

Tennessee State Textbook and Instructional Materials Quality Commission

April 20, 2015

Cycle A Textbook Screening Instruments

The Background:

The role of the Textbook Advisory Panel is to review textbook publishers' materials submitted for courses in this year's designated cycle. As such, the Panel must determine whether these materials meet the level of rigor and relevance required by the course standards. To aid in this work, the department has developed screening instruments to ensure that all prospective materials are evaluated fairly and consistently.

Per the Textbook Adoption Schedule, Cycle A is devoted to the review and adoption of instructional materials aligned to career and technical education (CTE) courses within the Advanced Manufacturing, Education & Training, Human Services, and Information Technology career clusters. All Cycle A screening instruments must be approved by the State Textbook and Instructional Materials Quality Commission per Commission Rule 0520-5-1-.09. Twelve (12) screening instruments are hereby submitted for the Commission's recognition, differentiated by program of study in order to fully capture the standards nuances unique to each. They are listed as follows:

- 1) Advanced Manufacturing: *Machining Technology* program of study
- 2) Advanced Manufacturing: *Electromechanical Technology* program of study
- 3) Advanced Manufacturing: *Mechatronics* program of study
- 4) Advanced Manufacturing: *Welding* program of study
- 5) Education & Training: (All programs of study)
- 6) Human Services: *Childhood Development Services* program of study
- 7) Human Services: *Social Health Services* program of study
- 8) Human Services: *Dietetics & Nutrition* program of study
- 9) Information Technology: *Programming & Software Development* program of study
- 10) Information Technology: *Networking Systems* program of study
- 11) Information Technology: *Web Design* program of study
- 12) Middle school courses aligned to Advanced Manufacturing, Education & Training, Human Services, and Information Technology

Approval of these instruments will ensure the Textbook Advisory Panel is equipped to adequately evaluate all materials received as part of the Cycle A period.

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
CHILDHOOD DEVELOPMENT SERVICES PROGRAM OF STUDY
HUMAN SERVICES CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Childhood Development Services program of study (POS):

- Early Childhood Education Careers I (6015)**
- Early Childhood Education Careers II (6016)**
- Early Childhood Education Careers III (6017)**
- Early Childhood Education Careers IV (6135)**
- Work-Based Learning: Career Practicum (6105)***

**Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Childhood Development Services program of study is designed to prepare students for careers as a preschool teacher, nanny, or childcare provider. Course content covers the components of child development, planning age-appropriate activities, learning environments, and many other skills related to teaching younger populations. Upon completion of this POS, proficient students will be prepared to pursue industry certification at a technology college or more advanced coursework at a two-year or four-year postsecondary institution.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA
 All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
(Was each component marked "yes"?)

Yes _____ No _____

<p>Were all three non-negotiables in section I met? (Was each component marked "yes"?)</p>	<p>Yes _____ No _____</p>
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, materials routinely make reference to and reinforce connections with national industry certification standards from agencies such as the National Association for the Education of Young Children (NAEYC).</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, sections devoted to child development content routinely make reference to and reinforce connections with child development theories, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, materials routinely make reference to and reinforce connections with the Council for Professional Recognition, Child Development Associate (CDA) Credential.</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Childhood Development Services program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN CHILD DEVELOPMENT	NOTES
<p>A. Materials include coverage of child development in relation to how children learn, with particular emphasis on implementing developmentally appropriate practices (DAP).</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between child development content and related career opportunities, such as child care provider, nanny, and preschool teacher.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Childhood Development Services POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Early Childhood Education Careers I (6015)

<http://www.tn.gov/education/cte/clusters/EarlyChildhoodI.pdf>

Early Childhood Education Careers II (6016)

<http://www.tn.gov/education/cte/clusters/EarlyChildhoodII.pdf>

Early Childhood Education Careers III (6017)

<http://www.tn.gov/education/cte/clusters/EarlyChildhoodIII.pdf>

Early Childhood Education Careers IV (6135)

<http://www.tn.gov/education/cte/clusters/EarlyChildhoodIV.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

** Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
DIETETICS & NUTRITION PROGRAM OF STUDY
HUMAN SERVICES CAREER CLUSTER**

BEFORE YOU BEGIN

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- 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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Dietetics & Nutrition program of study (POS):

- Introduction to Human Studies (6137)**
- Nutrition Across the Lifespan (6005)**
- Nutrition Science and Diet Therapy (6007)**
- Human Services Practicum (6138)**
- Psychology (3433)**
- Sociology (3432)**
- Work-Based Learning: Career Practicum (6105)***

** Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Dietetics & Nutrition program of study is designed to prepare students for occupations that focus on nutritional well-being, such as dietitian and nutritional counselor. The course content covers the foundations of human needs, nutritional requirements and issues, nutrients and their relation to disease, and disease prevention. Upon completion of this POS, proficient students will be prepared to pursue industry certification at a technology college or more advanced coursework at a two-year or four-year postsecondary institution.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

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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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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*.

