difficult for teacher education programs to admit students will negatively affect classrooms and communities across the state -- especially in areas that face multiple challenges. | requirement of a specialization for a special educationgeneral curriculum endorsement has been proposed to be stricken. |
| James Wicks, <br> Liberty University <br> (Town Hall) | 8VAC20-543-510. <br> Special education <br> - general <br> curriculum <br> K-6 (add-on endorsement). | Special education add-ons should require practicum with special education students. Compare to 45 hours required for add-ons for early childhood and for gifted: 8VAC20-23-140. Early childhood for three-year-olds and four-year-olds (add-on endorsement). 3. Completed a supervised practicum of at least 45 instructional hours in a preschool setting (i.e., three-year-olds and four-year-olds | A practicum requirement is recommended to be added to the regulations. |
| Tracey Pritchard, Liberty University (Town Hall) | 8VAC20-543-510. <br> Special education <br> - general <br> curriculum <br> K-6 (add-on endorsement). | A practicum should be required, with special education students at the 6-12 grade levels, for the special education add-on. | A practicum requirement is recommended to be added to the regulations. |
| Mark Ginsberg, Ellen Rodgers; George Mason University <br> (Agency/Town Hall) | 8VAC20-543-530 <br> 8VAC20-543-530 <br> Special education <br> - general <br> curriculum 6-12 <br> (add-on <br> endorsement). | Support for this proposal. Strong concern regarding the lack of a specified field experience or practicum component. | A practicum requirement is recommended to be added to the regulations. |
| Tracey Pritchard, Liberty | 8VAC20-543-530 <br> Special education - general | Practicum should be required, with special education students at the endorsement grade level (K-6, 6-8, 6- | A practicum requirement is recommended to |


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| University <br> (Town Hall) | curriculum 6-12 (add-on) endorsement). | 12), for a special education add-on endorsement | be added to the regulations. |
| James Wicks, <br> Liberty <br> University <br> (Town Hall) | 8VAC20-543-530 <br> Special education <br> - general curriculum grades 6-12 (add-on endorsement). | Special education add-ons should require practicum with special education students. Compare to 45 hours required for add-ons for early childhood and for gifted: 8VAC20-23-140. Early childhood for three-year-olds and four-year-olds (add-on endorsement). 3. Completed a supervised practicum of at least 45 instructional hours in a preschool setting (i.e., three-year-olds and four-year-olds | A practicum requirement is recommended to be added to the regulations. |
| Beth Ackerman, VACTE President <br> (Town Hall) | 8VAC20-543-530. <br> Special education <br> - general <br> curriculum grades <br> 6-12 (add-on) | Please consider adding a practicum experience to the add-on endorsements. | A practicum requirement is recommended to be added to the regulations. |
| James Wicks, <br> Liberty <br> University <br> (Town Hall) | 8VAC20-543-530. <br> Special education <br> - general <br> curriculum grades <br> 6-12 (add-on) | Special education add-ons should require practicum with special education students. Compare to 45 hours required for add-ons for early childhood and for gifted: 8VAC20-23-140. Early childhood for three-year-olds and four-year-olds (add-on endorsement). 3. Completed a supervised practicum of at least 45 instructional hours in a preschool setting (i.e., three-year-olds and four-year-olds | A practicum requirement is recommended to be added to the regulations. |
| Tracey Pritchard, Liberty University <br> (Town Hall) | 8VAC20-543-530. <br> Special education <br> - general <br> curriculum grades <br> 6-12 (add-on) | A practicum with special education students at the 6-8 grade levels should be required for a special education addon. | A practicum requirement is recommended to be added to the regulations. |
| Karen Parker, <br> Liberty University <br> (Town Hall) | 8VAC20-543510/520/530. <br> (special education endorsements) | Special education add-ons should require practicum with special education students. Compare to 45 hours required for add-ons for early childhood and for gifted: 8VAC20-23-140. Early childhood for three-year-olds and four-year-olds (add-on endorsement). 3. Completed a supervised practicum of at least 45 instructional hours in a preschool setting (i.e., three-year-olds and four-year-olds <br> 8VAC20-543-320. Gifted education (addon endorsement). 9. The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with gifted students. | A practicum requirement is recommended to be added to the regulations. |
| Beth Ackerman, VACTE | $\begin{aligned} & \text { 8VAC20-543-510, } \\ & 520,530 \end{aligned}$ | Please consider adding a practicum experience to the add-on endorsements | A practicum requirement is |


