

**Annex A**  
**TITLE 22. EDUCATION**  
**PART I. STATE BOARD OF EDUCATION**  
**CHAPTER 4. ACADEMIC STANDARDS AND ASSESSMENT**

**GENERAL PROVISIONS**

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**§ 4.3. Definitions.**

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

*[AVTS—Area vocational-technical school]* *ACTS—Area Career and Technical School*—A public school that provides **[vocational-technical] career and technical** education to secondary school students, out-of-school youth and adults in a geographical area comprised and operated by one or more school districts and established under sections 1840—1853 of the School Code (24 P. S. §§ 18-1840—18-1853).

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*Board*—The State Board of Education established under sections 2601-B—2606-B of the School Code (24 P.S. §§ 26-2601-B—26-2606-B).

**Career and technical education—Programs under public supervision and control which provide an organized process of learning experiences designed to develop integrated academic and occupational skills, knowledge, attitudes, work habits and leadership ability for entry into and advancement within various levels of employment in occupational areas of agriculture, business, marketing and distribution, health, home economics and trade and industry and for participation in postsecondary education and training.**

*Chief school administrator*—The superintendent of a school district, the superintendent of an **[AVTS] ACTS** or the chief executive officer of a charter school.

*Cooperative [vocational-technical] career and technical education*—A planned method of instruction developed through a signed cooperative arrangement among school representatives, students, parents and employers in the community to provide students with an opportunity to alternate in-school academic and **[vocational-technical] career and technical** instruction in entry-level paid employment in an occupational field, in which the student's total occupational

work experience is planned, coordinated and supervised by the school in close cooperation with the employer.

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*Employment area*—A geographic area where **[vocational-technical] career and technical** education program completers are most likely to be employed.

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*School entity*—A local public education provider (for example, public school district, charter school, cyber charter school, **[AVTS] ACTS** or intermediate unit).

*School organization*—The organization of a school district’s programs into kindergarten, primary, intermediate level, middle level and high school programs, including programs operated at **[AVTSS] ACTSs**.

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*Tech-prep program*—A combined secondary and postsecondary program which leads to an associate degree or certificate and employment by providing technical preparation in engineering technology, applied science, mechanical, industrial or practical art or trade, agriculture, health or business, including development of competence in mathematics, science and communications through a sequential course of study.

***[Vocational-technical education—Programs under public supervision and control which provide an organized process of learning experiences designed to develop integrated academic and occupational skills, knowledge, attitudes, work habits and leadership ability for entry into and advancement within various levels of employment in occupational areas of agriculture, business, marketing and distribution, health, home economics and trade and industry and for participation in postsecondary education and training.]***

#### **§ 4.4. General policies.**

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(e) The Department will provide support to school districts, **[AVTSS] ACTSs** and charter schools, including cyber charter schools, in developing educational programs that enable students to attain academic standards under § 4.12. Department support will include:

- (1) Establishment of a voluntary model curriculum and diagnostic supports aligned with State academic standards in each of the content areas assessed by the Keystone Exams under § 4.51b(i) **and (j)** (relating to Keystone Exams).
- (2) Assistance in the development of effective student tutoring, remediation and extended instructional time programs.

(3) Opportunities for continuing professional education designed to improve instruction in each of the content areas assessed by the Keystone Exams under § 4.51b(i) ~~and (j)~~.

(4) Technical guidance in developing local assessments that meet the requirements of § 4.24(c)(1)(iii)(B) (relating to high school graduation requirements), upon request.

(f) The Department may not, and the Board will not, require school entities to utilize a Statewide curriculum or Statewide reading lists.

## ACADEMIC STANDARDS AND PLANNING

### § 4.11. Purpose of public education.

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(g) Public schools provide instruction throughout the curriculum so that students may develop knowledge and skills in the following areas:

- (1) English language arts.
- (2) Mathematics.
- (3) Science and **[technology] environment and ecology**.
- (4) **[Environment and ecology] Technology and engineering**.
- (5) Social studies (civics and government, geography, economics and history).
- (6) Arts and humanities.
- (7) Career education and work.
- (8) Health, safety and physical education.
- (9) Family and consumer science.

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### § 4.12. Academic standards.

(a) School entities may develop, expand or improve existing academic standards in the following content areas:

(1) **The following apply:**

(i) **Through June 30, 2024 2025:** *Science and technology.* Study of the natural world and facts, principles, theories and laws in the areas of biology, chemistry, physics and earth sciences. Technology is the application of science to enable societal development, including food and fiber production, manufacturing, building, transportation and communication. Science and technology share the use of the senses, science processes, inquiry, investigation, analysis and problem solving strategies. The Pennsylvania Core Standards for Reading in

Science and Technology and the Pennsylvania Core Standards for Writing in Science and Technology will be an appendix to the Commonwealth's academic standards for Science and Technology upon publication in the *Pennsylvania Bulletin*.

**(ii) Effective July 1, 2024 2025: Pennsylvania Integrated Standards for Science, Environment, Ecology, Technology, and Engineering (Grades K-5). Guide the elementary-level study of the natural and human-made world through inquiry, problem-solving, critical thinking, and authentic exploration. The integration of these disciplines in the elementary grades highlights the interconnectedness of scientific study and the integral relationship between humans and the environment.**

(2) The following apply:

**(i) Through June 30, 2024 2025: Environment and ecology.** Understanding the components of ecological systems and their interrelationships with social systems and technologies. These components incorporate the disciplines of resource management, agricultural diversity, government and the impact of human actions on natural systems. This interaction leads to the study of watersheds, threatened and endangered species, pest management and the development of laws and regulations.

**(ii) Effective July 1, 2024 2025: Pennsylvania Integrated Standards for Science, Environment and Ecology (Grades 6-12). Utilize a three-dimensional approach to guide the study of physical sciences, life sciences, and earth and space sciences at the middle and high school levels. The standards highlight the critical intersections of these disciplines with environmental science, ecology, and agriculture. These three-dimensional standards integrate disciplinary core ideas, practices in science and engineering, and crosscutting concepts into coherent learning progressions across the grade bands.**

**(iii) Effective July 1, 2024 2025: Pennsylvania Technology and Engineering Standards (Grades 6-12). Define the knowledge, skills, and abilities necessary for establishing literacy in technology and engineering literacy. Students develop a practical understanding of how humans are influenced by science and technology. Four core disciplinary standards describe practices in technology and engineering and include specific benchmarks for students in grade bands 6-8 and 9-12.**

(3) *Social studies.*

(i) *History.* Study of the record of human experience including important events; interactions of culture, race and ideas; the nature of prejudice; change and continuity in political systems; effects of technology; importance of global-international perspectives; and the integration of geography, economics and civics studies on major developments in the history of the Commonwealth, the United States and the world.

