APPENDIX A

New Educational Functioning Level Descriptors for Adult Basic Education and English as a Second Language
New Educational Functioning Level Descriptors for Adult Basic Education (ABE)\(^1,2\)

Literacy/English Language Arts

Introduction

The educational functioning level (EFL) descriptors for Literacy/English Language Arts are intended to guide both teaching and assessment for adult learners. They are divided into six EFLs: Beginning Literacy; Beginning Basic; Low Intermediate; High Intermediate; Low Adult Secondary; and High Adult Secondary. The descriptors do not provide a complete or comprehensive delineation of all of the skills at any given level but provide examples of the most critical concepts and skills for the level. The descriptors use the College and Career Readiness (CCR) Standards for Adult Education (CCR) as the foundation.

While these narrative descriptors address the most critical concepts for assessment and instruction for adult learners, lesson plans and test items should be based on additional critical concepts from State instructional frameworks and standards, as appropriate for the learner and State requirements.

The EFLs for Literacy/English Language arts are organized into reading, writing, speaking and listening, and language domains. Emphasis was placed on reading and writing because most instruction and assessment attention will be paid to these domains for ABE students. In addition, the descriptors were further informed by OCTAE’s Framework for Employability Skills to ensure the levels paid adequate attention to workforce preparation.


\(^2\)These descriptors are included in the AEFLA information collection (OMB control number 1830-0027) and were implemented with Federal Register notice 82 FR 42339. Programs may continue to use existing tests aligned with the NRS educational functioning level descriptors in Exhibit 2.2 until February 2, 2019.

*Texas Adult Education and Literacy Content Standards v. 3*
Introduction (cont.)

Reading
The reading sections of the descriptors are consistently more comprehensive than the other domains. Reading is a critical area for college and career readiness. One of the elements in the reading descriptors that draws clear distinctions between competencies required at each level is the complexity of the text that students are to be reading. The EFLs specify a staircase of increasing text complexity for students to master from beginning basic reading through the college and career readiness level. The comprehension skills of reading are to be applied to level-appropriate complex text. The reading domain elements of the descriptors carry within it references to other key skills from the other domains and workforce preparation skills. Examples of this include listening comprehension as a supplement to reading comprehension at levels 1 and 2 so students can work with the richer ideas adult students can handle intellectually, if not yet independently through their own reading. It also includes integrating and evaluating information from a variety of media, including translating quantitative or technical information presented visually or in words. Learning to work with diverse media is an important job skill as well as a critical applied academic skill. Another example is an emphasis on research that includes a combination of reading, writing, and speaking and listening skills—again as a way to connect the domains in important ways and to create the EFLs as a focused and useful document.

Writing
Details about the level of writing proficiency required at each level have been pared to draw clear distinctions between competencies required at each level. The descriptors emphasize writing arguments and writing to inform and explain from Level 3 and beyond. Both writing types stress writing to sources and asking students to draw evidence from texts is emphasized in the descriptors. With writing, many of the process standards were not included because process proficiency is hard to measure. In addition, reference is consistently made to research skills in both the reading and writing sections of each level as these skills are important to writing.

Speaking and Listening
The speaking and listening descriptors at each level are connected closely to workforce preparation and the Employability Skills Framework. These skills have the benefit of both being measurable and clearly related to citizenship, work, and life success. Collaborative conversations and teamwork are emphasized at every level as is students’ use of evidence. In this context of speaking and listening, the descriptors reflect use of listening comprehension capacities (particularly in Levels 1 and 2 to augment students’ lower reading comprehension abilities), evidence in conversation, ability to evaluate what others are saying, and the capacity to share information effectively with others.
Literacy/English Language Arts (cont.)

Introduction (cont.)

Language
In the language domain, descriptors are consistent with workforce preparation from the Employability Skills Framework and are vital to attaining college and career readiness from each level such as a growth in students’ grammar and punctuation skills, as well as their growth in vocabulary.

Level 1: Beginning Literacy

Reading: Individuals ready to exit the Beginning Literacy Level comprehend how print corresponds to spoken language and are able to demonstrate understanding of spoken words, syllables, and sound-letter relationships (phonetic patterns), including consonant digraphs and blends. In particular, students at this level are able to recognize and produce rhyming words, blend and segment onsets and rhymes, isolate and pronounce initial, medial, and final sounds, add or substitute individual sounds, and blend and segment single syllable words. They are able to decode two-syllable words following basic patterns as well as recognize common high frequency words by sight. Individuals are able to read simple decodable texts with accuracy, appropriate rate, and expression. They are able to determine the meaning of words and phrases in texts with clear and explicit context.

Individuals ready to exit this level are able to determine main ideas, retell key details, and ask and answer questions about key details in simple texts. Individuals are also able to use the illustrations in the text(s), whether print or digital, to describe its key ideas (e.g., maps, charts, photographs, cartoons). They also are able to use text features, both print and digital, to locate key facts or information. When listening to text above their current independent reading level, they are able to identify the reasons an author gives to support points in a text, describe the connections between ideas within a text, and examine the basic similarities in and differences between two texts on the same topic.

Writing: Individuals ready to exit the Beginning Literacy Level are able to write basic sight words and familiar words and phrases as they compose simple sentences or phrases. This includes writing simple informative texts in which they supply some facts about a topic and narratives that include some details regarding what happened. They use simple transition and temporal words to signal event order (e.g., so, and, because, when, next, finally). With support, they are able to gather and use information from provided sources, both print and digital, to answer a simple research question.
Literacy/English Language Arts (cont.)

Level 1: Beginning Literacy (cont.)

Speaking and Listening: Individuals ready to exit this level are able to participate in conversations of short duration, collaborating with diverse partners and groups, while respecting individual differences. This includes following agreed upon rules for discussion and responding to the comments of others through multiple exchanges. Individuals are able to describe people, places, things, and events with relevant details, producing complete sentences when appropriate to task and situation. They can discuss what they have heard read aloud and ask and answer questions about it.

Language: When writing and speaking, individuals ready to exit this level are able to correctly use frequently occurring nouns, verbs (past, present, and future), adjectives, pronouns, prepositions and conjunctions. When writing sentences individuals correctly use capitalization, ending punctuation, and commas in dates and to separate single words in a series. They are able to spell words with common patterns and frequently occurring irregular words. Other words they spell phonetically. In response to prompts, they are able to produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences orally. Individuals are able to determine the meaning of unknown and multiple-meaning words by applying their knowledge of frequently occurring roots and affixes, as well as sentence-level context. They are able to distinguish shades of meaning among verbs (e.g., look, glance, stare, glare) and adjectives differing in intensity (e.g., large, gigantic) by choosing them or acting out their meanings.

Level 2: Beginning Basic

Reading: Individuals ready to exit the Beginning Basic Level are able to decode multi-syllable words, distinguish long and short vowels when reading regularly spelled one-syllable words, and recognize the spelling-sound correspondences for common vowel teams. They also are able to identify and understand the meaning of the most common prefixes and suffixes. They can read common irregular sight words. Individuals are able to read level appropriate texts (e.g., texts with a Lexile Measure of between 420 and 820) with accuracy, appropriate rate, and expression.2 They are able to determine the meaning of words and phrases in level-appropriate complex texts. Individuals ready to exit this level are able to determine main ideas, ask and answer questions about key details in texts and show how those details support the main idea. Individuals also are able to explain how specific aspects of both digital and print illustrations contribute to what is conveyed by the words of a text. They are able to compare and contrast the most important points and key details of two texts on the same topic. When listening to text above their current independent reading level, they are able to describe the relationship between ideas in a text in terms of time, sequence, and cause/effect, as well as use text features and search tools, both print and digital, to locate information relevant to a given topic efficiently. They also are able to describe how reasons support specific points an author makes in a text and identify the author’s main purpose or what the author wants to answer, explain or describe, as well as distinguish their own point of view from that of the author’s.

Texas Adult Education and Literacy Content Standards v. 3
Literacy/English Language Arts (cont.)

Level 2: Beginning Basic (cont.)

**Writing:** Individuals ready to exit the Beginning Basic Level are able to write opinion pieces on topics or texts, supporting a point of view with reasons. They are able to write simple informative texts in which they examine a topic and convey information clearly. They also are able to write narratives with details that describe actions, thoughts, and feelings. They use transition and temporal words (e.g., also, another, more, but) to link ideas and signal event order. Individuals ready to exit this level are able to use technology to produce and publish writing as well as to interact and collaborate with others. They are able to conduct short research projects and summarize their learning in print. This includes taking brief notes from both print and digital sources, and sorting evidence into provided categories.

**Speaking and Listening:** Individuals ready to exit this level are able to participate in a range of collaborative conversations with diverse partners and groups, respecting individual differences. This includes gaining the floor in respectful way, linking their comments to the remarks of others, and expressing their own ideas clearly in light of the discussions. Individuals are able to report on a topic or text or recount an experience with appropriate facts and relevant, descriptive details. They are able to speak in complete sentences appropriate to task and situation in order to provide requested detail or clarification. They can discuss what they have heard read aloud and provide the main ideas and appropriate elaboration and detail about the information presented.

**Language:** When writing and speaking, individuals ready to exit this level are able to correctly use regular and irregular nouns and verbs, comparative and superlative adjectives and adverbs, and coordinating and subordinating conjunctions. When writing simple, compound and complex sentences, individuals use correct subject-verb and pronoun-antecedent agreement. They also use correct capitalization, ending punctuation, commas, and apostrophes to form contractions and possessives. They also are able to spell words with conventional patterns and suffixes. They are able to use spelling patterns and generalizations (e.g., word patterns, ending rules) in writing words. In response to prompts, they are able to produce, expand, and rearrange simple and compound sentences. Individuals are able to determine the meaning of unknown and multiple-meaning words in level-appropriate complex texts, including academic words, by applying their knowledge of roots and affixes, as well as sentence-level context. They are able to distinguish literal from non-literal meaning of words, and shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, wondered, suspected). They are able to demonstrate understanding of and use general academic words that signal spatial and temporal relationships.
Level 3: Low Intermediate

Reading: Individuals ready to exit the Low Intermediate Level are able to read fluently text of the complexity demanded of this level (e.g., a Lexile Measure of between 740 and 1010). They are able to use knowledge of letter-sound correspondences, syllabication patterns, and roots and affixes to accurately decode unfamiliar words. They are able to determine the meaning of words and phrases (e.g., metaphors and similes) in level-appropriate complex texts. Individuals ready to exit this level are able to make logical inferences, summarize central ideas or themes, and explain how they are supported by key details. They are able to explain events, procedures, or ideas in historical, scientific, or technical texts, including what happened and why. They are able to describe the overall structure of a text and compare and contrast the structures of two texts. Individuals ready to exit this level are also able to interpret information presented visually, orally, or quantitatively to find an answer to a question or solve a problem. They display this facility with both print and digital media. Individuals are able to explain how authors use reasons and evidence to support particular points in a text and can integrate information from several texts, whether print, media, or a mix, on the same topic. They are able to describe how point of view influences how events are described. They are able to analyze multiple accounts of the same event or topic noting similarities and differences. They are able to produce valid evidence for their findings and assertions.

Writing: Individuals ready to exit the Low Intermediate Level are able to write opinion pieces on topics or texts, supporting a point of view with facts and logically ordered reasons. They are able to produce informative texts in which they develop a topic with concrete facts and details. They convey information clearly with precise language and well-organized paragraphs. They link ideas, opinions, and reasons with words, phrases, and clauses (e.g., another, specifically, consequently, because). They are also able to use technology (including the Internet) to produce and publish writing as well as to interact and collaborate with others. They are able to conduct short research projects, making frequent use of on-line as well as print sources. This includes the ability to draw evidence from several texts to support an analysis. They are able to summarize or paraphrase information from and provide a list of those sources.

Speaking and Listening: Individuals ready to exit this level are able to participate in a range of collaborative conversations with diverse partners and groups, respecting individual differences. This includes demonstrating an understanding of teamwork and working well with others by carrying out their assigned roles, and posing and responding to specific questions, and making comments that contribute to and elaborate on the remarks of others. Individuals are able to report on a topic or text or present an opinion, sequencing ideas logically, and providing appropriate facts and relevant, descriptive details that support the main ideas or themes. They are able to differentiate between contexts that call for formal English and situations where informal discourse is appropriate. They also are able to paraphrase and summarize what they have heard aloud and explain how each claim is supported by reasons and evidence.

Texas Adult Education and Literacy Content Standards v. 3
Literacy/English Language Arts (cont.)

Level 3: Low Intermediate (cont.)

**Language:** When writing and speaking, individuals ready to exit this level are able to use verb tenses to convey various times, sequences, states, and conditions correctly and recognize inappropriate shifts in verb tense. They use prepositions, conjunctions, and interjections properly. Individuals write simple, compound and complex sentences and use correct subject-verb and pronoun-antecedent agreement throughout a piece of writing. They also use correct capitalization, commas, and underlining, quotation marks, and italics to indicate titles of works. They are able to correctly use frequently confused words (e.g., to, too, two; there, their) and spell correctly, consulting references as needed. They are able to produce complete sentences, recognizing and correcting inappropriate fragments and run-ons as well as expand, combine, and reduce sentences for meaning, reader interest, and style. Individuals are able to determine the meaning of unknown and multiple-meaning words in level-appropriate complex texts, including academic words, by applying their knowledge of roots and affixes, as well as sentence-level context. Individuals are able to interpret figurative language, including similes and metaphors. They also are able to recognize and explain the meaning of common idioms, adages, and proverbs. They are able to demonstrate understanding of and use general academic words that signal precise actions or emotions (e.g., whined, stammered), signal contrast (e.g., however, nevertheless), or other logical relationships (e.g., however, similarly), and are basic to a particular topic (e.g. endangered when discussing animal preservation).

