

State of Hawaii
Department of Education

Hawaii Community Schools for Adults

High School Equivalency Test

HiSET



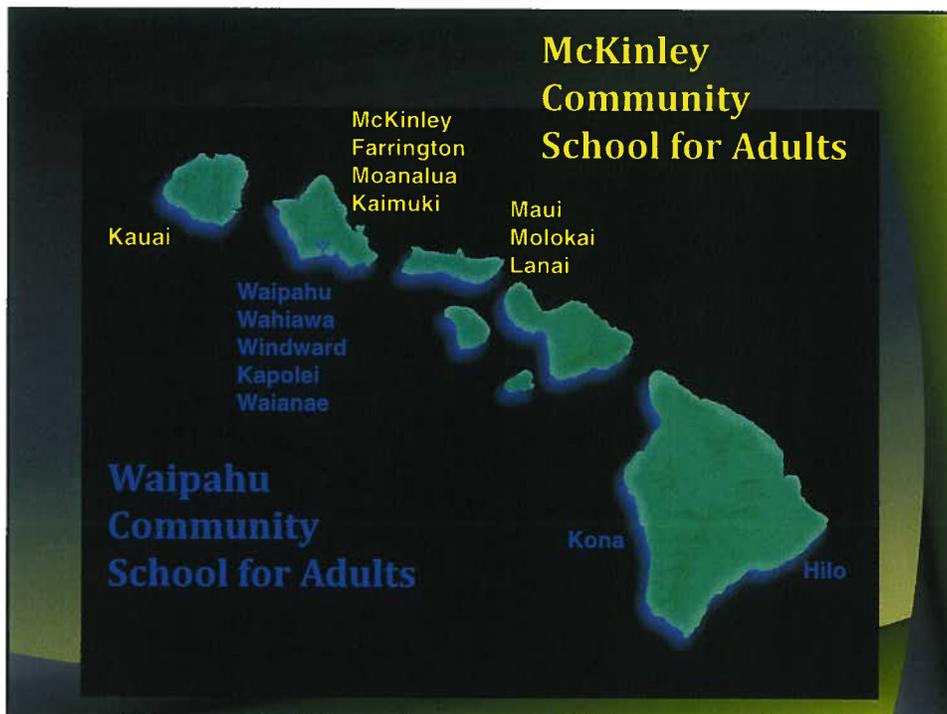
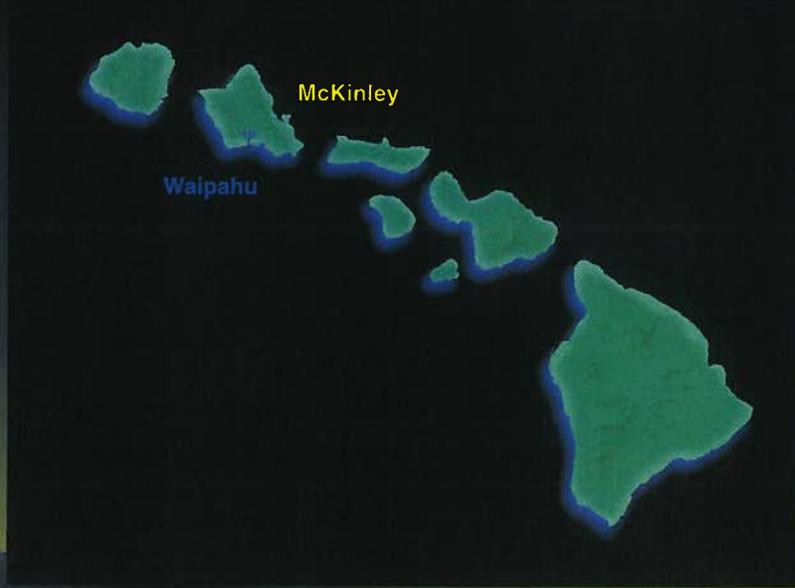
Board of Education Meeting
April 7, 2015



Pre-2012 – 11 CSAs



2012 – Two Schools Consolidation



What is Adult Education?

- Program to serve adults:
 - ✓ 16 years of age and older
 - ✓ functioning below high-school completion level
- Program offers flexibility in learning opportunities for working/care-giving adults.
 - ✓ Weekday, Saturday and evening classes
 - ✓ Various locations within the community
- Program with emphasis on:
 - ✓ English Literacy, Reading and Numeracy

What is the value of these programs?

- Assist adults seeking employment through integrated adult education and occupational training services.
- Assist adults in helping their children with homework and to be successful in school.
- Assist adults in leaving public assistance and achieving a family sustaining income.

What is the value of these programs?

- Assist adults in learning the English language, understanding U.S. culture, and participating in society.
- Assist adults seeking an adult school diploma or high school equivalency certificate (GED®).
- Assist adults wishing transfer to post secondary or other training and education programs.

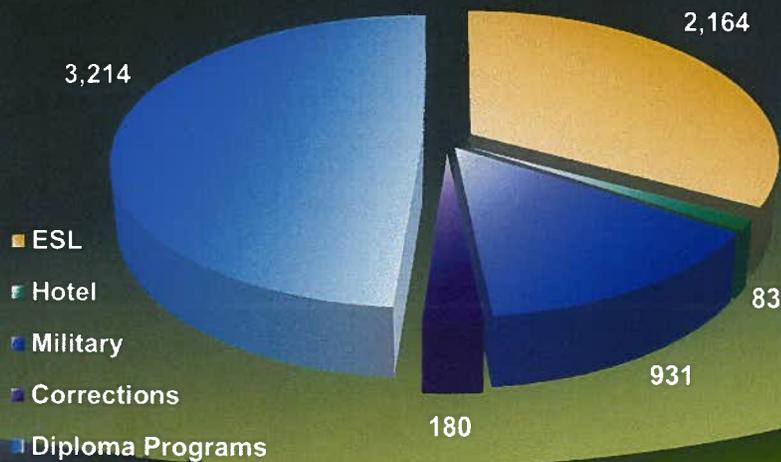
Core Functions

- Adult Basic Education (ABE)
- Adult Secondary Education (ASE)
 - ✓ Two Pathways
 - Competency-Based Community School Diploma Program (CBCSDP)
 - Diploma and/or High School Equivalency Program (GED®)
- English as Second Language Program (ELL)
- Literacy (Workplace and Family)

5th Core Function... Value-Added Service to the DOE

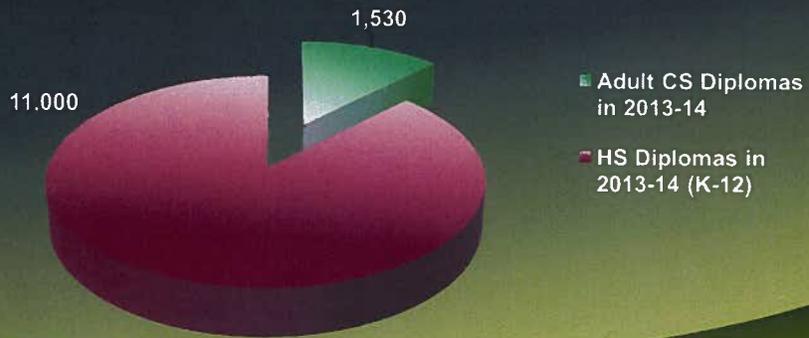
- Substitute teacher certification and recertification courses
- Para-Pro assessment (Spring 2015)
- PRAXIS Prep
- Credit-recovery courses for high school students
- Test-preparation courses via EDMENTUM (PLATO)
 - SAT, ACT, ASVAB, COMPASS, GED, and HiSET

National Reporting System (NRS) Student Distribution



Diplomas Granted

- 2,362 CSA Issued High School Diplomas in 2011-2012
- 1,530 Adult Community School Diplomas in 2013-2014



Total Student Distribution



CSA Public & Private Partnerships

- Catholic Charities
- Department of Human Services
- Department of Labor and Industrial Relations
- Department of Public Safety (Corrections)
- Goodwill Industries
- Hale Kipa (Kauai)
- Hawaii Tourism & Travel Industry
- Hawaii Youth Challenge Academies
- Honolulu Community Action Program (HCAP)
- Job Corp
- Kupu Hawaii
- Native Hawaiian Library
- United States Citizenship & Immigration Services (USCIS)
- United States Armed Forces
- University of Hawaii Community Colleges
- Youth Build

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of Schools And Colleges



Awarded Six Year Terms: Expiration 2020

Workforce Investment Opportunities ACT (WIOA)

Under the new law (WIOA) CSA's are part of an alliance of partners that are tasked to:

- Provide a seamless array of services to the community.
- Provide the educational support for those entering employment, post secondary and apprenticeship programs.

