

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT**  
**Sections I & III Reviews**

Book:	AgriScience Student Edition - Pearson	Publisher:	Pearson Education Inc., publishing as Prentice Hall
ISBN:	9781269542968	Year:	2015
Levels/Course:	Basal	Category:	5957

**BEFORE YOU BEGIN**

**ALIGNMENT TO THE TENNESSEE CAREER AND TECHNICAL EDUCATION STANDARDS:**

Tennessee's Career and Technical Education Standards (hereafter, "the standards") represent a significant shift in the definition of student proficiency within career and technical education environments. Evaluators of materials should understand that the standards replace the proficiency frameworks of years past in three major respects:

- 1) A shift to clear, specific, and measurable expectations for student learning. The standards articulate deep knowledge and skill attainment, departing from the competency-based structure of years past.
- 2) Increased focus on rigor in literacy and mathematics within technical contexts. The new standards align to all Tennessee State Standards for English Language Arts and Literacy in Technical Subjects and, where appropriate, select Tennessee State Standards in Mathematics.
- 3) Sequential progression of knowledge and skills within and across courses. The new standards build on each other both within course content and across course levels, arranged within programs of study that culminate in capstone and/or work-based learning experiences for students.

Evaluators of materials must be well versed in the standards for the course(s) aligned to the materials in question, how the content fits into the progressions in the content standards, and the expectations of the standards with respect to conceptual understanding, fluency, and technical application. Aligned courses in the Architecture & Construction Career Cluster:

**ORGANIZATION OF THIS DOCUMENT**

**SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY**

Section II includes additional criteria for alignment to the standards as well as indicators of quality.

**SECTION III: FOCUS AREA (*optional*)**

Section III allows reviewers to capture qualitative observations on an additional area of focus, if presented in the materials.

\*For the purposes of this document, Tennessee CTE students are considered to be enrolled in course "levels" (i.e., Level 1, Level 2, Level 3, and Level 4) due to variation in the *grade* level at which students may take a course. For example, a tenth-grade student may be enrolled in a Level 1 course. For this reason, reviewers are asked to evaluate materials on the basis of their alignment to particular *course levels*, not *grade levels* or *grade bands*.

\*\*This percentage is a guide. Reviewers should not attempt to compute percentages based on counting pages or counting lessons. Reviewers will use their professional judgment to determine how students are meant to spend their time to determine focus and provide evidence for their decision.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
A. Materials are aligned to relevant <b>national and/or industry standards</b> where appropriate. For example, <i>Mechatronics I</i> materials routinely make reference to and reinforce connections with national industry certification standards from companies like Siemens.	2	[2]Industry Standards are listed throughout the text. Examples include soil/media, pesticides, and fertilization. Certifications listed are Pesticide and no other certifications can be found. But, there are many references to career connections.
B. Materials are aligned to discipline-specific <b>content or pedagogical frameworks</b> frequently used by professionals in associated industries. For example, <i>Differentiating Instruction</i> materials routinely make reference to and reinforce connections with instructional strategies that meet the educational needs of the student, as specified in the standards.	2	[2]At the end of every chapter “Thinking Critically”, Stem and Academic Activities and SAE opportunities align to content and reinforce connections. This is an excellent resource.
C. Connections are made to discipline-specific <b>professional societies and organizations</b> , and their value is clearly communicated in the materials. For example, <i>School Counseling</i> materials routinely make reference to and reinforce connections with the American School Counselor Association (ASCA).	2	[2]Text does not clearly communicate about professional societies and organizations but it does a great job connecting industry careers to post-secondary institutions.

**Additional Comment Section II(1):**

Section II(2). SEQUENCE AND PROGRESSION OF STANDARDS	SCORE	JUSTIFICATION/NOTES
A. Connections are made within a course between knowledge and skills, where these connections are appropriate and natural, as set forth by the standards.	2	Many subjects within the text have figures that correlate skills to understanding of knowledge. “Stem and

		academic activities” at the end of the chapters also connect knowledge to skills.
B. Materials are vertically coherent with previous courses and these connections are made clear in the materials. The connections are explicit to the other materials in the course.	2	The text is very detailed and comprehensive over the horticulture pathway. Connections are explicit to other materials such as Grafting, propagation, media/soil, Pest management and it goes above and beyond course standards.
C. For materials in a series, content progressions reflect the progressions as seen in the standards. These progression connections are clearly indicated in the materials. Any discrepancies in content progressions enhance the required learning in each course and are clearly aimed at helping students meet the standards as written.	2	Progression into horticulture from Agriscience is clear. Students reading this text will have a clear understanding of plants and the horticulture industry.