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(5) *Career education and work.* Understanding career options in relationship to individual interests, aptitudes and skills including the relationship between changes in society, technology, government and economy and their effect on individuals and careers. Development of knowledge and skill in job-seeking and job-retaining skills and, for students completing **[vocational-technical] career and technical education** programs, the skills to succeed in the occupation for which they are prepared.

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(i) **[Every 3 years] No sooner than every 5 years and no later than every ten years**, the Board will review the State academic standards and State assessments under this section to determine if they are appropriate, clear, specific and challenging, and will make revisions as necessary by revising this chapter.

(j) The Department may not expand the collection of student data and, in accordance with section 444 of the Family Educational Rights and Privacy Act of 1974 (20 U.S.C.A. § 1232g), regarding family educational and privacy rights, may not collect personal family data due to the implementation of Pennsylvania Core Standards in Appendix A-2.

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## CURRICULUM AND INSTRUCTION

### § 4.21. Elementary education: primary and intermediate levels.

(a) The primary program shall ordinarily be completed by children who are approximately **[8] 6** years of age. School districts, including charter schools, shall provide opportunities for individualized rates of learning and social and emotional development that reflect differing rates of development and learning styles of young children.

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(e) Planned instruction aligned with academic standards in the following areas shall be provided to every student every year in the primary program. Planned instruction may be provided as separate course or other interdisciplinary activity.

(1) Language arts, integrating reading, writing, phonics, spelling, listening, speaking, literature and grammar, and information management, including library skills.

(2) Mathematics, including problem-solving and computation skills.

(3) Science, **environment** and **[technology education] ecology**, involving active learning experiences for students.

(4) **[Environment and ecology] Technology and engineering** education, involving active learning experiences for students.

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(f) Planned instruction in the following areas shall be provided to every student every year in the intermediate level program. Planned instruction may be provided as a separate course or as an instructional unit within another course or other interdisciplinary instructional activity:

(1) Language arts, integrating reading, writing, spelling, listening, speaking, literature and grammar.

(2) Mathematics, including problem-solving and computation skills.

(3) Science, **environment** and **[technology] ecology**, including instruction about agriculture and agricultural science.

(4) **[Environment and ecology, including instruction about agriculture and agricultural science] Technology and Engineering**.

(5) Social studies (civics and government, economics, geography and history).

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#### **§ 4.22. Middle level education.**

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(c) Planned instruction aligned with academic standards in the following areas shall be provided to every student in the middle level program. Planned instruction may be provided as a separate course or as an instructional unit within a course or other interdisciplinary instructional activity:

(1) Language arts, integrating reading, writing, listening, speaking, literature and grammar.

(2) Mathematics, including mathematical reasoning, algebra and problem-solving.

(3) Science, **environment** and **[technology] ecology**, which involves active learning experiences and which may include laboratory experiments **[and]**, instruction in agriculture and agricultural science, **and political and economic aspects of ecology**.

(4) Social studies (civics and government, economics, geography and history, including the history and cultures of the United States, the Commonwealth, and the world).

(5) **[Environment and ecology, including social, political and economic aspects of ecology, and instruction in agriculture and agricultural science] Technology and Engineering**.

(6) Information skills, including access to traditional and electronic information sources, computer use and research.

(7) Health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, physical fitness, movement concepts, motor skill development, safety in physical activity settings, and the prevention of alcohol, chemical and tobacco abuse.

(8) The arts, including art, music, dance and theatre.

(9) Career education, including exposure to various career options and the educational preparation necessary to achieve those options.

(10) Technology education, emphasizing practical application of academic skills and problem-solving experiences facilitated by technology.

(11) Family and consumer science, including principles of consumer behavior and basic knowledge of child health and child care skills.

(d) This section does not preclude the teaching of other planned instruction designed to achieve a school entity's academic standards.

(e) School entities shall determine the most appropriate way to operate their middle level programs to achieve the purposes under subsection (b) and any additional academic standards as determined by the school entity.

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#### **§ 4.23. High school education.**

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(c) Planned instruction aligned with academic standards in the following areas shall be provided to every student in the high school program. Planned instruction may be provided as a separate course or as an instructional unit within a course or other interdisciplinary instructional activity:

(1) Language arts, integrating reading, writing, listening, speaking, literature and grammar.

(2) Mathematics, including problem-solving, mathematical reasoning, algebra, geometry and concepts of calculus.

(3) Science, **environment** and **[technology] ecology**, including **scientific, social, political and economic aspects of ecology**, participation in hands-on experiments and at least one laboratory science chosen from life sciences, earth and space sciences, chemical sciences, physical sciences and agricultural sciences.

(4) Social studies (civics and government, economics, geography and history, including the history and cultures of the United States, the Commonwealth and the world).

(5) **[Environment and ecology, including scientific, social, political and economic aspects of ecology] Technology and Engineering.**

(6) The arts, including art, music, dance, theatre and humanities.

(7) Use of applications of microcomputers and software, including word processing, database, spreadsheets and telecommunications; and information skills, including access to traditional and electronic information sources, computer use and research.

(8) Health, safety and physical education, including instruction in concepts and skills which affect personal, family and community health and safety, nutrition, physical fitness, movement concepts, motor skill development, safety in physical activity settings, and the prevention of alcohol, chemical and tobacco abuse.

(9) Family and consumer science, including principles of consumer behavior and basic knowledge of child health, child care and early literacy skill development.

(d) The following planned instruction shall be made available to every student in the high school program:

(1) **[Vocational-technical] Career and technical** education under § § 4.3 and 4.31—4.35.

(2) Business education, including courses to assist students in developing business and information technology skills.