Level 4: High Intermediate

**Reading:** Individuals who are ready to exit the High Intermediate Level are able to read fluently text of the complexity demanded of this level (e.g., a Lexile Measure of between 925 and 1185). They display increasing facility with academic vocabulary and are able to analyze the impact of a specific word choice on meaning and tone in level-appropriate complex texts.

Individuals are able to make logical inferences by offering several pieces of textual evidence. This includes citing evidence to support the analysis of primary and secondary sources in history, as well as analysis of science and technical texts. They are able to summarize and analyze central ideas, including how they are conveyed through particular details in the text. They also are able to analyze how a text makes connections among and distinctions between ideas or events and how major sections of a text contribute to the development of the ideas. They also are able to follow multistep procedures. Individuals are able to identify aspects of a text that reveal point of view and assess how point of view shapes style and content in texts. In addition, they are able to evaluate the validity of specific claims an author makes through the sufficiency of the reasoning and evidence supplied in the text. This includes analyzing how an author responds to conflicting evidence or viewpoints. They are able to analyze how multiple texts address similar themes, including how authors acknowledge and respond to conflicting evidence or viewpoints and include or avoid particular facts. Individuals are
Literacy/English Language Arts (cont.)

Level 4: High Intermediate (cont.)

Reading (cont.)
also able to analyze the purpose of information presented in diverse media as well as integrate and evaluate content from those sources, including quantitative or technical information presented visually and in words. They are able to produce valid evidence for their findings and assertions, make sound decisions, and solve problems.

Writing: Writing in response to one or more text(s), individuals ready to exit this level are able to compose arguments and informative texts (this includes the narration of historical events, scientific procedures/experiments, or technical processes). When writing arguments, they are able to introduce claims, acknowledge alternate or opposing claims, support claims with clear reasons and relevant evidence, and organize them logically in a manner that demonstrates an understanding of the topic. When writing informative texts, individuals are able to examine a topic through the selection, organization, and analysis of relevant facts, concrete details, quotations and other information to aid comprehension. Individuals create cohesion in their writing by clarifying the relationships among ideas, reasons, and evidence; using appropriate transitions; and including a logical progression of ideas, and maintaining consistency in style and tone. Individuals are able to use specific word choices appropriate for the topic, purpose, and audience. They also are able to use technology to produce and publish writing and link to and cite sources. They conduct short research projects, drawing on several sources. This includes the ability to draw evidence from several texts to support an analysis. It also includes the ability to locate and organize information, assess the credibility and accuracy of each source, and communicate the data and conclusions of others while avoiding plagiarism.

Speaking and Listening: Individuals ready to exit the High Intermediate level collaborate well as a member of team by building on others’ ideas, expressing their own clearly and maintaining a positive attitude. This includes following the rules for collegial discussions and decision-making and tracking progress toward specific goals and deadlines. It also includes the ability to pose questions that connect the ideas of several speakers and respond to others’ questions and comments with relevant evidence and ideas. During these discussions, individuals are able to qualify, alter, or justify their own views in light of the evidence presented by others. Just as in writing, individuals are able to delineate a speaker's argument, evaluating the soundness of the reasoning and relevance of the evidence. They are able to identify when irrelevant evidence is introduced. They also are able to present their own claims and findings that emphasize salient points in a focused and coherent manner, with relevant evidence, valid reasoning, and well-chosen details. Individuals adapt their speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.
Literacy/English Language Arts (cont.)

Level 4: High Intermediate (cont.)

**Language:** When writing and speaking, individuals ready to exit the High Intermediate level are able to ensure pronouns are in the proper case, recognize and correct inappropriate shifts in pronoun number and person, and correct vague or unclear pronouns. They know how to form all verb tenses, and recognize and correct inappropriate shifts in verb voice and mood. They know how to recognize and correct misplaced and dangling modifiers. They are able to adapt their speech to a variety of contexts and tasks when indicated. They are able to choose language that expresses ideas precisely and concisely, recognizing and eliminating redundancy and wordiness as well as maintaining consistency in style and tone. Though errors may be present, the meaning of their written and oral communications is clear. Individuals are able to determine the meaning of unknown and multiple-meaning words and phrases as they are used in level-appropriate complex texts through context clues, knowledge of affixes and roots, and use of reference materials.

Level 5: Low Adult Secondary

**Reading:** Individuals who are ready to exit Low Adult Secondary Level are able to read fluently texts that measure at the secondary level of complexity (e.g., a Lexile Measure of between 1050 and 1335). This includes increasing facility with academic vocabulary and figurative language in level-appropriate complex texts. This includes determining the meaning of symbols and key terms used in a specific scientific or technical context. They are able to analyze the cumulative impact of specific word choices on meaning and tone. Individuals are able to make logical and well-supported inferences about those complex texts. They are able to analyze the development of central ideas over the course of a text and explain how they are refined by particular sentences, paragraphs, or portions of text. They are able to provide an objective summary of a text. They are able to analyze in detail a series of events described in text and determine whether earlier events caused later ones or simply preceded them. They also are able to follow complex multistep directions or procedures. Individuals are able to compare the point of view of two or more authors writing about the same or similar topics. They are able to evaluate the validity of specific claims an author makes through the sufficiency and relevance of the reasoning and evidence supplied. They also are able to identify false statements and fallacious reasoning. They are able to analyze how multiple texts address related themes and concepts, including challenging texts, such as seminal U.S. documents of historical and literary significance (e.g., Washington's Farewell Address, the Gettysburg Address). In addition, they are able to contrast the findings presented in a text, noting whether those findings support or contradict previous explanations or accounts. Individuals are also able to 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 into words. Through their reading and research, they are able to cite strong and thorough textual evidence for their findings and assertions to make informed decisions and solve problems.

*Texas Adult Education and Literacy Content Standards v. 3*
Literacy/English Language Arts (cont.)

Level 5: Low Adult Secondary (cont.)

Writing: Writing in response to one or more text(s), individuals ready to exit this level are able to compose arguments and informative texts (this includes the narration of historical events, scientific procedures/experiments, or technical processes). When writing arguments, they are able to introduce precise claims, distinguish the claims from alternate or opposing claims, and support claims with clear reasons and relevant and sufficient evidence. When writing informative texts, they are able to examine a topic through the effective selection, organization, and analysis of well chosen, relevant, and sufficient facts appropriate to the audience’s knowledge of the topic. They use appropriate and varied transitions as well as consistency in style and tone to link major sections of the text, create cohesion, and establish clear relationships among claims, reasons, and evidence. Individuals use precise language and domain-specific vocabulary to manage the complexity of the topic. They are also able to take advantage of technology’s capacity to link to other information and display information flexibly and dynamically. They conduct short research projects as well as more sustained research projects to make informed decisions and solve problems. This includes the ability to draw evidence from several texts to support an analysis. It also includes the ability to gather and organize information, assess the credibility, accuracy, and usefulness of each source, and communicate the data and conclusions of others while avoiding plagiarism.

Speaking and Listening: Individuals ready to exit the Low Adult Secondary level are able to participate in a thoughtful, respectful, and well-reasoned exchange of ideas as a member of a team. As they collaborate with peers, they are able to set rules for collegial discussions and decision-making, clear goals, and deadlines. They are able to propel these conversations forward by clarifying, verifying, or challenging ideas that are presented, actively incorporating others into the discussion, responding thoughtfully to diverse perspectives, and summarizing points of agreement and disagreement. They also are able to qualify, alter, or justify their own views and understanding in light of the evidence and reasoning presented by others. Just as in writing, individuals are able to evaluate a speaker’s point of view, and in particular, assess the links among ideas, word choice, and points of emphasis and tone used. They also are able to present their own findings and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning. Individuals adapt their speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

Language: Individuals ready to exit the Low Adult Secondary level demonstrate strong control of English grammar, usage, and mechanics and use these elements to enhance the presentation of ideas both in speech and writing. This includes the use of parallel structure and the correct use of various types of phrases and clauses to convey specific meanings. They are able to adapt their speech to a variety of contexts and tasks when indicated. Though some errors may be present, meaning of their written and oral communications is clear. Individuals are able to determine the meaning of unknown and multiple-meaning words and phrases as they are used in level-appropriate complex texts through context clues, knowledge of affixes and roots, and use of reference materials.
Level 6: High Adult Secondary

Reading: Individuals who are ready to exit High Adult Secondary Level are able to read fluently at the college and career readiness level of text complexity (e.g., a Lexile Measure between 1185 and 1385). This includes increasing facility with academic vocabulary and figurative language sufficient for reading, writing, speaking, and listening at the college and career readiness level. They are able to analyze the cumulative impact of specific word choices on meaning and tone. Individuals are able to make logical and well-supported inferences about those complex texts. They are able to summarize the challenging ideas, concepts or processes contained within them. They are able to paraphrase texts in simpler but still accurate terms. Whether they are conducting analyses of complex primary and secondary sources in history or in scientific and technical texts, they are able to analyze how the ideas and concepts within them develop and interact. Individuals are able to assess how points of view shape style and content in texts with particular attention to distinguishing what is directly stated in a text from what is really meant (e.g., satire, sarcasm, irony, or understatement). Individuals are able to analyze how multiple texts address related themes and concepts, including challenging texts such as U.S. founding documents (Declaration of Independence, the Bill of Rights). In addition, they are able to compare and contrast treatments of the same topic in several primary and secondary sources. Individuals are also able to integrate and evaluate multiple sources of information presented in diverse media in order to address a question. Through their reading and research at complex levels, they are able to cite strong and thorough textual evidence for their findings and assertions to make sound decisions and solve problems.

Writing: Writing in response to one or more text(s), individuals ready to exit this level are able to compose arguments and informative texts (this includes the narration of historical events, scientific procedures/experiments, or technical processes). When writing arguments, they are able to create an organization that establishes clear relationships among the claim(s), counterclaim(s), reasons and evidence. They fully develop claims and counterclaims, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns. When writing informative texts, they are able to organize complex ideas, concepts, and information to make important connections and distinctions through the effective selection and analysis of content. They use appropriate and varied transitions to clarify the relationships among complex ideas, create cohesion, and link major sections of the text. Individuals are able to maintain a formal style while they attend to the norms and conventions of the discipline in which they are writing. They are also able to take advantage of technology’s capacity to link to other information and display information flexibly and dynamically. They conduct short research projects as well as more sustained research projects that require the synthesis of multiple complex sources to make informed decisions and solve problems. This includes the ability to draw evidence from several texts to support an analysis. It also includes the ability to gather and organize information, assess the credibility, accuracy, and usefulness of each source in answering the research question, noting any discrepancies among the data collected.
Literacy/English Language Arts (cont.)

Level 6: High Adult Secondary (cont.)

**Speaking and Listening:** Individuals ready to exit the High Adult Secondary level demonstrate flexibility, integrity, and initiative when collaborating as an effective member of a team. They are able to manage their time and other resources wisely in order to contribute to the team's overarching goal(s) and meet the agreed upon deadlines. This includes the ability to exercise leadership, resolve conflicts as they arise, and pose and respond to questions that relate the current discussion to broader themes or larger ideas. They are able to express alternative views clearly and persuasively, verify or challenge others’ ideas and conclusions, and think creatively and critically in light of the evidence and reasoning presented. Just as in writing, individuals are able to evaluate a speaker’s point of view, stance, premises, evidence, reasoning, rhetoric, and tone. They also are able to present their own findings and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning, making strategic use of digital media. Individuals adapt their speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate.

**Language:** Individuals ready to exit the High Adult Secondary level demonstrate strong control of English grammar, usage, and mechanics and use these elements to enhance the presentation of ideas both in speech and writing. This includes the use of parallel structure and the correct use of various types of phrases and clauses to convey specific meanings. They are able to adapt their speech to a variety of contexts and tasks when indicated. The meaning of their written and oral communications is clear. Individuals are able to determine the meaning of unknown and multiple-meaning words and phrases as they are used in level-appropriate complex texts through context clues, knowledge of affixes and roots, and use of reference materials.
Literacy/English Language Arts (cont.)

Level 6: High Adult Secondary (cont.)