Workforce Investment Opportunities Act (WIOA)

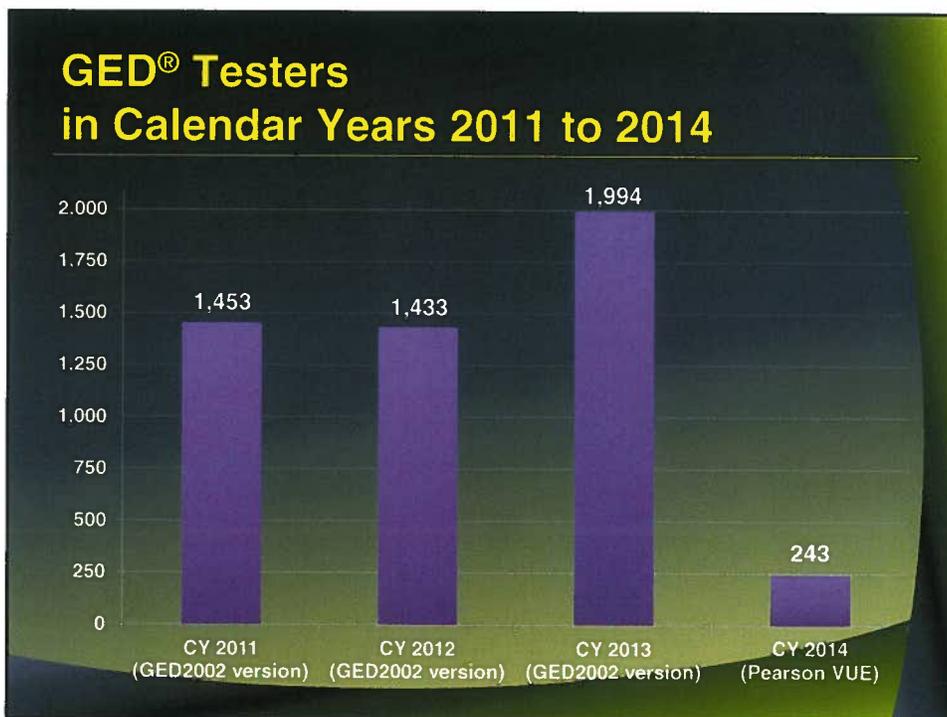
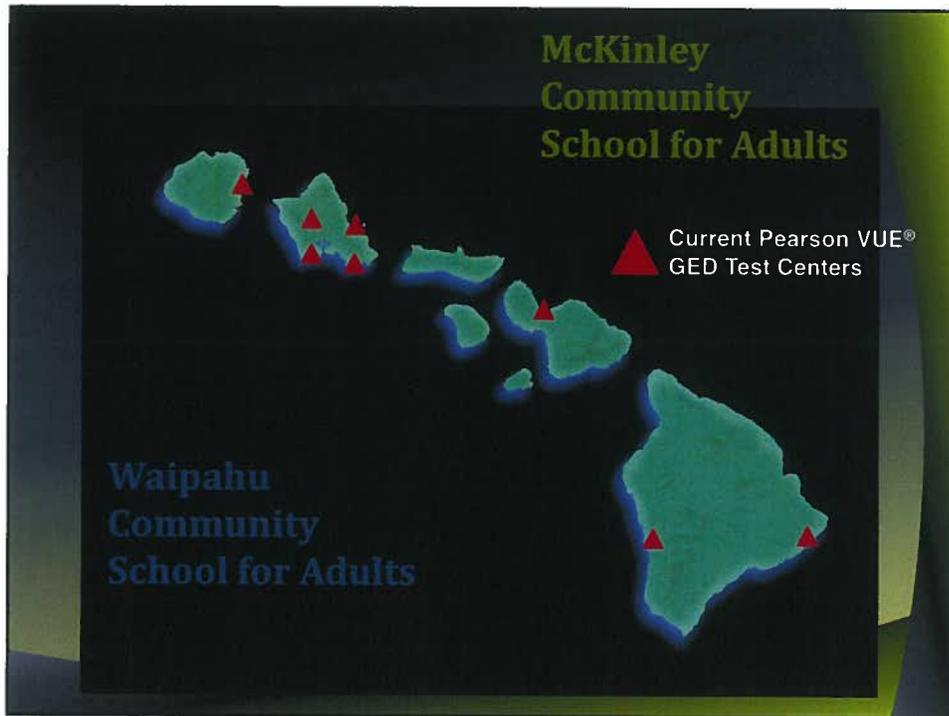
WIOA - Alliance of Partners

- Department of Labor
- Department of Human Services
 - ✓ Division of Vocational Rehabilitation
- DOE Adult Education
 - ✓ McKinley and Waipahu CSA

HiSET

Why *HiSET*?

- Currently the only high school equivalency examination available in the State of Hawaii is the GED® Test.
- The GED® Test can only be administered at certified Pearson VUE Authorized Testing Centers (computer-based). Limits access to testers on Molokai, Lanai, Hana, Hawi, Punaluu, Naalehu, Correctional Facilities and other remote areas.
- Hawaii needs an alternative to the GED® that provides flexibility in test administration (paper-pencil).



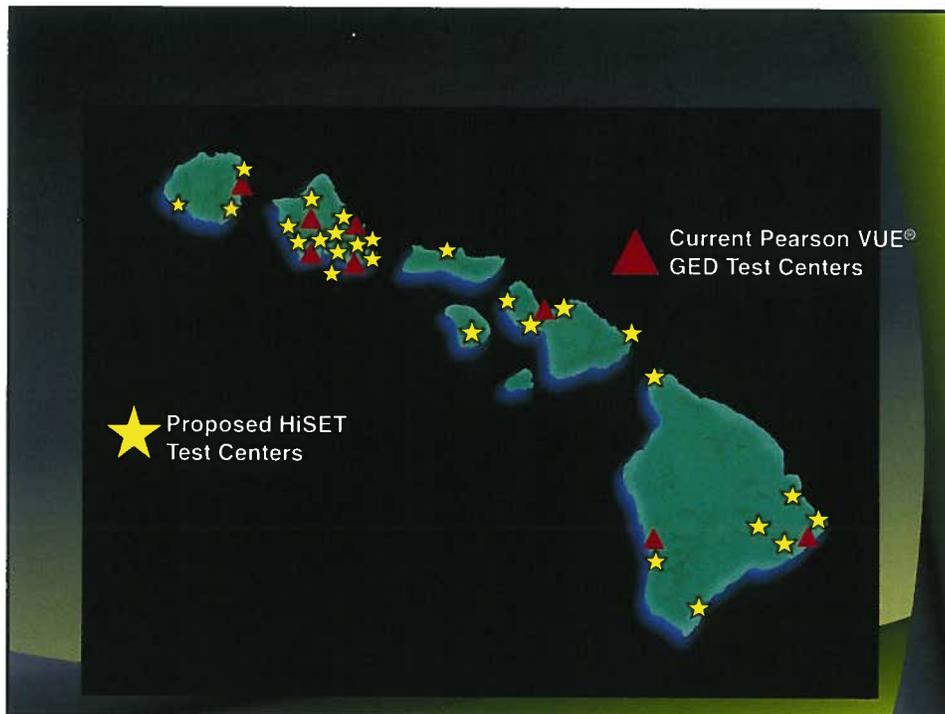
Why *HiSET*?

- Hawaii needs another option for those seeking a high school equivalency credential. It has been unavailable up to now.
- Paper-based test option is available for those unable to access a GED® Pearson VUE® Authorized Test Center (computer-based).

- Affordable test fees

HiSET, Full Battery - \$70

GED®, Full Battery - \$150



HiSET Handouts

- HiSET 2015 Informational Brief
- Research Rationale for HiSET
- HiSET and Federal Programs
- The HiSET reflects College and Career Readiness

HiSET® Information Brief–2015

The purpose of the ETS High School Equivalency Test (*HiSET*®) is to certify a candidate's attainment of academic knowledge and skills equivalent to those of a high school graduate. *HiSET*® scores will identify those candidates who have performed at a level consistent with high school equivalency. Information from the HiSET program also will help identify areas in which candidates are career- and college-ready, as well as areas in which additional preparation may be needed.

Candidates will be tested in five core areas: Language Arts – Reading, Language Arts – Writing, Mathematics, Science, and Social Studies. Descriptions of each of these five tests are contained in this document. Included with the descriptions are sample items that illustrate the types of items that will appear on the test. The ***HiSET*® Practice Tests** allow the candidates to view sample content and item types and provide them with general information about their level of preparation for taking the operational form.

Through ongoing validity research, the HiSET program has been connected to college readiness indicators. Candidate performance relative to these indicators is part of the reporting system for the assessment.

The following “Test at a Glance” sections provide an outline of the Content and Process Categories for each subject area.

The emphasis of each category is expressed as the percent of questions per category. This percent is the average number of questions across all 2015 forms on the HiSET exam.

Language Arts – Reading

Test at a Glance	
Test Name	Language Arts – Reading
Time	65 minutes
Number of Questions	40
Format	Multiple-choice questions
<p>A pie chart illustrating the distribution of content categories. The chart is divided into two segments: a larger green segment labeled 'I' representing 60% and a smaller light gray segment labeled 'II' representing 40%.</p>	Content Categories
	Application of concepts, analysis, synthesis, and evaluation involving:
	<ol style="list-style-type: none">I. Literary TextsII. Informational Texts
	Process Categories
	<ol style="list-style-type: none">A. ComprehensionB. Inference and InterpretationC. AnalysisD. Synthesis and Generalization

About This Test

The Language Arts – Reading test provides evidence of a candidate’s ability to understand, comprehend, interpret, and analyze a variety of reading material. The item pool from which the HiSET test forms will be assembled is 60 percent literary content and 40 percent informational content, as defined by CCSS. We note that this is a closer representation of CCSS than the current high school equivalency test. In the ETS HiSET program, candidates will be required to read a broad range of high-quality, increasingly challenging literary and informational texts. The selections are presented in multiple genres on subject matter that varies in purpose and style. The selections may take the form of memoirs, essays, biographical sketches, editorials, or poetry. The texts generally range in length from approximately 400 to 600 words.