(3) World languages under § 4.25 (relating to languages).

(4) Technology education, incorporating technological problem-solving and the impacts of technology on individuals and society.

(e) College-level advanced placement courses may be offered as planned instruction in the high school curriculum.

(f) This section does not preclude the teaching of other planned instruction designed to achieve a school district's, including a charter school's, academic standards.

(g) School districts, including a charter school, shall determine the most appropriate way to operate their high school programs to achieve the purposes under subsection (a) and any additional academic standards as determined by the school entity.

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#### **§ 4.24. High school graduation requirements.**

(a) *Approval.* High school graduation requirements and revisions to them shall be approved by a school entity's governing board **[by September 2, 2014] no later than the beginning of the 2020-2021 school year**, and a copy of the requirements shall be published and distributed to students, parents and guardians. Copies of the requirements also shall be available in each school building or on each school entity's publicly accessible web site. Changes to high school graduation requirements shall be published and distributed to students, parents and guardians and made available in each school building or on each school entity's publicly accessible web site immediately following approval by the governing board.

(b) *Requirements through the ~~2015-2016~~ 2021-2022 school year.* Each school district, charter school (including a cyber charter school) and **[AVTS] ACTS**, if applicable, shall specify requirements for graduation. Requirements through the ~~2015-2016~~ 2021-2022 school year must include course completion and grades, completion of a culminating project, results of local assessments aligned with the academic standards and a demonstration of proficiency in English Language Arts and Mathematics on either the State assessments administered in grade 11 or 12 or local assessments aligned with academic standards and State assessments under § 4.52 (relating to local assessment system) at the proficient level or better to graduate. The purpose of the culminating project is to assure that students are able to apply, analyze, synthesize and evaluate information and communicate significant knowledge and understanding.

(c) *Requirements beginning in the ~~[2016-2017]~~ 2022-2023 school year.*

(1) *General.* Beginning in the [2016-2017] **2022-2023** school year, each school district, charter school (including a cyber charter school) and [AVTS] **ACTS**, if applicable, shall adopt and implement requirements for high school graduation that, at minimum, include:

(i) Course completion and grades.

(ii) Demonstration of proficiency as determined by the school district, charter school (including a cyber charter school) or [AVTS] **ACTS**, if applicable, in each of the State academic standards not assessed by a State assessment under § 4.51, § 4.51a or § 4.51b (relating to State assessment system; Pennsylvania System of School Assessment; and Keystone Exams).

(iii) Demonstration of proficiency or above in each of the following State academic standards: English Language Arts and Mathematics (Appendix A-2); **THROUGH JUNE 30, 2025, Science and {Technology} and Environment and Ecology {(Appendix B)}, AND, BEGINNING JULY 1, 2025, SCIENCE, ENVIRONMENT AND ECOLOGY (Appendix B-1)**, as determined through any one or a combination of the following:

(A) Completion of secondary level coursework in English Language Arts (Literature), Algebra I and Biology in which a student demonstrates proficiency on the associated Keystone Exam or **[related project-based assessment if § 4.4(d)(4) (relating to general policies) applies] through a pathway established in section 121(c) or section 121(c.1) of the Public School Code of 1949 (24 P.S. §§ 1-121(c) or (c.1)).**

(I) A school district, [AVTS] **ACTS** or charter school, including a cyber charter school, shall allow a student to take a Keystone Exam prior to taking the course associated with the exam's content provided that the student achieved a score of advanced on the most recent associated PSSA assessment administered to the student.

(II) A school district, [AVTS] **ACTS** or charter school, including a cyber charter school, shall allow a student who transfers from another state to take a Keystone Exam prior to taking the course associated with the exam's content, provided that the student achieved a score comparable to the PSSA's advanced performance level on a comparable assessment administered by another state.

(III) A school district, [AVTS] **ACTS** or charter school, including a cyber charter school, may allow a student who scores at the advanced level on a particular Keystone Exam prior to taking the course to be granted course credit for the course without having to complete the course.

(B) Locally approved and administered assessments, which shall be independently and objectively validated once every 6 years. Local assessments may be designed to include a variety of assessment strategies listed in § 4.52(c) and may include the use of one or more Keystone Exams. Except for replacement of individual test items that have a similar level of difficulty, a new validation is required for any material changes to the assessment. Validated local assessments must meet the following standards:

(I) Alignment with the following State academic standards: English Language Arts (Literature and Composition); Mathematics (Algebra I), **AND** Science and [Technology,] Environment and Ecology (Biology)~~, and Civics and Government~~.

(II) Performance level expectations and descriptors that describe the level of performance required to achieve proficiency comparable to that used for the Keystone Exams.

(III) Administration of the local assessment to all students, as a requirement for graduation, except for those exempted by their individualized education program under subsection [(g)] (d), regarding special education students, or gifted individualized education plan as provided in § 16.32 (relating to GIEP).

(IV) Subject to appropriations provided by law, the cost to validate local assessments shall be evenly divided between the school district, [AVTS] ACTS or charter school, including a cyber charter school, and the Department. If the Department does not provide sufficient funding to meet its share, local assessments submitted for validation shall be deemed valid until a new validation is due to the Department.

(V) The Department will establish a list of entities approved to perform independent validations of local assessments in consultation with the Local Assessment Validation Advisory Committee as provided in § 4.52(f).

(VI) School boards shall only approve assessments that have been determined to meet the requirements of this subsection by an approved entity performing the independent validation. If a school district, [AVTS] ACTS or charter school, including a cyber charter school, uses a local assessment that has not been independently validated, the Secretary will direct the school entity to discontinue its use until the local assessment is approved through independent validation by an approved entity.

