

New CASAS Reading GOALS Series
Assessment Strategies
Aligned to the College and Career
Readiness Standards
for Adult Education

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Workshop Agenda



- CCRS (College and Career Readiness Standards) for Adult Education and Adult ESL Overview
- The "Three Shifts" related to Assessment
- CCRS Reading Anchor Standards
- Identifying Appropriate Reading Texts for Formative Assessment
 - Text Complexity
 - Academic Language
- Developing Text Dependent Assessment Questions
- CCRS Resources

Overview



- This workshop provides strategies and hands-on activities for developing classroom-based assessments for Adult ESL learners to measure reading skills in the College and Career Readiness (CCR) Standards for Adult Education (April 2013).
- The CCR Standards are the Anchor Standards for the Common Core State Standards for K-12 programs. The Federal Office of Career, Technical, and Adult Education (OCTAE) April 2013 study was based on these standards.
- The April 2013 CCRS study focused on Adult Basic Education (ABE) and Adult Secondary Education (ASE) learners, not on Adult ESL learners.

CCR Standards for Adult ELLs



- In 2015, OCTAE funded a similar study for Adult ESL.
 - This project produced the new English Language Proficiency (ELP) Standards and related training materials for Adult ELLs.
 - Revised NRS EFL Descriptors for ELLs have not been published yet.
 A draft for public review may be ready in Summer 2017.
- Adult ELL programs may use the ABE/ASE CCR Standards for Adult Education and adapt them for Adult ELLs.
- Continue to use current NRS ESL Descriptors (EFLs) for now.
- Change in terms from ESL (English as a Second Language)
 learners to ELL (English Language Learners)





| Α | В | C | D | E |
|---|--|---|--|--|
| Identify the main topic and retell key details of a text. | Determine the main idea of a text; recount the key details and explain how they support the main idea. | Determine the main idea of a text and explain how it is supported by key details; summarize the text. Determine a theme of a story, drama, or poem from details in the text; summarize the text. | Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. |
| BEG LIT ESL, LOW BEG ESL, HIGH BEG ESL | LOW INT ESL | HIGH INT ESL | ADV ESL | NRS Level |

ABE/ASE NRS Educational Functioning Levels, Summer Institute 2017 CCR & CASAS Test Levels, & Estimated ESL Levels

| EFL | ABE/ASE Level | CCR Level | Lexile Level | CASAS Test Level | ESL Level (estimated) |
|-----|-------------------------|------------|--------------|---------------------|---------------------------------|
| 1 | Beg Literacy | A (K-1) | N/A | Α | Beg Lit, Low Beg., High Beg. |
| 2 | Beg Basic | B (2-3) | 420-820 | В | Low Intermediate |
| 3 | Low Int. Basic | C (4-5) | 740-1010 | В | High Intermediate |
| 4 | High Int. Basic | D (6-8) | 925-1185 | С | Advanced |
| 5 | Low Adult Secondary | E (9-10) | 1050-1335 | D | N/A |
| 6 | High Adult Secondary | E (11-CCR) | 1185-1385 | Е | N/A |

Formative Assessment



- Ongoing monitoring of student learning
 - Distinct from initial and summative (final) assessment
 - Especially important when transitioning to new curriculum and/or instructional approaches
- Can also serve as test prep by using item types found in standardized pre- and post-tests
- Importance of teaching and assessing reading for college and career readiness
- Need ways to do efficiently and integrate into instruction
 - Hopefully this workshop will help...

Three Elements of a Reading Test Question



Text

Stem (question)

Response

- MCQ: Answer options -- key (correct answer) & distractors (3 or 4) OR
- Expected generated response

They all work together to create the difficulty of a question.

Rey Shifts in ELA Instruction Prompted by the Common Core



- The OCTAE CCR for Adult Education Reading Panel validated key shifts in instruction prompted by the Common Core:
 - Complexity: Regular practice with complex text (and its academic language)
 - Evidence: Reading, writing, and speaking grounded in evidence from text
 - Knowledge: Building knowledge through content-rich informational texts

~Susan Pimentel, Student Achievement Partners

Building Knowledge



- "Content rich informational text"
- "Literary non-fiction"

- Educational background of Adult ELLs
 - Low educated: "Beginning ABE" learners in L1
 - Some education: weak academic skills
 - Highly educated: strong academic skills

Identifying Reading Texts for Assessment



- Is the text appropriate for my students?
- Will it be interesting to my students (and to me)?
- Is it rich in content?
- Is it complex enough to be challenging but not overwhelming for my students?
- Does it lend itself to higher order reading skills questions (DOK)?
- Does it (could it) contain academic language?

Complexity: Features of Complex Text



- Unfamiliar content, format or purpose
 - Abstract or technical content
- Difficult vocabulary
- Complicated syntax and complex sentences
- Density of information and/or long paragraphs
- Lack of words, sentences or paragraphs that review or provide clear transitions
- Some tools to check text complexity:
 - Lexile.com
 - http://www.fortheteachers.org/Lexile%20files/Using%20the%20Lexile%20Analyzer.pdf
 - Flesch-Kincaid measure
 - Type "Readability" in the Help box in Microsoft Word.

Academic Vocabulary



- Tier 1
 Words acquired through every day speech.
- Tier 2
 Academic words that appear across all types of text (e.g., analyze, require).
- Tier 3 Domain specific words that are specifically tied to content (e.g., Constitution, Iava). Typically included in glossaries, highlighted in textbooks, and address by teachers. Difficult words important to understanding content.

Academic Word Lists

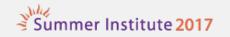


- Academic Word List (AWL)
 - developed by Averil Coxhead at the School of Linguistics and Applied Language Studies at <u>Victoria University of</u> <u>Wellington</u>, New Zealand.
 - This list contains 570 word families which were selected because they appear with great frequency in a broad range of academic texts.
 - Alphabetized version (see handout)

General Service List

 This list does not include words that are in the most frequent 2000 words of English, thus making it specific to academic contexts.

Close Reading and Evidence from Text: Implications for Assessment Questions



- Do not ask about information or evidence from outside the text.
- Require students to refer to the text to answer questions.
 - If possible, ask where in the text the answer can be found (e.g., In which section? In which line?).
- Require students to follow the details of what is explicitly stated and make valid claims that square with text evidence.