Reading Process Categories

In addition to the variety of reading texts, candidates also will answer questions that may involve one or more of the processes described below.

Comprehension

- *Understand restatements of information*
- *Determine the meaning of words and phrases as they are used in the text*
- *Analyze the impact of specific word choices on meaning and tone*

Inference and Interpretation

- *Make inferences from the text*
- *Draw conclusions or deduce meanings not explicitly present in the text*
- *Infer the traits, feelings, and motives of characters or individuals*
- *Apply information*
- *Interpret nonliteral language*

Analysis

- *Analyze multiple interpretations of a text*
- *Determine the main idea, topic, or theme of a text*
- *Identify the author's or speaker's purpose or viewpoint*
- *Distinguish among opinions, facts, assumptions, observations, and conclusions*
- *Recognize aspects of an author's style, structure, mood, or tone*
- *Recognize literary or argumentative techniques*

Synthesis and Generalization

- *Draw conclusions and make generalizations*
- *Make predictions*
- *Compare and contrast*
- *Synthesize information across multiple sources*

Language Arts – Writing

Test at a Glance	
Test Name	Language Arts – Writing
Time	Part 1 – 75 minutes Part 2 – 45 minutes
Number of Questions	51
Format	Multiple-choice questions Essay question
	Content Categories – Part 1
	<ul style="list-style-type: none"> I. Organization of Ideas (25%) II. Language Facility (41%) III. Writing Conventions (34%)
	Content Categories – Part 2
	<ul style="list-style-type: none"> A. Development of Ideas B. Organization of Ideas C. Language Facility D. Writing Conventions

About This Test

The Language Arts – Writing test provides information about a candidate's skill in recognizing and producing effective standard American written English. Part 1 of the test measures a candidate's ability to edit and revise written text. Part 2 of the test measures a candidate's ability to generate and organize ideas in writing.

Part 1 requires candidates to make revision choices concerning organization, diction and clarity, sentence structure, usage, and mechanics. The test questions are embedded in complete texts in the form of letters, essays, newspaper articles, personal accounts, and reports.

The texts are presented as drafts in which parts have been underlined to indicate a possible need for revision. Questions present alternatives that may correct or improve the underlined portions. Aspects of written language that are tested may include appropriate style, logical transitions, discourse structure and organization, conciseness and clarity, or usage and mechanics.

Part 2 of the test measures proficiency in the generation and organization of ideas through a direct assessment of writing. Candidates are evaluated on development, organization, language facility, and writing conventions.

Content Descriptions

The following are descriptions of the topics covered in the basic content categories of Part 1. Because the assessments were designed to measure the ability to analyze and evaluate writing, answering any question may involve aspects of more than one category.

Organization of Ideas

- *Select logical or effective opening, transitional, and closing sentences*
- *Evaluate relevance of content*
- *Analyze and evaluate paragraph structure*
- *Recognize logical transitions and related words and phrases*

Language Facility

- *Recognize appropriate subordination and coordination, parallelism, and modifier placement*
- *Maintain consistent verb tense*
- *Recognize effective sentence combining*

Writing Conventions

- *Recognize verb, pronoun, and modifier forms*
- *Maintain grammatical agreement*
- *Recognize idiomatic usage*
- *Recognize correct capitalization, punctuation, and spelling*

Part 2 of the Language Arts – Writing test requires that candidates create written responses that are evaluated for development of ideas, organization of ideas, language facility, and conventions.

Development of Ideas

- *Focus on central idea, supporting ideas*
- *Explanation of supporting ideas*

Organization of Ideas

- *Introduction and conclusion*
- *Sequencing of ideas*
- *Paragraphing*
- *Transitions*

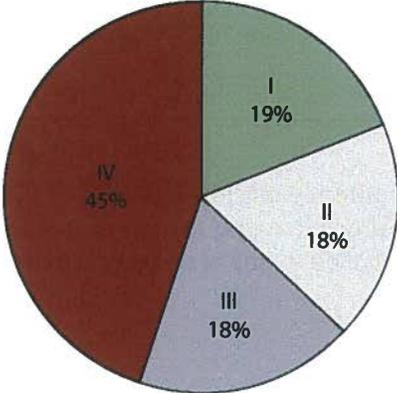
Language Facility

- *Word choice*
- *Sentence structure*
- *Expression and voice*

Writing Conventions

- *Grammar*
- *Usage*
- *Mechanics*

Mathematics

Test at a Glance	
Test Name	Mathematics
Time	90 minutes
Number of Questions	50
Format	Multiple-choice questions
	Content Categories
	I. Numbers and Operations on Numbers (19%) II. Measurement/Geometry (18%) III. Data Analysis/Probability/Statistics (18%) IV. Algebraic Concepts (45%)
	Process Categories
	A. Understand Mathematical Concepts and Procedures B. Analyze and Interpret Information C. Synthesize Data and Solve Problems

About This Test

The Mathematics test assesses mathematical knowledge and competencies. The test measures a candidate's ability to solve quantitative problems using fundamental concepts and reasoning skills. The questions present practical problems that require numerical operations, measurement, estimation, data interpretation, and logical thinking. Problems are based on realistic situations and may test abstract concepts such as algebraic patterns, precision in measurement, and probability. The use of calculators is an option for candidates.

Content Descriptions

The following are descriptions of the topics covered in the basic content categories. Because the assessments were designed to measure the ability to integrate knowledge of mathematics, answering any question may involve content from more than one category.

Numbers and Operations on Numbers may include the following topics: properties of operations, vectors, and matrices; real and complex numbers; absolute values; and computation and estimation with real numbers, exponents, radicals, ratios, proportions, and percents.

Measurement and Geometry may include the following topics: measurable attributes of objects and the appropriate techniques, tools, and formulas to determine measurement and achieve specified degrees of precision. Key ideas in geometry include: properties of geometric figures; theorems of lines and triangles; and the perimeter, surface area, volume, lengths, and angles for geometric shapes.

Data Analysis, Probability, and Statistics may include the basic concepts of probability, linear relationships, and measures of central tendency and variability to solve problems. Concepts and processes may include understanding relations among events, data collection, counting principles, and the aspects of distributions.

Algebraic Concepts may include the concepts of analyzing mathematical situations and structures using algebraic symbols. Candidates should understand patterns, relations, and functions. Topics may include linear functions and inequalities as well as nonlinear functional relations. Candidates may be required to analyze and interpret algebraically, numerically, and graphically; represent, generalize, and solve problem situations; simplify algebraic expressions; analyze and interpret functions of one variable by investigating rates of change and intercepts; and understand the meaning of equivalent forms of expressions, equations, inequalities, and relations.

Mathematics Process Categories

In addition to knowing and understanding the mathematics content explicitly described in the Content Descriptions section, candidates also will answer questions that may involve one or more of the processes described below. Any of the processes may be applied to any of the content areas of the mathematics test.

Understand Mathematical Concepts and Procedures

- *Select appropriate procedures*
- *Identify examples and counterexamples of concepts*

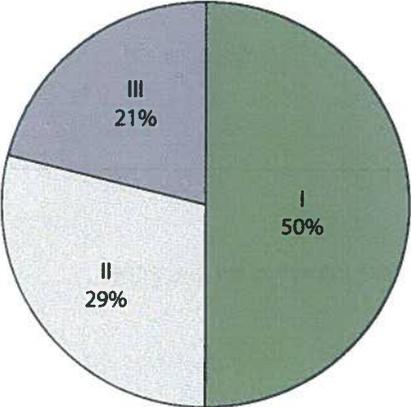
Analyze and Interpret Information

- *Make inferences or predictions based on data or information*
- *Interpret data from a variety of sources*

Synthesize Data and Solve Problems

- *Reason quantitatively*
- *Evaluate the reasonableness of solutions*

Science

Test at a Glance	
Test Name	Science
Time	80 minutes
Number of Questions	50
Format	Multiple-choice questions
	Content Categories
	I. Life Science (50%) II. Physical Science (29%) III. Earth Science (21%)
	Process Categories
	A. Interpret and Apply B. Analyze C. Evaluate and Generalize

About This Test

The Science test provides evidence of a candidate's ability to use science content knowledge, apply principles of scientific inquiry, and interpret and evaluate scientific information. Most of the questions in the test are associated with stimulus materials that provide descriptions of scientific investigations and their results. Scientific information is based on reports that might be found in scientific journals. Graphs, tables, and charts are used to present information and results.

The science situations use material from a variety of content areas such as: physics, chemistry, botany, zoology, health, and astronomy. The questions may ask candidates to identify the research question of interest, select the best design for a specific research question, and recognize conclusions that can be drawn from results. Candidates also may be asked to evaluate the adequacy of procedures and distinguish among hypotheses, assumptions, and observations.

Content Descriptions

The following are descriptions of the topics covered in the basic content categories. Because the assessments were designed to measure the ability to analyze and evaluate scientific information, answering any question may involve content from more than one category.

Life Science topics may include fundamental biological concepts, including organisms, their environments, and their life cycles; the interdependence of organisms; and the relationships between structure and function in living systems.

Physical Science topics may include observable properties such as size, weight, shape, color, and temperature; concepts relating to the position and motion of objects; and the principles of light, heat, electricity, and magnetism.

Earth Science topics may include properties of earth materials, geologic structures and time, and Earth's movements in the solar system.