**[(C) Completion of an Advanced Placement exam or International Baccalaureate exam that includes academic content comparable to the appropriate Keystone Exam at a score established by the Secretary to be comparable to the proficient level on the appropriate Keystone Exam.**

**(d) Requirements beginning in the 2018-2019 school year. Effective with the 2018-2019 school year, requirements in subsection (c)(1)(iii) must include a determination of proficiency in English Language Arts (Composition) (Appendix A-2).**

**(e) Requirements beginning in the 2019-2020 school year. Effective with the 2019-2020 school year, Civics and Government (Appendix C) is added to the academic standards in subsection (c)(1)(iii). The requirements in subsection (c)(1)(iii) must include a determination of proficiency in Civics and Government.**

**(f) Career and technical education program students. A student enrolled in a Department-approved career and technical education program may satisfy the requirements of subsections (d) and (e) upon completion of secondary level coursework in English Language Arts (Literature), Algebra I and Biology, in which a student demonstrates proficiency on the associated Keystone Exam, validated local assessment or project-based assessment, and achieves a score of competent or advanced on a Pennsylvania State Skills Assessment required under § 4.31(a) (relating to vocational-technical education).]**

**[(g)] (d) Special education students.** Children with disabilities who satisfactorily complete a special education program developed by an Individualized Education Program team under the Individuals with Disabilities Education Act and this part shall be granted and issued a regular high school diploma by the school district of residence, charter school (including cyber charter

school) or [AVTS] **ACTS**, if applicable. This subsection applies if the special education program of a child with a disability does not otherwise meet the requirements of this chapter.

[(h)] **(e) *Demonstration of proficiency.*** For purposes of this section, a student shall be deemed proficient in the State-assessed standards whenever the student demonstrates proficiency through any of the options in subsection (c)(1)(iii), regardless of the student's grade level or age.

**[(i) *Transcripts.* Beginning in the 2003-2004 school year, and through the 2012-2013 school year, PSSA scores in each assessed discipline shall be included on student transcripts. Beginning in the 2016-2017 school year, the performance level demonstrated in each of the academic standards in subsections (c)—(e) shall be included on student transcripts. The information presented on a transcript must include the highest performance level demonstrated by a student on the associated Keystone Exam, validated local assessment or project-based assessment at the time the transcript is produced.]**

**[(f) *Transcripts.* The performance level demonstrated by a student in each of the state academic standards, including the highest performance level demonstrated by a student on the associated Keystone Exam, may be included on a student's transcript as determined by each school entity.]**

[(j)] **(g) *Release of scores.*** This section does not allow for the release of individual student PSSA or Keystone Exam scores to the Department or other Commonwealth entities in accordance with § 4.51(f) and (g).

**[(k) *Supplemental instruction.* Beginning in the 2011-2012 school year, a] (h) *Supplemental instruction.* A student who does not demonstrate proficiency on a Keystone Exam or a locally validated assessment specified in subsection (c)], (d) or (e) shall may be offered supplemental instructional support by the student's school district, [AVTS] **ACTS** or charter school, including a cyber charter school]. **The supplemental instructional support must be consistent with the student's educational program and assist the student to attain proficiency in the State academic standards] consistent with section 121(c.4) of the Public School Code of 1949 (24 P. S. § 1-121(c.4)).****

[(l)] **(i) *Out-of-state transfers.*** A school district, [AVTS] **ACTS** or charter school, including a cyber charter school, shall determine whether a student who transfers from an out-of-State school having demonstrated proficiency in coursework and assessments aligned with the academic standards assessed by each Keystone Exam may satisfy the requirements of [subsections (c)—(e) subject to guidance developed by the Secretary] **subsection (c).**

**[(m) *Transition.* To effect successful transition between requirements outlined in subsections (b) and (c) regarding requirements through the 2015-2016 school year and requirements beginning in the 2016-2017 school year, subsection (d) regarding requirements beginning in the 2018-2019 school year and subsection (e) regarding requirements beginning in the 2019-2020 school year, a student who will graduate in the 2016-2017 school year or thereafter, who successfully completes courses with academic content assessed under subsection (c), (d) or (e), regarding requirements beginning in the 2016-2017 school year, 2018-2019 school year and 2019-2020 school year for which both the Keystone Exams and local validated assessments were not available at the time the course was completed, shall be deemed proficient for purposes of this section.]**

**(j) In any year in which the Federal government has waived the testing and accountability requirements of the Elementary and Secondary Education Act, AS AMENDED BY THE EVERY STUDENT SUCCEEDS ACT (20 U.S.C.A. §§ 6301–7981), a student shall not be required to take a Keystone Exam for the purpose established in this section and shall be deemed proficient for purposes of this section by meeting the requirements set forth in section 121.1 of the Public School Code of 1949 (24 P.S. § 1-121.).**

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## **[VOCATIONAL-TECHNICAL] CAREER AND TECHNICAL EDUCATION**

### **§ 4.31. [Vocational-technical education] Career and Technical education.**

(a) **[Vocational-technical] Career and technical** education courses shall be developed in the planned instruction format and be accessible to all high school students attending those grades in which **[vocational-technical] career and technical** education courses are offered. All students and their parents or guardians shall be informed of the students' rights to participate in **[vocational-technical] career and technical** education programs and courses and that students with disabilities enrolled in the programs are entitled to services under Chapter 14 (relating to special education services and programs). Students who complete approved **[vocational-technical] career and technical** education programs shall have their occupational competency assessed by completion of the appropriate assessment under the Pennsylvania Skills Certificate Program or by completion of another occupational competency assessment approved by the Department. A student with a disability shall be provided appropriate accommodations when provided for in the student's individualized education program. Students shall also demonstrate proficiency in meeting academic standards as required under § 4.24 (relating to high school graduation requirements), including § 4.12(f) (relating to academic standards) and **[§ 4.24(g)] § 4.24(d)** for students with disabilities with an individualized education program.

(b) **[Vocational-technical] Career and technical** education courses may be taught at **[AVTSS] ACTSs** or other high schools.

(c) **[Vocational-technical] Career and technical** education programs must consist of a series of planned academic and **[vocational-technical] career and technical** education courses that are articulated with one another so that knowledge and skills are taught in a systematic manner. When appropriate, **[vocational-technical] career and technical** education programs must adopt, in program areas for which they are available, industry recognized skills standards and may also include cooperative **[vocational-technical] career and technical** education and participation in **[vocational] career and technical** student organizations to develop leadership skills.

(d) **[Vocational-technical] Career and technical** education courses must include content based upon occupational analysis, clearly stated performance objectives deemed critical to successful employment and assessment of student competencies based upon performance standards.