Drawing Evidence from Texts



Not Text-Dependent

In "Casey at the Bat," Casey strikes out. Describe a time when you failed at something.

In "Letter from a Birmingham Jail," Dr. King discusses nonviolent protest. Discuss, in writing, a time when you wanted to fight against something that you felt was unfair.

From "The Adventures of Tom Sawyer," have students identify the different methods of removing warts that Tom and Huck talk about. Ask students to devise their own charm to remove warts. Are there cultural ideas or artifacts from the current time that could be used in the charm?

Text-Dependent



What makes Casey's experiences at bat humorous?



What can you infer from King's letter about the letter that he received?



Why does Tom hesitate to allow Ben to paint the fence? How does Twain construct his sentences to reflect that hesitation? What effect do Tom's hesitations have on Ben?

Ask cognitively complex questions based on complex text!



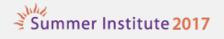
- The CCRS requires higher order thinking.
- Two frameworks to describe levels of cognitive processing:
- Bloom's Taxonomy of Educational Objectives Knowledge, Understanding, Application, Analysis, Synthesis, Evaluation (1956)
 - What type of thinking (verbs) is needed to complete a task?
- Norman Webb's Depth of Knowledge (DOK) framework (2005), WI Center for Education Research
 - How deeply do you have to understand the content to successfully interact with it?
 - How complex or abstract is the content?
 - See also the "DOK Wheel" handout.
- Cognitive Rigor Matrix for ELA (2009) by Karin Hess
 - Combines Bloom and Webb

Some CCRS Observations



- It is essential to work with the level-specific descriptors (A - E)
- Teach and assess higher order reading skills at lower levels of reading ability
- Read the standards carefully to ensure understanding of the full extent of what they require (e.g., explain, analyze, not just identify)
- About inference...

CCRS Reading Foundational Skills Anchor Standards: Short Descriptors



- RF1 organization and basic features of print
 - (Not in CCRS. Only in CCSS.)
- RF2 phonological awareness
- RF3 phonics and word recognition
- RF4 read fluently enough to support comprehension

CCRS Reading Anchor Standards: Short Descriptors



- R1 cite evidence; infer
- R2 main idea; summarize
- R3 analyze text development and interaction
- R4 meaning of words and phrases (vocabulary)
- R5 text structure
- R6 author's point of view
- R7 diverse media and formats
- R8 analyze and evaluate arguments
- R9 compare 2 or more texts
- R10 text complexity and independent reading

New CASAS Reading GOALS Series Test Reporting Categories



| CASAS Reading Content Areas | CCRS Reading Anchor* |
|---|----------------------|
| Vocabulary | R4 |
| Reading Comprehension Skills | |
| Locate information/detail; cite evidence | R1, R2 |
| Identify main idea and details | |
| Higher Order Reading Skills | |
| Cite evidence; infer; draw conclusions; summarize | R1, R2 |
| Text structure and features | R5 |
| Author's purpose and point of view | R6 |
| Analyze claim/argument | R8 |
| *CCRS Reading Standards R7, R9 and R10 are measured across content areas. | |

Write Some Reading Test Questions...



- Assessment Development Materials and Tools:
 - CCRS Reading Standards (April 2013)
 - CCRS Reading Test Question Frames
 - AWL list
 - DOK Levels (wheel chart)
 - Hess' Cognitive Rigor Matrix for ELA
- And based on the newsela article at the level of your presumed students for today...

Write Some Reading Test Questions...



1. Write a test question that measures R1 or R2.

2. Write a test question that measures a word or phrase that is "academic language" (R4).

3. Write a test question that measures a higher order reading skill.

Resources



- College and Career Readiness Standards for Adult Education
 - http://lincs.ed.gov/publications/pdf/CCRStandardsAdultEd.pdf
- Common Core Information and Discussions
 - Student Achievement Partners website (writers of the Common Core): www.achievethecore.org
 - https://www.teachingchannel.org/videos/common-core-standards-ela
- Common Core Links related specifically to ELLs
 - Stanford's "Understanding Language" website: http://ell.stanford.edu
 - Center for Applied Linguistics, Implementing the Common Core for English Learners: www.cal.org
 - Parrish and Johnson, "Promoting Learner Transitions to Postsecondary Education and Work: Developing Academic Readiness Skills from the Beginning" at http://www.cal.org/caelanetwork/resources/transitions.html
- Common Core Lesson Videos (K-12 contexts)
 - http://www.achievethecore.org/ela-literacy-common-core/lesson-videos/
 - https://www.teachingchannel.org/videos/build-student-vocabulary
- Common Core Text Resources
 - Newsela.com
 - Lexile.com



Thank You for Attending!

- Be sure to visit the CASAS website at www.casas.org
- Follow us on Twitter <u>la twitter.com/CASASsystem</u> and use the hashtag <u>#casassi2016</u> to tweet updates, photos, and stories.
- Keep in touch with Facebook f facebook.com/CASASsystem use the hashtag #casassi2016 to share photos and post stories.
- Visit us on the <u>SouTube Channel</u>

(Averil Coxhead's) High-Incidence Academic Word List (AWL) – Alphabetical Order Words of highest frequency are followed by the number 1