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SECTION I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
(Was each component marked "yes"?)

Yes _____ No _____

<p>Were all three non-negotiables in section I met? (Was each component marked "yes"?)</p>	<p>Yes _____ No _____</p>
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

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- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, sections devoted to nutrient metabolism content routinely make reference to and reinforce connections with scientific and chemical processes, as specified in the standards.</p>	<p>2 1 0</p>	
<p>B. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Nutrition Science and Diet Therapy</i> materials routinely make reference to and reinforce connections with the Academy of Nutrition and Dietetics (AND).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

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 1 0	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
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 1 0	
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 1 0	
C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.	2 1 0	
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 1 0	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Dietetics & Nutrition program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN NUTRITION	NOTES
<p>A. Materials include coverage of the anatomy and physiology of nutrition and principles of nutrient metabolism. Materials cultivate understanding of nutrition and health in relation to disease prevention.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between nutrition content and career opportunities in related fields (e.g., dietitian, nutrition counselor).</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Dietetics & Nutrition POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Introduction to Human Studies (6137)

<http://www.tn.gov/education/cte/clusters/IntroHumanStudies.pdf>

Nutrition Across the Lifespan (6005)

<http://www.tn.gov/education/cte/clusters/NutritionAcrossLifespan.pdf>

Nutrition Science and Diet Therapy (6007)

<http://www.tn.gov/education/cte/clusters/NutritionScienceDietTherapy.pdf>

Human Services Practicum (6138)

<http://www.tn.gov/education/cte/clusters/HumanServicesPracticum.pdf>

Psychology (3433)

http://www.tn.gov/education/standards/social_studies/SS_Psychology.pdf

Sociology (3432)

http://www.tennessee.gov/education/standards/social_studies/SS_Sociology.pdf

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

** Indicates courses available for elective credit*

TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT, EDUCATION & TRAINING CAREER CLUSTER

BEFORE YOU BEGIN

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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. It is recommended that evaluators refer to the Publishers' Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers' Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Education & Training Career Cluster:

Fundamentals of Education (6123)
Early Childhood Education Careers II (6016)
School Counseling (6124)
Teaching as a Profession I (6010)
Teaching as a Profession II (6125)
Teaching as a Profession III (6126)
Lifespan Development (6013)*
Work-Based Learning: Career Practicum (6105)*

**Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Education & Training career cluster is designed for students interested in becoming an educator, early childhood teacher, or an educational support staff member, such as a school counselor. In this cluster, course content covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, educational technology, classroom management, lesson planning, professionalism, and more. Upon completion of this POS, proficient students will be prepared to complete more advanced coursework at a two-year or four-year postsecondary institution.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

Were all three non-negotiables in section I met? (Was each component marked "yes"?)	Yes _____ No _____
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, sections devoted to differentiating instruction routinely make reference to and reinforce connections with instructional strategies that meet the educational needs of diverse learners, as specified in the standards.</p>	<p>2 1 0</p>	
<p>B. Connections are made to discipline-specific professional societies and organizations, 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).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Education and Training career cluster is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN STUDENT LEARNING	NOTES
<p>A. Materials include coverage of a diverse array of student learning theories, including how outside of the classroom factors influence learning and behavior.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between educational content and related career opportunities, such as teacher, educational professional, and school counselor.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Education & Training Career Cluster Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Fundamentals of Education (6123)

<http://www.tn.gov/education/cte/clusters/FundamentalsEducation.pdf>

Early Childhood Education Careers II (6016)

<http://www.tn.gov/education/cte/clusters/EarlyChildhoodII.pdf>

School Counseling (6124)

<http://www.tn.gov/education/cte/clusters/SchoolCounseling.pdf>

Teaching as a Profession I (6010)

<http://www.tn.gov/education/cte/clusters/TAPI.pdf>

Teaching as a Profession II (6125)

<http://www.tn.gov/education/cte/clusters/TAPII.pdf>

Teaching as a Profession III (6126)

<http://www.tn.gov/education/cte/clusters/TAPIII.pdf>

Lifespan Development (6013)*

<http://www.tn.gov/education/cte/clusters/LifespanDevelopment.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

**Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
ELECTROMECHANICAL TECHNOLOGY PROGRAM OF STUDY
ADVANCED MANUFACTURING CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Electromechanical Technology program of study (POS):