(e) The record of a student enrolled in a **[vocational-technical] career and technical** education program must include the student's educational and occupational objectives and the results of the assessment of student competencies under subsection (d).

(f) Safety education, consisting of safety practices, accident prevention, occupational health habits and environmental concerns shall be integrated into the instruction and practices in **[vocational-technical] career and technical** education programs.

(g) School districts and **[AVTSs] ACTSs** administering **[vocational-technical] career and technical** education programs shall develop written policies regarding admissions. Course announcements, guidance materials and other communications must convey the philosophy of equal access to students considering enrolling in **[AVTSs] ACTSs** and include a description of admissions policies. The policies must assure that when admissions to **[AVTSs] ACTSs** must be limited, the admissions shall be on a nondiscriminatory basis.

#### **§ 4.32. Standards and reports.**

(a) The Secretary is responsible for the promulgation of standards appropriate for implementing § 4.31 (relating to **[vocational-technical] career and technical** education). Present standards, to the extent that they are inconsistent, are superseded by this chapter.

(b) The Secretary will report annually to the Board on the status of **[vocational-technical] career and technical** education programs, including tech-prep and apprenticeship programs. Reports will include numbers and types of programs, numbers of students, post-program status of students, Statewide competency standards and assessment information.

#### **§ 4.33. Advisory committees.**

(a) A school district or **[AVTS] ACTS** administering or planning to administer **[vocational-technical] career and technical** education programs shall appoint a local advisory committee. Membership on the committee shall consist of business and industry representatives, public sector employers, agriculture, labor organizations, community organizations, postsecondary education institutions and the general public. The appointed advisory committee shall meet at least once each year and give advice to the board and the administration concerning the program of the school, including its general philosophy, academic and other standards, course offerings, support services, safety requirements and the skill needs of employers. An advisory committee may serve multiple institutions where employment areas overlap.

(b) An administrative committee, composed of chief school administrators representing participating school districts, shall be included in the organization of each **[AVTS] ACTS**. The committee shall advise the **[AVTS] ACTS** board and the administration concerning the educational program and policies of the school.

(c) An occupational advisory committee shall be established for each **[vocational-technical] career and technical** education program or cluster of related programs offered by a school district or **[AVTS] ACTS**. The committee shall be appointed by the board of directors, and a

majority of the members of the committee shall be employees and employers in the occupation for which training is provided. The committee shall meet at least twice each year to advise the board, administration and staff on curriculum, equipment, instructional materials, safety requirements, program evaluation and other related matters and to verify that the programs meet industry standards and, if appropriate, licensing board criteria and that they prepare students with occupation related competencies.

#### **§ 4.34. Programs and equipment.**

(a) A satellite **[vocational-technical] career and technical** education program may be operated by an **[AVTS] ACTS** board in conformity with a memorandum of understanding adopted with the participating school district's board of school directors.

(b) Certified guidance personnel in each secondary school and **[AVTS] ACTS** shall be assigned responsibility to provide pupils with **[vocational-technical] career and technical education** guidance services.

(c) Equipment will be deemed appropriate if it is compatible, insofar as practical, to that used in occupations or households for which **[vocational-technical] career and technical** education is provided.

#### **§ 4.35. [AVTSs] ACTSs.**

(a) **[AVTS] ACTS** attendance areas shall conform to the plan of the State Board **[for Vocational] of Career and Technical** Education. Boards of school directors may petition the State Board **[for Vocational] of Career and Technical** Education for attendance area assignment or reassignment.

(b) The following provisions apply to the establishment of **[AVTSs] ACTSs**:

(1) Where more than one district constitutes an attendance area, the appropriate intermediate unit may, and upon the request of any school district shall, call for an election by the boards of school directors within the attendance area to determine if an **[AVTS] ACTS** shall be established.

(2) A school district within the attendance area may elect to participate in the establishment of the **[AVTS] ACTS**.

(3) Where a single school district constitutes an attendance area, the board of school directors of that district may establish and operate **[AVTSs] ACTSs** and be considered an **[AVTS] ACTS** board.

(c) The following provisions apply to articles of agreement for the establishment and operation of **[AVTSs] ACTSs**:

(1) The boards of school directors of the school districts electing to participate in the **[AVTS] ACTS** shall enter into a written agreement setting forth rights and obligations of the participating school districts.

(2) No change will be made in the articles of agreement under paragraph (1) without the consent of each participating school district by the affirmative vote of each board of school directors.

(3) No school district may withdraw from the articles of agreement under paragraph (1) without the consent of each participating school district.

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## ASSESSMENT

### § 4.51. State assessment system.

(a) The State assessment system shall be designed to serve the following purposes:

(1) Provide students, parents, educators and citizens with an understanding of student and school performance consistent with the No Child Left Behind Act of 2001 (Pub. L. No. 107-110, 115 Stat. 1425).

(2) Determine the degree to which school programs enable students to attain proficiency of academic standards under § 4.12 (relating to academic standards).

(3) Provide information to State policymakers, including the General Assembly and the Board, on how effective schools are in promoting and demonstrating student proficiency of academic standards.

(4) Provide information to the general public on school performance.

(5) Provide results to school entities based upon the aggregate performance of all students, for students with an Individualized Education Program (IEP) and for those without an IEP.

(6) Assess student proficiency in the Academic Standards for English Language Arts (Appendix A-2), Mathematics (Appendix A-2), **AND, THROUGH JUNE 30, 2025, Science and ~~Technology and~~ Environment and Ecology ~~(Appendix B)~~, AND, BEGINNING JULY 1, 2025, SCIENCE, ENVIRONMENT, ECOLOGY and Technology and Engineering (Appendix B-1) and Civics and Government (Appendix C)** for the purpose of determining, in part, a student's eligibility for high school graduation.

(b) The State assessment system must include PSSA assessments and Keystone Exams.

(c) Neither State assessments nor academic standards under § 4.12 may require students to hold or express particular attitudes, values or beliefs.

(d) The Department will make samples of State assessment questions, assessment formats and scoring guides available to the public after each administration of State assessments.

(e) To ensure that information regarding student performance is available to parents and teachers, State assessments developed under this section must include student names.

(f) Individual assessment results shall be used in planning instruction only by parents, teachers, administrators and guidance counselors with a need to know based upon local board policy on testing and in reporting academic progress.