| abandon | 8 | bias | 8 | constitute | 1 | distinct | 2 | fee | 6 |
|--------------|--------|--------------|--------|---------------|--------|-------------|--------|------------------|--------|
| abstract | 6 | bond | 6 | constrain | 3 | distort | 9 | file | 7 |
| academy | 5 | brief | 6 | construct | 2 | distribute | 1 | final | 2 |
| access | 4 | bulk | 9 | consult | 5 | diverse | 6 | finance | 1 |
| accommodate | 9 | capable | 6 | consume | 2 | document | 3 | finite | 7 |
| accompany | 8 | capacity | 5 | contact | 5 | domain | 6 | flexible | 6 |
| accumulate | 8 | category | 2 | contemporary | 8 | domestic | 4 | fluctuate | 8 |
| accurate | 6 | cease | 9 | context | 1 | dominate | 3 | focus | 2 |
| achieve | 2 | challenge | 5 | contract | 1 | draft | 5 | format | 9 |
| acknowledge | 6 | channel | 7 | contradict | 8 | drama | 8 | formula | 1 |
| acquire | 2 | chapter | 2 | contrary | 7 | duration | 9 | forthcoming | 10 |
| adapt | 7 | chart | 8 | contrast | 4 | dynamic | 7 | foundation | 7 |
| adequate | 4 | chemical | 7 | contribute | 3 | economy | 1 | found | 9 |
| adjacent | 10 | circumstance | 3 | controversy | 9 | edit | 6 | framework | 3 |
| adjust | 5 | cite | 6 | convene | 3 | element | 2 | function | 1 |
| administrate | 2 | civil | 4 | converse | 9 | eliminate | 7 | fund | 3 |
| adult | 7 | clarify | 8 | convert | 7 | emerge | 4 | fundamental | 5 |
| advocate | 7 | classic | 7 | convince | 10 | emphasis | 3 | furthermore | 6 |
| affect | 2 | clause | 5 | cooperate | 6 | empirical | 7 | gender | 6 |
| aggregate | 6 | code | 4 | coordinate | 3 | enable | 5 | generate | 5 |
| aid | 7 | coherent | 9 | core | 3 | encounter | 10 | generation | 5 |
| albeit | 10 | coincide | 9 | corporate | 3 | energy | 5 | globe | 7 |
| allocate | 6 | | 10 | correspond | 3 | enforce | 5 | goal | 4 |
| alter | 5 | | 10 | couple | 7 | enhance | 6 | grade | 7 |
| alternative | 3 | commence | 9 | create | 1 | enormous | 10 | grant | 4 |
| ambiguous | 8 | comment | 3 | credit | 2 | ensure | 3 | guarantee | 7 |
| amend | 5 | commission | 2 | criteria | 3 | entity | 5 | guideline | 8 |
| analogy | 9 | commit | 4 | crucial | 8 | environment | 1 | hence | 4 |
| analyse | 1 | commodity | 8 | culture | 2 | equate | 2 | hierarchy | 7 |
| annual | 4 | communicate | 4 | currency | 8 | equip | 7 | highlight | 8 |
| anticipate | 9 | community | 2 | cycle | 4 | equivalent | 5 | hypothesis | 4 |
| apparent | 4 | compatible | 9 | data | 1 | erode | 9 | identical | 7 |
| append | 8 | compensate | 3 | debate | 4 | error | 4 | identify | 1 |
| appreciate | 8 | | 10 | decade | 7 | establish | 1 | ideology | 7 |
| approach | 1 | complement | 8 | decline | 5 | estate | 6 | ignorance | 6 |
| appropriate | 2 | complex | 2 | deduce | 3 | estimate | 1 | illustrate | 3 |
| approximate | 4 | component | 3 | define | 1 | ethic | 9 | image | 5 |
| arbitrary | 8 | compound | 5 | definite | 7 | ethnic | 4 | immigrate | 3 |
| area | 1 | • | 7 | demonstrate | 3 | evaluate | 2 | impact | 2 |
| aspect | 2 | comprise | 7 | denote | 8 | eventual | 8 | implement | 4 |
| assemble | 10 | compute | 2 | deny | 7 | evident | 1 | implicate | 4 |
| assess | 1 | | 10 | depress | 10 | evolve | 5 | implicit | 8 |
| assign | 6 | concentrate | 4 | derive | 1 | exceed | 6 | imply | 3 |
| assist | 2 | concept | i 1 | design | 2 | exclude | 3 | impose | 4 |
| assume | 1 | conclude | 2 | despite | 4 | exhibit | 8 | incentive | 6 |
| assure | 9 | concurrent | 9 | detect | 8 | expand | 5 | incidence | 6 |
| attach | 6 | conduct | 2 | deviate | 8 | expert | 6 | incline | 10 |
| attain | 9 | confer | 4 | device | 9 | explicit | 6 | income | 1 |
| attitude | 4 | confine | 9 | devote | 9 | exploit | 8 | incorporate | 6 |
| attribute | 4 | confirm | 7 | differentiate | 7 | export | 1 | index | 6 |
| author | 6 | conflict | 5 | dimension | 4 | expose | 5 | indicate | 1 |
| authority | 1 | conform | 8 | diminish | 9 | external | 5 | individual | 1 |
| automate | 8 | consent | 3 | discrete | 9 5 | extract | 5 7 | induce | 8 |
| available | 1 | consequent | 2 | discriminate | 6 | facilitate | 5 | inevitable | 8 |
| avaliable | 1 5 | consequent | 3 | displace | 8 | factor | ວ 1 | infer | o 7 |
| behalf | 9 | consist | ა 1 | displace | 6 | feature | 2 | infrastructure | 8 |
| benefit | 1 | constant | 3 | dispose | 7 | federal | 6 | inherent | 9 |
| Deliciif | 1 | Ulisialii | J | l dishose | , | leneral | U | I IIIII EI EI II | 3 |