Science Process Categories

In addition to knowing and understanding the science content explicitly described in the Content Descriptions section, candidates also will answer questions on this assessment that may involve one or more of the processes described below. Any of the processes may be applied to any of the content topics.

Interpret and Apply

- *Interpret observed data or information*
- *Apply scientific principles*

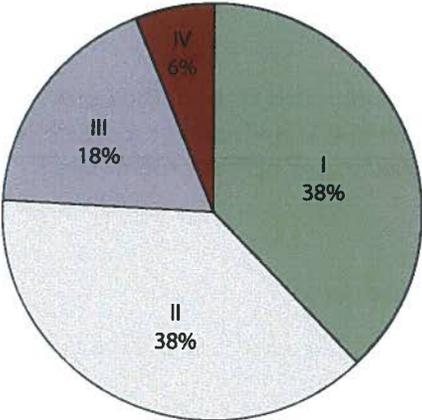
Analyze

- *Discern an appropriate research question suggested by the information presented*
- *Identify reasons for a procedure and analyze limitations*
- *Select the best procedure*

Evaluate and Generalize

- *Distinguish among hypotheses, assumptions, data, and conclusions*
- *Judge the basis of information for a given conclusion*
- *Determine relevance for answering a question*
- *Judge the reliability of sources*

Social Studies

Test at a Glance	
Test Name	Social Studies
Time	70 minutes
Number of Questions	50
Format	Multiple-choice questions
	Content Categories
	I. History (38%) II. Civics/Government (38%) III. Economics (18%) IV. Geography (6%)
	Process Categories
	A. Interpret and Apply B. Analyze C. Evaluate and Generalize

About This Test

The Social Studies test provides evidence of a candidate's ability to analyze and evaluate various kinds of social studies information. The test uses materials from a variety of content areas, including history, political science, psychology, sociology, anthropology, geography, and economics. Primary documents, posters, cartoons, timelines, maps, graphs, tables, charts, and reading passages may be used to present information. The questions may ask candidates to distinguish statements of fact from opinion; recognize the limitations of procedures and methods; and make judgments about the reliability of sources, the validity of inferences and conclusions, and the adequacy of information for drawing conclusions.

Content Descriptions

The following are descriptions of the topics covered in the basic content categories. Because the assessments were designed to measure the ability to analyze and evaluate various kinds of social studies information, answering any question may involve content from more than one category.

History may include historical sources and perspectives; the interconnections among the past, present, and future; and specific eras in U.S. and world history, including the people who have shaped them and the political, economic, and cultural characteristics of those eras.

Civics/Government may include the civic ideals and practices of citizenship in a democratic society; the role of the informed citizen and the meaning of citizenship; the concepts of power and authority; the purposes and characteristics of various governance systems, with particular emphasis on the U.S. government; and the relationship between individual rights and responsibilities, and the concepts of a just society.

Economics may include the principles of supply and demand; the difference between needs and wants; the impact of technology on economics; the interdependent nature of economies; and how the economy can be affected by governments, and how that effect varies over time.

Geography may include concepts and terminology of physical and human geography; geographic concepts to analyze spatial phenomena and discuss economic, political, and social factors; and interpretation of maps and other visual and technological tools, and the analysis of case studies.

Social Studies Process Categories

In addition to knowing and understanding the social studies content described in the Content Descriptions section, candidates also will answer questions that may involve one or more of the processes described below. Any of the processes may be applied to any of the content topics.

Interpret and Apply

- *Make inferences or predictions based on data or other information*
- *Infer unstated relationships*
- *Extend conclusions to related phenomena*

Analyze

- *Distinguish among facts, opinions, and values*
- *Recognize the author's purpose, assumptions, and arguments*

Evaluate and Generalize

- *Determine the adequacy of information for reaching conclusions*
- *Judge the validity of conclusions*
- *Compare and contrast the reliability of sources*

Research Rationale for the *HiSET*™ Assessment

There is a foundational core of academic skills and content knowledge that a person must acquire in order to be successfully prepared to enter a job, a training program, or an entry-level, credit-bearing postsecondary course. While the emphasis on particular skills may differ from job to job and course to course, mastery of a core set of essential skills is required.

The *HiSET*™ assessment measures the foundational core of academic skills that represent the long-term goals of secondary education, particularly the critical thinking skills of analysis and evaluation. The *HiSET* assessment directly measures the academic skills in reading, language arts, mathematics, science and social studies that typically define high school coursework.

Based on national data collected over the past 70 years, the results of the *HiSET* assessment can be validly used to determine performance for two distinct purposes:

1. The level of academic skills and knowledge typically required to earn a high school credential
2. The level of academic skills typically required to be successful in a postsecondary education program

Development of the *HiSET* assessment

The *HiSET* assessment has been carefully designed, developed and researched to support these two purposes. The procedures used to develop and revise the test materials are the foundation for the assessment's validity. Meaningful evidence related to

inferences based on high school curriculum content and performance standards has guided the design and development of the content. In addition to content validity, the assessment has been validated using indicators of college and career readiness.

The *HiSET* assessment has been designed and implemented according to established professional standards, in order to ensure that the assessment is a measure of what it claims to be, following the guidelines in the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 1999).

Content Validity. The content of the *HiSET* assessment is developed through a comprehensive and iterative process during which tests and item specifications are developed to measure the knowledge and skills critical to earn a high school diploma and those critical to being successful in postsecondary programs. This process includes the review of local, state and national curriculum guidelines including the Common Core State Standards (CCSS); the input of school administrators, curriculum specialists, and secondary and postsecondary educators; and surveying of educators with respect to the relative importance and criticality of the specified knowledge and skills.

After test specifications have been developed and validated, item writers are trained to write items that elicit the intended cognition and content area knowledge and skills. All items are

reviewed extensively for accuracy, appropriateness, accessibility and fairness. All items surviving the review stages are administered to national samples of representative high school seniors to evaluate their technical quality and appropriateness.

New forms of the HiSET assessment will be developed to be consistent with shifts in curriculum and to expand the coverage of the CCSS.

Fairness. Concern for fairness and the elimination of bias from the assessment is a guiding principle throughout design and development. In particular, this assessment was built with careful attention to content-related sources of test bias. Development procedures addressed this source of bias through the following:

- Thorough examination of content and performance standards for the selection of the appropriate content
- Engagement of panels of experts in the review of the test specifications, items and forms
- Statistical procedures for identifying items on these tests that function differently across various groups of examinees
- Careful selection of a national sample of students to evaluate item performance prior to operational use

Construct Validity. The factor structure of the HiSET assessment was analyzed using exploratory factor analysis techniques. The identified factors clearly reflect the test composition and are consistent with the emphasis found in high school curricula. The first factor could be identified as a “literacy” factor, while the second factor was a “numeracy” factor. Reading contributed the most to the interpretation of the first factor, with substantial influence from language arts, social studies and science. The inclusion of the social studies and science tests in the literacy factor is consistent with the structure of the CCSS, which includes these areas in the English Language Arts Literacy standards. The mathematics

test loaded heavily on the second factor with some contribution from science.

Alignment to Common Core State Standards

Alignment is an integral part of validity as it contributes to the evidence needed to support specific interpretations of an assessment. To that end, the alignment process used for the HiSET items provides the appropriate evidence to support the use of the assessments to measure essential components of the CCSS. All items used in assembling the initial forms of the HiSET assessment have been aligned to the CCSS by panels of professionals. Content experts, test developers and measurement experts conducted a thorough review of the CCSS and the HiSET assessment. The process was an item-by-item evaluation of the content coverage and cognitive demands of the items compared to the relevant domains of the CCSS. These domain-level alignments provide the basis for breakout reports in each subject area that will show the relative performance of examinees in dimensions of the CCSS.

Table 1 indicates the sections of the CCSS English Language Arts standards (grades 11–12) that are measured by four of the HiSET assessments. The Language Arts Writing, Language Arts Reading, Social Studies and Science assessments all align to specific standards of the CCSS in English Language Arts. In addition, the Language Arts Reading assessment includes a mix of both literary and informational texts as defined by the CCSS. Genres include fiction, poetry, science, social studies and literary nonfiction among others.

Table 2 indicates the sections of the CCSS Mathematics standards (grades 11–12) that are measured by the HiSET Mathematics assessment.

All Phase I items are aligned to the CCSS, although not all of the CCSS will be covered by the Phase I assessment. As states and adult education programs

adopt, implement and set standards based on the CCSS over the next few years, the HiSET assessment will evolve to reflect these changes.

The Next-Generation Science Standards call for assessments that capture students' competencies in performing the practices of science and engineering by applying the content and skills they have learned. These standards present significant challenges for those who will develop new assessments to measure the kinds of learning it describes. As these standards are finalized and implemented, the HiSET program will develop and introduce new materials in the Science assessment to reflect these changes.

Psychometric Framework for Reporting HiSET Results

To support inferences related to high school equivalency, the HiSET item pool was calibrated and scaled in a series of studies with a national probability sample of high school students enrolled in regular programs of study leading to successful completion of local graduation requirements and receipt of a high school diploma. Thus, the HiSET reporting scales and metrics reflect national performance of the U.S. graduating class of 2012.