Exhibit B.1. Quantitative Analysis Chart for Determining Text Complexity

<table>
<thead>
<tr>
<th>CCR Levels of Learning</th>
<th>ATOS</th>
<th>Degrees of Reading Power</th>
<th>Flesch–Kincaid</th>
<th>The Lexile Framework</th>
<th>Reading Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>B (Level 2)</td>
<td>2.75–5.14</td>
<td>42–54</td>
<td>1.98–5.34</td>
<td>420–820</td>
<td>3.53–6.13</td>
</tr>
<tr>
<td>C (Level 3)</td>
<td>4.97–7.03</td>
<td>52–60</td>
<td>4.51–7.73</td>
<td>740–1010</td>
<td>5.42–7.92</td>
</tr>
<tr>
<td>D (Level 4)</td>
<td>7.00–9.98</td>
<td>57–67</td>
<td>6.51–10.34</td>
<td>925–1185</td>
<td>7.04–9.57</td>
</tr>
<tr>
<td>E (Level 6)</td>
<td>11.20–4.10</td>
<td>67–74</td>
<td>10.34–14.2</td>
<td>1185–1385</td>
<td>9.57–12.00</td>
</tr>
</tbody>
</table>

This chart only identifies text complexity or levels B through E. At level A, students are just learning how to read, so it is not appropriate to focus on the complexity of the text until level B.
Introduction and Process

The EFL Descriptors for Mathematics also use the CCR as the foundation. They are intended to guide both teaching and assessment for adult learners. While these narrative descriptors address the most critical concepts for adult learners (as defined in the Major Work of the Level), there are additional concepts found in the CCR standards that support the major work for each level, and that are included in these descriptors. Lesson plans and assessment items for adult learners should be based on the full text of the CCR standards for each level, using these critical concepts as the foundation for lesson development and assessment.

The mathematics descriptors are divided into six educational functioning levels. The levels are Beginning Literacy (corresponding to Level A of the CCR); Beginning Basic (corresponding to Level B of the CCR); Low Intermediate (corresponding to Level C of the CCR); Middle Intermediate (corresponding to part of the Level D CCR), High Intermediate (corresponding to the remainder of the Level D CCR); and Adult Secondary (corresponding to Level E of the CCR). Each of the levels corresponds roughly to two grade levels, in K-12 terms, except for Level E, which combines the critical concepts of all of grades 9 through 12. Within each level the descriptors are further divided by domain: The Mathematical Practices, Number Sense and Operations, Algebraic Thinking, Geometry (and Measurement), and Data Analysis (Statistics and Probability).

The descriptors do not provide a complete or comprehensive delineation of all of the skills at any given level but provide examples of the most critical concepts and skills for the level to guide assessment and instruction. Assessment of the Mathematical Practice descriptors are best performed in the classroom using assessments that could be formative or summative and may be informal. It should be noted that mathematics placement decisions should take into account the reading level of the adult student. Verbally presented application problems at all mathematics levels require a minimum reading level.

Level 1: Beginning Literacy

The Mathematical Practices: Students prepared to exit this level are able to decipher a simple problem presented in a context and reason about and apply correct units to the results. They can visualize a situation using manipulatives or drawings and explain their processes and results using mathematical terms and symbols appropriate for the level. They recognize errors in the work and reasoning of others. They are able to strategically select and use appropriate tools to aid in their work such as pencil/paper, measuring devices, and/or manipulatives. They can see patterns and structure in sets of numbers and geometric shapes and use those insights to work more efficiently.
Mathematics (cont.)

Level 1: Beginning Literacy (cont.)

**Number Sense and Operations:** Students prepared to exit this level have an understanding of whole number place value for tens and ones and are able to use their understanding of place value to compare two-digit numbers. They are able to add whole numbers within 100 and explain their reasoning, e.g., using concrete models or drawings and strategies based on place value and/or properties of operations. They are able to apply their knowledge of whole number addition and subtraction to represent and solve word problems that call for addition of three whole numbers whose sum is less than 20 by using such problem-solving tools as objects, drawings, and/or simple equations.

**Algebraic Thinking:** Students prepared to exit this level understand and apply the properties of operations to addition and subtraction problems. They understand the relationship between the two operations and can determine the unknown number in addition or subtraction equations.

**Geometry and Measurement:** Students prepared to exit this level can analyze and compare 2-dimensional and 3-dimensional shapes based on their attributes, such as their shape, size, orientation, the number of sides and/or vertices (angles), or the lengths of their sides. They can reason with two-dimensional shapes (e.g., quadrilaterals and half-and quarter-circles) and with three-dimensional shapes (e.g., right prisms, cones, and cylinders) to create composite shapes. They are able to measure the length of an object as a whole number of units, which are not necessarily standard units, for example measuring the length of a pencil using a paper clip as the length unit.

**Data Analysis:** Students prepared to exit this level are able to organize, represent, and interpret simple data sets (e.g., lists of numbers, shapes, or items) using up to three categories. They can answer basic questions related to the total number of data points in a set and the number of data points in each category and can compare the number of data points in the different categories.

Level 2: Beginning Basic

**The Mathematical Practices:** Students prepared to exit this level are able to decipher two-step problems presented in a context, visualizing a situation using diagrams or sketches, and reasoning about and applying the correct units and the proper degree of precision to the results. They can explain their processes and results using mathematical terms and symbols appropriate for the level and recognize errors in the reasoning of others. They strategically select and use the appropriate tools to aid in their work such as pencil/paper, measuring devices, manipulatives, and/or calculators. They are able to see patterns and structure in sets of numbers, including in multiplication or addition tables, and use those insights to work more efficiently.
Mathematics (cont.)

Level 2: Beginning Basic (cont.)

Number Sense and Operations: Students prepared to exit this level understand place value for whole numbers to 1000 and can use that understanding to read, write, count, compare, and round three-digit whole numbers to the nearest 10 or 100. They are able to compute fluently with all four operations with whole numbers within 100. They use place value and properties of operations to explain why addition and subtraction strategies work and can demonstrate an understanding of the inverse relationship between multiplication and division. They can solve one-and two-step word problems involving all four operations within 100 and identify and explain arithmetic patterns. They have an understanding of fractions, especially unit fractions, and can represent simple fractions on a number line. They understand and can explain equivalence of fractions, can recognize and generate simple equivalent fractions, and can compare two fractions with the same numerator or denominator by reasoning about their size.

Algebraic Thinking: Students prepared to exit this level apply the properties of operations to multiplication and division of whole numbers. They understand the relationship between multiplication and division and can determine the unknown number in multiplication or division equations.

Geometry and Measurement: Students prepared to exit this level are able to reason about geometric shapes and their attributes. They can demonstrate an understanding that different shapes might share common attributes (e.g., four sides) and can compare and classify two-dimensional shapes, particularly quadrilaterals. They are able to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole. They can use common U.S. Customary and metric units for linear measurements (e.g., inches, feet, centimeters, and meters) and solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. They understand the concept of area and can relate it to addition and multiplication to solve real-world problems. They also understand, and can solve, real-world and mathematical problems involving perimeter of polygons.

Data Analysis: Students prepared to exit this level are able to draw and interpret simple graphs (e.g., bar graphs, picture graphs, and number line diagrams) including scaled bar and picture graphs. They can solve one-and two-step problems using scaled bar graphs. They can generate measurement data by measuring lengths to the nearest half-and quarter-inch and display that data by making a line plot marked off in appropriate units.
Mathematics (cont.)

Level 3: Low Intermediate

The Mathematical Practices: Students prepared to exit this level are able to decipher multi-step problems presented in a context and reason about and apply the correct units and the proper degree of precision to the results. They can visualize a situation using diagrams or sketches, see multiple strategies for solving a problem, explain their processes and results, and recognize errors in the work and reasoning of others. They can express themselves using mathematical terms and notation appropriate for the level and can strategically select and use tools to aid in their work, such as pencil/paper, measuring devices, and/or technology. They are able to see patterns and structure in sets of numbers and geometric shapes and use those insights to work more efficiently.

Number Sense and Operations: Students prepared to exit this level understand place value for both multi-digit whole numbers and decimals to thousandths, and use their understanding to read, write, compare, and round decimals. They are able to use their place value understanding and properties of operations to fluently perform operations with multi-digit whole numbers and decimals. They can find common factors, common multiples, and understand fraction concepts, including fraction equivalence and comparison. They can add, subtract, multiply and divide with fractions and mixed numbers. They are able to solve multi-step word problems posed with whole numbers and fractions using the four operations. They also have an understanding of ratio concepts and can use ratio language to describe a relationship between two quantities, including the concept of a unit rate associated with a ratio.

Algebraic Thinking: Students prepared to exit this level are able to apply and extend their understanding of arithmetic to algebraic expressions, using a symbol to represent an unknown value. They can write, evaluate, and interpret expressions and equations, including expressions that arise from formulas used in real-world problems. They can solve real-world and mathematical problems by writing and solving simple one-variable equations and write a simple inequality that represents a constraint or condition in a real-world or mathematical problem. They can represent and analyze quantitative relationships between dependent and independent variables.
Mathematics (cont.)

Level 3: Low Intermediate (cont.)

**Geometry and Measurement:** Students prepared to exit this level have a basic understanding of the coordinate plane and can plot points (i.e., ordered pairs) and place polygons in the coordinate plane to solve real-world and mathematical problems. They can classify two-dimensional shapes and use formulas to determine the area of two-dimensional shapes such as triangles and quadrilaterals. They can determine the surface area of three-dimensional shapes composed of rectangles and triangles and find the volume of right rectangular prisms. They are able to convert like measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m) and use these conversions to solve multi-step, real-world problems. They are also able to solve measurement word problems (such as those that involve area, perimeter, distance, time intervals, liquid volumes, mass, and money) that involve simple fractions or decimals.

**Data Analysis and Statistics:** Students prepared to exit this level have a basic conceptual understanding of statistical variability, including such concepts as center, spread, and the overall shape of a distribution of data. They can present data using displays such as dot plots, histograms, and box plots.

Level 4: Middle Intermediate

**The Mathematical Practices:** Students prepared to exit this level are able to think critically, determine an efficient strategy (from among multiple possible strategies) for solving a multi-step problem, and persevere in solving challenging problems. They can express themselves using the mathematical terms and notation appropriate to the level. They are able to defend their findings and critique the reasoning of others. They are accurate in their calculations and use estimation strategies to assess the reasonableness of their results. They can create algebraic and geometric models and use them to answer questions and solve problems. They can strategically select and use tools to aid in their work, such as pencil/paper, measuring devices, calculators, and/or spreadsheets. They are able to see patterns and structure in number sets, data, expressions and equations, and geometric figures.

**Number Sense and Operations:** Students prepared to exit this level have an understanding of the rational number system, including how rational numbers can be represented on a number line and pairs of rational numbers can be represented on a coordinate plane. They can apply the concept of absolute value to find horizontal and vertical distances. They are able to apply the properties of integer exponents and evaluate, estimate, and compare simple square roots and cube roots. Individuals at this level also understand ratio, rate, and percent concepts, as well as proportional relationships.
Mathematics (cont.)

Level 4: Middle Intermediate (cont.)

**Algebraic Thinking:** Students prepared to exit this level understand the connections between proportional relationships, lines, and linear equations. They understand numerical and algebraic expressions, and equations and are able to use them to solve real-world and mathematical problems. They are able to analyze and solve linear equations and pairs of simultaneous linear equations. Individuals at this level are able to define, interpret, and compare linear functions.

**Geometry:** Students prepared to exit this level can solve real-world and mathematical problems that involve angle measure, circumference, and area of 2-dimensional figures. They are able to solve problems involving scale drawings of 2-dimensional geometric figures. They understand the concepts of congruence and similarity with respect to 2-dimensional figures. They understand the Pythagorean theorem and can apply it to determine missing lengths in right triangles.

**Statistics and Probability:** Students prepared to exit this level can summarize and describe numerical data sets in relation to their context, including determining measures of center and variability and describing patterns and/or striking deviations from patterns. They understand and can apply the concept of chance or probability. They are able to use scatter plots for bivariate measurement data to describe patterns of association between two quantities (such as clustering, outliers, positive or negative association, linear or non-linear association).

Level 5: High Intermediate

**The Mathematical Practices:** Students prepared to exit this level are able to think critically, determine an efficient strategy (from among multiple possible strategies) for solving a multi-step problem, and persevere in solving challenging problems. They can reason quantitatively, including using units as a way to solve problems. They are able to defend their findings and critique the reasoning of others. They are accurate in their calculations and use estimation strategies to assess the reasonableness of their results. They can create algebraic and geometric models and use them to answer questions and solve problems. They can strategically select and use tools to aid in their work, such as graphing calculators, spreadsheets, and/or computer software. They are able to make generalizations based on patterns and structure they discover in number sets, data, expressions and equations, and geometric figures and use these insights to work more efficiently.
Mathematics (cont.)

Level 5: High Intermediate (cont.)

**Number Sense and Operations:** Students prepared to exit this level can reason about and solve real-world and mathematical problems that involve the four operations with rational numbers. They can apply the concept of absolute value to demonstrate on a number line their understanding of addition and subtraction with negative and positive rational numbers. Individuals at this level can apply ratio and percent concepts, including using rates and proportional relationships to solve multi-step real-world and mathematical problems.

**Algebraic Thinking:** Students prepared to exit this level are able to use algebraic and graphical representations to solve real-world and mathematical problems, involving linear equations, inequalities, and pairs of simultaneous linear equations. Individuals at this level are able to use linear functions to describe, analyze, and model linear relationships between quantities.

**Geometry:** Students prepared to exit this level can solve real-world and mathematical problems that involve volume and surface area of 3-dimensional geometric figures. They can use informal arguments to establish facts about various angle relationships such as the relationships between angles created when parallel lines are cut by a transversal. They apply the Pythagorean theorem to determine lengths in real-world contexts and distances in the coordinate plane.