(g) The Department and other Commonwealth entities are prohibited from collecting individual student test scores and may collect only aggregate test scores by school and district.

(h) The Board will authorize the expansion of the State assessment system through a revision of this chapter.

(1) The Board will not include National assessments as part of the State assessment system unless, upon consultation with teachers, counselors and parents representing students who have been identified under Chapter 14 (relating to special education services and programs), the Board determines the assessment is an appropriate means of assessing the academic progress of students identified under Chapter 14, or unless the General Assembly authorizes the use of a National assessment.

(2) Subject to paragraph (3), the Board will not, and the Department may not, be a governing state in any consortium for the development of a National assessment for the purpose of utilization as part of the State assessment system.

(3) The Department may continue to participate in a consortium to develop an alternate assessment to measure the academic progress of students identified under Chapter 14.

(i) The Department will implement provisions for security of the State assessment system, including the following:

(1) Action by a professional employee or commissioned officer that is willfully designed to divulge test questions, falsify student scores or in some other fashion compromise the integrity of the State assessment system as determined by the school district, [AVTS] ACTS or charter school, including a cyber charter school, shall be subject to disciplinary action under the Educator Discipline Act (24 P. S. § § 2070.1a—2070.18c).

(2) Cheating by students or employees other than those covered in paragraph (1) shall be subject to disciplinary action by the school district, [AVTS] ACTS or charter school, including a cyber charter school.

(3) Cheating or breaches of assessment security shall be reported to the Secretary as soon as detected.

(j) The Secretary is authorized to establish guidelines for the administration of the State assessment system.

(k) The Secretary will report each September to the Board and the General Assembly information and pertinent data regarding the State assessment system. The Secretary also will provide each school entity information and pertinent data for the school entity and its students.

(l) Children with disabilities and children with limited English proficiency shall be included in the State assessment system as required by Federal law, with appropriate accommodations when necessary. As appropriate, the Commonwealth will develop guidelines for the participation of children with disabilities in alternate assessments for those children who cannot participate in the

PSSA or Keystone Exams as determined by each child's individualized education program team under the Individuals with Disabilities Education Act and this part.

**§ 4.51a. Pennsylvania System of School Assessment.**

(a) All PSSA assessments administered in English Language Arts, Mathematics, and Science, **[and Technology and]** Environment **[and]**, Ecology, **Technology and Engineering** will be standards-based and criterion referenced and include essay or open-ended response items in addition to other item formats. The proportion of type of items will vary by grade level. The criteria for judging performance on PSSA assessments are as follows:

(1) Performance on PSSA English Language Arts assessments shall be demonstrated by students' responses to comprehension questions about age-appropriate reading passages, by their written responses to in-depth comprehension questions about the passages and by the quality of their written compositions on a variety of topics and modes of writing.

(2) Performance on PSSA mathematics assessments shall be demonstrated by students' responses to questions about grade-appropriate content and by the quality of their responses to questions that require a written solution to a problem.

(3) Performance on PSSA science assessments shall be demonstrated by students' responses to grade appropriate content and by the quality of their responses to questions that demonstrate knowledge of each category of the standards for science **[and technology and]**, environment **[and]**, ecology, **technology and engineering**.

(4) Performance levels shall be advanced, proficient, basic and below basic. In consultation with educators, students, parents and citizens, the Department will develop and recommend to the Board for its approval specific criteria for advanced, proficient, basic and below basic levels of performance.

(b) The Department will develop or cause to be developed PSSA assessments based on Pennsylvania Core Standards in Mathematics and English Language Arts under § 4.12 (relating to academic standards) and contained in Appendix A-2. **and THROUGH JUNE 30, 2025, THE DEPARTMENT WILL DEVELOP OR CAUSE TO BE DEVELOPED PSSA ASSESSMENTS BASED ON ACADEMIC STANDARDS IN SCIENCE AND TECHNOLOGY AND ENVIRONMENT AND ECOLOGY UNDER § 4.12 AND CONTAINED IN APPENDIX B. BEGINNING JULY 1, 2025, THE DEPARTMENT WILL DEVELOP OR CAUSE TO BE DEVELOPED PSSA ASSESSMENTS BASED ON** academic standards in Science **[and Technology and]**, Environment **[and]**, Ecology, **Technology and Engineering** under § 4.12 and contained in **[Appendix B] Appendix B-1**. In developing PSSA assessments, the Department will consult with educators, students, parents and citizens regarding the specific methods of assessment.

(c) The PSSA assessments shall be administered annually and include assessments of the State academic standards in Mathematics and English Language Arts at grades 3 through 8, and in Science **[and Technology and]**, Environment **[and]**, Ecology, **Technology and Engineering** at grades 4 and 8.

## § 4.51b. Keystone Exams.

(a) The Department will develop or cause to be developed Keystone Exams as provided in this subsection. (This subsection is intended by the Board to be a continuation of § 4.51(f) (relating to State assessment system) as published at 40 Pa.B. 240 (January 9, 2010) and referenced in section 102 of the School Code (24 P. S. § 1-102).)

(1) **[Three assessments] One assessment** aligned with the Mathematics standards, contained in Appendix A-2, that **[assess] assesses** the academic content traditionally included in **an Algebra I, Algebra II and Geometry courses] course.**

(2) **[Two assessments] One assessment** aligned with select English Language Arts standards, contained in Appendix A-2 that **[assess] assesses** academic content traditionally included in **a high school literature [and composition courses] course.**

**[(3) Three assessments aligned with select History and Civics and Government standards, contained in Appendix C, that assess content traditionally included in high school level American History, World History and Civics and Government courses.]**

**[(4) Two assessments] (3) THROUGH JUNE 30, 2025, ONE ASSESSMENT ALIGNED WITH SELECT STANDARDS FOR SCIENCE AND TECHNOLOGY AND ENVIRONMENT AND ECOLOGY, CONTAINED IN APPENDIX B, THAT ASSESSES ACADEMIC CONTENT TRADITIONALLY INCLUDED IN A HIGH SCHOOL LEVEL BIOLOGY COURSE. BEGINNING JULY 1, 2025, ~~One~~ ONE assessment** aligned with select standards for Science **[and Technology and]**, Environment and Ecology, contained in **[Appendix B] Appendix B-1**, that **[assess] assesses** academic content traditionally included in **a high school level Biology [and Chemistry courses] course.**

(b) Keystone Exams shall be offered at least three times each year: once each in the fall, spring and summer.