Parallel forms of the HiSET assessment were linked to one another using item-response theory (IRT) estimated true-score equating and the 3-parameter logistic model (3PL). Parameters for all items in the pool were estimated from the national probability sample, and these parameter estimates were used to define the base scale for ability and item difficulty and discrimination, referred to as the Base National Ability Scale. All items were calibrated with the marginal maximum likelihood method originally described by Bock & Aitkin (1981). For any given item subset within the pool, a concurrent calibration design was used to estimate item parameters. Links among item parameters across elements of the pool were established by an equivalent-groups equating

design. A series of scale transformations (Stocking & Lord, 1983) were developed to place all estimated item parameters on the base scale for the national population of high school students.

National Comparisons, Cut-Scores and Forms Assembly for the HiSET Assessment

Given the Base National Ability Scale, test characteristic curves (TCCs) were used to define the relationship between raw scores on each HiSET form and the ability scale. National administrations of items from the HiSET pool were used to define the link between the Base National Ability Scale and percentiles of the ability distribution of the reference population, thus allowing for the number of correct raw scores on assembled HiSET forms to be associated with national percentile ranks (NPRs).

Once NPRs have equivalents on the Base National Ability Scale for the item pool, any number of specific applications involving cut-scores can be readily accomplished. For example, the cut-score for passing the HiSET assessment is that value on the ability scale corresponding to the 40th percentile nationally. Using results described in Welch and Dunbar (2011), cut-scores for college readiness in ELA-Writing, ELA-Reading, Mathematics, and Science can be defined on the Base National Ability Scale as well.

The assembly of test forms for the HiSET assessment was guided not only by content and alignment considerations, but also by the values of the test information function (TIF) in each domain assessed in the neighborhood of the HiSET passing score and the college-readiness threshold. TIFs for multiple forms of the HiSET assessment assembled from the pool of existing items were used to evaluate the comparability of forms relative to test information near the cut-scores for passing and for college readiness.

**Table 1 – Common Core State Standards – English Language Arts
Grades 11–12**

**HISET
Assessment**

<p>CCSS.ELA-Literacy. RL.11-12.1</p>	<p>Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.2</p>	<p>Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.3</p>	<p>Analyze the impact of the author’s choices regarding how to develop and relate elements of a story or drama (e.g., where a story is set, how the action is ordered, how the characters are introduced and developed).</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.4</p>	<p>Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including words with multiple meanings or language that is particularly fresh, engaging, or beautiful. (Include Shakespeare as well as other authors.)</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.5</p>	<p>Analyze how an author’s choices concerning how to structure specific parts of a text (e.g., the choice of where to begin or end a story, the choice to provide a comedic or tragic resolution) contribute to its overall structure and meaning as well as its aesthetic impact.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.6</p>	<p>Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.7</p>	<p>Analyze multiple interpretations of a story, drama, or poem (e.g., recorded or live production of a play or recorded novel or poetry), evaluating how each version interprets the source text. (Include at least one play by Shakespeare and one play by an American dramatist.)</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.9</p>	<p>Demonstrate knowledge of eighteenth-, nineteenth- and early twentieth-century foundational works of American literature, including how two or more texts from the same period treat similar themes or topics.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RL.11-12.10</p>	<p>By the end of grade 11, read and comprehend literature, including stories, dramas, and poems, in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. L.11-12.1</p>	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	<p>Language Arts – Writing</p>

**Table 1 – Common Core State Standards – English Language Arts
Grades 11–12**

**HiSET
Assessment**

CCSS.ELA-Literacy.L.11-12.2	Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.	Language Arts – Writing
CCSS.ELA-Literacy.L.11-12.3	Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on <i>grades 11–12 reading and content</i> , choosing flexibly from a range of strategies.	Language Arts – Writing
CCSS.ELA-Literacy.L.11-12.4	Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	Language Arts – Writing
CCSS.ELA-Literacy.L.11-12.5	Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.	Language Arts – Writing
CCSS.ELA-Literacy.W.11-12.1	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	Language Arts – Writing
CCSS.ELA-Literacy.W.11-12.2	Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	Language Arts – Writing
CCSS.ELA-Literacy.W.11-12.3	Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.	Language Arts – Writing
CCSS.ELA-Literacy.W.11-12.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)	Language Arts – Writing
CCSS.ELA-Literacy.W.11-12.5	Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	Language Arts – Writing
CCSS.ELA-Literacy.RST.11-12.9	Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.	Science
CCSS.ELA-Literacy.RST.11-12.10	By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently.	Science

**Table 1 – Common Core State Standards – English Language Arts
Grades 11–12**

**HiSET
Assessment**

CCSS.ELA-Literacy. RH.11-12.1	Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.	Social Studies
CCSS.ELA-Literacy. RH.11-12.2	Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.	Social Studies
CCSS.ELA-Literacy. RH.11-12.3	Evaluate various explanations for actions or events and determine which explanation best accords with textual evidence, acknowledging where the text leaves matters uncertain.	Social Studies
CCSS.ELA-Literacy. RH.11-12.4	Determine the meaning of words and phrases as they are used in a text, including analyzing how an author uses and refines the meaning of a key term over the course of a text (e.g., how Madison defines <i>faction</i> in <i>Federalist No. 10</i>).	Social Studies
CCSS.ELA-Literacy. RH.11-12.5	Analyze in detail how a complex primary source is structured, including how key sentences, paragraphs, and larger portions of the text contribute to the whole.	Social Studies
CCSS.ELA-Literacy. RH.11-12.6	Evaluate authors' differing points of view on the same historical event or issue by assessing the authors' claims, reasoning, and evidence.	Social Studies
CCSS.ELA-Literacy. RH.11-12.7	Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.	Social Studies
CCSS.ELA-Literacy. RH.11-12.8	Evaluate an author's premises, claims, and evidence by corroborating or challenging them with other information.	Social Studies
CCSS.ELA-Literacy. RH.11-12.9	Integrate information from diverse sources, both primary and secondary, into a coherent understanding of an idea or event, noting discrepancies among sources.	Social Studies
CCSS.ELA-Literacy. RH.11-12.10	By the end of grade 12, read and comprehend history/social studies texts in the grades 11–CCR text complexity band independently and proficiently.	Social Studies
CCSS.ELA-Literacy. RI.11-12.1	Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.	Language Arts – Reading

**Table 1 – Common Core State Standards – English Language Arts
Grades 11–12**

**HiSET
Assessment**

<p>CCSS.ELA-Literacy. RI.11-12.2</p>	<p>Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RI.11-12.3</p>	<p>Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RI.11-12.4</p>	<p>Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze how an author uses and refines the meaning of a key term or terms over the course of a text (e.g., how Madison defines faction in Federalist No. 10).</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RI.11-12.5</p>	<p>Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RI.11-12.6</p>	<p>Determine an author’s point of view or purpose in a text in which the rhetoric is particularly effective, analyzing how style and content contribute to the power, persuasiveness or beauty of the text.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RI.11-12.7</p>	<p>Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.</p>	<p>Language Arts – Reading</p>
<p>CCSS.ELA-Literacy. RI.11-12.8</p>	<p>Delineate and evaluate the reasoning in seminal U.S. texts, including the application of constitutional principles and use of legal reasoning (e.g., in U.S. Supreme Court majority opinions and dissents) and the premises, purposes, and arguments in works of public advocacy (e.g., <i>The Federalist</i>, presidential addresses).</p>	<p>Language Arts – Reading Social Studies</p>
<p>CCSS.ELA-Literacy. RI.11-12.9</p>	<p>Analyze seventeenth-, eighteenth- and nineteenth-century foundational U.S. documents of historical and literary significance (including The Declaration of Independence, the Preamble to the Constitution, the Bill of Rights, and Lincoln’s Second Inaugural Address) for their themes, purposes, and rhetorical features.</p>	<p>Language Arts – Reading Social Studies</p>
<p>CCSS.ELA-Literacy. RI.11-12.10</p>	<p>By the end of grade 11, read and comprehend literary nonfiction in the grades 11–CCR text complexity band proficiently, with scaffolding as needed at the high end of the range.</p>	<p>Language Arts – Reading</p>

Table 2 – Common Core State Standards – Mathematics
Grades 11–12

HiSET
Assessment

CCSS.Mathematics- Number and Quantity	<p>The Real Number System</p> <ul style="list-style-type: none"> • Extend the properties of exponents to rational exponents • Use properties of rational and irrational numbers 	Mathematics
CCSS.Mathematics- Number and Quantity	<p>Quantities</p> <ul style="list-style-type: none"> • Reason quantitatively and use units to solve problems 	Mathematics
CCSS.Mathematics- Number and Quantity	<p>The Complex Number System</p> <ul style="list-style-type: none"> • Perform arithmetic operations with complex numbers • Represent complex numbers and their operations on the complex plans • Use complex numbers in polynomial identities and equations 	Mathematics
CCSS.Mathematics- Number and Quantity	<p>Vector and Matrix Quantities</p> <ul style="list-style-type: none"> • Represent and model with vector quantities • Perform operations on vectors • Perform operations on matrices and use matrices in applications 	Mathematics
CCSS.Mathematics- Algebra	<p>Seeing Structure in Expressions</p> <ul style="list-style-type: none"> • Interpret the structure of expressions • Write expressions in equivalent forms to solve problems 	Mathematics
CCSS.Mathematics- Algebra	<p>Arithmetic with Polynomials and Rational Functions</p> <ul style="list-style-type: none"> • Perform arithmetic operations on polynomials • Understand the relationship between zeros and factors of polynomials 	Mathematics
CCSS.Mathematics- Algebra	<p>Reasoning with Equations and Inequalities</p> <ul style="list-style-type: none"> • Understand solving equations as a process of reasoning and explain the reasoning • Solve equations and inequalities in one variable • Solve systems of equations • Represent and solve equations and inequalities graphically 	Mathematics
CCSS.Mathematics- Functions	<p>Interpreting Functions</p> <ul style="list-style-type: none"> • Understand the concept of a function and use function notation • Interpret functions that arise in applications in terms of the context • Analyze functions using different representations 	Mathematics
CCSS.Mathematics- Functions	<p>Building Functions</p> <ul style="list-style-type: none"> • Build a function that models a relationship between two quantities • Build new functions from existing functions 	Mathematics