Academic Word List – Alphabetical

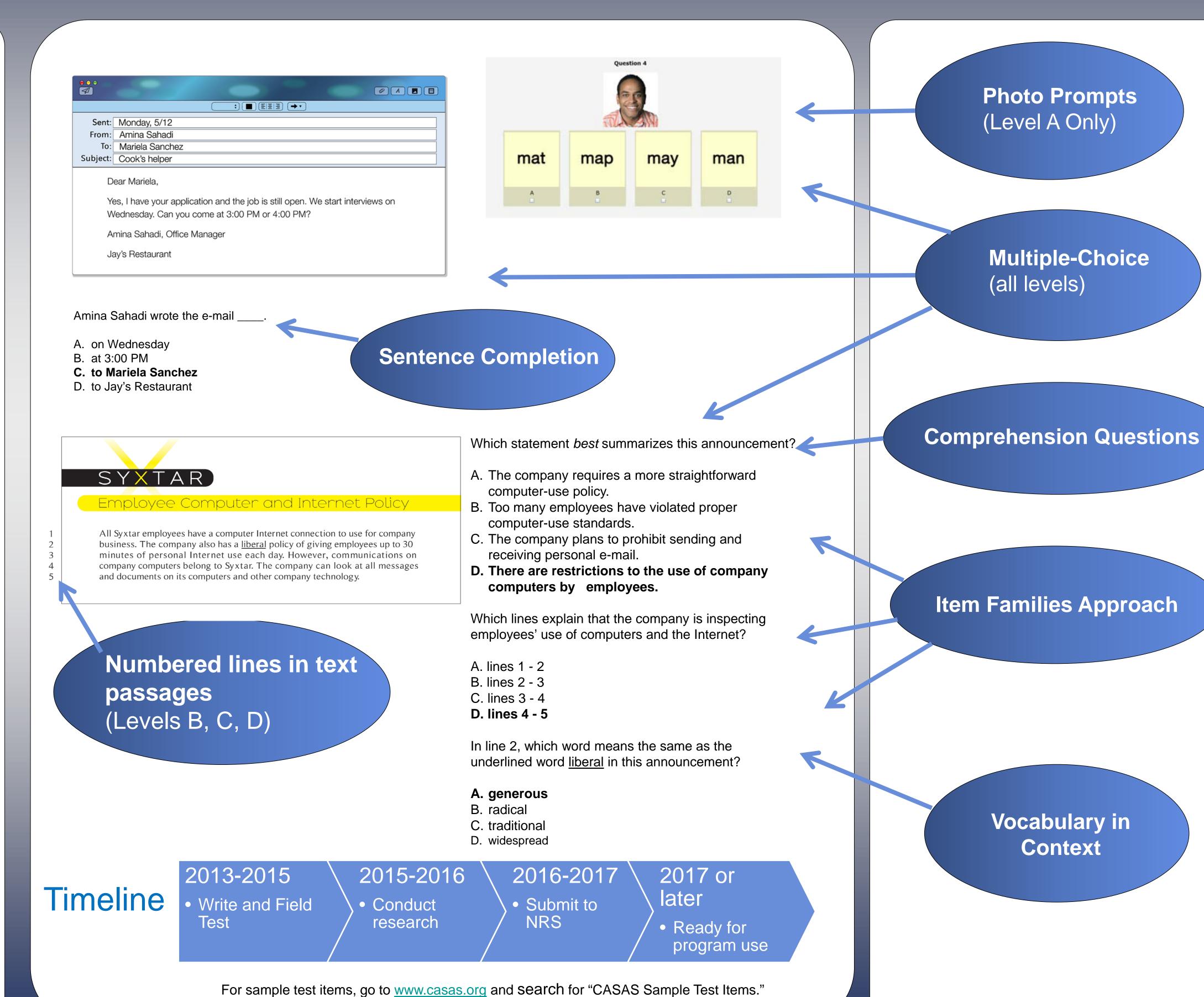
| | • | <i>-</i> | | ilic vvoia Eist- | - | u Deticai | _ | l , |
|--------------|----|----------------|----|------------------|----|-----------------|--------|------------|
| inhibit | 6 | migrate | 6 | precede | 6 | reverse | 7 | tense |
| initial | 3 | military | 9 | precise | 5 | revise | 8 | terminate |
| initiate | 6 | minimal | 9 | predict | 4 | revolution | 9 | text |
| injure | 2 | minimise | 8 | predominant | 8 | rigid | 9 | theme |
| innovate | 7 | minimum | 6 | preliminary | 9 | role | 1 | theory |
| input | 6 | ministry | 6 | presume | 6 | route | 9 | thereby |
| | 7 | • | | • | | | | |
| insert | | minor | 3 | previous | 2 | scenario | 9 | thesis |
| insight | 9 | mode | 7 | primary | 2 | schedule | 8 | topic |
| inspect | 8 | modify | 5 | prime | 5 | scheme | 3 | trace |
| instance | 3 | monitor | 5 | principal | 4 | scope | 6 | tradition |
| institute | 2 | motive | 6 | principle | 1 | section | 1 | transfer |
| instruct | 6 | mutual | 9 | prior | 4 | sector | 1 | transform |
| | 9 | | 3 | | 7 | | 2 | transit |
| integral | | negate | | priority | | secure | | |
| integrate | 4 | network | 5 | proceed | 1 | seek | 2 | transmit |
| integrity | 10 | neutral | 6 | process | 1 | select | 2 | transport |
| intelligence | 6 | nevertheless | 6 | professional | 4 | sequence | 3 | trend |
| intense | 8 | nonetheless | 10 | prohibit | 7 | series | 4 | trigger |
| interact | 3 | norm | 9 | project | 4 | sex | 3 | ultimate |
| intermediate | 9 | normal | 2 | promote | 4 | shift | 3 | undergo |
| internal | 4 | | 5 | • | - | significant | | underlie |
| | | notion | | proportion | 3 | . • | 1 | |
| interpret | 1 | notwithstandir | • | prospect | 8 | similar | 1 | undertake |
| interval | 6 | nuclear | 8 | protocol | 9 | simulate | 7 | uniform |
| intervene | 7 | objective | 5 | psychology | 5 | site | 2 | unify |
| intrinsic | 10 | obtain | 2 | publication | 7 | so-called | 10 | unique |
| invest | 2 | obvious | 4 | publish | 3 | sole | 7 | utilise |
| investigate | 4 | | 4 | purchase | 2 | somewhat | , 7 | valid |
| | | occupy | | • | | | | |
| invoke | 10 | occur | 1 | pursue | 5 | source | 1 | vary |
| involve | 1 | odd | 10 | qualitative | 9 | specific | 1 | vehicle |
| isolate | 7 | offset | 8 | quote | 7 | specify | 3 | version |
| issue | 1 | ongoing | 10 | radical | 8 | sphere | 9 | via |
| item | 2 | option | 4 | random | 8 | stable | 5 | violate |
| job | 4 | orient | 5 | range | 2 | statistic | 4 | virtual |
| • | 2 | outcome | 3 | ratio | 5 | status | 4 | visible |
| journal | | | | | | | | |
| justify | 3 | output | 4 | rational | 6 | straightforward | | vision |
| label | 4 | overall | 4 | react | 3 | strategy | 2 | visual |
| labour | 1 | overlap | 9 | recover | 6 | stress | 4 | volume |
| layer | 3 | overseas | 6 | refine | 9 | structure | 1 | voluntary |
| lecture | 6 | panel | 10 | regime | 4 | style | 5 | welfare |
| legal | 1 | paradigm | 7 | region | 2 | submit | 7 | whereas |
| | 1 | | 8 | | 3 | subordinate | 9 | whereby |
| legislate | | paragraph | | register | | | | • |
| levy | 10 | parallel | 4 | regulate | 2 | subsequent | 4 | widespread |
| liberal | 5 | parameter | 4 | reinforce | 8 | subsidy | 6 | |
| licence | 5 | participate | 2 | reject | 5 | substitute | 5 | |
| likewise | 10 | partner | 3 | relax | 9 | successor | 7 | |
| link | 3 | passive | 9 | release | 7 | sufficient | 3 | |
| locate | 3 | perceive | 2 | relevant | 2 | sum | 4 | |
| logic | 5 | percent | 1 | reluctance | 10 | summary | 4 | |
| | | | | | | 1 | | |
| maintain | 2 | period | 1 | rely | 3 | supplement | 9 | |
| major | 1 | persist | 10 | remove | 3 | survey | 2 | |
| manipulate | 8 | perspective | 5 | require | 1 | survive | 7 | |
| manual | 9 | phase | 4 | research | 1 | suspend | 9 | |
| margin | 5 | phenomenon | 7 | reside | 2 | sustain | 5 | |
| mature | 9 | philosophy | 3 | resolve | 4 | symbol | 5 | |
| | 3 | | | | | | 6 | |
| maximise | | physical | 3 | resource | 2 | tape | | |
| mechanism | 4 | plus | 8 | respond | 1 | target | 5 | |
| media | 7 | policy | 1 | restore | 8 | task | 3 | |
| mediate | 9 | portion | 9 | restrain | 9 | team | 9 | |
| medical | 5 | pose | 10 | restrict | 2 | technical | 3 | |
| medium | 9 | positive | 2 | retain | 4 | technique | 3 | |
| mental | 5 | potential | 2 | reveal | 6 | technology | 3 | |
| | | | | | | | | |
| method | 1 | practitioner | 8 | revenue | 5 | temporary | 9 | l |