(c) Keystone Exams shall be administered, reviewed and scored so that scores for candidates for graduation are provided to schools no later than 10 calendar days prior to graduation. A school district, **[AVTS] ACTS** or charter school, including a cyber charter school, may request the Department to approve alternative test administration and scoring time frames. The Department will publish guidelines and procedures for approving alternative test administration and scoring time frames on its web site. The guidelines will provide for approval of all requests unless the approval is contrary to standards of test validity and scoring.

(d) A student shall be permitted to retake any Keystone Exam, or Keystone Exam module, in which the student did not score proficient or above at the next available testing date, **so long as the student has participated in a satisfactory manner in supplemental instruction as provided under § 4.24(k) (relating to high school graduation requirements) and subsection (f).** There is not a limit on the number of times a student who did not score proficient on a Keystone Exam is permitted to retake the Keystone Exam or Keystone Exam module. A student who has achieved a score of proficient or advanced on a Keystone Exam **[is not permitted to retake the exam] shall be permitted to retake a Keystone Exam only if the student or parent submits a request in writing to the school entity.**

(e) Each Keystone Exam will be designed in modules that reflect distinct, related academic content that is common to the traditional progression of coursework to allow students who do not score proficient or above to retake those portions of the test in which they did not score proficient or above.

(f) A student taking Keystone Exams, or Keystone Exam modules, who did not score proficient on a Keystone Exam, or Keystone Exam module, **[shall] may** be provided supplemental instruction consistent with the student's educational program by the student's school district, **[AVTS] ACTS** or charter school, including a cyber charter school, **[until the student can demonstrate proficiency in the subject area or the student begins a project-based assessment provided in § 4.51c (relating to project-based assessment)] consistent with section 121(c.4) of the Public School Code OF 1949 (24 P. S. § 1-121(c.4))**.

(g) Performance levels for Keystone Exams shall be set at the advanced, proficient, basic and below basic levels. In consultation with the Performance Level Advisory Committee, the Department will develop and recommend to the Board for its approval performance level descriptors and performance level cut scores for the Keystone Exams and any alternative assessments developed to assess students with disabilities as permitted by the No Child Left Behind Act of 2001 (Pub. L. No. 107-110, 115 Stat. 1425). The Department will use widely-accepted psychometric procedures to establish the cut scores. Cut scores shall be presented at a public meeting of the Board for its review at least 2 weeks prior to scheduled Board action on the cut scores.

(h) The Department will provide guidance to school districts, **[AVTSs] ACTSs** and charter schools, including cyber charter schools, as to the appropriate accommodations school entities shall provide to students with disabilities, students who are gifted and English language learners, when appropriate.

(i) Beginning in the 2012-2013 school year, Keystone Exams in the following subjects will be developed by the Department and made available for use by school districts, **[AVTSs] ACTSs** and charter schools, including cyber charter schools, for the purpose of assessing high school graduation requirements in § 4.24(c)(1)(iii):

Algebra I  
Literature  
Biology

**[(j) Subject to funding appropriated by the General Assembly for development of the exams and related project-based assessments and validation of related local assessments, Keystone Exams in the following subjects will be developed by the Department and made available for use by school districts, AVTSs and charter schools, including cyber charter schools, for the purpose of assessing high school graduation requirements in § 4.24(c)(1)(iii) in accordance with the following schedule:**

**School Year 2015-2016 English Composition  
School Year 2016-2017 Civics and Government**

**(1) During the 2014-2015 school year, school districts, AVTSs and charter schools, including cyber charter schools, shall administer the Keystone Exam in English**

**Composition for the purpose of gathering data to set performance level cut scores for the exam.**

**(2) During the 2015-2016 school year, school districts, AVTSs and charter schools, including cyber charter schools, shall administer the Keystone Exam in Civics and Government for the purpose of gathering data to set performance level cut scores for the exam.**

**(k) Subject to funding appropriated by the General Assembly for development of the exams, Keystone Exams in the following subjects will be developed by the Department and made available for voluntary use by school districts, AVTSs and charter schools, including cyber charter schools, in accordance with the following schedule:**

**School Year 2016-2017 Geometry  
School Year 2017-2018 U.S. History  
School Year 2018-2019 Algebra II  
School Year 2019-2020 Chemistry  
School Year 2020-2021 World History]**

**[(l)] (j) The Department will seek to have the Keystone Exams approved as the high school level single accountability system under the ~~No Child Left Behind Act of 2001~~ EVERY STUDENT SUCCEEDS ACT (PUB. L. NO. 114-95) or its successor Federal statute. [Upon approval by the United States Department of Education, the Algebra I and Literature exams will be used to determine adequate yearly progress at the high school level. The Biology Keystone Exam will be used as the high school level science assessment, which is not a factor in determining adequate yearly progress.] If the Keystone Exams receive approval as the high school level accountability measure, school districts, [AVTSs] ACTSs and charter schools, including cyber charter schools, shall administer the Literature, Algebra I and Biology exams as end-of-course tests in the grade level in which students complete the relevant coursework.**

**[(m)] (k) The 11th grade PSSA exams in Reading, Writing, Math and Science shall be discontinued upon implementation of the Keystone Exams as the approved assessment system under section 1111(b)(2)(C) of the No Child Left Behind Act of 2001 (20 U.S.C.A. § 6311(b)(2)(C)).**

**[(n)] (l) At least once every 5 years, the Department will contract with a qualified, independent research organization to perform a validity study of the Keystone Exams using generally accepted education research standards. These studies will determine, at a minimum, the degree to which the Keystone Exams and performance level cut scores are valid for the purposes for which they are used; aligned with State academic standards; aligned with performance levels of other states; internationally benchmarked; and predict college and career success. In addition, all Keystone Exams, performance level descriptors and cut scores will be subject to the best available forms of content, criterion and consequential validation.**

**[(o)] (m) The Department will establish a State Assessment Validation Advisory Committee (Committee). The Committee will advise the Department on its plans to conduct the validity study and review and provide feedback on its findings.**

~~[(p)]~~ **(n)** The Department and the Committee will investigate the use of a certificate based on industry approved standards and performance on an NOCTI exam as an alternative pathway to graduation and will make a report and recommendation to the Board by January 10, 2011.