Table 2 – Common Core State Standards – Mathematics
Grades 11–12

HiSET
Assessment

<p>CCSS.Mathematics- Functions</p>	<p>Linear, Quadratic, and Exponential Models</p> <ul style="list-style-type: none"> • Construct and compare linear, quadratic, and exponential models and solve problems • Interpret expressions for functions in terms of the situation they model 	<p>Mathematics</p>
<p>CCSS.Mathematics- Geometry</p>	<p>Congruence</p> <ul style="list-style-type: none"> • Experiment with transformations in the plane • Understand congruence in terms of rigid motions • Prove geometric theorems • Make geometric constructions 	<p>Mathematics</p>
<p>CCSS.Mathematics- Geometry</p>	<p>Similarity, Right Triangles, and Trigonometry</p> <ul style="list-style-type: none"> • Understand similarity in terms of similarity transformations • Prove theorems involving similarity • Define trigonometric ratios and solve problems involving right triangles • Apply trigonometry to general triangles 	<p>Mathematics</p>
<p>CCSS.Mathematics- Geometry</p>	<p>Circles</p> <ul style="list-style-type: none"> • Understand and apply theorems about circles • Find arc lengths and areas of sectors of circles 	<p>Mathematics</p>
<p>CCSS.Mathematics- Geometry</p>	<p>Expressing Geometric Properties with Equations</p> <ul style="list-style-type: none"> • Translate between the geometric description and the equation for a conic section • Use coordinates to prove simple geometric theorems algebraically 	<p>Mathematics</p>
<p>CCSS.Mathematics- Geometry</p>	<p>Geometric Measurement and Dimension</p> <ul style="list-style-type: none"> • Explain volume formulas and use them to solve problems • Visualize relationships between two-dimensional and three-dimensional objects 	<p>Mathematics</p>
<p>CCSS.Mathematics- Geometry</p>	<p>Modeling with Geometry</p> <ul style="list-style-type: none"> • Apply geometric concepts in modeling situations 	<p>Mathematics</p>
<p>CCSS.Mathematics- Statistics and Probability</p>	<p>Interpreting Categorical and Quantitative Data</p> <ul style="list-style-type: none"> • Summarize, represent, and interpret data on a single count or measurement variable • Summarize, represent, and interpret data on two categorical and quantitative variables • Interpret linear models 	<p>Mathematics Science Social Studies</p>

Table 2 – Common Core State Standards – Mathematics
Grades 11–12

HiSET
Assessment

<p>CCSS.Mathematics- Statistics and Probability</p>	<p>Making Inferences and Justifying Conclusions</p> <ul style="list-style-type: none"> • Understand and evaluate random processes underlying statistical experiments • Make inferences and justify conclusions from sample surveys, experiences and observational studies 	<p>Mathematics Science Social Studies</p>
<p>CCSS.Mathematics- Statistics and Probability</p>	<p>Conditional Probability and the Rules of Probability</p> <ul style="list-style-type: none"> • Understand independence and conditional probability and use them to interpret data • Use the rules of probability to compute probabilities of compound events in a uniform probability model 	<p>Mathematics</p>
<p>CCSS.Mathematics- Statistics and Probability</p>	<p>Using Probability to Make Decisions</p> <ul style="list-style-type: none"> • Calculate expected values and use them to solve problems • Use probability to evaluate outcomes of decisions 	<p>Mathematics</p>



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HiSET™ and Federal Programs

ETS — in response to states' interest in continuing to offer a reasonably priced high school equivalency test available in paper-and-pencil format — developed the ETS High School Equivalency Test (*HiSET*™). States have responded enthusiastically to the HiSET program, but have sought assurances that it will be recognized for purposes of meeting federal education requirements, such as to qualify for federal student aid (grants, loans and work-study funds).

To alleviate these concerns, ETS reviewed all major federal education and training laws and regulations that reference high school equivalency assessments. As outlined in the appendix that follows, these programs including, but not limited to, the Higher Education Act, the Elementary and Secondary Education Act, the Workforce Investment Act, the Adult Education Act, and the Perkins Career and Technical Education Act, leave the decision to states to recognize high school equivalency alternatives and the awarding of credentials.

In addition, a student who has passed the HiSET exam in a state that has approved it as a test of secondary school-level knowledge will be given the same enlistment priority by the Department of Defense as they would for passing any other high school equivalency test approved by the state. In other words, states, not the federal government, make the determination of what constitutes an alternative for a high school diploma.

ETS is happy to answer any questions and concerns that a state may have. For assistance, please contact:

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APPENDIX

REFERENCES TO HIGH SCHOOL EQUIVALENCY IN MAJOR FEDERAL EDUCATION PROGRAMS

HIGHER EDUCATION ACT	SPECIFIC CITATION
<p>General Definition of Institution of Higher Education</p> <p>[20 U.S.C. 1001]</p>	<p>Sec. 101 General Definition of Institution of Higher Education.—</p> <p>(a) INSTITUTION OF HIGHER EDUCATION.—For purposes of this Act, other than title IV, the term “institution of higher education” means an educational institution in any State that—</p> <p>(1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate, or persons who meet the requirements of section 484(d)(3);</p> <p>NOTE: The Higher Education Act regulations further define the “recognized equivalent of a high school diploma” as:</p> <p>(1) A General Education Development Certificate (GED);</p> <p>(2) A State certificate received by a student after the student has passed a State-authorized examination that the State recognizes as the equivalent of a high school diploma;</p> <p>(3) ...</p>
<p>Eligibility for Student Loans</p> <p>[20 U.S.C. 1091]</p>	<p>Sec. 484 Student Eligibility.—</p> <p>(d) STUDENTS WHO ARE NOT HIGH SCHOOL GRADUATES.—In order for a student who does not have a certificate of graduation from a school providing secondary education, or the recognized equivalent of such certificate, to be eligible for any assistance under subparts 1, 3, and 4 of part A and parts B, C, D, and E of this title, the student shall meet one of the following standards:</p>
<p>Higher Education Program Participation Agreement</p> <p>[20 U.S.C. 1094]</p>	<p>Sec. 487 Program Participation Agreements.—</p> <p>(a) Required for Programs of Assistance; Contents.—</p> <p>... (11) In the case of any institution whose students receive financial assistance pursuant to section 484(d), the institution will make available to such students a program proven successful in assisting students in obtaining a certificate of high school equivalency.</p>

GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs)

[20 U.S.C. 1070a-21]

Sec. 404A. Early Intervention and College Awareness Programs Authorized.—

(a) **PROGRAM AUTHORIZED.**—The Secretary is authorized, in accordance with the requirements of this chapter, to establish a program that encourages eligible entities to provide support, and maintain a commitment, to eligible low-income students, including students with disabilities, to assist the students in obtaining a secondary school diploma (or its recognized equivalent) and to prepare for and succeed in postsecondary education, by providing—...

High School Equivalency Program and College Assistance Migrant Program (HEP and CAMP)

[20 U.S.C. 1070d]

Sec. 418 Maintenance and Expansion of Existing Programs.—

(a) **PROGRAM AUTHORITY.**—The Secretary shall maintain and expand existing secondary and postsecondary high school equivalency program and college assistance migrant program projects located at institutions of higher education or at private nonprofit organizations working in cooperation with institutions of higher education.

(b) **Services provided by high school equivalency program**
The services authorized by this subpart for the high school equivalency program include—...

(1) recruitment services to reach persons—

... (C) who lack a high school diploma or its equivalent;

(2) educational services which provide instruction designed to help students obtain a general education diploma which meets the guidelines established by the State in which the project is located for high school equivalency;

ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA)	SPECIFIC CITATION
<p>Title I – State Plan</p> <p>[20 U.S.C. 6311]</p>	<p>Sec. 1111(c) Other Provisions to Support Teaching and Learning.— Each State plan shall contain assurances that — ...</p> <p>(14) the State educational agency will encourage local educational agencies and individual schools participating in a program assisted under this part to offer family literacy services (using funds under this part), if the agency or school determines that a substantial number of students served under this part by the agency or school have parents who do not have a secondary school diploma or its recognized equivalent or who have low levels of literacy.</p>
<p>Title I – Part D Prevention and Intervention Programs for Children and Youth who are Neglected, Delinquent, or At Risk</p> <p>[20 U.S.C. 6421]</p>	<p>Sec. 1414(c) State Agency Applications</p> <p>(16) provides an assurance that the State agency will work with children and youth who dropped out of school before entering the correctional facility or institution for neglected or delinquent children and youth to encourage the children and youth to reenter school once the term of the incarceration is completed or provide the child or youth with the skills necessary to gain employment, continue the education of the child or youth, or achieve a secondary school diploma or its recognized equivalent if the child or youth does not intend to return to school;</p>