| Commenter | Section | Comment | Agency Response |
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| President <br> (Town Hall) | (special education endorsements) | (ECE). | recommended to be added to the regulations. |
| Heather Schoffstall, Liberty University <br> (Town Hall) | $\begin{aligned} & \text { 8VAC20-543-510, } \\ & 520,530 \\ & \text { (special education } \\ & \text { endorsements) } \end{aligned}$ | I think all special education add-ons should require practicum with special education students. Please compare to the 45 hours required for add-ons for early childhood (8VAC20-23-140) and for gifted (8VAC20-23-370). | A practicum requirement is recommended to be added to the regulations. |
| James Madison University - Phil Wishon, Maggie Kyger and Steve Purcell <br> (Town Hall) | 8VAC20-543-580, <br> 590. Mathematics specialist for elementary education. Mathe matics specialist for middle education | We support maintaining the current K-8 mathematics specialist license for two reasons. First, elementary teachers should have a detailed understanding of middle school mathematics and vice versa, providing a perspective on the learning trajectories students across multiple grade bands. Second, we would struggle to recruit enough candidates for a cohort in either grade band if the licensure were to be differentiated. | The recommendation is to establish (1) a mathematics specialist for elementary education endorsement and (2) a mathematics specialist for elementary and middle education endorsement. |
| Emerson- <br> Stonnell, Lewis, Shilling-Traina, Smith, and Timmerman Program Coordinators and professors for Longwood <br> (Town Hall) | 8VAC20-543-590 <br> 8VAC20-543-580 <br> Mathematics specialist for elementary education. Mathe matics specialist for middle education | We support the decision to separate the elementary and middle school mathematics specialist endorsements. This change recognizes the need for program coursework that is more tailored to the content and pedagogy necessary for mathematics specialists to meet the needs of elementary and middle school students and teachers. <br> However, the program requirements as written are not different for the elementary and middle school specialist programs with the exception of the technologies mentioned in B.7. While we believe there should be some overlap in the program requirements of these two programs we do not think they represent distinctively different programs as currently written. For example, the elementary school specialist would benefit from a curriculum that included more focus on lower elementary (Prek-1) foundational knowledge while middle school specialists would benefit from curriculum that extends into high school concepts taught in many middle schools. As currently written, the prerequirement of secondary licensure and the technologies mentioned are the only | The recommendation is to establish (1) a mathematics specialist for elementary education endorsement and (2) a mathematics specialist for elementary and middle education endorsement. |


| Commenter | Section | Comment | Agency Response |
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|  |  | differences in the requirements for these two programs. <br> We feel teachers and students would benefit from program mathematics requirements that differ for the programs and include these differences in B2. As written, a person with an initial secondary mathematics licensure could obtain both certifications with the same course work while a person without that initial license would complete the same course work but earn a different license. This is very atypical as usually the purpose of having different programs is that the coursework in those programs is also different. <br> Additionally, we also feel the language in part $B$ of both the elementary and middle mathematics specialists requirements currently reads as if the program consists of a three-year period where the specialists are teaching and they are demonstrating competencies through this teaching. This language is similar to the previous language for the elementary mathematics specialist but needs revising. <br> Current version: "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:" <br> We recommend: "The mathematics specialist program shall ensure the candidate has completed at least three years of successful classroom teaching experience in which the teaching of mathematics was an important responsibility and ensures the candidate has demonstrated the following competencies:" <br> We appreciate the opportunity to comment and the Virginia Board of Education's consideration of our |  |


| Commenter | Section | Comment | Agency <br> Response |
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| Robert N. Corley <br> III, Virginia State <br> University | 8VAC20-543-610 <br> School counselor <br> preK-12. | The program shall include at least 100 <br> clock hours of internship and practicum <br> experience in the preK-6 setting and 100 <br> clock hours of internship and practicum <br> experience in the grades 7-12 setting. | Clarification of the <br> experience <br> requirement has <br> been added to the <br> regulations. |
| (Town Hall) |  | Clarification is needed regarding <br> teaching experience, etc., requirements <br> for this endorsement area. |  |
|  | There is a discrepancy between <br> proposed licensure and approved <br> program regulations regarding teaching <br> experience, etc., requirements. In both <br> options, the proposed licensure <br> regulations include requirements for <br> clock hours and a teaching experience, <br> etc. However, the proposed approved <br> program regulations only require the <br> clock hours. |  |  |

All changes made in this regulatory action

Please list all changes that are being proposed and the consequences of the proposed changes. Describe new provisions and/or all changes to existing sections. Explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation

| Current section <br> number | Proposed new <br> section number, <br> if applicable | Current <br> requirement <br> 8VAC20-542-10. <br> Definitions. <br> 8VAC20-543-10. <br> Definitions. <br> Provides <br> definitions of <br> technical terms <br> that are used in <br> the regulations. <br> Revises the following definitions: <br> accredited program; field experiences; <br> professional studies; and program <br> noncompleters. <br> The changes will revise the definitions <br> section of these regulations to align <br> with proposed revisions throughout the <br> Regulations Governing the Review and <br> Approval of Education Programs in <br> Virginia. |  |
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| 8VAC20-542-30. <br> Options for <br> accreditation or a <br> process approved <br> by the board of <br> education. | 8VAC20-543-20. <br> Accreditation and <br> administering this <br> chapter | Professional <br> education <br> programs in <br> Virginia shall <br> obtain and <br> maintain <br> national <br> accreditation | Required professional education <br> accreditation by the Council for the <br> Accreditation of Educator Preparation <br> (CAEP) and discontinued the Board of <br> Education accreditation process. |
| The accreditation process offered by an |  |  |  |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  | from the Council for the <br> Accreditation of Educator <br> Preparation (CAEP), including CAEP/National Council for the Accreditation of Teacher Education (NCATE) and CAEP/Teacher Education Accreditation Council (TEAC) or a process approved by the Board of Education. | out-of-state third party provides an impartial professional perspective with no vested interest in the outcome of the review and evaluation. Furthermore, CAEP provides national resources to manage and maintain this ongoing process of program review and accreditation |
| 8VAC20-542-20. Administering the regulations. | 8VAC20-543-20. Accreditation and administering this chapter. | Professional studies coursework and methodology, excluding field experiences, are limited to 24 semester hours for baccalaureate degree programs in early/primary education, elementary education, and special education. | Eliminates the professional studies coursework cap for undergraduate programs to provide colleges and universities more flexibility in offering undergraduate teacher preparation programs to meet required competencies. |
| N/A | 8VAC20-543-20. Accreditation and administering this chapter. | Not a statutory requirement. | Requires education programs to ensure candidates have completed training or certification in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators. <br> The requirement that individuals must complete training or certification in emergency first aid, CPR, and the use of AEDs is a statutory requirement. The requirement must be completed prior to the issuance of a license. |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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| 8VAC20-542-20. Administering the regulations. | 8VAC20-543-20. Accreditation and administering this chapter. | 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), or Board of Education accreditation process. | Deletes reference to the previously approved national organizations; NCATE and TEAC. <br> Requires Professional education programs in Virginia to obtain and maintain national accreditation from the Council for the Accreditation of Educator Preparation (CAEP). <br> As of July 1, 2013 consolidation of the National Council for the Accreditation of Teacher Education (NCATE) and the Teacher Education Accreditation Council (TEAC) created the Council for the Accreditation of Educator Preparation (CAEP). |
| 8VAC20-542-20. Administering the regulations. | 8VAC20-543-20. Accreditation and administering this chapter. | E. Professional studies coursework and methodology, including field experiences, required in this chapter shall be designed for completion within an approved baccalaureate degree program | Revises the text to reference all approved programs (rather than only approved baccalaureate degree programs). <br> E. Professional studies coursework and methodology, including field experiences, required in this chapter shall be designed for completion within an approved program. <br> Revises the text to clarify that Professional Studies are required by both undergraduate and graduate programs in response to public comment. |
| 8VAC20-542-20. Administering the regulations. | 8VAC20-543-20. Accreditation and administering this chapter. | F. Professional education programs shall ensure that candidates demonstrate proficiency in | Adds the following text to support competencies in alignment with core concepts, Virginia Standards of Learning and the college and career readiness standards. <br> Candidates in education endorsement |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  | the use of educational technology for instruction; complete study in child abuse recognition and intervention; and complete training or 8VAC20-543-20. Accreditation and administering this chapter, certification in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators. | programs must demonstrate an understanding of competencies, including the core concepts and facts of the disciplines and the Virginia Standards of Learning, for the content areas they plan to teach. Professional education programs shall ensure that candidates demonstrate skills needed to help preK-12 students achieve college and career performance expectations. <br> Establishes an expectation for approved teacher preparation programs that candidates demonstrate skills and commitment that afford all P-12 students access to rigorous college and career-ready standards. |
| N/A | 8VAC20-543-20. Accreditation and administering this chapter. | Not referenced in current regulations | Adds administration support with reference to the Licensure Regulations for School Personnel (iVAC20-23) <br> [O. In administering these regulations, licensure requirements for Virginia are outlined in the Licensure Regulations for School Personnel (iVAC20-23). This document should be referenced for detailed information regarding requirements for Virginia licensure.] <br> Addition informs institutions and candidates of licensure requirements. The cross reference with the Licensure Regulations for School Personnel provides knowledge of licensure shared competencies, requirements, and procedures. |
| N/A | 8VAC20-543-30 <br> Application for new education endorsement programs | Not referenced in current regulations | Provides guidance for the successful submission and review of new education endorsement programs by education preparation programs. <br> Set forth documents to be submitted for new education endorsement programs |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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| 8VAC20-542-40. <br> Standards for biennial approval of Education programs. | 8VAC20-543-40. Standards for biennial approval of education. | Describes evidence of education endorsement program achievement biennially of Board of Education prescribed accountability measures. <br> Candidate progress and performance on prescribed Board of Education licensure assessments. Candidates passing rates, reported by percentages, shall not fall below 80\% biennially for: Completing a program and Exiting a program. * <br> *Program exiters: Individuals who have successfully completed all coursework, regardless of whether the individuals attempted, passed, or failed required licensure assessments and/or who may not have completed supervised | Stipulates 10 weeks of a summative clinical student teaching experience under the supervision of a cooperating teacher with demonstrated effectiveness in the classroom. <br> Adds an indicator for biennial reporting: "Employer job satisfaction documentation must address teachers' performance, including student academic progress." <br> 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. * <br> Revises the definition for noncompleter as the following: *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, have successfully completed all coursework, but who have not completed supervised student teaching or required internship. <br> Revises in response to public comment |


| $\begin{array}{l}\text { Current section } \\ \text { number }\end{array}$ | $\begin{array}{l}\text { Proposed new } \\ \text { section number, } \\ \text { if applicable }\end{array}$ | $\begin{array}{l}\text { Current } \\ \text { requirement }\end{array}$ | Proposed change and rationale |
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| $\begin{array}{l}\text { 8VAC20-542-40. } \\ \text { Standards for } \\ \text { biennial approval of } \\ \text { education } \\ \text { programs. }\end{array}$ | $\begin{array}{l}\text { student teaching } \\ \text { or required } \\ \text { internship. }\end{array}$ | $\begin{array}{l}\text { 8VAC20-543-40. } \\ \text { Standards for } \\ \text { biennial approval } \\ \text { of education } \\ \text { programs. }\end{array}$ | $\begin{array}{l}\text { Diverse school } \\ \text { settings were } \\ \text { not consistently } \\ \text { described in this } \\ \text { section and } \\ \text { omitted several } \\ \text { areas. }\end{array}$ | \(\left.\begin{array}{l}Revises diverse school settings. <br>