**§ 4.51c. Project-based assessment.**

~~(a)~~ The Department will develop a project-based assessment system that is aligned with the modules for the Keystone Exams in Literature, Algebra I, and Biology], **Composition, and Civics and Government for students who are unable to demonstrate proficiency on a Keystone Exam or Keystone Exam module, or if § 4.4(d)(4) (relating to general policies) applies]. School entities may utilize project-based assessments for students consistent with section 121(c.5) of the Public School Code of 1949 (24 P. S. § 1-121(c.5)).**

**(b)** The project-based assessment system shall be administered by schools and scored by Statewide panels composed of teachers, principals and curriculum specialists assembled by the Department. The Statewide review panels shall score student projects according to scoring protocols and rubrics developed by the Department.

**(c)** A student in grade 12 who has not demonstrated proficiency on a Keystone Exam or Keystone Exam module may qualify to participate in one or more project-based assessments if the student has met the following conditions:

**(1)** Has taken the course.

**(2)** Has met the attendance requirements of the school district, AVTS or charter school, including a cyber charter school.

**(3)** Has participated in a satisfactory manner in supplemental instructional services consistent with the student's educational program provided by the school district, AVTS or charter school, including a cyber charter school, as provided under § § 4.24(k) and 4.51b(f) (relating to high school graduation requirements; and Keystone Exams).

**(d)** A student below grade 12 who has not demonstrated proficiency on a Keystone Exam or Keystone Exam module after at least two attempts on the exam or module may qualify to participate in one or more project-based assessments if the student has met the following conditions:

**(1)** Has taken the course.

**(2)** Has met the attendance requirements of the school district, AVTS or charter school, including a cyber charter school.

**(3)** Has participated in a satisfactory manner in supplemental instructional services consistent with the student's educational program provided by the school district, AVTS or charter school, including a cyber charter school, as provided under § § 4.24(k) and 4.51b(f).

**(e)** A student to whom § 4.4(d)(4) applies may qualify to participate in one or more project-based assessments if the student has met the following conditions:

**(1)** Has taken the course.

**(2) Has met the attendance requirements of the school district, AVTS or charter school, including a cyber charter school.**

**(f) Successful completion of a project-based assessment aligned to the Keystone Exam or Keystone Exam module on which a student did not demonstrate proficiency shall satisfy the requirements that students achieve proficiency on the Keystone Exams in § 4.24.**

**(g) A student enrolled in a Department-approved career and technical education program who has not demonstrated proficiency on a Keystone Exam or Keystone Exam module in Biology may qualify to participate in a project-based assessment in Biology if the student has met the following conditions:**

**(1) Has taken the course.**

**(2) Has met the attendance requirements of the school district, AVTS or charter school, including a cyber charter school.]**

#### **§ 4.51d. Waivers.**

A chief school administrator, in his sole discretion, may waive the requirements in § 4.24 (relating to high school graduation requirements) **[on a case-by-case basis for good cause. Waivers may be granted for a student in grade 12 who was not successful in completing a project-based assessment as provided in § 4.51c (relating to project-based assessment), or to accommodate a student who experiences extenuating circumstances (including serious illness, death in immediate family, family emergency, frequent transfers in schools or transfer from an out-of-State school in grade 12).**

**(1) Prior to granting a waiver, a chief school administrator shall certify that the student meets the following criteria:**

**(i) Has met the local requirements of the school district, AVTS or charter school, including a cyber charter school, for graduation, except for demonstration of proficiency of the requirements in § 4.24(c)(1)(iii)(A) for which the waiver is being requested.**

**(ii) Has not demonstrated proficiency on a Keystone Exam or Keystone Exam module.**

**(iii) If the student is required to participate in supplemental instruction under § 4.24(k) and § 4.51b(f) (relating to Keystone Exams), has participated in a satisfactory manner in supplemental instructional services consistent with the student's educational program provided by the school district, AVTS or charter school, including a cyber charter school.**

**(iv) Has not successfully completed a project-based assessment aligned to the Keystone Exam or Keystone Exam module on which the student did not demonstrate proficiency.**

**(2) If a chief school administrator is considering granting waivers for more than 10% of students in the graduating class of a school district, AVTS or charter school, including a cyber charter school, because the students were not successful in completing a project-based assessment as provided in § 4.51c, the chief school administrator shall submit an action plan for approval by the Secretary no later than 10 calendar days prior to graduation. The action plan must identify improvements the school district, AVTS or**

**charter school, including a cyber charter school, will implement to each course associated with the Keystone Exam content for which the waivers were granted.] consistent with section 121(c.3) of the Public School Code of 1949 (24 P. S. § 1-121(c.3)).**

[(3)] **(1)** The chief school administrator of each school district, [AVTS] **ACTS** and charter school, including a cyber charter school, shall annually report to the Department the number of waivers granted to students in the most recent graduating class **consistent with section 121(c.11)(6) of the Public School Code of 1949 (24 P. S. § 1-121(c.11)(6))**, and the Department will annually report to the Board the number of waivers granted by each school district, [AVTS] **ACTS** and charter school, including a cyber charter school.

[(4)] **(2)** The waiver process described in this section does not confer an individual right on any student.

[(5)] **(3)** The decision of a chief school administrator concerning a waiver request is not an adjudication.

**[(6) Disapproval of the action plan required under paragraph (2) does not confer an individual right on any student relative to a waiver determination made by a chief school administrator.]**

#### **§ 4.52. Local assessment system.**

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(e) Children with disabilities shall be included in the local assessment system, with appropriate accommodations, when necessary. As appropriate, the school district, including a charter school, including a cyber charter school, or [AVTS] **ACTS** shall develop guidelines for the participation of children with disabilities in alternate assessments for those children who cannot participate in the local assessment as determined by each child's Individualized Education Program team under the Individuals with Disabilities Education Act and this part.

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