New CASASGOALS Reading Series

Introduction

CASAS is developing a new ABE/ASE reading test series for release in 2017.

- Test content is aligned with College and Career Readiness (CCR) Standards for Adult Education.
- Comprehension
 questions draw on higher
 order reading skills,
 including citing evidence
 from complex texts and
 summarizing.
- New question types include Sentence Completion and an "Item Families" approach.
- Both computer-based and paper-based testing will be available.
- NRS ABE/ASE levels will be covered in four test levels.



For sample test items, go to <u>www.casas.org</u> and search for CASAS Sample test items

College and Career Readiness Standards for Adult Education

By Susan Pimentel

Prepared by
MPR Associates, Inc.
Berkeley, CA Washington, DC

Prepared for
U.S. Department of Education
Office of Vocational and Adult Education April 2013

Reading Standards

To become college and career ready, students need to grapple with works of exceptional craft and thought whose range extends across genres, cultures, and centuries. By engaging with increasingly complex readings, students gain the ability to evaluate intricate arguments and the capacity to surmount the challenges posed by complex texts. Standards 1 and 10 play a special role since they operate whenever students are reading: Standard 1 outlines the command of evidence required to support any analysis of text (e.g., analyzing structure, ideas, or the meaning of word as defined by Standards 2-9); Standard 10 defines the range and complexity of what students need to read.

Reading Strand

Key: The citation at the end of each standard in the following chart identifies the CCSS strand, grade, and number (or standard number and letter, where applicable).

For example, RI.4.3 stands for Reading, Informational Text, Grade 4, Standard 3.

RI: Reading Informational Text RH: Reading Historical/Social Studies Text

RL: Reading Literature RST: Reading Scientific and Technical Text

| А | В | С | D | E | | | | |
|---|---|---|--|---|--|--|--|--|
| _ | CCR Anchor 1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) ⁴ | | | | | | | |
| Ask and answer questions about key details in a text. (RI/RL.1.1) | Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. (RI/RL.2.1) | Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (RI/RL.4.1) Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (RI/RL.5.1) | Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. (RI/RL.7.1) • Application: cite specific textual evidence to support analysis of primary and secondary sources. (RH.6-8.1) • Application: cite specific textual evidence to support analysis of science and technical texts. (RST.6-8.1) | Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text. (RI/RL.9-10.1) • Application: cite specific textual evidence to support analysis of primary and secondary sources, attending to such features as the date and origin of the information. (RH.9-10.1) • Application: cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions. (RST.9-10.1) | | | | |

⁴ Standard 10 defines a staircase of increasing text complexity that rises from beginning reading to the college and career readiness level. Panel members added this statement to Anchor Standards 1-9 to make sure it is understood that the skills of reading are to be applied to level-appropriate complex text.

| A | В | С | D | Е | | | | |
|--|---|---|---|--|--|--|--|--|
| | CCR Anchor 2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) | | | | | | | |
| Identify the main topic and retell key details of a text. (RI.1.2) | Determine the main idea of a text; recount the key details and explain how they support the main idea. (RI.3.2) | Determine the main idea of a text and explain how it is supported by key details; summarize the text. (RI.4.2) Determine a theme of a story, drama, or poem from details in the text; summarize the text. (RL.4.2) | Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. (RI/RL.6.2) • Application: determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions. (RST.6-8.2) | Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. (RI/RL.9-10.2) Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. (RST.11-12.2) | | | | |

| Α | В | С | D | E | | | | |
|--|---|---|---|---|--|--|--|--|
| • | CCR Anchor 3: Analyze how and why individuals, events, and ideas develop and interact over the course of a text. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) | | | | | | | |
| Describe the connection between two individuals, events, ideas, or pieces of information in a text. (RI.1.3) | Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. (RI.3.3) | Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. (RI.4.3) | Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories). (RI.8.3) • Application: identify key steps in a text's description of a process related to history/social studies (e.g., how a bill becomes law, how interest rates are raised or lowered). (RH.6-8.3) Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks. (RST.6-8.3) | 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. (RI.11-12.3) Analyze in detail a series of events described in a text; determine whether earlier events caused later ones or simply preceded them. (RH.9-10.3) Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text. (RST.9-10.3) | | | | |