4. Evidence of opportunities for <br>
candidates to participate in diverse <br>
school settings that provide <br>
experiences with populations that <br>
include racial, gender, exceptionality, <br>
religion, geographic, economic, <br>
linguistic, and ethnic diversity <br>
throughout the program experiences.\end{array}\right\}\)

| Current section <br> number | Proposed new <br> section number, <br> if applicable | Current <br> requirement | Proposed change and rationale |
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|  |  |  | completers and noncompleters, the <br> institution must submit an annual report <br> attesting to continued progress in <br> meeting the requirements. |
| N/A | The changes would provide clarification <br> to language regarding the application of <br> the standards for biennial approval of <br> education endorsement programs <br> described in this section of the |  |  |
| regulations in response to public |  |  |  |
| comment. |  |  |  |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  | A major in the arts and sciences is required with one area of specialization | 2. History and social sciences: complete six semester hours in history and social sciences, complete a methods teaching elementary history and social sciences course, <br> Deletes candidates seeking an endorsement in special education general curriculum K-12 must have one area of specialization. <br> Additions and deletions made in response to public comment. |
| 8VAC20-542-80. <br> Professional studies requirements for early/primary education, elementary education, and middle education <br> 8VAC20-542-130. <br> Professional studies requirements for preK-12 <br> endorsements, special education, secondary grades 6-12 endorsements, and adult education. | 8VAC20-543-90 <br> 8VAC20-543-140 <br> Professional studies courses. | Describes in detail the competencies to be included in all professional studies courses. Describes in detail the competencies including, Human Growth and Development, Curriculum, Classroom Management, Reading and Foundations of Education. | Amends the following professional studies requirements: <br> -Reading; renamed to "Language and Literacy"; <br> -The Teaching Profession; renamed to <br> "Foundations of Education and the Teaching Profession" <br> Adds competencies in "Assessment of and for Learning" must be addressed in programs. <br> Amends the professional studies requirements in response to public comment. |
| 8VAC20-542-90 through 8VAC-542-600. | 8VAC20-543-90 through 8VAC-543-640. | Describes in detail the competencies to be included in all education endorsement programs. | Revises the language to include the following: <br> -limited English proficient students to English learners; <br> -family involvement to family engagement; and <br> -effective communication to varied and effective methods of communication. <br> - culturally responsive <br> Amends the competencies in response to public comment. |
| 8VAC20-542-90. <br> Early childhood for | 8VAC20-543-100. <br> Early childhood for | Describes in detail the | Adds competencies to the endorsement area to support alignment with |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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| three- and four-year-olds (add-on endorsement) | three-year-olds and four-year-olds (add-on endorsement). | competencies to be included in education endorsement programs. | standards and current requirements. <br> Adds a practicum with children from three years old to age five in response to public comment. <br> Expands the endorsement to allow individuals who hold the early childhood special education endorsement to add the endorsement. |
| 8VAC20-542-100. <br> Early/primary education preK-3. | 8VAC20-543-110. <br> Early/primary education preK-3 | Describes in detail the competencies to be included in education endorsement programs. | Adds the following: <br> 1. Methods <br> k. Adapt task and interactions to maximize language development, conceptual understanding, and skill competence within each child's zone of proximal development. <br> Aligns competencies with standards and current requirements. <br> Revises or deletes the language to include the following: <br> 2. Knowledge and skills. <br> c. History and social sciences. <br> (2) Understanding of the nature of history and the social sciences, and how the study of the disciplines assists students in developing historical thinking, geographical analysis, economic decision making, and responsible citizenship by: <br> (a) Using artifacts and primary and secondary sources to understand events in history; <br> (b) Using geographic skills to explain the interaction of people, places, and events to support an understanding of events in historyThe use of primary sources such as artifacts, letters, photographs, and nowspapers; <br> (c) Using charts, graphs, and pictures to determine characteristics of people, places, or events in historyHow events in history are shaped both by the ideas and |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  |  | actions of people; <br> (d) Asking appropriate questions and summarizing points to answer a questionDiverse cultures and shared humanity; <br> (e) Comparing and contrasting people, places, and events in historyCivic participation in a democracy; <br> (f) Recognizing direct cause and effect relationships in history ${ }^{\text {Fhe }}$ relationship between history, literature, art, and music. <br> (g) Explaining connections across time and place; <br> (h) Using a decision-making model to identify costs and benefits of a specific choice made; <br> (i) Practicing good citizenship skills and respect for rules and laws, and participating in classroom activities; and <br> (j) Developing fluency in content vocabulary and comprehension of verbal, written and visual sources. <br> Revisions and deletion were added to align with the newly approved competencies in the history standards of learning. |