**Statistics and Probability:** Students prepared to exit this level can use random sampling to draw inferences about a population and are able to draw informal comparative inferences about two populations using measures of center and measures of variability for numerical data from random samples. They can develop, use, and evaluate probability models. They are able to use scatter plots for bivariate measurement data to interpret patterns of association between two quantities (such as clustering, outliers, positive or negative association, linear or non-linear association) and a 2-way table to summarize and interpret bivariate categorical data.
Mathematics (cont.)

Level 6: Adult Secondary

**The Mathematical Practices:** Students prepared to exit this level are able to think critically, make assumptions based on a situation, select an efficient strategy from multiple possible problem-solving strategies, plan a solution pathway, and make adjustments as needed when solving problems. They persevere in solving challenging problems, including considering analogous, simpler problems as a way to solving a more complex one. They can reason quantitatively, including through the use of units, and can express themselves using the precise definitions and mathematical terms and notation appropriate to the level. They are accurate in their calculations, use an appropriate level of precision in finding solutions and reporting results, and use estimation strategies to assess the reasonableness of their results. They are able to make conjectures, use logic to defend their conclusions, and can detect faulty thinking and errors caused by improper use of technology. They can create algebraic and geometric models and use them to answer questions, interpret data, make predictions, and solve problems. They can strategically select and use tools, such as measuring devices, calculators, spreadsheets, and/or computer software, to aid in their work. They are able to see patterns and structure in calculations, expressions, and equations and make connections to algebraic generalizations, which they use to work more efficiently.

**Number Sense and Operations:** Students prepared to exit this level have extended their number sense to include irrational numbers, radicals, and rational exponents and understand and use the set of real numbers. They are able to assess the reasonableness of calculation results based on the limitations of technology or given units and quantities and give results with the appropriate degree of precision.

**Algebraic Thinking:** Students prepared to exit this level understand the structure of expressions and can use that structure to rewrite linear, exponential, and quadratic expressions. They can add, subtract, and multiply polynomials that involve linear and/or quadratic expressions. They are also able to create linear equations and inequalities and quadratic and simple exponential equations to represent relationships between quantities and can represent constraints by linear equations or inequalities, or by systems of linear equations and/or inequalities. They can interpret the structure of polynomial and rational expressions and use that structure to identify ways to rewrite and operate accurately with them. They can add, subtract, and multiply polynomials that extend beyond quadratics. They are able to rearrange formulas to highlight a quantity of interest, for example rearranging Ohm’s law, \( V = IR \), to highlight resistance \( R \). They are also able to create equations and inequalities representing relationships between quantities, including those that extend beyond equations or inequalities arising from linear, quadratic, and simple exponential functions to include those arising from simple rational functions. They are able to use these equations/inequalities to solve problems both algebraically and graphically. They can solve linear equations and inequalities; systems of linear equations; quadratic, simple rational, and radical equations in one variable; and recognize how and when extraneous solutions may arise.
Mathematics (cont.)

Level 6: Adult Secondary (cont.)

Students prepared to exit this level also have a basic understanding of functions, can use function notation properly, and use such notation to write a function describing a relationship between two quantities. They are able to evaluate functions for inputs in their domains and interpret linear, quadratic, and exponential functions that arise in applications in terms of the context. They are able to construct, graph, compare, and interpret functions (including, but not limited to, linear, quadratic, and exponential). They can sketch graphs given a verbal description of the relationship and identify and interpret key features of the graphs of functions that arise in applications in a context. They are able to select or define a function that appropriately models a relationship and to compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal description).

Geometry: Students prepared to exit this level can solve problems involving similarity and congruence criteria for triangles and use volume formulas for cylinders, pyramids, cones, and spheres to solve problems. They can apply the concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTU’s per cubic foot).

Data Analysis and Statistics: Students prepared to exit this level can summarize, represent, and interpret data based on two categorical and quantitative variables, including by using frequency tables. They can compare data sets by looking at commonalities and differences in shape, center, and spread. They can recognize possible associations and trends in data, in particular in linear models, and distinguish between correlation and causation. They interpret one-and two-variable data, including those with linear and non-linear relationships. They interpret the slope (rate of change) and intercept (constant term) for a line of best fit and in the context of the data. They understand and account for extreme points of data in their analysis and interpret relative frequencies (joint, marginal and conditional).
New Educational Functioning Level Descriptors for English as a Second Language (ESL)

Introduction

In the National Reporting System for Adult Education (NRS), the Educational Functioning Level (EFL) descriptors are intended to guide teaching and assessment for adult learners. The descriptors for English as a second language (ESL) are divided into six educational functioning levels: Beginning ESL Literacy, Low Beginning ESL, High Beginning ESL, Low Intermediate ESL, High Intermediate ESL, and Advanced ESL. The descriptors do not provide a complete or comprehensive delineation of all of the skills at any given level but rather provide a description of the most critical concepts and skills for the level.

Although these narrative descriptors address the most critical concepts for assessment and instruction for adult learners, lesson plans and test items should be based on additional critical concepts from state instructional frameworks and standards, as appropriate for the learner and state requirements.

The EFLs for ESL are organized into three modalities: interpretive, productive, and interactive. These modalities include the domains of reading, writing, speaking, and listening. These modalities allow for an integrated or holistic approach to teaching and assessing English language learners (ELLs) in the adult education setting.

- Interpretive refers to the learner’s ability to process, understand, interpret, or engage with level-appropriate literary and informational written and spoken text to construct meaning. For example, an ELL exiting from the Low Intermediate ESL classroom should be able to, with support, explain the reasons an author or a speaker gives to support a claim and identify one or two reasons an author or a speaker gives to support the main point.

- Productive refers to the learner’s ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning. For example, an ELL exiting from the Low Beginning ESL classroom should be able to, with support, communicate information and feelings about familiar texts, topics, and experiences.

- Interactive refers to the learner’s ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in, and transmitting meaning. For example, ELLs exiting from the High Beginning ESL classroom should be able to, with support, gather information from provided print and digital sources, record information in simple notes, and summarize data and information.

*These ESL descriptors are included in the AEFLA information collection (OMB control number 1830-0027). They will not be implemented until the Secretary of Education has determined that there is at least one assessment that is aligned with these descriptors and is suitable for use in the NRS.*
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Text Complexity and Familiar Topics

Teachers and assessment developers must select appropriately complex literary and informational texts, topics, and events to prepare learners for success. Complexity should show progress within EFLs and in successive levels that reflect increasingly complex and cognitively demanding language structures, academic vocabulary, and concepts.

Language in the revised NRS EFLs for ESL calls for progressive complexity without being prescriptive about the specific complexity measures at each EFL. Terminology in the EFLs such as emerging, developing, increasing, and growing are guides to indicate the needed progression of complexity from level to level.

Instruction and assessment also should involve a progression of topics, from the more familiar to substantive and academic topics, with increasing levels of complexity within and across levels. Teachers and test developers are encouraged to refer to the guiding principles found in the English Language Proficiency Standards for Adult Education. The guiding principles recommend that instruction also include the use of digital tools and resources; academic language; a variety of informational texts and content areas, including science, technology, engineering, and mathematics; and college and career readiness skills as appropriate to learners at a given level.

Additional guidance about text complexity in adult education may be found in the College and Career Readiness Standards for Adult Education, "Appendix D—Understanding Text Complexity."

*Texas Adult Education and Literacy Content Standards v. 3
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 1: Beginning ESL Literacy

Interpretive: The ability to process, understand, interpret and/or engage with level-appropriate literary and informational written and spoken text to construct meaning (1, 6, 7, 8).

ELLs ready to exit the Beginning ESL Literacy Level are able to, with prompting and support (including context, and visual aids), identify a few key words and phrases from read alouds, visual images, and oral presentations using a very limited set of strategies.

ELLs ready to exit this level can, with prompting and support (including context and visual aids), recognize the meaning of a few frequently occurring words and phrases in simple oral presentations and read alouds about familiar topics, experiences, and events. They can recognize the meaning of some words learned through conversations, reading, and being read to.

Productive: The ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning (3, 4, 7, 9, 10).

ELLs ready to exit this level are able to, with prompting and support (including context and visual aids), communicate simple information or feelings about familiar topics, events, or experiences. They can express a preference or opinion about a familiar topic.

ELLs ready to exit this level are able to show limited awareness of differences between informal and formal language use.

With support (including context and visual aids), ELLs ready to exit this level are able to recognize and use a small number of frequently occurring nouns and verbs, use a narrow range of vocabulary and syntactically simple sentences, and understand and respond to simple questions.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 1: Beginning ESL Literacy (cont.)

Interactive: The ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in, and transmitting meaning (2, 5).

ELLs ready to exit this level are able to, with limited involvement, participate in short conversations and written exchanges about familiar topics and in familiar contexts. They can respond to simple yes/no questions and some wh-questions.

ELLs ready to exit this level are able to, with prompting and support, participate in short, shared research projects, gather information from a few provided sources, and label some key information.

Level 2: Low Beginning ESL

(ELP Standards for AE Level 1)

Interpretive: The ability to process, understand, interpret and/or engage with level-appropriate literary and informational written and spoken text to construct meaning (1, 6, 7, 8).

ELLs ready to exit the Low Beginning ESL Level are able to identify a few key words and phrases in oral communications and simple spoken and written texts using a very limited set of strategies. They can recognize the meaning of some words learned through conversations, reading, and being read to.

ELLs ready to exit this level are able to, with support, identify a point an author or a speaker makes.

Relying heavily on context, questioning, and knowledge of morphology in their native language(s), ELLs ready to exit this level are able to recognize the meaning of a few frequently occurring words, simple phrases, and formulaic expressions in spoken and written texts about familiar topics, experiences, or events.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 2: Low Beginning ESL (cont.)

**Productive:** The ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning (3, 4, 7, 9, 10).

ELLs ready to exit this level are able to, with support, communicate information and feelings about familiar texts, topics, and experiences.

ELLs ready to exit this level are able to express an opinion about a familiar topic, experience, or event and give a reason for the opinion.

ELLs ready to exit this level are able to show emerging awareness of differences between informal and formal language use.

ELLs ready to exit this level are able to, with support, use a narrow range of vocabulary and syntactically simple sentences. They can, with support, recognize and use a small number of frequently occurring nouns, noun phrases, verbs, conjunctions, and prepositions and understand and respond to simple questions.

**Interactive:** The ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in and transmitting meaning (2, 5).

ELLs ready to exit this level are able to actively listen to others. They can participate in short conversations and written exchanges about familiar topics and in familiar contexts. They can present simple information and respond to simple yes/no questions and some wh-questions.

ELLs ready to exit this level are able to, with support, carry out short, shared research projects. They can, with support, gather information from a few provided print and digital sources, label collected information, experiences, or events, and recall information from experience or from a provided source.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 3: High Beginning ESL

(ELP Standards for AE Level 2)

Interpretive: The ability to process, understand, interpret and/or engage with level-appropriate literary and informational written and spoken text to construct meaning (1, 6, 8).

ELLs ready to exit the High Beginning ESL Level are able to identify the main topic in oral presentations and simple spoken and written texts and retell a few key details using an emerging set of strategies.

ELLs ready to exit this level are able to, with support, identify the main argument an author or speaker makes. They can, with support, identify one reason an author or a speaker gives to support the argument.

ELLs ready to exit this level are able to determine the meaning of frequently occurring words, phrases, and expressions in spoken and written texts about familiar topics, experiences, or events.

Productive: The ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning (3, 4, 7, 9, 10).

ELLs ready to exit this level are able to, with support, deliver short oral presentations and compose simple written narratives or informational texts about familiar texts, topics, experiences, or events.

ELLs ready to exit this level are able to construct a claim about familiar topics, experiences, or events. They can introduce a familiar topic, experience, or event, give a reason to support a claim, and provide a concluding statement.

ELLs ready to exit this level are able to, with support, recount a short sequence of events in order. They can, with support, introduce an informational topic, provide one or two facts about the topic, and use common linking words to connect events and ideas.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 3: High Beginning ESL (cont.)

ELLs ready to exit this level are able to show increasing awareness of differences between informal and formal language use. They can adapt language choices to task and audience with emerging control in various social and academic contexts.

ELLs ready to exit this level can begin to use some frequently occurring general academic and content-specific words. ELLs ready to exit this level are able to, with support, use frequently occurring verbs, nouns, adjectives, adverbs, prepositions, and conjunctions. They can, with support, produce simple and compound sentences.

Interactive: The ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in and transmitting meaning (2, 5).

ELLs ready to exit this level are able to participate in conversations and written exchanges about familiar topics and texts. They can present information and ideas, appropriately take turns in interactions with others, and respond to simple questions and wh-questions.

ELLs ready to exit this level are able to, with support, carry out short individual or shared research projects. They can, with support, gather information from provided print and digital sources, record information in simple notes, and summarize data and information.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 4: Low Intermediate ESL

(ELP Standards for AE Level 3)

Interpretive: The ability to process, understand, interpret and/or engage with level-appropriate literary and informational written and spoken text to construct meaning (1, 6, 8).

ELLs ready to exit the Low Intermediate ESL Level are able to determine a central idea or theme in oral presentations and spoken and written texts, retell key details, answer questions about key details, explain how the theme is developed by specific details in texts, and summarize part of a text using a developing set of strategies.