| Α | В | С | D | E | | | | |
|--|---|---|---|---|--|--|--|--|
| CCR Anchor 4: Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) | | | | | | | | |
| Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. (RI.1.4) | Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a topic or subject area. (RI.3.4) | Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a topic or subject area. (RI.5.4) Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes. (RL.5.4) | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone. (RI/RL.6.4) | Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper). (RI/RL.9-10.4) • Application: determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context. (RST.9-10.4) | | | | |
| • | ructure of texts, including how spotthe whole. (Apply this standard to | | - | section, chapter, scene, or | | | | |
| Know and use various text features (e.g., headings, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. (RI.1.5) | Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently. | Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. (RI.4.5) | Analyze how a particular sentence, paragraph, chapter, or section fits into the overall structure of a text and contributes to the development of the ideas. (RI.6.5) | Analyze in detail how an author's ideas or claims are developed and refined by particular sentences, paragraphs, or larger portions of a text (e.g., a section or chapter). (RI.9-10.5) | | | | |
| in a text. (RI.1.5) | (RI.2.5) Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently. (RI.3.5) | Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts. (RI.5.5) | Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to the development of the ideas. (RI.7.5) | 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. (RI.11-12.5) | | | | |

| Α | В | С | D | E | | | | |
|--|---|---|--|---|--|--|--|--|
| CCR Anchor 6: Assess how point of view or purpose shapes the content and style of a text. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) | | | | | | | | |
| | Identify the main purpose of a text, including what the author wants to answer, explain, or describe. (RI.2.6) Distinguish their own point of view from that of the author of a text. (RI.3.6) | Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. (RI.5.6) Describe how a narrator's or speaker's point of view influences how events are described. (RL.5.6) | Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints. (RI.8.6) Identify aspects of a text that reveal an author's point of view or purpose (e.g., loaded language, inclusion or avoidance of particular facts). (RH.6-8.6) | Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. (RI.9-10.6) • Application: analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature. (RL.9-10.6) Analyze a case in which grasping point of view requires distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). (RL.11-12.6) Compare the point of view of two or more authors for how they treat the same or similar topics, including which details they include and emphasize in their respective accounts. (RH.9-10.6) | | | | |

| Α | В | С | D | E | | | | |
|---|---|--|--|--|--|--|--|--|
| CCR Anchor 7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words. (Apply this standard to texts of appropriate complexity as outline by Standard 10.) | | | | | | | | |
| Use the illustrations and details in a text to describe its key ideas (e.g., maps, charts, photographs, political cartoons, etc.). (RI.1.7) | Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). (RI.3.7) Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting). (RL.3.7) | Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. (RI.4.7) Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (RI.5.7) | Integrate information presented in different media or formats (e.g., in charts, graphs, photographs, videos, or maps) as well as in words to develop a coherent understanding of a topic or issue. (RI.6.7) Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). (RST.6-8.7) | Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text. (RH.9-10.7) Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words. (RST.9-10.7) 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. (RI.11-12.7) | | | | |
| CCR Anchor 8: Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) | | | | | | | | |
| Identify the reasons an author gives to support points in a text. (RI.1.8) | Describe how reasons support specific points the author makes in a text. (RI.2.8) | Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). (RI.5.8) | Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced. (RI.8.8) | 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 fallacious reasoning. (RI.9-10.8) | | | | |

| A | В | С | D | E | | | | |
|--|---|---|--|--|--|--|--|--|
| CCR Anchor 9: Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take. (Apply this standard to texts of appropriate complexity as outlined by Standard 10.) | | | | | | | | |
| Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). (RI.1.9) | Compare and contrast the most important points and key details presented in two texts on the same topic. (RI.3.9) | Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (RI.5.9) | Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation. (RI.8.9) | Analyze seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address, Roosevelt's Four Freedoms speech, King's "Letter from Birmingham Jail"), including how they address related themes and concepts. (RI.9-10.9) | | | | |
| | | | | 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. (RI.11-12.9) Compare and contrast findings presented in a text to those from | | | | |
| | | | | other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts. (RST.9-10.9) | | | | |
| | | | | Application: compare and contrast treatments of the same topic in several primary and secondary sources. (RH.9-10.9) | | | | |

CCR Anchor 10: Read and comprehend complex literary and informational texts independently and proficiently.⁵

Associated Quantitative Measures of Text Complexity to B-E Levels of Learning

| Common Core Band | ATOS | Degrees of Reading Power® | Flesch-Kincaid | The Lexile Framework® | Reading Maturity | SourceRater |
|------------------|---------------|------------------------------|----------------|--------------------------|------------------|---------------|
| 2nd – 3rd (B) | 2.75 – 5.14 | 42 – 54 | 1.98 - 5.34 | 420 – 820 | 3.53 – 6.13 | 0.05 - 2.48 |
| 4th – 5th (C) | 4.97 – 7.03 | 52 – 60 | 4.51 – 7.73 | 740 – 1010 | 5.42 – 7.92 | 0.84 – 5.75 |
| 6th – 8th (D) | 7.00 – 9.98 | 57 – 67 | 6.51 – 10.34 | 925 – 1185 | 7.04 – 9.57 | 4.11 – 10.66 |
| 9th – 10th (E) | 9.67 – 12.01 | 62 – 72 | 8.32 – 12.12 | 1050 – 1335 | 8.41 – 10.81 | 9.02 – 13.93 |
| 11th – CCR (E) | 11.20 – 14.10 | 67 – 74 | 10.34 – 14.2 | 1185 – 1385 | 9.57 – 12.00 | 12.30 – 14.50 |

⁵ See Appendix D of this report for the research explaining the importance of text complexity in reading achievement.