| 8VAC20-542-110. <br> Elementary education preK-6. | 8VAC20-543-120. <br> Elementary education preK-6. | Describes in detail the competencies to be included in education endorsement programs. | Adds the following: <br> 1. Methods <br> k. Adapt task and interactions to maximize language development, conceptual understanding, and skill competence within each child's zone of proximal development. <br> Revises the following: <br> 2. Knowledge and skills. <br> b. Mathematics. <br> 7. Understanding of and the ability to use strategies to teach mathematics to diverse learners. <br> c. History and social sciences. <br> (2) Understanding of the nature of history and the social sciences, |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  |  | and how the study of the disciplines assists students in developing historical thinking, geographical analysis, economic decision making, and responsible citizenship by: <br> (a) Using artifacts and primary and secondary sources to understand events in historyThe relationship between past and present; <br> (b) Using geographic skills to explain the interaction of people, places, and events to support an understanding of events in historyThe use of primary sources such as artifacts, letters, photographs, and nowspapers; <br> (c) Using charts, graphs, and pictures to determine characteristics of people, places, or events in historyHow events in history are shaped both by the ideas and actions of people; <br> (d) Asking appropriate questions and summarizing points to answer a question. Diverse cultures and shared humanity; <br> (e) Comparing and contrasting people, places, and events in history; <br> (f) Recognizing direct cause and effect relationships in history; <br> (g) Explaining connections across time and place; <br> (h) Using a decision-making model to identify costs and benefits of a specific choice made; <br> (i) Practicing good citizenship skills and respect for rules and laws, and participating in classroom activities; and <br> (j) Developing fluency in content vocabulary and comprehension of verbal, written and visual sources. <br> Deletes computer science: terminology, simple programming, and software |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  |  | applications. <br> Aligns competencies with standards and current requirements. |
| 8VAC20-542-120. <br> Middle education 6-8. | 8VAC20-543-130. Middle education 6-8. | Describes in detail the competencies to be included in education endorsement programs. | Adds the following: <br> - 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; <br> -(3) Practices required to provide empirical answers to research questions, including data collection and analysis, modeling, argumentation with evidence, and constructing explanations; <br> -Reliability of scientific knowledge and its constant scrutiny and refinement; -Self-checking mechanisms used by science to increase objectivity including peer review; and <br> - Assumptions, influencing conditions, and limits of empirical knowledge. -Conduct research projects and experiments including applications of the design process and technology; -Conduct systematic field investigations using the school grounds, the community, and regional resources; -Conduct formative and summative assessments of student learning; <br> - Ensure student competence in middle school science; <br> -The application of key principles in science to solve practical problems; and <br> Deletes the following: <br> - Science skills of data analysis, measurement, observation, prediction, and experimentation; <br> - Conduct research projects and experiments; <br> - Student achievement in science. <br> Aligns competencies with standards and current requirements. |
| 8VAC20-542-140. <br> Adult education. | 8VAC20-543-150. <br> Adult education. | Describes in detail the competencies to be included in | Revises the following: The program in adult education shall ensure that the candidate has demonstrated the following |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  | education endorsement programs. | competencies: <br> 3. Understanding of the knowledge, skills, and processes needed for the selection, evaluation, and instructional applications of the methods and materials for adult basis skillsadults to become college and career ready including: <br> a. Curriculum development in adult basic education or [high school equivalency (HSE)general educational dovelopment (GED) instruction; <br> b. Literacy skills for adultsBeginning reading for adults; <br> c. Numeracy skills for adultsBeginning mathematics for adults; and <br> d. Workforce skills for adults. Reading comprehension for adull education; <br> Deletes the following: <br> e. Foundations of adult education; and <br> f. Other adult basic skills instruction. <br> Aligns competencies with standards and current requirements. |
| 8VAC20-542-150. Adult English as a second language (add-on endorsement). | 8VAC20-543-160. Adult English as a second language (add-on endorsement). | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: <br> 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: <br> 2.Knowledge of teaching methods and matorials in adull English as a socond tanguageKnowledge in methods and materials in the teaching of English to adult speakers of other languages; <br> 3. Knowledge in adult language acquisitionSkills in the teaching of reading and writing to include (i) the five areas of reading instruction: |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  |  | phonemic awareness, phonics, fluency, vocabulary, and text comprehension: <br> (ii) similarities and differences between reading in a first language and reading in a second language; and (iii) a balanced literacy approach; <br> 4. Knowledge of assessment methods in adult English as a second language instructionKnowledge in adult second language acquisition; <br> 5. Knowledge of assessment methods in instruction of English to adult speakers of other languages; <br> Aligns competencies with standards and current requirements. |
|  |  | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: <br> 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: <br> 2. Knowledge of teaching methods and materials in adult English as a second languageKnowledge in methods and materials in the teaching of English to adult speakers of other languages; <br> 3. Knowledge in adult language acquisitionSkills in the teaching of reading and writing to include (i) the five areas of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and text comprehension: <br> (ii) similarities and differences between reading in a first language and reading in a second language; and (iii) a balanced literacy approach; <br> 4. Knowledge of assessment methods in adult English as a second language instructionKnowledge in adult second language acquisition; <br> 5. Knowledge of assessment methods in instruction of English to adult speakers of other languages; |