ELLs ready to exit this level are able to, with support, explain the reasons an author or a speaker gives to support a claim and identify one or two reasons an author or a speaker gives to support the main point.

Using context, questioning, and a developing knowledge of English and their native language(s)’ morphology, ELLs ready to exit this level are able to determine the meaning of general academic and content-specific words and phrases and frequently occurring expressions in spoken and written texts about familiar topics, experiences, or events.

Productive: The ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning (3, 4, 7, 9, 10).

ELLs ready to exit this level are able to, with support, deliver short oral presentations and compose written informational texts about familiar texts, topics, or events. This includes developing the topic with a few details.

ELLs ready to exit this level are able to construct a claim about familiar topics. They can introduce the topic, provide sufficient reasons or facts to support the claim, and provide a concluding statement. When producing written and spoken texts, ELLs ready to exit this level are able to, with support, recount a sequence of events, with a beginning, middle, and end. They can introduce and develop an informational topic with facts and details, use common transitional words and phrases to connect events, ideas, and opinions, and provide a conclusion.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 4: Low Intermediate ESL (cont.)

ELLs ready to exit this level are able to adapt language choices and style according to purpose, task, and audience with developing ease in various social and academic contexts and show developing control of style and tone in spoken and written texts.

In their spoken and written texts, ELLs ready to exit this level can use an increasing number of general academic and content-specific words and expressions.

ELLs ready to exit this level are able to, with support, use simple phrases and clauses. They can produce and expand simple, compound, and a few complex sentences.

Interactive: The ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in and transmitting meaning (2, 5).

ELLs ready to exit this level are able to participate in conversations, discussions, and written exchanges about familiar topics, texts, and issues. They can build on the ideas of others, express their own ideas, ask and answer relevant questions, add relevant information and evidence, restate some of the key ideas expressed, follow rules for discussion, and ask questions to gain information or clarify understanding.

ELLs ready to exit this level are able to, with support, carry out short research projects to answer a question. They can, with support, gather information from multiple provided print and digital sources, paraphrase key information in a short written or oral report, include illustrations, diagrams, or other graphics as appropriate, and provide a list of sources.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 5: High Intermediate ESL

(ELP Standards for AE Level 4)

Interpretive: The ability to process, understand, interpret and/or engage with level-appropriate literary and informational written and spoken text to construct meaning (1, 6, 8).

ELLs ready to exit the High intermediate ESL Level are able to determine a central idea or theme in oral presentations and spoken and written texts using an increasing range of strategies. They can analyze the development of the themes/ideas, cite specific details and evidence from texts to support the analysis, and summarize a text.

ELLs ready to exit this level are able to analyze the reasoning in persuasive spoken and written texts and determine whether the evidence is sufficient to support the claim. They can cite textual evidence to support the analysis.

Using context, questioning, and an increasing knowledge of English morphology, ELLs ready to exit this level can determine the meaning of general academic and content-specific words and phrases, figurative and connotative language, and a growing number of idiomatic expressions in spoken and written texts about a variety of topics, experiences, or events.

Productive: The ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning (3, 4, 7, 9, 10).

ELLs ready to exit this level are able to deliver oral presentations and compose written informational texts about a variety of texts, topics, or events. This includes developing the topic with some relevant details, concepts, examples, and information and integrating graphics or multimedia when appropriate.

ELLs ready to exit this level are able to construct a claim about a variety of topics. They can construct a claim, introduce the topic, provide logically ordered reasons or facts that effectively support the claim, and provide a concluding statement.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 5: High Intermediate ESL (cont.)

When producing written and spoken texts, ELLs ready to exit this level can recount a longer, more detailed sequence of events or steps in a process, with a clear sequential or chronological structure. They can introduce and develop an informational topic with facts, details, and evidence, and provide a concluding section or statement.

ELLs ready to exit this level can also adapt language choices and style according to purpose, task, and audience in various social and academic contexts and adopt and maintain a formal and informal style and tone in spoken and written texts, as appropriate.

In their spoken and written texts, ELLs ready to exit this level can also use a wider range of complex general academic and content-specific words and phrases.

ELLs ready to exit this level will use increasingly complex phrases and clauses, produce and expand simple, compound, and complex sentences, and use a variety of more complex transitions to link the major sections of speech and text and to clarify relationships among events and ideas.

Interactive: The ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in and transmitting meaning (2, 5).

ELLs ready to exit this level are able to participate in conversations, discussions, and written exchanges about a range of topics, texts, and issues. They can build on the ideas of others, express his or her own ideas, clearly support points with specific and relevant evidence, ask and answer questions to clarify ideas and conclusions, and summarize the key points expressed.

ELLs ready to exit this level are able to carry out both short and more sustained research projects to answer a question, gather information from multiple print and digital sources, evaluate the reliability of each source, and use search terms effectively. They are able to synthesize information from multiple print and digital sources, integrate information into an organized oral or written report, include illustrations, diagrams, or other graphics as appropriate, and cite sources appropriately.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 6: Advanced ESL

(ELP Standards for AE Level 5)

Interpretive: The ability to process, understand, interpret and/or engage with level-appropriate literary and informational written and spoken text to construct meaning (1, 6, 8).

ELLs ready to exit the Advanced ESL Level are able to determine central ideas or themes in oral presentations and spoken and written texts using a wide range of strategies. They can analyze the development of the themes/ideas, cite specific details and evidence from texts to support the analysis, and summarize a text.

ELLs ready to exit this level are able to analyze and evaluate the reasoning in persuasive spoken and written texts, determine whether the evidence is sufficient to support the claim, and cite specific textual evidence to thoroughly support the analysis.

Using context, questioning, and consistent knowledge of English morphology, ELLs ready to exit this level are able to determine the meaning of general academic and content-specific words and phrases, figurative and connotative language, and idiomatic expressions in spoken and written texts about a variety of topics, experiences, or events.

Productive: The ability to produce level-appropriate written and spoken text such that it meaningfully transmits meaning (3, 4, 7, 9, 10).

ELLs ready to exit this level are able to deliver oral presentations and compose written informational texts about a variety of texts, topics, or events. They can fully develop the topic with relevant details, concepts, examples, and information, and integrate graphics or multimedia when appropriate.

ELLs ready to exit this level are able to construct a substantive claim about a variety of topics. They can introduce the claim and distinguish it from a counter-claim. They are able to provide logically ordered and relevant reasons and evidence to support the claim and to refute the counter-claim and provide a conclusion that summarizes the argument presented.
New Educational Functioning Level Descriptors for English as a Second Language (ESL) (cont.)

Level 6: Advanced ESL (cont.)

ELLs ready to exit this level are able to recount a complex and detailed sequence of events or steps in a process, with an effective sequential or chronological order. They can introduce and effectively develop an informational topic with facts, details, and evidence, use complex and varied transitions to link the major sections of speech and text and to clarify relationships among events and ideas, and provide a concluding section or statement.

ELLs ready to exit this level are able to adapt language choices and style according to purpose, task, and audience with ease in various social and academic contexts. They can employ both formal and more informal styles and tones effectively in spoken and written texts, as appropriate.

In their spoken and written texts, ELLs ready to exit this level can use a wide variety of complex general academic and content-specific words and phrases.

ELLs ready to exit this level will use complex phrases and clauses and produce and expand simple, compound, and complex sentences.

Interactive: The ability to process and produce level-appropriate written and spoken text interactively with the purpose of understanding, interpreting, engaging in and transmitting meaning (2, 5).

ELLs ready to exit this level are able to participate in conversations, extended discussions, and written exchanges about a range of substantive topics, texts, and issues. They can build on the ideas of others, express their own ideas clearly and persuasively, refer to specific and relevant evidence from texts or research to support their ideas, ask and answer questions that probe reasoning and claims, and summarize the key points and evidence discussed.

ELLs ready to exit this level are able to carry out both short and more sustained research projects to answer a question or solve a problem. They can gather information from multiple print and digital sources, evaluate the reliability of each source, and use advanced search terms effectively. They can synthesize information from multiple print and digital sources, analyze and integrate information into clearly organized spoken and written texts, include illustrations, diagrams, or other graphics as appropriate, and cite sources appropriately.
Introduction

The International Society for Technology in Education (ISTE)\(^1\) is a nonprofit organization serving educators who are interested in the use of technology in education. ISTE has developed technology standards for students, educators, and educational leaders which describe the skills and knowledge needed to impact learning, teaching, and educational leadership.

The ISTE Standards for Students\(^2\) are excerpted here in response to feedback from the members of the work groups, including representatives from both academia and industry, who reviewed the 2014 Content Standards and recommended a stronger emphasis on technology skills, especially for problem solving.

Technology in education has moved away from learning how to use technology tools, where technology instruction previously focused on how to use various software applications. It is more important to know how to use technology to apply the knowledge and skills that are described by our content standards.

The ISTE standards, if achieved, will enable adult education students to take better charge of their own learning and to build knowledge in ways that will support the goals that they set for themselves.

1. Empowered Learner

Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

1a -- Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.

1b -- Students build networks and customize their learning environments in ways that support the learning process.

1c -- Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.

1d -- Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies, and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen

Students recognize the rights, responsibilities and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.

2a -- Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

2b -- Students engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.

2c -- Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

2d -- Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

---

3 Excerpted from ISTE Standards for Students with permission for educational use, 2019 International Society for Technology in Education.

Texas Adult Education and Literacy Content Standards v. 3
3. Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others

3a -- Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.
3b -- Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.
3c -- Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
3d -- Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.

4. Innovative Designer

Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.

4a -- Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.
4b -- Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.
4c -- Students develop, test, and refine prototypes as part of a cyclical design process.
4d -- Students exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.
5. Computational Thinker

Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

5a -- Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models, and algorithmic thinking in exploring and finding solutions.

5b -- Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

5c -- Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

5d -- Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator

Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals.

6a -- Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

6b -- Students create original works or responsibly repurpose or remix digital resources into new creations.

6c -- Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.

6d -- Students publish or present content that customizes the message and medium for their intended audiences.
7. Global Collaborator

Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

7a -- Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

7b -- Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

7c -- Students contribute constructively to project teams, assuming various roles and responsibilities, to work effectively toward a common goal.

7d -- Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.
GED  \[\rightarrow\] ESL

- Career Training
- Employment
- College Prep
- Wage Gain

APPENDIX C
Acronyms
Acronyms

The acronyms listed in this appendix represent terms, concepts, organizations, and assessments that would likely appear in a discussion about content standards in Texas. Most of them are used in this document.


<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 GED</td>
<td>General Equivalency Development test (one of three assessments that serve as a basis for awarding a TxCHSE)</td>
</tr>
<tr>
<td>ABE</td>
<td>Adult Basic Education (basic skills development in reading, writing, mathematics, and problem solving through an eighth-grade proficiency level)</td>
</tr>
<tr>
<td>AEFLA</td>
<td>Adult Education and Family Literacy Act (Title II of the Workforce Innovation and Opportunity Act of 2014)</td>
</tr>
<tr>
<td>AEL</td>
<td>Adult Education &amp; Literacy</td>
</tr>
<tr>
<td>ASE</td>
<td>Adult Secondary Education (instruction for learners with proficiency levels ranging from grades 9 to 12, designed for preparation for a high school credential or for transition to employment, workforce training, and/or college)</td>
</tr>
<tr>
<td>BEST/BEST Plus</td>
<td>Basic English Skills Test (one of several assessments for ESL approved by NRS)</td>
</tr>
<tr>
<td>BICS</td>
<td>Basic Interpersonal Communication Skills (basic communication skills for social situations)</td>
</tr>
<tr>
<td>CALP</td>
<td>Cognitive Academic Language Proficiency (listening, speaking, reading, and writing for academic purposes)</td>
</tr>
<tr>
<td>CASAS</td>
<td>Comprehensive Adult Student Assessment System (one of several assessments approved by NRS)</td>
</tr>
<tr>
<td>CCRS</td>
<td>College and Career Readiness Standards for Adult Education (federal standards based on Common Core)</td>
</tr>
<tr>
<td>CCSS</td>
<td>Common Core State Standards</td>
</tr>
<tr>
<td>CEFR</td>
<td>Common European Framework Reference for Languages (international standards for describing language ability)</td>
</tr>
<tr>
<td>Content Standards</td>
<td>Abbreviated in this document for Texas Adult Education and Literacy Content Standards, published in 2016</td>
</tr>
<tr>
<td>DE</td>
<td>Developmental Education</td>
</tr>
</tbody>
</table>
## Acronyms (cont.)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFL</td>
<td>Educational Functioning Level</td>
</tr>
<tr>
<td>ELA</td>
<td>English Language Arts (one of three Content Areas addressed by Content Standards)</td>
</tr>
<tr>
<td>EL Civics</td>
<td>English Literacy and Civics</td>
</tr>
<tr>
<td>ELL</td>
<td>English Language Learner</td>
</tr>
<tr>
<td>ELP</td>
<td>English Language Proficiency</td>
</tr>
<tr>
<td>ELP Standards</td>
<td>English Language Proficiency Standards for Adult Education</td>
</tr>
<tr>
<td>EOC</td>
<td>End-of-Course Assessment (component of the STAAR for secondary education)</td>
</tr>
<tr>
<td>ESL</td>
<td>English as a Second Language (one of three Content Areas addressed by Content Standards)</td>
</tr>
<tr>
<td>GSE</td>
<td>Global Scale of English (European English language standards aligned to the Common European Framework Reference)</td>
</tr>
<tr>
<td>HiSET</td>
<td>High School Equivalency Test (one of three assessments that serve as a basis for awarding a TxCHSE)</td>
</tr>
<tr>
<td>IET</td>
<td>Integrated Education and Training</td>
</tr>
<tr>
<td>Integrated EL Civics</td>
<td>Integrated English Literacy and Civics</td>
</tr>
<tr>
<td>ISTE</td>
<td>International Society for Technology in Education</td>
</tr>
<tr>
<td>ITEC Plan</td>
<td>Individual Training, Education and Career Plan</td>
</tr>
<tr>
<td>LEP</td>
<td>Limited English Proficient</td>
</tr>
<tr>
<td>LINCS</td>
<td>Literacy Information and Communication System</td>
</tr>
<tr>
<td>MSG</td>
<td>Measurable Skills Gain</td>
</tr>
<tr>
<td>NRS</td>
<td>National Reporting System</td>
</tr>
<tr>
<td>OCTAE</td>
<td>Office of Career, Technical, and Adult Education (agency within the U.S. Department of Education that oversees Adult Education)</td>
</tr>
<tr>
<td>O*NET</td>
<td>Occupational Information Network</td>
</tr>
<tr>
<td>PAL</td>
<td>Principles of Adult Learning</td>
</tr>
<tr>
<td>PD</td>
<td>Professional Development</td>
</tr>
</tbody>
</table>

*Texas Adult Education and Literacy Content Standards v. 3*
Acronyms (cont.)