Hess' Cognitive Rigor Matrix & Curricular Examples: Applying Webb's Depth-of-Knowledge Levels to Bloom's Cognitive Process Dimensions - ELA

| Specify, explain, show relationships: Specify, explain, show relationships: Specify, explain, show relationships: Suplain hity, cause-effect Give non-examples examples Summarize results, concepts, ideas Specifically relate to other content (dentify main ideas or accurate Identify main ideas or texts View not bas may affect the readers Identify main ideas or texts Identify main ideas or texts Identify main ideas or texts Identify main ideas or accurate Identify main ideas or texts Identify main ideas Identify main ideas or texts Identify main ideas search and apply them to new Identify identify iden meaning or Identify main ideas or texts Identify main ideas Identify iden meaning or Identify observation of texts Identify main identify iden meaning or Identify main identified on organize Identify observations dawn Identify observation identify Identify ide | | Brainstorm ideas concents | Create Reorganize elements into new | |
|--|--|---------------------------|--|--|
| Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference) Identify/ make inferences about explicit or implicit themes Describe how word choice, point of view, or bias may affect the readers' interpretation of a text Write multi-paragraph composition for specific purpose, focus, voice, tone, & audience Apply a concept in a new context Apply a concept in a new context Revise final draft for meaning or progression of ideas Apply internal consistency of text organization and structure to composing a full composition Apply word choice, point of view, style to impact readers' /viewers' interpretation of a text Analyze information within data sets or texts Analyze interrelationships among concepts, issues, problems Analyze interpret author's craft (literary devices, viewpoint, or potential bias) to create or critique a text Use reasoning, planning, and evidence to support inferences | | | Evaluate Make judgments based on criteria, check, detect inconsistencies or fallacies, judge, critique | |
| ips: Caplain, generalize, or connect ideas using supporting evidence (quote, example, text reference) clantify make inferences about explicit or implicit themes Caplicit or impact focus, voice, tone, & audience Caplicit or meaning or progression of ideas Caply internal consistency of text Capply word choice, point of view, style to impact readers' /viewers' Capply interpretation of a text | whether specific on is contained in representations (e.g., art, table, graph, T-chart,) or text features (e.g., s, subheadings, captions) which text structure is ate to audience and o | 0 0 | Analyze Break into constituent parts, determine how parts relate, differentiate between relevant-irrelevant, distinguish, focus, select, organize, outline, find coherence, deconstruct (e.g., for bias or point of view) | |
| ationships; c Explain, generalize, or connect ideas using supporting evidence (quote, example, text reference) opts, ideas c identify/ make inferences about explicit or implicit themes complexits of Describe how word choice, point of view, or bias may affect the readers' interpretation of a text of white multi-paragraph composition for specific purpose, focus, voice, tone, & audience | Use language structure cylindrical of the conventions, word relationships of word (symonym/antonym) to determine of words conventions, word use Apply rules or resources to edit spelling, grammar, punctuation, conventions, word use Apply basic formats for structure documenting sources outside types) | 0 0 0 | Apply Carry out or use a procedure in carry out or use a procedure in a given situation; carry out (apply to a familiar task), or use (apply) to an unfamiliar task | |
| | Identify or describe literary elements (characters, setting, sequence, etc.) sequence, etc.) Select appropriate words when intended meaning/definition is clearly evident Describe/explain who, what, where, when, or how Define/describe facts, details, terms, principles Write simple sentences Summ O Make to predict or lidentify, general or lidentify, implicit | 0 0 0 0 0 | Understand Construct meaning, clarify, paraphrase, represent, translate, illustrate, give examples, classify, categorize, summarize, generalize, infer a logical conclusion), predict, compare/contrast, match like ideas, explain, construct models | |
| | s, or nected | 0 0 | Remember Retrieve knowledge from long- term memory, recognize, recall, locate, identify | |
| Webb's DOK Level 2 Webb's DOK Level 3 Webb's DOK Level 4 Skills & Concepts Strategic Thinking/ Reasoning Extended Thinking | DOK Level 1 | Webb's Recall 8 | Revised Bloom's Taxonomy | |

Depth of Knowledge (DOK) Levels



Level One Activities

Recall elements and details of story structure, such as sequence of events, character, plot and setting.

Conduct basic mathematical calculations.

Label locations on a map.

Represent in words or diagrams a scientific concept or relationship.

Perform routine procedures like measuring length or using punctuation marks correctly.

Describe the features of a place or people.

Level Two Activities

Identify and summarize the major events in a narrative.

Use context cues to identify the meaning of unfamiliar words.

Solve routine multiple-step problems.

Describe the cause/effect of a particular event.

Identify patterns in events or behavior.

Formulate a routine problem given data and conditions.

Organize, represent and interpret data.

Level Three Activities

Support ideas with details and examples.

Use voice appropriate to the purpose and audience.

Identify research questions and design investigations for a scientific problem.

Develop a scientific model for a complex situation.

Determine the author's purpose and describe how it affects the interpretation of a reading selection.

Apply a concept in other contexts.

Level Four Activities

Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/solutions.

Apply mathematical model to illuminate a problem or situation.

Analyze and synthesize information from multiple sources.

Describe and illustrate how common themes are found across texts from different cultures.

Design a mathematical model to inform and solve a practical or abstract situation.

| CCRS Reading | Selected Reading Test Question Frames for CCRS Reading Anchors |
|------------------|--|
| Anchor CCR R1 | When does the open on? |
| CCR R1 | Based on the article, which of the following is true? |
| CCR R1 | According to the article, what is the most important way to? |
| CCR R1 | Which paragraph/sentence suggests that? |
| CCR R1 | Select the sentence from the first three paragraphs that most likely explains why decided to |
| CCR R1 | Based on the quotes in the article, how? |
| CCR R1 | Why is it surprising that decided to? |
| CCD D3 | NAME of the America index of the postinical |
| CCR R2 CCR R2 | What is the main idea of the article? Which of these are the two most important main ideas of the article? |
| | |
| CCR R2 | What is the main purpose of paragraph 1? |
| CCR R2 | Which of the following answer choices would be another good title for the section ""? |
| CCR R2 | Which of the following answer choices would be the BEST title for paragraphs 3-5? |
| CCR R2 | Which sentence would be least/most important to include in a summary of the article? |
| CCR R2 | Which section of the article provides the best details to explain |
| CCR R2 | Given below are four quotes from the article. Which of them helps support the main idea of the article? |
| CCR R2 | Which of the following sentences does <u>not</u> belong in a summary of the article? |
| CCR R2 | Which of the following sentences is a personal opinion or judgment that would $\underline{\text{not}}$ belong in a summary of the article? |
| CCR R3 | Read the instructions to assemble What is the next step after? |
| | |
| CCR R3 | Describe the events that lead to George Washington's decision to retreat from New York during the Revolutionary War. |
| CCR R4 | Read the title of the article. Which of the following words from the article has the opposite meaning of the word "" as used in the title? |
| CCR R4 | Read this sentence from the second paragraph What does the word "" mean in this sentence? |
| CCR R4 | Explain the meaning of "" as the phrase is used in this sentence from the section "" |
| CCR R4 | Read the sentence from the section "" Which of the following phrases from the paragraph is an example of an ""? |
| CCR R4 | What is the meaning of the phrase as used in the following sentence from the article? |
| CCR R4 | Read the sentence from the article Which word from the introduction [paragraphs 1-3] has the SAME meaning as the word "harmful"? |
| CCR R4 | Read the following sentence from the section ""Select the answer choice that best describes the meaning of the phrase "" |