| Current section <br> number | Proposed new <br> section number, <br> if applicable | Current <br> requirement | Proposed change and rationale |
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|  |  |  | Aligns competencies with standards <br> and current requirements. |
| 8VAC20-542-250. <br> Computer science. | 8VAC20-543-250. <br> Computer science. |  |  |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  |  | systems; <br> h. Recognizing how regular preventive maintenance reduces Vohicle controls, vehicle maintenance, vehicle functions, andl vehicle malfunctions, and the warning signs that indicate the need for maintenance, repair, or replacement; <br> i. Recognizing the cConsequences of aggressive driving, road rage, fatigue, distracted driving, and other physical, social, and psychological influences that affect the driver behavior and performance; <br> j. Understand the effects of momentum, gravity, and inertia on vehicle control and balance, and the relationship between kinetic energy and force of impactNatural laws and environmental factors that influence the decisionmaking process; <br> k. Ability to evaluate emergencyresponse strategies to avoid or reduce the severity of a collision in high-risk driving situations, and how technological advancements in intelligent handling and stability control systems affect driving practicesAdverse driving conditions and handling emergencies; <br> I. Knowledge about map-reading and trip pPlanning technologies and evaluating personal transportation needs and their impact on the environmenta safo trip; <br> Aligns competencies with standards and current requirements. |
| N/A | 8VAC20-543-280 Engineering. | N/A | Establishes the endorsement in "engineering." <br> The engineering endorsement is another pathway for individuals to become licensed and endorsed to teach engineering courses. Individuals holding valid Virginia teaching licenses with an endorsement n technology education may teach engineering courses. |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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| 8VAC20-542-290. <br> English as a second language preK-12. | 8VAC20-543-300. <br> English as a second language preK-12. | Describes in detail the competencies to be included in education endorsement programs. | The program in English as a second language shall ensure that the candidate has demonstrated the following competencies: <br> 2. Skills in designing and administering formative or classroom-based assessments and interpreting results of both formative and summative assessments, including the WIDA Access test. Using the results of a variety of formative assessments, including performance-based assessments of oral language and writing, to direct instruction. Ensuring that formative assessments reflect high validity and reliability for the purposes for which they are used and are appropriate for the targeted students. Teaching test-taking skills in preparation for standardized tests. student assessment for English as a second language to include the Assessing Comprehension and Communication in English State-toState for English Language Learners (Access for ELLs(8) test; <br> 3. Skills in the teaching of reading and writing to include (i) the five areas of reading instruction: phonemic awareness;;pre-reading, duringreading, and post-reading strategies; vocabulary development; and guided reading. Ability to structure interactive tasks that engage students in using oral language to develop reading skills. Ability to determine students' reading levels and design instruction for multilevel classrooms by incorporating appropriate scaffolding or language supportsphonics, fluency, vocabulary and text comprehension; (ii) similaritios and differences between reading in a first language and reading in a second language; and (iii) a balanced literacy approach; <br> 4. Skills in teaching grammar and syntax in the context of writing. Ability to model and teach editing skills and organization of writing using predominant text structures in the |


| $\begin{array}{c}\text { Current section } \\ \text { number }\end{array}$ | $\begin{array}{c}\text { Proposed new } \\ \text { section number, } \\ \text { if applicable }\end{array}$ | $\begin{array}{c}\text { Current } \\ \text { requirement }\end{array}$ | Proposed change and rationale |
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|  |  |  | $\begin{array}{l}\text { content areas. } \\ 5 \text { 4. Knowledge of the effects of } \\ \text { sociocultural variables in the } \\ \text { instructional setting; } \\ \text { 65. Proficiency in spoken and written } \\ \text { English; }\end{array}$ |
|  |  | $\begin{array}{l}\text { 76. Skills in providing language and } \\ \text { cognitive support or scaffolding bases } \\ \text { on the various stages of the second } \\ \text { language acquisition } \\ \text { processUnderstanding of second } \\ \text { language acquisition }\end{array}$ |  |
| $\begin{array}{ll}\text { 8VAC20-542-310. }\end{array}$ |  |  |  |
| Gifted education |  |  |  |
| (add-on |  |  |  |
| endorsement). | $\begin{array}{l}\text { 8VAC20-543-320. } \\ \text { Gifted education } \\ \text { (add-on } \\ \text { endorsement). }\end{array}$ | $\begin{array}{l}\text { Describes in } \\ \text { detail the } \\ \text { competencies to } \\ \text { be included in } \\ \text { education } \\ \text { endorsement } \\ \text { programs. }\end{array}$ | $\begin{array}{l}\text { Aligns competencies with standards } \\ \text { and current requirements. }\end{array}$ |
| $\begin{array}{ll}\text { Revises the following: } \\ \text { The program in gifted education shall } \\ \text { ensure that the candidate holds an } \\ \text { active license with a teaching } \\ \text { endorsement or endorsements issued } \\ \text { by the Virginia Board of Education and } \\ \text { has demonstrated the following } \\ \text { competencies: } \\ \text { 6. Understanding the fundamental } \\ \text { principles of differentiated curricula for } \\ \text { effective program planning and } \\ \text { evaluation, including: } \\ \text { a. Program design and development } \\ \text { for gifted learners; } \\ \text { b. Research and topics for effective } \\ \text { administrative arrangements, } \\ \text { supervision, and } \\ \text { program implementation; }\end{array}$ |  |  |  |
| c. Activities to encourage parental and |  |  |  |
| community involvement in gifted |  |  |  |
| education; and |  |  |  |$\}$