PII ................. Personally Identifiable Information
SAIC ................ Standards Alignment to Industry Clusters (name of project to align 2016 AEL Content Standards to four key Texas industries)
SBE .................. Standards-Based Education
SBOE .................. State Board of Education
STAAR .............. State of Texas Assessments for Academic Readiness (assessments used by K-12 in Texas)
Standards 2.0 ........ Abbreviated in this document to refer to the revision of the 2016 Texas AEL Content Standards
SWG ................. Standards Work Group
TABE ................ Test of Adult Basic Education (one of several assessments for ABE/ASE approved by NRS)
TABE CLAS E ....... TABE Complete Language Assessment System - English (one of several assessments for ESL approved by NRS)
TAECsB ............... Texas Adult Education Content Standards and Benchmarks (an earlier version of Content Standards, released in 2008)
TANF .................. Temporary Assistance for Needy Families
TASC ................ Texas Assessment of Secondary Completion (one of three assessments that serve as a basis for awarding a TxCHSE)
TCALL ................. Texas Center for the Advancement of Literacy and Learning, located at Texas A&M University
TCCRS ............... Texas College and Career Readiness Standards
TEA .................... Texas Education Agency
TEAMS .............. Texas Educating Adults Management System (official database for Texas AEL data)
TEC .................... Texas Education Code
TEKS .................. Texas Essential Knowledge and Skills (Texas K12 Standards)
TESOL ................. Teachers of English to Speakers of Other Languages
THECB ................. Texas Higher Education Coordinating Board
TRAIN PD ............ The professional development provider for AEL, located at the Texas Center for the Advancement of Literacy and Learning, Texas A&M University.
TSIA .................. Texas Success Initiative Assessment (test required for most incoming college freshmen in Texas)
Acronyms (cont.)

TWC ................. Texas Workforce Commission
TxCHSE ............... Texas Certificate of High School Equivalency (issued by TEA to examinees who successfully pass the 2014 GED®, the HiSET or the TASC)
TxState ............... Abbreviated in this document for Texas State University
WIOA ................ Workforce Innovation and Opportunity Act of 2014
APPENDIX D

In-Depth Description of the Development Process for the 2016 AEL Content Standards
Process Framework

The Texas Workforce Commission (TWC) contracted with Texas State University (TxState) to update the 2008 Texas Adult Education Content Standards and Benchmarks (TAECSB) and align them with the Texas College & Career Readiness Standards (TCCRS), the Texas Certificate of High School Equivalency (TxCHSE), and the Texas Success Initiative Assessment (TSIA). The contract period was from November 2015 to December 2016. The final version of the Texas Adult Education & Literacy Content Standards (Content Standards) was released in December 2016.

The development process mirrored the methodology used by the federal work group for the development of the College and Career Readiness Standards for Adult Education. While the methodology for standards development was the same as the federal process, the informing resources were different, prioritizing resources specific to Texas.

To support the project staff in anchoring their decisions in evidence, TWC identified specific guiding documents, including, but not limited to:

- the Texas College and Career Readiness Standards (TCCRS),
- the Texas Certificate of High School Equivalency (TxCHSE),
- the Texas Success Initiative Assessment (TSIA),
- the National Reporting Systems (NRS) guideline descriptors,
- recommendations from the content standards expert contracted by the Texas Education Agency (TEA),
- the College and Career Readiness Standards for Adult Education (CCRS),
- the State of Texas Assessments of Academic Readiness (STAAR) performance standards,
- work readiness skills or criteria recognized by the Board or private sectors employers,
- Teachers of English to Speakers of Other Languages (TESOL) standards for Adult Education programs, and
- the Comprehensive Adult Student Assessment Systems (CASAS) standards.

A second priority was to ensure that a broad base of Adult Education practitioners reviewed the draft Content Standards. The project team identified 15 people they believed would have interest and expertise in college and career readiness in English Language Arts (ELA), Mathematics, and English as a Second Language (ESL) to serve on the Standards Working Group (SWG). The membership of the SWG included representatives from community colleges, the Texas Education Agency, the Texas Higher Education Coordinating Board, independent school districts, community-based organizations, professional development providers and industries.

Texas Adult Education and Literacy Content Standards v. 3
Process Framework (cont.)

Project staff also received feedback from 13 subject matter experts (SMEs), most of whom were also active adult education classroom teachers. This team became the Informal Team of Practitioners (ITP). Similar to the composition of the SWG, the ITP included representatives from adult education, developmental education, college faculty, and career/technical training.

A third priority was to introduce a series of checks and balances by establishing an ongoing feedback process and conducting a series of online validation surveys. Project staff members facilitated the feedback and validation process, which included multiple rounds of review and revision by both the SWG and the ITP.

Timeline of Deliberations

The first full meeting in March 2016 began with an orientation to the role and responsibilities of the SWG, as well as to understand the State’s standards initiative. Discussion topics included the State’s perspective on the standards, establishing a common set of definitions and a common language, establishing norms for working together, determining frequency and methods of communication, and reviewing the change process as it relates to the standards development. SWG members used a Nominal Group Technique (Delbecq & VandeVen, 1971, and Vedros, 1979) to identify areas they considered to be either relevant and important to adult education or not essential to adult education. SWG members were asked to make professional judgments regarding the knowledge and skills they believed were necessary to include in any standards for Adult Education. The SWG agreed upon three primary areas that the standards should address: English Language Arts and Literacy (thus merging reading and writing), Mathematics, and English as a Second Language. Notes from this meeting were summarized and sent to the members of the SWG who were asked to confirm their agreement with the accuracy of the identified key content and skills.

During March and April 2016, an environmental scan of existing materials and publications authored by stakeholder groups allowed project staff to gather information without requiring a commitment of time from the SWG and the ITP. Project staff and consulting SMEs reviewed research on the following: (a) standards-based education, (b) the content areas, and (c) existing federal and state-level Adult Education content standards. The review of the research on standards-based education helped to provide an understanding of the potential effect that content standards will have on other systems in adult education such as curriculum, instruction, assessment, professional development, and local program accountability. The review of content area standards assisted in identifying and narrowing the key components and skills for each of the content areas—English Language Arts, Mathematics, and English as a Second Language. The review of existing federal and state-level adult education content standards assisted in determining how best to use existing standards to inform the Texas standards. The reference section of this book includes a list of the documents used during each step of the
Timeline of Deliberations (cont.)

environmental scan. Following the environmental scan, to assist SWG and ITP members, and to expedite the development process, content experts and project staff made initial judgments about the process and content that should guide the development of content standards.

Process Framework (cont.)

In May 2016, the SWG members began reviewing the Content Standards draft and providing written feedback via participation in a digital validation survey. For each Standard and its supporting Benchmarks, the work group members were asked to apply four criteria in order to make a professional judgment: (a) Content Match, (b) Accuracy, (c) Equity, and (d) Relevance. The SWG members were asked to apply these criteria and to determine if each standard and benchmark was “valid as is” or “not valid.” If the reviewer felt that a given standard or benchmark was “not valid,” they were asked to suggest revisions to the statement that could be addressed in subsequent drafts of the Content Standards. The SWG member could also provide general comments and feedback not specific to any individual standard or benchmark.

Drafts of the three identified Content Areas—English Language Arts (ELA), Mathematics, and English as a Second Language (ESL)— were produced by content experts and then submitted to the SWG and the ITP for two rounds of review and validation to develop three progressive drafts of the standards and benchmarks for each of the three Content Areas. Following Round 1 and Round 2 reviews, consulting SMEs reviewed the revisions to ensure that the draft Content Standards continued to reflect current research and practice. The third draft for each Content Area was then reviewed by a national expert on standards development who suggested editorial revisions to strengthen the language and structure of Content Standards. This expert did not make revisions that would change the intent of the SWG. The feedback provided by the SWG was essential to the development of each of the three progressive drafts of the Content Standards. The national standards expert and project staff reviewed and addressed all relevant changes in the documents after each round of SWG and IPT review.

Additional feedback was also sought from the ITP, who were asked to review the SWG’s decisions and apply the perspective of an Adult Education classroom teacher to the draft Content Standards.

June 2016 was dedicated to reviewing and responding to the feedback provided by the SWG and the ITP via the validation process. When conflicting suggestions were made by different SWG or ITP members for adding, revising, or deleting specific content, project staff solicited further review and feedback from content expert consultants whose expertise informed final decisions. Feedback from these content expert consultants was gathered using a Delphi Method (Delbecq, VandeVen, & Gustafson, 1975). The Content Standards included in this document were identified and refined into their current version over a period of three months of review and deliberations.
The draft Content Standards underwent a 52-day period of public comment from July 15, 2016 through September 5, 2016. Project staff scheduled 5 face-to-face public comment sessions over a 2-week period in early August in the following cities: San Marcos, TX, at the Literacy Texas Conference, San Antonio, TX, Midland, TX, Fort Worth, TX, and Houston, TX. Feedback received during the public comment period was used to further refine the draft Content Standards.

A final meeting of the SWG was held October 7, 2016 in San Antonio, TX. The purpose of this meeting was to provide working group members with an additional opportunity to closely examine and provide feedback on the draft content standards and benchmarks. The SWG members were directed to prepare for the meeting and were mailed bound copies of the following documents: 1) The draft of the Texas Adult Education Content Standards and Benchmarks, 2) Example Performance Indicators document, and 3) Guiding Prompts for Content Standards Review, with Tips for submitting effective feedback. SWG members were directed to utilize weeks prior to the final meeting to thoroughly review the draft contents and benchmarks for their area of expertise using the guiding prompts and to bring responses in writing to the meeting on October 7th.

The guiding prompts were as follows:

1. Logical Development of ELA/Mathematics/ESL concepts:
   If necessary, note any inconsistencies in the logical development of ELA, mathematics, and ESL concepts.

2. Vocabulary and Terminology:
   If necessary, note any incorrect, inconsistent, or confusing vocabulary and terminology contained in the document.

3. Rigor:
   If the level of rigor for exit standards is inappropriate for the ELA, mathematics, or ESL standards, indicate which standard and how it might be revised to an appropriate level and include a rationale for the revision.

4. Clarity of Benchmarks:
   If necessary, offer recommendations for making the language in the benchmarks clearer or more specific.

5. Reflection of Current Research:
   If necessary, provide specific recommendations for what should be added or deleted, including citations for the research on which the recommendations are based.

6. Alignment to the Texas College and Career Readiness Standards:
   Provide recommendation for revisions that will help align the standards more appropriately to the TCCRS.
Process Framework (cont.)

SWG members were invited to add suggestions for ways in which the ELA/Mathematics/ESL Standards and Benchmarks could be improved.

A series of conference calls were held the week prior to the October 2016 meeting with the SWG content area sub groups (ELA, Math, and ESL) to provide an advance opportunity for the members to discuss their reviews of the draft Content Standards. The calls were facilitated by staff from the Texas Workforce Commission and participants were directed to bring specific comments and recommendations in writing to the October 7th meeting.

Content Validation Process

Each Content Area was put through a structured content validation process in which two rounds of review were conducted with the SWG and the ITP. The content validation review provided a structured methodology by which the SWG and ITP members provided feedback on the content standards and benchmarks. The information included below provides a summary overview of the directions provided to the group members and an example of a validation form. A final review of the Content Standards was conducted by consulting subject matter experts from which the version was constructed. The validation surveys were conducted using the online tool, Survey Monkey.

Content validation methods focus on content relevance and representation (Stelly & Goldstein, 2007, p. 256). Content relevance is the extent to which the knowledge and skills are relevant to the target domain. Representativeness refers to the extent to which the knowledge and skills are proportional to the facets of the domain. Content relevance and representativeness are commonly assessed using subject matter expert ratings.
Summary Overview of Draft Standards Review, Feedback and Validation Criteria

The following criteria were considered while reviewing the Draft Standards.