Section II(3). TEACHER SUPPORTS	SCORE	JUSTIFICATION/NOTES
A. Materials support teachers in ways such as the following: planning (including ideas for pacing), sample lessons, laboratory applications, projects, vocabulary, and instructional strategies.	2	Materials in the text alone are a great resource for teachers. Throughout the chapter there are questions, career connections, stem applications, math, safety notes, extensive vocabulary. Instructional strategies are also in the text for extended

		practice and “before you read”.
B. Materials include teacher-directed materials that explain the role of the practice activities in the classroom and in students’ content development. Problems and activities present opportunities for students to make use of and exhibit the skills as they work on mastery of content.	2	The end of each chapter in the text offers great activities and labs that easy to follow and understand.
C. Opportunities and resources are provided for teachers to conduct independent study to enhance their own understanding and knowledge of course topics. Materials provide avenues to seek and identify quality professional development in a manner that will support student learning.	2	Resources available on line with the companion website and in the text Materials in the text go beyond standards and teachers can find many resources to expand their knowledge.

<b>Section II(4). USABILITY</b>	<b>SCORE</b>	<b>JUSTIFICATION/NOTES</b>
A. Materials can be accessed in a variety of formats and media, including but not limited to printed textbooks, digital storage devices, online applications, and cloud-based forums.	2	Text offers “on-line textbook” and digital storage devices with on-line activities and videos.
B. Materials are clear and easy to read for students, teachers, and parents. The design and graphics do not distract from the course content and are appropriately placed.	2	Materials are clear and easy to read. Text has beautiful pictures and great graphics that explain skills, careers, safety, and detail.
C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.	2	Paragraphs are short and designed for any type of learner. “Before You Read” is a great scaffold for ELs students. “Corner Question” throughout the text suggesting deep thinking and applications.
D. Materials are culturally and politically sensitive to the full range of potential users, and do not advance unwarranted opinions that are not factually based. All materials strive to present content, not beliefs.	2	

**Please note any concerns with sensitivity below:**

<b>Section II(5). ASSESSMENTS</b>	<b>SCORE</b>	<b>JUSTIFICATION/NOTES</b>
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A. Materials include aligned assessments at regular intervals throughout the text(s), or as supplements to the primary instructional materials. Aligned assessments may include end-of-chapter quizzes, unit test modules, and practice exams.	2	As stated earlier questions are presented throughout the text. End of the chapter has an assortment of assessments and activities. At the end of each chapter there is a great assortment of assessments.
B. Materials offer ideas and guidance on measuring student progress throughout the duration of the aligned course(s). Formative, interim, and summative assessment strategies are all presented to inform instructional strategy and improvement.	2	There are multiple resources in the text and companion website for the instructor to scaffold questioning to check student understanding.
C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.	2	Text and on-line materials of great resources for diverse learners. An example is using the "Know and Understand" and "Stem Activities" which can challenge students.

Please use the space below to leave any additional notes about Section II not previously captured:

### SECTION III (*optional*): FOCUS AREA

Use this section to capture qualitative observations on an additional area of focus, if presented in the materials. A sample focus area for the Health Informatics program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN Health Information Systems	NOTES
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A. Materials include coverage of major parameters most frequently reported in health databases.	<i>[Insert reviewer evaluation here.]</i>
B. Materials draw clear connections between policy and procedures and the legal ramifications of health informatics.	<i>[Insert reviewer evaluation here.]</i>
<b>III. FOCUS AREA:</b>	<b>NOTES</b>
A. Materials include coverage of hydroponics and aquaponics production and cropping systems.	Materials are provided for Hydroponics and Aquaponics studies, in fact, a student could do a research paper from reading the chapter on 21st Century Horticulture.
B. Materials draw clear connection between greenhouse management at the secondary level and introduction to plant science at the postsecondary level including field crop standards.	The text goes beyond basic understanding of greenhouse management and offers in-site to college level standards. There are scientific discussions, which will help students to bridge plant science principles to basic greenhouse