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  | endorsement programs. | 1. Understanding of the knowledge, skills, and processes of health and physical education as defined in the Virginia Standards of Learning including; <br> a. Competence in motor skills and movement patterns needed to perform a variety of physical activities; <br> b. Knowledge of structures and functions of the body and how they relate to and are affected by human movement to learning and developing motor skills and specialized movement forms; <br> c. Demonstrate the aptitude, attitude, and skills to lead responsible, fulfilling, and respectful lives; and <br> d. Understand the importance of energy balance and nutritional needs of the body to maintain optimal health and prevent chronic disease. <br> 5. Understanding of the knowledge, skills, and processes of health education as defined in the Virginia Standards of Learning, including; <br> a. Demonstrate the knowledge and skills to make healthy decisions that reduce health risks and enhance the health of self and others; <br> b. Demonstrate the ability to access, evaluate, and use health information, products, and services that influence health and wellness in a positive manner; and <br> c. Demonstrate the use of appropriate health practices and behaviors to promote a safe and healthy community when alone, with family, at school, and in other group settings. <br> Aligns competencies with standards and current requirements. |
| 8VAC20-542-370. Mathematics. | 8VAC20-543-380. Mathematics. | Describes in detail the competencies to be included in | Revises the following: <br> The program in mathematics shall ensure that the candidate has |


| Current section number | Proposed new section number, if applicable | Current requirement | Proposed change and rationale |
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|  |  | education endorsement programs. | demonstrated the following competencies: <br> 12. Knowledge of programming in at least two widely used programming languages, including definition, structure, and comparison; <br> 13. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing; and 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 <br> 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. Understanding of and proficiency in grammar, usage, and mechanics and their integration in writing. <br> Aligns competencies with standards and current requirements. |
| 8VAC20-542-480. <br> Special Education General Curriculum K-12. | 8VAC20-543-510. <br> Special education - general curriculum elementary education K-6 (add-on endorsement). <br> 8VAC20-543-520. <br> Special education - general curriculum middle education grades 6-8 (add-on endorsement). <br> 8VAC20-543-530. Special education - general | Describes in detail the competencies to be included in education endorsement program (single endorsement only). <br> No Add-on endorsements in Special Education | Proposes endorsements and competencies to regulations <br> Establishes add-on special educationgeneral curriculum endorsements (elementary, middle, and secondary) to early/primary education, elementary education, middle education 6-8, and secondary endorsements. <br> Aligns competencies with standards and current requirements. <br> Adds a practicum <br> 5. The program shall include a practicum that shall include a minimum of 45 instructional hours of successful teaching experiences with students with disabilities accessing the general |


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|  | curriculum secondary education grades 6-12 (add-on endorsement). |  | curriculum in a public or accredited nonpublic school. <br> Additions made in response to public comment. |
| 8VAC20-542-540. <br> Mathematics specialist for elementary and middle education. | 8VAC20-543-590. <br> Mathematics specialist for elementary and middle education. 8VAC20-543-590. Mathematics specialist for [elementary and middle education] | Currently, <br> Virginia offers one <br> mathematics specialist endorsement -mathematics specialist for elementary and middle <br> education. In the proposed regulatory process, the one endorsement was recommended to be changed to two endorsements, mathematics specialist for elementary education and mathematics specialist for middle education. | Amends endorsement to establish separate endorsements specific to the population of students being served (1) a mathematics specialist for elementary education endorsement and (2) a mathematics specialist for elementary and middle education endorsement. In the final stage, the Board of Education is recommending the establishment of the mathematics specialist for elementary education endorsement and maintaining the mathematics specialist for elementary and middle education endorsement. |
| 8VAC20-542-550. Reading specialist | 8VAC20-543-600. <br> Reading <br> specialist. | Describes in detail the competencies to be included in education endorsement programs. | Adds a practicum <br> n . The candidate shall complete a supervised practicum or field experience in the diagnosis and remediation of reading difficulties in a public or accredited nonpublic school. <br> Proposed technical edit |
| 8VAC20-542-560. School counselor preK-12. | 8VAC20-543-610. School counselor preK-12. | Describes in detail the competencies to be included in education endorsement programs. | Revises the following: <br> The school counselor preK-12 program shall ensure that the candidate has completed two years of successful, fulltime teaching experience or two years of successful full-time experience in school counseling in a public or an accredited nonpublic school (two years of successful, full-time experience in |


| Current section <br> number | Proposed new <br> section number, <br> if applicable | Current <br> requirement | Proposed change and rationale |
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|  |  | school counseling in a public or an <br> accredited nonpublic school under a <br> nonrenewable Provisional License may <br> be accepted to meet this requirement), |  |
| 8VAC20-542-580. <br> School social <br> Worker. | 8VAC20-543-630. <br> School social <br> worker. | Describes in <br> detail the <br> competencies to <br> be included in <br> education <br> endorsement <br> programs. | Aligns competencies with standards <br> and current requirements. |
| Revises the requirements for the school <br> social worker endorsement to recognize <br> an earned advanced standing masters <br> of social work degree from a regionally <br> accredited college or university with a <br> minimum of 30 graduate level semester <br> hours. |  |  |  |
| 8VAC20-542-590. <br> Special education <br> speech-language <br> disorders preK-12. | N/A | Aligns competencies with standards <br> and current requirements. |  |


[^0]:    ${ }^{1}$ Examples are: testimony by Aneesh Chopra on Supporting Innovation in the $21^{\text {st }}$ Century Economy to Committee on Science and Technology, Subcommittee on Technology and Innovation, United State House of Representatives, March 24, 2010; "Innovation America - A Final Report" from The National Governors Association, July 2007; The 2009 report by the National Academy of Engineering and National Research Council, "Engineering in K-12 Education", is available from the National Academies Press (www.nap.edu).
    ${ }^{2}$ Other examples include Future Cities, Egg Drop and model boat and race-car contests.