1. Content Match
   - Is the content addressed by the Standards and the supporting Benchmarks appropriate for inclusion in the Content Standards?
   - Is the content within each Standard and the supporting Benchmarks appropriate for adult students to work toward as an exit level performance level?
   - Do the Standards and the supporting Benchmarks reflect appropriate exit level expectations for adult learners?
   - Are the Benchmarks appropriate to show an adult students’ ability to meet the Standard?
   - Is the content, knowledge, or skill addressed by the Standard and the supporting Benchmarks relevant to adult learners?

2. Accuracy
   The content contained in the Standards must be accurate. This applies also to terminology and grammar. Each Standard must present clearly defined content, knowledge, or skill expectations. Benchmarks should be concise and a true representation of the types of things that students should be able to do when they have reached the exit level standard. The physical representation of the Standards and any additional graphics should be accurate and easy to understand.
   - Does the Standard clearly state the required content knowledge or skill/task?
   - Are clear expectations stated within the Standard and the supporting Benchmarks?
   - Is the terminology used accurate and appropriate?
   - Are the Standards and supporting Benchmarks grammatically correct?
   - Are the Standards and supporting Benchmarks clear in meaning?
   - Is the physical presentation clear, accurate, and easy to understand?
Summary Overview of Draft Standards Review, Feedback and Validation Criteria (cont.)

3. Equity
The language and content included in the Standards and the supporting Benchmarks must be free of potential stereotypes and should not disadvantage, offend, or be advantageous to any individual based upon race, ethnicity, gender, religion, age, nationality, or disability. The Standards and the supporting Benchmarks should be fair and equitable to all learners.

- **Content** - Are the Standards and the supporting Benchmarks free of content that could disadvantage or be advantageous to an individual based upon race, ethnicity, gender, religion, age, nationality, or disability? Economic, cultural, or geographic background?

- **Language** - Are the Standards and the supporting Benchmarks free of language that disadvantages or is advantageous to an individual based upon race, ethnicity, gender, religion, age, nationality, or disability? Economic, cultural, or geographic background? Offense - Are the Standards and the supporting Benchmarks presented in such a way as to not offend an individual based upon race, ethnicity, gender, religion, age, nationality, or disability? Economic, cultural, or geographic background?

- **Stereotypes** - Are the Standards and the supporting Benchmarks void of language or content that may represent a stereotypical view of an individual or group based upon race, ethnicity, gender, religion, age, nationality, or disability? Economic, cultural, or geographic background?

- **Fairness** - Are the Standards and supporting Benchmarks fair to all individuals regardless of race, ethnicity, gender, religion, age, nationality, or disability? Economic, cultural, or geographic background?

4. Relevance

- Do the Standards and the supporting Benchmarks require tasks and state expectations that are appropriate exit level expectations for adult learners?

- Do the Standards and the supporting Benchmarks measure content, knowledge, and skills that an adult learner who is exiting adult education services should know or be able to do?

- Is the content, knowledge, and skills contained in the Standards and the supporting Benchmarks relevant to adult learners?
APPENDIX E

Description of the Standards Alignment to Industry Clusters Project (2017-2018)
The Standards Alignment to Industry Clusters Project and Content Standards 2.0

The 2016 Texas Adult Education and Literacy Content Standards was intended to develop college and career readiness standards in adult education and literacy (AEL) that link adult education, post-secondary education, and the world of employment. The focus of the 2016 standards was mainly on academic outcomes; the second phase of Standards 2.0 was to explore applications of the standards to employment.

The Standards Alignment to Industry Clusters (SAIC) project was a grant-funded project of the Texas Workforce Commission. The project was conducted from June 2017 to August 2018 with the objective of aligning the 2016 Texas Adult Education and Literacy Content Standards to knowledge, skills, and abilities required for success in high-demand entry- and intermediate-level jobs that have career potential for adult education customers.

Under the guidance of the Texas Workforce Commission, four lead organizations worked in partnership with adult educators and subject matter experts from the four target industries to develop the content for Content Standards 2.0. The forty-one subject matter experts have extensive backgrounds in training, education, and the world of work. Over a year’s time (June 2017 – June 2018), the experts convened in person and virtually to align the knowledge, skills, and abilities needed for in-demand jobs with career potential with the AEL Content Standards. The names and affiliations of the team members are provided in Appendix F.

**Employers:** The twenty-eight industry representatives ranged from former oil and gas executives, construction trades entrepreneurs, and healthcare human resources directors to manufacturing training managers and distribution center managers. They came from diverse geographic regions of the state. Many had experience partnering with educators to help prepare students for work in their sectors. Several had learning programs on site at their companies, for example, for English as a Second Language, technical skills, or other areas.

**Adult Educators:** The fourteen subject matter experts representing adult education and literacy programs from around the state had years of experience in the development, delivery, and management of instruction. The team included bilingual instructors and program managers as well as those with expertise in the development and delivery of workplace literacy. The teams were led by project managers with decades of experience in adult literacy and workforce development, including multiple projects with Fortune 500 employers and public-private workforce education partnerships.
The Standards Alignment to Industry Clusters Project and *Content Standards 2.0* (cont.)

**Lead Partners:** Four primary partners guided the development of the content for *Standards 2.0*. The partners included experts with decades of experience in adult literacy and workforce research and development, national and state standards, public-private workforce education partnerships, and industry training and credentialing.

- **Literacy Texas** - the statewide literacy coalition, connecting and equipping literacy providers through resources, training, networking, and advocacy.
- **Educational Testing Service (ETS)** - the world’s largest educational assessment and research organization.
- **National Center for Construction Education and Research (NCCER)** - dedicated to standardized training and credentialing for the industry in order to develop a workforce that is safe and productive.
- **Haigler Enterprises International, Inc.** - a consulting firm with extensive experience in adult literacy, workforce analysis, public-private partnerships, and academic and skills standards.

The SAIC project examined high demand jobs in four key industry clusters—Advanced Manufacturing, Construction and Extraction, Healthcare Sciences, and Transportation, Distribution, and Logistics. These clusters were selected because they are expected to grow in all regions of Texas and because each cluster offers a wide variety of job opportunities and pathways. The project convened a working group from each cluster consisting of employers and key industry staff who examined the 2016 Content Standards to determine their relevance to jobs and industry employment requirements. Subject matter experts from AEL were then convened to evaluate the findings and recommendations of the industry cluster working groups.
The project also relied heavily on O*NET\(^1\) for data and general information on high-demand jobs in the four target industry clusters. The Educational Testing Service (ETS) led the research effort to identify high-demand occupations in the four target industry clusters and related critical characteristics across the jobs. ETS:

- identified high-demand jobs for each of the four industry clusters based on data from Texas Workforce Commission reports (2015/2016) and jobs in O*NET that show positive growth projections in Texas (15% or more) from 2014-2024.
- used O*NET to conduct research on knowledge, skills, abilities, work activities, and work styles for Texas high-demand jobs for each of, and across, the four industry clusters.
- calculated the mean (to show overall high level of importance) and Standard Deviation (to represent the range spread of characteristic importance). ETS used these to identify the critical characteristics that were focused on high importance across the majority of the jobs.

Additional job-related information was provided by the industry cluster and AEL subject matter experts. The industry cluster experts provided specific work-related examples tied to positions and tasks in their sectors. The AEL experts conducted research about high-demand entry- and intermediate-level jobs in O*NET to confirm these critical characteristics.

The project team developed draft documents that aligned the standards with the work-related information. The subject matter experts provided feedback and validated the information. Finally, the draft documents from the SAIC project were integrated into the 2016 AEL Content Standards and Benchmarks. The resulting product was re-named Content Standards 2.0.

\(^1\) U.S. Department of Labor’s Occupational Information Network.
Why is it important to align academic standards to jobs?

A good career requires college-ready and career-ready knowledge and skills. Leading economists who have examined labor market projections note that key college- and career-ready knowledge and skills are closely linked to being able to get the training necessary to earn a living wage in high-growth industries (Carnevale & Desrochers, 2002, 2003). It is important, then, that Adult Education programs provide students the opportunity to acquire these skills to pursue their long-term career aspirations and goals.

The employers who participated in SAIC agreed that preparing students with knowledge and skills used on the job would help students succeed at work. Representatives from the healthcare sciences industry, for example, said that they would prefer to train employees on competencies and skills needed instead of accepting blanket certifications and degrees that do not ensure job readiness. The implication for AEL providers, they say, is that Standards 2.0 can help students achieve academic competencies through work skills.

A representative from advanced manufacturing put it this way: “This project is important now. There is an urgent need for the employer voice that can’t wait another two to eight years to set educational standards for industry.” An employer from the construction industry said that Standards 2.0 provides a teaching opportunity in which employers can be translators, helping educators better understand what the workplace requires of their students. The project’s end game, one industry representative added, is about competencies and skills, not just about education levels.

Subject matter expert employers from the four industries identified moderate to severe shortages in finding workers. In transportation, for example, there is a severe shortage of truck drivers that will significantly impact the industry. In construction, likewise, a significant lack of skilled tradesmen makes infrastructure projects much more challenging.
Why is it important to align academic standards to jobs? (cont.)

The Standards 2.0 initiative also supports the Strategic Plan for Adult Education & Literacy, 2015 – 2020. A central component of the initiative was engaging employers to align the standards with knowledge, skills, and abilities that lead to success on the job and careers as described in the table below.

<table>
<thead>
<tr>
<th>Strategy 1, Objective 2: Increase business and employer community roles in AEL.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactic 1: Engage businesses, chambers of commerce, and the Texas Association of Business in developing strategies for increasing employer engagement in AEL.</td>
</tr>
<tr>
<td>Tactic 2: Fund and support with technical assistance work-based projects with employers to support business expansion and build employers as AEL allies.</td>
</tr>
<tr>
<td>Tactic 3: Engage employers and employer organizations and expand investments that have proven effective within the 28 Local Workforce Development Boards in efforts to align AEL levels to occupationally-specific skills and work-readiness requirements, including work-recognized certifications.</td>
</tr>
</tbody>
</table>

How can Content Standards 2.0 be used?

By aligning the standards to competencies required by employers, the standards become a resource for program improvement. Workforce development specialists can use the standards to:

- Guide the development of skills required for work;
- Define skills and tasks not easily identified in academic standards;
- Focus instruction and career guidance;
- Promote AEL and students as an employer resource;
- Engage employers and workforce professionals actively in AEL; and
- Review skill requirements in other sectors.
How can Content Standards 2.0 be used? (cont.)

Standards 2.0 creates a valuable resource for a broad spectrum of stakeholders:

Instructors can use the standards to ensure learning activities support a trajectory toward both college and career readiness while supporting students in better understanding how what they learn applies to work.

Curriculum developers can use the standards to outline required content and skills and develop and align curriculum, instruction, and assessments to work requirements.

Career navigators, job developers, and vocational rehabilitation counselors can use the standards to better target career counseling along defined career pathways to better prepare students for successful, long-term employment and continued career progression.

Employers can use the standards to better develop job descriptions as well as succession paths for current workers.

Integrated education and training staff can use the standards to contextualize curriculum and activities to ensure programs better match learners’ skills with job requirements.

Directors can use the standards to build program objectives, and curricula, select instructors, and deploy professional development to support the critical skills and knowledge expected and required for success in at work in college and training and into employment.
What skills are more relevant for work?

Industry subject matter experts emphasized that there are several areas that are critical to success in employment across jobs and sectors. Examples of critical characteristics that are relevant to in-demand entry-level and intermediate-level jobs with career potential include the following:

**Critical Thinking**
Employers are clear in their definition of critical thinking. It’s about the application of thinking skills on the job.

A representative from the transportation/distribution/logistics sector explained that critical thinking is a bedrock for all courses and evaluations. It is about how students take in information, synthesize it, and apply it. The ability to think critically constantly evolves. The importance of a business workplace context can be important in learning how to apply this skill.

An expert from healthcare sector said that: “Critical thinking environments require that employees determine what information is lacking and how to make decisions without pieces of information that are needed.” The lack of critical thinking, as another put it, impacts decisions made by healthcare professionals at all times: “What is paramount is knowing what you are doing and why.”

As more than one employer and multiple educator experts pointed out, critical thinking in the workplace is an amalgam of skills, typically brought together in response to a problem. It is not enough to be able to solve a problem on a worksheet in a class setting. In the workplace, first the problem has to be discovered, then defined, and broken into component parts before different options for solving the problem become clear. All of these steps require critical thinking. It is a skill, another healthcare representative said, that improves with years of experience and exposure.

**Communication**
Communication is an essential part of work and life. Research repeatedly demonstrates that effective communication ties to an organization’s productivity and performance, and to employee engagement. As one example of the importance of communication, employees at all levels must understand and be able to communicate around safety or lives could be at stake. Communication may be called on when members of a team must collaborate to determine the root cause of an issue and to support critical thinking. Active listening is an important aspect of communicating at work. Whether it is a daily start-up meeting, working with a colleague or customer, or receiving instructions, employees are expected to be focused listeners and to ask appropriate questions to clarify information being relayed.

Communication, of course, is also fundamental to success in learning.
What skills are more relevant for work? (cont.)

Teamwork
Effective teamwork is also vital to success in the workplace. On effective teams, all the workers actively contribute, often in collaborative problem-solving. Workers must respect and help one another because they depend so much on each other. Team members focus on a common goal while executing related tasks. All aspects of communication are important as is mutual support.