| Which of the following phrases from the article is an example of? |
|--|
| Which word(s) have/has the same/opposite meaning of the word "" as used in the title/the introduction/paragraph? |
| |
| Select the paragraph from the section "" that shows how |
| Select the sentence that shows |
| Which section describes? |
| What role does section "" play in the article as a whole? |
| Which of the following sentences accurately compares the sections "" and ""? |
| How does the final paragraph contribute to the article? |
| Select the section in the article that describes |
| |
| The writer's attitude toward is best described as |
| The writer would likely agree that |
| The PRO and CON authors would likely agree that |
| Which sentence from the CON article would make the best reply to the PRO author's claim? |
| |
| What does the photo contribute to the reader's understanding of the article? |
| Use the public transit schedule and the museum's hours to determine which bus to take to arrive at the museum at least 3 hours before closing? |
| |
| How does the writer support her viewpoint? |
| "" Which detail in the article supports this claim? |
| |

CASAS Assessment Update

New CASAS GOALS Reading and Math Test Series

- Strongly aligned to CCRS (College and Career Readiness Standards for Adult Education)
- Reading GOALS assesses higher order thinking skills (Depth of Knowledge), complex informational text, and vocabulary, including academic language.
- Math GOALS assesses Number Sense, Algebra, Geometry, Measurement, and Statistical Reasoning.
- Currently undergoing OCTAE NRS Test Review (ABE/ASE Reading and Math)
- New ELL Reading development and research studies dependent on release of new NRS ELL Descriptors by OCTAE

CASAS Math Content Standards – available at casas.org

Revised CASAS Reading Content Standards (2016)

- Streamlined, re-organized, shortened
- Incorporate CCRS standards
- Posted on CASAS website. Go to "Product Overviews," then "Curriculum Management and Instruction," then "CASAS Basic Skills Content Standards".

CASAS NRS-approved Assessments -- Approved through **February 2019**:

- Life and Work Reading (80 series) and Beginning Literacy, Forms 27 and 28
- Life and Work Listening (980 series)
- Life Skills Math (30 series)

CASAS eTests and TOPSpro Enterprise

- New: test delivery via tablets, starting with Chromebooks.
- All computer-delivered test forms can be used with a touch screen.
- Beginning Literacy Forms 27 and 28 are on eTests and can also be used with a touch screen.

CASAS Reading GOALS Series Blueprint

| Reading GOALS Content Areas | CCRS* | CASAS Level A | CASAS Level B | CASAS Level C | CASAS Level D |
|---|--------------------------|------------------|------------------|------------------|------------------|
| Vocabulary High frequency sight words Academic vocabulary Meaning from context | R4 | 25% | 20% | 20% | 20% |
| Reading Comprehension Skills Locate information/detail; cite evidence Main idea | R1 R2 | 75% | 50% | 40% | 20% |
| Higher Order Reading Skills Cite evidence; infer; draw conclusions; summarize Text structure and features Author's purpose and point of view Analyze claim/argument | R1, R2 R5 R6 R8 | | 30% | 40% | 60% |

^{*}CCRS Reading Standards R7, R9 and R10 are measured across content areas.

CASAS Math GOALS Series Blueprint

| CASAS Content Domains | CASAS Level* A/B | CASAS Level* C/D | College and Career Readiness Standards covered by |
|----------------------------------|------------------------|------------------------|---|
| M1: Number Sense | 22% | 20% | At the A/B level, use basic concepts of number system, place values, operations of addition, subtraction, multiplication and division, fractions, fraction equivalents, ratios and proportions. |
| | | | At the C/D level, use advanced number concepts such as <i>comparing</i> fractions, using operations with rational numbers and exponents. |
| M2: Algebra | 15% | 30% | At the A/B level, understand and reason with properties of four operations, explain patterns in four operations, solve basic onevariable equations. At the C/D level, generate equivalent equations and those with two or more variables, understand radicals, use lines and linear equations, use functions and functional expression, including inequalities, polynomials, quadratics, and exponential models. |
| M3: Geometry | 10% | 10% | At the A/B level, identify and reason with shapes and their attributes in 2- and 3-dimensions, find area and volume. At the C/D level, solve problems of angle, area, congruence, similarity, trigonometry, volumes of cone, pyramids and spheres. |
| M4: Measurement** | 28% | 25% | At the A/B level, measure with standard units, time intervals, liquid masses and volumes, area, unit conversions, angle measurements. At the C/D level, understand/apply Pythagorean theorem, use volume measurements for complex modeling. |
| M5: Statistics and Probability** | 25% | 15% | At the A/B level, understand categories, identify relevant data in tables, represent data in graphs, understand variability, and describe distributions. At the C/D level, understand probability, sampling, draw inferences, summarize and interpret categorical and quantitative data, draw inferences, investigate associations in bivariate data. |

^{*} New *CASAS Math Goals* series includes (4) pre and post-test forms at two (2) levels. They cover all six (6) NRS levels for mathematics.

- A/B Levels 2 alternate forms; 40 items each; covers CCRS Levels A-C
- C/D Levels 2 alternate forms; 38 items each; covers CCRS Levels C-E

For a more detailed test blueprints for the *GOALS* series, go to "What's New" on the home page of casas.org. For sample test items for the *GOALS* series, go to casas.org and search for "CASAS Sample Test Items."

Free CASAS Training modules -- Go to "Online Training" at casas.org. Email: training@casas.org

General questions about the CASAS system: casas@casas.org CASAS phone: 800-255-1036; CASAS Tech Support: press 2

^{**} CCRS has <u>one</u> content domain - *Measurement and Data*. It is equivalent to the combination of CASAS content domains *M4*: *Measurement* and *M5*: *Statistics and Probability*.