CARL D. PERKINS CAREER AND TECHNICAL EDUCATION ACT	SPECIFIC CITATION
<p>General Definitions:</p> <p>[20 U.S.C. 2302]</p>	<p>Sec. 3 General Definitions</p> <p>(24) SCHOOL DROPOUT. —The term “school dropout” means an individual who is no longer attending any school and who has not received a secondary school diploma or its recognized equivalent.</p>
<p>Accountability</p> <p>[20 U.S.C. 2323]</p>	<p>Sec. 113 Accountability</p> <p>... (2) State Performance Measures</p> <p>(A) CORE INDICATORS OF PERFORMANCE FOR CAREER AND TECHNICAL EDUCATION STUDENTS AT THE SECONDARY LEVEL. —Each eligible agency shall identify in the State plan core indicators of performance for career and technical education students at the secondary level that are valid and reliable, and that include, at a minimum, measures of each of the following:</p> <p>...</p> <p>(I) A secondary school diploma.</p> <p>(II) A General Education Development (GED) credential, or other State-recognized equivalent (including recognized alternative standards for individuals with disabilities).</p>

WORKFORCE INVESTMENT ACT	SPECIFIC CITATION
<p>Youth Training Programs</p> <p>Definition of "Out-of-School Youth"</p> <p>[29 U.S.C. 2801]</p>	<p>Sec. 101 Definitions.—</p> <p>(33) Out-of-school youth.—The term "out-of-school youth" means—</p> <p>(A) an eligible youth who is a school dropout; or</p> <p>(B) an eligible youth who has received a secondary school diploma or its equivalent but is basic skills deficient, unemployed, or underemployed.</p>
<p>Definition of "School Dropout"</p> <p>[29 U.S.C. 2801]</p>	<p>(39) School dropout.—The term "school dropout" means an individual who is no longer attending any school and who has not received a secondary school diploma or its recognized equivalent.</p>
<p>Indicators of Performance</p> <p>[29 U.S.C. 2871]</p>	<p>Sec. 136 Performance Accountability System.—</p> <p>(2) Indicators of performance.—</p> <p>(A) Core indicators of performance.—</p> <p>(i) In general.—The core indicators of performance for employment and training activities authorized under section 134 (except for self-service and informational activities) and (for participants who are eligible youth age 19 through 21) for youth activities authorized under section 129 shall consist of—</p> <p>....</p> <p>(IV) attainment of a recognized credential relating to achievement of educational skills, which may include attainment of a secondary school diploma or its recognized equivalent, or occupational skills, by participants who enter unsubsidized employment, or by participants who are eligible youth age 19 through 21 who enter postsecondary education, advanced training, or unsubsidized employment.</p> <p>(ii) Core indicators for eligible youth.—The core indicators of performance (for participants who are eligible youth age 14 through 18) for youth activities authorized under section 129, shall include—</p> <p>(I) attainment of basic skills and, as appropriate, work readiness or occupational skills;</p> <p>(II) attainment of secondary school diplomas and their recognized equivalents; and</p> <p>(III) placement and retention in postsecondary education or advanced training, or placement and retention in military service, employment, or qualified apprenticeships.</p>
<p>Job Corps</p> <p>[29 U.S.C. 2882]</p>	<p>Sec. 142 Definitions.—</p> <p>(5) Graduate.—The term "graduate" means an individual who has voluntarily applied for, been selected for, and enrolled in the Job Corps program and has completed the requirements of a vocational training program, or received a secondary school diploma or recognized equivalent, as a result of participation in the Job Corps program.</p>

WORKFORCE INVESTMENT ACT	SPECIFIC CITATION
<p>Adult Education and Family Literacy Act</p> <p>Definition of "Adult Education"</p> <p>[20 U.S.C. 9202]</p>	<p>SEC. 203. DEFINITIONS.</p> <p>In this subtitle:</p> <p>(1) Adult education.—The term "adult education" means services or instruction below the postsecondary level for individuals—</p> <p>(A) who have attained 16 years of age;</p> <p>(B) who are not enrolled or required to be enrolled in secondary school under State law; and</p> <p>(C) who—</p> <p>(i) lack sufficient mastery of basic educational skills to enable the individuals to function effectively in society;</p> <p>(ii) do not have a secondary school diploma or its recognized equivalent, and have not achieved an equivalent level of education; or</p> <p>(iii) are unable to speak, read, or write the English language.</p>
<p>Indicators of Performance</p> <p>[20 U.S.C. 9212]</p>	<p>Sec. 212 Performance Accountability System</p> <p>(2) Indicators of performance.—</p> <p>(A) Core indicators of performance.—The core indicators of performance shall include the following:</p> <p>(i) Demonstrated improvements in literacy skill levels in reading, writing, and speaking the English language, numeracy, problem solving, English language acquisition, and other literacy skills.</p> <p>(ii) Placement in, retention in, or completion of, postsecondary education, training, unsubsidized employment or career advancement.</p> <p>(iii) Receipt of a secondary school diploma or its recognized equivalent.</p>
<p>YouthBuild</p> <p>[20 U.S.C. 2918a]</p>	<p>Sec. 173A</p> <p>(c)(2)(A)(iv)(III) secondary education services and activities, including tutoring, study skills training, and dropout prevention activities, designed to lead to the attainment of a secondary school diploma, General Education Development (GED) credential, or other state-recognized equivalent (including recognized alternative standards for individuals with disabilities);</p>

The *HiSET*® High School Equivalency Test reflects college and career readiness

The *HiSET*® program from ETS is designed to align with the College- and Career-Readiness (CCR) Standards for Adult Education released by the Office of Vocational and Adult Education in April 2013.

The panel that developed the standards adopted an approach that articulated the anchor standards in terms of a developmental sequence within five grade-level groupings to more closely reflect adult education levels of learning. The *HiSET* program incorporates these CCR anchor standards in grade grouping E (9–12) into the design specifications for the item pool and the assembled forms.

English-Language Arts (ELA)-Literacy

Table 1 on pages 3–4 provides an illustration of the CCR ELA/Literacy anchor standards (grades 11–12) that the *HiSET* Language Arts – Reading and Language Arts – Writing assessments measure. Both assessments align to specific standards of the Common Core State Standards (CCSS) in ELA. In addition, the Reading assessment includes a mix of both literary and informational texts as defined by the CCSS.

Aspects of Reading Comprehension Identified in the CCR Standards for Adult Education

The selection of reading materials and test questions for the *HiSET* program reflects three central emphases of the CCR Standards in ELA-Reading — **Complexity, Evidence and Knowledge**.

Complexity. Regular practice with complex text and its academic language

Text complexity is an important aspect of cognition in the assessment of reading. We drew the texts of the *HiSET* item pool from previously published works of authors recognized for their contributions to adult literature,

both fiction and nonfiction. Although this is recognized as a shift in emphasis for adult education, we selected these materials precisely because they present engaging ideas that support comprehension questions with variety in terms of cognitive complexity. In addition, specific questions are targeted at vocabulary acquisition and the use of context to recognize or infer the meaning of complex, academic vocabulary. Informational texts cover topics in the natural and social sciences as well as history and government, so we cover aspects of the CCR Standards related to the processing of complex information in social studies and science.

Consistent with the recommendations of the CCSS, we use three different dimensions to describe the text complexity of the *HiSET* assessment — qualitative, quantitative and reader/task considerations. Table 2 on page 5 summarizes the type of information available to help evaluate each dimension. The three dimensions are equally important in assembling a *HiSET* form, and we use the dimensions to provide a range of text complexity within a form and across forms so that the forms are as comparable as possible.

Testing and content experts review the text-based materials for four aspects of the qualitative dimension — level of meaning or purpose, structure, language conventionality and clarity. We assemble each *HiSET* form to include a balance of these dimensions. For example, a single form would include a range of text types of increasing complexity and sophistication. We evaluate the quantitative dimensions through a combination of text-based indices (e.g., Lexile® Measures and traditional readability indices) and national passage-based statistics that address the relative difficulty of these materials for 11th- and 12th-grade students. In addition, we have reviewed the passages for accessibility, appropriateness of test complexity and appropriateness of topics.

Evidence. Reading, writing and speaking grounded in evidence from text, both literary and informational

A second key shift required by the CCR Standards is the prioritization of textual evidence. In the HiSET Language Arts – Reading test, questions require candidates to use evidence from the text to identify key ideas used to support the central argument or important details used to convey meaning in informational texts. Candidates see questions and answer choices that require them to weigh and consider the relative importance of specific text references in advancing understanding of an author's main idea or in making an inference about an author's implicit meaning. In the Language Arts – Writing test, prompts may require candidates to analyze an issue, state a position and bring specific evidence to bear in support of the stated position.

Knowledge. Building knowledge through content-rich nonfiction

The final shift in the CCR Standards emphasizes literacy across the disciplines of science, social studies and technical subjects. In the HiSET Language Arts – Reading test, informational passages include topics drawn from the natural and social sciences and history. In addition, stimulus material in the Social Studies and Science tests require candidates to process complex information, to evaluate the relevance and validity of evidence presented in actual studies, and to differentiate conclusions and generalizations that evidence supports. Grounding such questions in content from across the disciplines is an important aspect of item development and selection criteria for the assembly of HiSET forms.