Technology
Can you think of a job with career potential that doesn't involve technology? Virtually every career and industry are becoming more technology-reliant and there is every indication that this trend will continue. Therefore, students with the ability to understand and apply technology on the job will be better positioned for success and advancement.

The industry cluster representatives emphasized that technology as it is used in the workplace can be applied across the standards. A sub-team of adult educators and employers in the project identified a resource that can help support educators and workforce development specialists as they include applied technology in lessons and activities. The International Society for Technology and Education (ISTE) is comprised of educators from around the world who support technology as a way to improve learning. The organization has developed a set of ISTE Standards as a framework for students, educators, administrators, coaches, computer science educators, and others to develop innovative learning strategies. The SAIC team members recommend the standards as a best-practice approach to help integrate work-relevant technology into adult learning.
APPENDIX F

Standards Working Group, Subject Matter Experts, Industry Cluster Members, and Project Staff
## Standards Working Group – Phase One

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan Carlos Aguirre, M.A.</td>
<td>Dean of Continuing, Professional, and Workforce Education</td>
<td>South Texas College</td>
</tr>
<tr>
<td>Kay Brooks, M.A.</td>
<td>AEL Grant Project Manager</td>
<td>Brazosport College</td>
</tr>
<tr>
<td>Tamara Clunis, Ph.D.</td>
<td>Dean, Academic Success</td>
<td>Amarillo College</td>
</tr>
<tr>
<td>Cesar Diaz, M.P.A., J.D.</td>
<td>Coordinator</td>
<td>Tarrant County College</td>
</tr>
<tr>
<td>Tammy Donaldson, Ph.D.</td>
<td>Assistant Professor of Reading &amp; Development Education Coordinator</td>
<td>Del Mar College</td>
</tr>
<tr>
<td>Marta M. Edwards, M.A.</td>
<td>The Center for College Access and Development</td>
<td>El Paso Community College</td>
</tr>
<tr>
<td>Annette Gregory, M.Ed.</td>
<td>Executive Director for Career and Technical Education</td>
<td>Austin ISD</td>
</tr>
<tr>
<td>Denise Guckert, M.A.</td>
<td>Adult Education Coordinator</td>
<td>Austin ISD</td>
</tr>
<tr>
<td>David Lindsay, M.S., M.B.A.</td>
<td>Vice President of Technical Research and Board of Directors of Literacy Texas</td>
<td>Central Texas Water Coalition; Literacy Texas</td>
</tr>
<tr>
<td>Denise Lujan, M.S.</td>
<td>Director of Developmental Math</td>
<td>The University of Texas, El Paso</td>
</tr>
<tr>
<td>Mary Helen Martinez, M.A.</td>
<td>Director of College Readiness</td>
<td>Alamo Community College</td>
</tr>
<tr>
<td>LaShondia McNeal, Ph.D.</td>
<td>Program Director for Research, Evaluation, and Professional Development</td>
<td>Houston Community College</td>
</tr>
</tbody>
</table>
### Standards Working Group – Phase One (cont.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suzanne Morales-Vale, Ph.D.</td>
<td>Director, Developmental and Adult Education</td>
<td>Texas Higher Education Coordinating Board</td>
</tr>
<tr>
<td>Denise Orand, M.Ed.</td>
<td>Director, Adult Education Grants</td>
<td>San Jacinto College</td>
</tr>
<tr>
<td>Glenda Rose, Ph.D.</td>
<td>Professional Development Specialist</td>
<td>Texas Center for the Advancement of Literacy and Learning</td>
</tr>
<tr>
<td>Sandi Schneider, M.Ed.</td>
<td>Trainer</td>
<td>Texas A&amp;M University</td>
</tr>
<tr>
<td>James Slack, M.S., M.B.A.</td>
<td>Statewide Mathematics Coordinator</td>
<td>The Texas Education Agency</td>
</tr>
</tbody>
</table>

### Informal Team of Practitioners – Phase One

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anwar Asad, M.Ed.</td>
<td>ESL Teacher</td>
<td>The University of Texas at El Paso</td>
</tr>
<tr>
<td>Julie Cosby, B.S.</td>
<td>Teacher, Teacher Facilitator</td>
<td>Fort Worth ISD</td>
</tr>
<tr>
<td>Marsha Ellis, M.Ed.</td>
<td>Faculty Development Specialist</td>
<td>Alamo Community Colleges</td>
</tr>
<tr>
<td>Olga Escamilla, Ph.D.</td>
<td>Lecturer, Professional Development Specialist</td>
<td>Texas A&amp;M Kingsville, Texas Center for the Advancement of Literacy &amp; Learning</td>
</tr>
<tr>
<td>Debbie Janysek, M.A.I.S</td>
<td>Adult Education Lead Instructor</td>
<td>Victoria College</td>
</tr>
<tr>
<td>Tiffany Lee, M.Ed.</td>
<td>Distance Learning Lead Instructor</td>
<td>Region 9 Education Service Center</td>
</tr>
<tr>
<td>Elizabeth Moya, C.M.P.I.</td>
<td>Curriculum Specialist</td>
<td>Ysleta Community Learning Center</td>
</tr>
</tbody>
</table>
### Informal Team of Practitioners – Phase One (cont.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patricia Solomon, M.B.A.</td>
<td>Director</td>
<td>Transforming Lives to the Next Level</td>
</tr>
<tr>
<td>Janice Wall, B.A.S.</td>
<td>Teacher</td>
<td>Temple College</td>
</tr>
</tbody>
</table>

### Consulting Subject Matter Experts – Phase One

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarena Lorrotta, Ph.D</td>
<td>Associate Professor of Adult Education, ESL Literacy and Research</td>
<td>Texas State University</td>
</tr>
<tr>
<td>Theresa Jones, Ph.D.</td>
<td>Faculty, Department of Mathematics</td>
<td>Texas State University</td>
</tr>
<tr>
<td>Terry Salinger, Ph.D</td>
<td>Fellow and Chief Scientist for Literacy Research</td>
<td>American Institutes for Research</td>
</tr>
<tr>
<td>Denise Sumlin-Johnson</td>
<td>Program Assistant, Adult Education Teacher</td>
<td>Harris County Department of Education</td>
</tr>
</tbody>
</table>
## Industry Cluster Team Members – Phase Two

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Member</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Manufacturing</td>
<td>J.R. Gambill</td>
<td>Klein Tools</td>
</tr>
<tr>
<td></td>
<td>Frank Green</td>
<td>Bell Helicopter</td>
</tr>
<tr>
<td></td>
<td>Sarah Haskins</td>
<td>Mother Parkers Tea &amp; Coffee</td>
</tr>
<tr>
<td></td>
<td>Candy Slocum</td>
<td>InterLink</td>
</tr>
<tr>
<td></td>
<td>Pat Tarver</td>
<td>APICS San Antonio</td>
</tr>
<tr>
<td></td>
<td>Keith Bell</td>
<td>Intex Electrical Contractors, Inc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction &amp; Extraction</td>
<td>Scott Bland</td>
<td>Jim Bland Construction</td>
</tr>
<tr>
<td></td>
<td>Jane B. Hanna</td>
<td>Construction Education Foundation</td>
</tr>
<tr>
<td></td>
<td>Jay Jones</td>
<td>Lincoln Electric</td>
</tr>
<tr>
<td></td>
<td>David Lindsay (retired)</td>
<td>LyondellBasell</td>
</tr>
<tr>
<td></td>
<td>Todd McAlister</td>
<td>Texas Air Conditioning Contractors Association</td>
</tr>
<tr>
<td></td>
<td>Mike Sandroussi</td>
<td>Craft Training Center of the Coastal Bend</td>
</tr>
<tr>
<td></td>
<td>Natalie Smith</td>
<td>KBR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare Science</td>
<td>Kathryn Biediger</td>
<td>University Health Systems</td>
</tr>
<tr>
<td></td>
<td>Jacque Burandt</td>
<td>Award-Winning Results</td>
</tr>
<tr>
<td></td>
<td>Gerard Camacho</td>
<td>Parkland Health &amp; Hospital Systems</td>
</tr>
<tr>
<td></td>
<td>Valerie Esparza</td>
<td>Seton Healthcare Family</td>
</tr>
<tr>
<td></td>
<td>Seleria Fletcher</td>
<td>Memorial Hermann Health System</td>
</tr>
<tr>
<td></td>
<td>Daniel Gandarilla</td>
<td>Texas Health Resources</td>
</tr>
<tr>
<td></td>
<td>Beena Joseph</td>
<td>Memorial Hermann Health System</td>
</tr>
<tr>
<td></td>
<td>Lee Webster</td>
<td>Healthcare Management Institute - UTMB</td>
</tr>
</tbody>
</table>
### Industry Cluster Team Members – Phase Two (cont.)

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Member</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation, Logistics, Distribution</td>
<td>Jim Bloess, Ronnie Brannon, Diana Contreras, Pat Tarver, Joseph Zambrano</td>
<td>Phillips Distribution, Palo Alto College, Dollar General, APICS San Antonio, Seasonal Living</td>
</tr>
</tbody>
</table>

### AEL Team Members – Phase Two

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashley Trevino</td>
<td>Director of Adult Education</td>
<td>Grayson College</td>
</tr>
<tr>
<td>Glenda Rose</td>
<td>Program Manager for PD Needs Assessment and Evaluation</td>
<td>TRAIN PD at Texas A&amp;M University</td>
</tr>
<tr>
<td>Cheryl Smith</td>
<td>Assistant Director, Career Navigator, and IET CMA Instructor</td>
<td>Howard College</td>
</tr>
<tr>
<td>Mechelle Marler</td>
<td>Education Division Instructional Specialist</td>
<td>Austin Community College</td>
</tr>
<tr>
<td>Elizabeth “Liz” Moya</td>
<td>Professional Development Coordinator</td>
<td>Ysleta Community Learning Center</td>
</tr>
<tr>
<td>Delia Watley</td>
<td>Program Director</td>
<td>Irving ISD, AEL Program</td>
</tr>
<tr>
<td>Beth Ponder</td>
<td>Associate Director PD Field Services, Professional Development Content Specialist</td>
<td>TRAIN PD at Texas A&amp;M University</td>
</tr>
</tbody>
</table>
### AEL Team Members – Phase Two (cont.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>AnneMarie Molinari-Sanders</td>
<td>Content Specialist</td>
<td>TRAIN PD at Texas A&amp;M University</td>
</tr>
<tr>
<td>Karen Condit</td>
<td>Academic Facilitator, Instructional Coach, Lead Instructor</td>
<td>Region 20 ESC, Alamo Adult Education Consortium</td>
</tr>
<tr>
<td>Debbie Janysek</td>
<td>Professional Development Coordinator</td>
<td>Victoria College Adult Education</td>
</tr>
<tr>
<td>Kelli Rhodes</td>
<td>Executive Director</td>
<td>Restore Education</td>
</tr>
<tr>
<td>Denise Johnson</td>
<td>Professional Development Coordinator</td>
<td>Harris County Department of Education</td>
</tr>
<tr>
<td>David Garza</td>
<td>Technology and Curriculum Coordinator</td>
<td>Denton ISD, Adult Education &amp; Literacy</td>
</tr>
</tbody>
</table>

### Informal Advisors – Phase Two

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeff Holcomb</td>
<td>Former CEO and President</td>
<td>Altus Traffic</td>
</tr>
<tr>
<td>Jeff Hall</td>
<td>Workflow Advisor</td>
<td>Chevron</td>
</tr>
</tbody>
</table>
### SAIC Project Staff – Phase Two

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer Edwards</td>
<td>CEO</td>
<td>Literacy Texas</td>
</tr>
<tr>
<td>Federico Salas-Isnardi</td>
<td>Acting CEO</td>
<td>Literacy Texas</td>
</tr>
<tr>
<td>Dale Pillow</td>
<td>Board of Directors</td>
<td>Literacy Texas</td>
</tr>
<tr>
<td>Bridgette Krienke</td>
<td>Community Coordinator</td>
<td>Literacy Texas</td>
</tr>
<tr>
<td>Sasha Khalifeh</td>
<td>Program Manager</td>
<td>Literacy Texas</td>
</tr>
<tr>
<td>Dan Hawthorne, Ph.D.</td>
<td>Director of Industrial/Organizational Solutions</td>
<td>Educational Testing Service</td>
</tr>
<tr>
<td>Maria Elena (Malena) Oliveri, Ph.D</td>
<td>Research Scientist</td>
<td>Educational Testing Service</td>
</tr>
<tr>
<td>David Lindsay</td>
<td>Retired</td>
<td>LyondellBasell</td>
</tr>
<tr>
<td>Karl Haigler</td>
<td>President</td>
<td>Haigler Enterprises International, Inc.</td>
</tr>
<tr>
<td>Rae Nelson</td>
<td>Associate</td>
<td>Haigler Enterprises International, Inc.</td>
</tr>
</tbody>
</table>

### Texas Workforce Commission Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anson Green, M.A.</td>
<td>State Director, Adult Education and Literacy</td>
<td>Texas Workforce Commission</td>
</tr>
<tr>
<td>John Stevenson, M.Ed.</td>
<td>Program Specialist</td>
<td>Texas Workforce Commission</td>
</tr>
</tbody>
</table>