[^1]:    ${ }^{3}$ The engineering panel was composed of eleven practicing engineers drawn from industry, government labs, and academe along with three high school engineering teachers.
    4 "The committee concluded that, although it is theoretically possible to develop standards for $K-12$ engineering education, it would be extremely difficult to ensure their usefulness and effective implementation. This conclusion is supported by the following findings:
    (1) there is relatively limited experience with $K-12$ engineering education in U.S. elementary and secondary schools,
    (2) there is not at present a critical mass of teachers qualified to deliver engineering instruction,
    (3) evidence regarding the impact of standards-based educational reforms on student learning in other subjects, such as mathematics and science, is inconclusive, and
    (4) there are significant barriers to introducing stand-alone standards for an entirely new content area in a curriculum already burdened with learning goals in more established domains of study.

[^2]:    ${ }^{5}$ Nominally offered by schools of education, technology education focuses on the critical hands-on skills traditionally taught in shop or vocational education classes. Professors are seldom engineers, but rather technology education and trades specialists themselves.
    ${ }^{6}$ Nominally offered by schools of engineering, engineering technology contains more engineering, mathematics and science than technology education and the graduate is prepared for a career as a project manager using current tools and technology to carry out projects that require today's technology. Engineering Technologists are implementers rather than designers.
    ${ }^{7}$ Offered by ABET (Accreditation Board for Engineering and Technology) accredited schools of engineering, engineering requires that the student have significantly more and higher level mathematics and science than engineering technologists. The engineer is trained on conceptual aspects as well as hands-on application so as to be prepared to innovate through the design of new systems of value to society.

[^3]:    ${ }^{8}$ This group included: Capt. Joe Bouchard (USN ret.), Former Delegate VA General Assembly; Doug Dwoyer, Director (retired) of Research, NASA Langley Research Center; Tim Early, President/CEO, Hampton Roads Technology Council; Rear Adm. Bill Hayden (USN ret.), Executive Director, STARBASE Victory, Portsmouth Public Schools; Rick Lally, Interim Director, Innovate!HamptonRoads; John Ledgerwood, Engineering \& Technology Coordinator, VA Beach Public Schools; Bob Lindberg, President \& Executive Director, National Institute of Aerospace; Brett Vassey, Executive Director \& CEO, Virginia Manufacturers Association; and Jonathan Whitt, Executive Director, Region 2000 Technology Council.
    ${ }^{9}$ Members (and pertinent affiliation at the time) were Bob Kolvoord, Head of the Interdisciplinary \& Applied Science Dept (and developer and former interim Dean of the Engineering major) at James Madison University; Doug Dwoyer, retired Director for Research \& Technology at NASA Langley Research Center; Bob Lindberg, President of the National Institute for Aerospace, former vice-president Orbital Sciences Corp; John Ledgerwood, Technology Education Coordinator for VA Beach Public Schools; and Jim Batterson, Head, Dynamics \& Control Branch at NASA Langley Research Center

[^4]:    ${ }^{10}$ WHEREAS, STEM is the acronym used in K-12 education for Science, Technology, Engineering, and Mathematics; and
    WHEREAS, each component of STEM differs from the others in subtle but important ways; and
    WHEREAS, science is concerned with the discovery of the laws by which nature works - the discovery of the natural world; and WHEREAS, mathematics is concerned with the study of patterns and relationships among quantities, numbers, and shapes; and
    WHEREAS, technology education is concerned with the modification of the natural environment in order to satisfy human needs and wants; and
    WHEREAS, engineering is concerned with the creation of the human-designed world-the purposeful shaping of science and technology to meet societal needs; and
    WHEREAS, innovation, critical thinking, and problem solving are highly desired twenty- first-century capabilities in the Commonwealth and the nation; and
    WHEREAS, innovation is born directly of engineering rather than science and mathematics; and
    WHEREAS, the engineering design process differs from the scientific method; and
    WHEREAS, engineering design leads to the manufacture or fabrication of a product that meets design requirements and constraints; and
    WHEREAS, engineering teachers require a significant background in the engineering design process and the manufacture to specifications process as well as science, mathematics, and technology education; and WHEREAS, mastery in the engineering design process or manufacture to specifications process is not required of science and mathematics teachers; and
    WHEREAS, mastery in science and mathematics is not required of technology education teachers; and WHEREAS, a robust K-12 STEM education will lead students to successful transition to higher education in engineering; now, therefore, be it
    RESOLVED by the Senate, the House of Delegates concurring, That the Department of Education be requested to establish shared goals for an engineering program of study, and assign a shared responsibility for this program between the existing science, mathematics, and technology disciplines; and, be it
    RESOLVED FURTHER, That K-12 engineering not be subsumed by just one curriculum domain, but only taught in conjunction with science, mathematics, and technology education by teachers with appropriate training in the engineering design process, the scientific method, science, and manufacture to specifications and constraints.