**Table 1 – College- and Career-Readiness Standards for Adult Education
ELA-Literacy – Grades 11–12**

**HiSET
Assessment**

<p>CCR Anchor 1 (CCSS.ELALiteracy. RI.11-12.1)</p>	<p>Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 2 (CCSS.ELALiteracy. RST.11-12.2)</p>	<p>Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 3 (CCSS.ELALiteracy. RI.11-12.3)</p>	<p>Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 4 (CCSS.ELALiteracy. RI.11-12.4)</p>	<p>Determine the meaning of words and phrases as they are used in the text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 5 (CCSS.ELALiteracy. RI.11-12.5)</p>	<p>Analyze and evaluate the effectiveness of the structure an author uses in his or her exposition or argument, including whether the structure makes points clear, convincing, and engaging.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 6 (CCSS.ELALiteracy. RI.11-12.6)</p>	<p>Analyze a case in which grasping a point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement).</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 7 (CCSS.ELALiteracy. RI.11-12.7)</p>	<p>Integrate and evaluate multiple sources of information presented in different media or formats as well as in words in order to address a question or solve a problem.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 8 (CCSS.ELALiteracy. RI.9-10.8)</p>	<p>Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and false reasoning.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 9 (CCSS.ELALiteracy. RL.11-12.9)</p>	<p>Analyze seventeenth-, eighteenth- and nineteenth-century foundational U.S. documents of historical and literary significance for their themes, purposes, and rhetorical features.</p>	<p>Language Arts – Reading</p>
<p>CCR Anchor 10 (Complexity Shift)</p>	<p>Read and comprehend complex literary and informational text independently and proficiently.</p>	<p>Language Arts – Reading</p>

**Table 1 – Common Core State Standards – English Language Arts
Grades 11–12**

**HiSET
Assessment**

<p>CCR Anchor 1 (CCSS.ELA.Literacy. L.11-12.1)</p>	<p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 2 (CCSS.ELA.Literacy. L.9-10.2)</p>	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 3 (CCSS.ELA.Literacy. L.11-12.2)</p>	<p>Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 4 (CCSS.ELA.Literacy. L.11-12.3)</p>	<p>Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grades 11–12 <i>reading and content</i>, choosing flexibly from a range of strategies.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 5 (CCSS.ELA.Literacy. L.11-12.4)</p>	<p>Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 6 (CCSS.ELA.Literacy. L.11-12.6)</p>	<p>Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college- and career-readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 1 (CCSS.ELA.Literacy. W.11-12.1)</p>	<p>Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 2 (CCSS.ELA.Literacy. W.11-12.2)</p>	<p>Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 3 (CCSS.ELA.Literacy. W.11-12.3)</p>	<p>Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 4 (CCSS.ELA.Literacy. W.11-12.4)</p>	<p>Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)</p>	<p>Language Arts – Writing</p>
<p>CCR Anchor 5 (CCSS.ELA.Literacy. W.11-12.5)</p>	<p>Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p>	<p>Language Arts – Writing</p>

Table 2 – Dimensions of HiSET Text Complexity Table

Dimension	Considerations for HiSET Forms					
Qualitative dimension		Reading	Language Arts	Social Studies	Science	
	Levels of Meaning or Purpose	Includes a variety of literary and informational texts from simple meaning to multiple meanings	Includes a variety of literary and informational texts from explicitly stated to implicitly stated			
	Structure	Includes a variety of texts from simple to highly complex	Includes a variety of texts from simple to highly complex	Graphics and figures range from simple to complex	Graphics and figures range from simple to complex	
	Language Conventinality and Clarity	Texts rely on a range of language conventionality and clarity from literal to figurative. We balance texts to represent this range within a given form of the HiSET				
	Knowledge Demands	No assumptions about readers' life experiences	No assumptions about readers' life experiences	Background content knowledge assumed	Background content knowledge assumed	
Quantitative dimension	<p>Lexile scores for text-based stimuli aligned to the college- and career-readiness ranges established by MetaMetrics®</p> <p>Traditional readability indices for text-based stimuli based on word length, frequency, and complexity</p> <p>Item-level and form-level difficulty indices collected from a nationally representative sample of 11th- and 12th-grade students</p>					
Reader and task considerations	<p>Student difficulty levels collected on nationally representative samples of 11th- and 12th-graders</p> <p>Professional judgments from educators on the appropriateness of the passages and stimuli included in the HiSET forms</p>					

Mathematics

The CCR Mathematics standards reflect an emphasis on core aspects of the mathematics domain. Additionally, the approach stressed a developmental progression of content and skill complexity associated with the use of mathematics and quantitative thinking in vocational applications and adult life.

Table 3 on pages 6–7 indicates the sections of the CCSS Mathematics standards (grades 11–12) that the HiSET Mathematics test measures.

Aspects of Mathematics Identified in the CCR Standards for Adult Education

The selection of major content domains and test questions for the HiSET Mathematics test reflects three central emphases of the CCR Standards in mathematics — **Focus, Coherence and Rigor**.

Focus. Focusing strongly where the standards focus

The HiSET mathematics domains focus on core standards of Numbers and Operations on Numbers (Number and Quantity, Functions), Measurement/Geometry, Data Analysis/Probability/Statistics and Algebraic Concepts. Fluency developed in adult education programs that cover foundation skills in mathematics prepares candidates to

solve HiSET problems in all domains represented in the assessment as problems are placed in contexts and may be solved with multiple and varied solution strategies.

Coherence. Designing learning around coherent progressions level to level

This shift in the CCR Standards reflects the observation that higher-level standards become extensions of previous learning for adult learners, rather than new concepts or ideas. The HiSET Mathematics assessment presents problems that represent the culmination of conceptual development in learning progressions that begin with foundation skills, numerical operations and patterns of quantitative thinking.

Rigor. Pursuing conceptual understanding, procedural skill and fluency, and application — all with equal intensity.

The application of mathematical concepts to real-world contexts reflects this shift. Candidates must understand the application setting to solve problems that require more than the simple application of a set of procedures. HiSET questions in mathematics may often be approached from more than one perspective, and solution strategies may involve, for example, both algebraic thinking and numerical understanding of proportional relationships, ratios and even place value.

Table 3 – College- and Career-Readiness Standards for Adult Education
Mathematics – Grades 11–12

HiSET
Assessment

		HiSET Assessment	
CCSS.Mathematics – Number and Quantity	The Real Number System <ul style="list-style-type: none"> Extend the properties of exponents to rational exponents 	<ul style="list-style-type: none"> Use properties of rational and irrational numbers 	Mathematics
CCSS.Mathematics – Number and Quantity	Quantities <ul style="list-style-type: none"> Reason quantitatively and use units to solve problems 		Mathematics
CCSS.Mathematics – Number and Quantity	The Complex Number System <ul style="list-style-type: none"> Perform arithmetic operations with complex numbers 	<ul style="list-style-type: none"> Represent complex numbers and their operations on the complex plane Use complex numbers in polynomial identities and equations 	Mathematics
CCSS.Mathematics – Algebra	Seeing Structure in Expressions <ul style="list-style-type: none"> Interpret the structure of expressions Write expressions in equivalent forms to solve problems 		Mathematics

Table 3 – College- and Career-Readiness Standards for Adult Education
Mathematics – Grades 11–12

HiSET
Assessment

CCSS.Mathematics – Algebra	<p>Arithmetic with Polynomials and Rational Functions</p> <ul style="list-style-type: none"> • Perform arithmetic operations on polynomials • Rewrite rational expressions 	Mathematics	
CCSS.Mathematics – Algebra	<p>Creating Equations</p> <ul style="list-style-type: none"> • Create equations that describe numbers or relationships 	Mathematics	
CCSS.Mathematics – Algebra	<p>Reasoning with Equations and Inequalities</p> <ul style="list-style-type: none"> • Understand solving equations as a process of reasoning and explain the reasoning 	<ul style="list-style-type: none"> • Solve equations and inequalities in one variable • Solve systems of equations • Represent and solve equations and inequalities graphically 	Mathematics
CCSS.Mathematics – Functions	<p>Interpreting Functions</p> <ul style="list-style-type: none"> • Understand the concept of a function and use function notation 	<ul style="list-style-type: none"> • Interpret functions that arise in applications in terms of the context • Analyze functions using different representations 	Mathematics
CCSS.Mathematics – Functions	<p>Building Functions</p> <ul style="list-style-type: none"> • Build a function that models a relationship between two quantities 	Mathematics	
CCSS.Mathematics – Functions	<p>Linear, Quadratic, and Exponential Models</p> <ul style="list-style-type: none"> • Construct and compare linear, quadratic, and exponential models and solve problems • Interpret expressions for functions in terms of the situation they model 	Mathematics	
CCSS.Mathematics – Geometry	<p>Congruence</p> <ul style="list-style-type: none"> • Experiment with transformations in the plane 	Mathematics	
CCSS.Mathematics – Geometry	<p>Similarity, Right Triangles, and Trigonometry</p> <ul style="list-style-type: none"> • Prove theorems involving similarity 	Mathematics	
CCSS.Mathematics – Geometry	<p>Geometric Measurement and Dimension</p> <ul style="list-style-type: none"> • Explain volume formulas and use them to solve problems 	Mathematics	
CCSS.Mathematics – Geometry	<p>Modeling with Geometry</p> <ul style="list-style-type: none"> • Apply geometric concepts in modeling situations 	Mathematics	
CCSS.Mathematics – Statistics and Probability	<p>Interpreting Categorical and Quantitative Data</p> <ul style="list-style-type: none"> • Summarize, represent, and interpret data on a single count or measurement variable 	<ul style="list-style-type: none"> • Summarize, represent, and interpret data on two categorical and quantitative variables • Interpret linear models 	Mathematics Science Social Studies

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