- Principles of Manufacturing (5922)**
- Introduction to Electromechanical (6091)**
- Advanced Electromechanical Technology (6090)**
- Manufacturing Practicum (5926)**
- Robotics & Automated Systems (6143)***
- Work-Based Learning: Career Practicum (6105)***

**Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Electromechanical Technology program of study is designed for students who wish to pursue careers related to industrial maintenance, such as electromechanical technician, electromechanical equipment assembler, maintenance technician, or test technician. The course content is competency-based and focuses on analytical understanding and troubleshooting. Key topics cover the operation and maintenance of electrical, instrumentation, and mechanical systems found in typical manufacturing facilities. Upon completion of this POS, proficient students will have learned skills and knowledge needed to enter a postsecondary electromechanical associate degree or technical certificate program.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes ____ No ____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

<p>Were all three non-negotiables in section I met? (Was each component marked "yes"?)</p>	<p>Yes _____ No _____</p>
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, <i>Advanced Electromechanical Technology</i> materials routinely make reference to and reinforce connections with the National Electrical Code (NEC).</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, <i>Robotics & Automated Systems</i> materials routinely make reference to and reinforce connections with the Engineering Design Process or the Science and Engineering Practices, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Introduction to Electromechanical</i> materials routinely make reference to and reinforce connections with the Society for Maintenance and Reliability Professionals (SMRP).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Electromechanical Technology program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN RELIABILITY ANALYTICS	NOTES
A. Materials include coverage of advanced techniques for diagnosing and analyzing the performance of industrial equipment to improve reliability in sophisticated machinery.	<i>[Insert reviewer evaluation here.]</i>
B. Materials draw clear connections between reliability analytics and career opportunities in industrial maintenance fields.	<i>[Insert reviewer evaluation here.]</i>

III. FOCUS AREA:	NOTES

Appendix A: Electromechanical Technology POS Standards by Course

Navigate to the following links to access Tennessee CTE State Standards in courses aligned to this instrument.

Principles of Manufacturing (5922)

<http://www.tn.gov/education/cte/phase2/PrinciplesManufacturing.pdf>

Introduction to Electromechanical (6091)

<http://www.tn.gov/education/cte/clusters/IntroElectromechanical.pdf>

Advanced Electromechanical Technology (6090)

<http://www.tn.gov/education/cte/phase2/AdvElectromechanicalTech.pdf>

Manufacturing Practicum (5926)

<http://www.tn.gov/education/cte/phase2/ManufacturingPracticum.pdf>

Robotics & Automated Systems (6143)*

<http://www.tn.gov/education/cte/clusters/RoboticsAutomatedSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

**Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
MACHINING TECHNOLOGY PROGRAM OF STUDY
ADVANCED MANUFACTURING CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Machining Technology program of study (POS):

- Principles of Manufacturing (5922)**
- Principles of Machining I (5929)**
- Principles of Machining II (5923)**
- Manufacturing Practicum (5926)**
- Robotics & Automated Systems (6143)***
- Work-Based Learning: Career Practicum (6105)***

**Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Machining Technology program of study is designed for students interested in careers such as machinist, computer-numerical-control (CNC) machine operator, machine setter, or tool and die maker. This program is structured to offer students an overview of concepts related to the field of manufacturing. Students will learn concepts and practices needed to be successful in a production environment supported by advanced machining and engineering facilities. Upon completion of this POS, proficient students will have gained experience to pursue postsecondary education and certifications related to the metalworking industry.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes ____ No ____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes _____	No _____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes _____	No _____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes _____	No _____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes _____	No _____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes _____ No _____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
(Was each component marked "yes"?)

Yes _____ No _____

<p>Were all three non-negotiables in section I met? (Was each component marked "yes"?)</p>	<p>Yes _____ No _____</p>
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, <i>Principles of Machining II</i> materials routinely make reference to and reinforce connections with standards developed by the National Institute for Metalworking Skills (NIMS).</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, <i>Robotics & Automated Systems</i> materials routinely make reference to and reinforce connections with the Engineering Design Process or the Science and Engineering Practices, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Principles of Machining I</i> materials routinely make reference to and reinforce connections with the National Tooling and Machining Association (NTMA).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Machining Technology program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN PRECISION ENGINEERING	NOTES
A. Materials include coverage of precision engineering within today’s advanced manufacturing environments, exploring technologies and techniques such as 3-D printing, laser etching, and other rapid prototyping.	[Insert reviewer evaluation here.]
B. Materials draw clear connections between precision engineering and careers that make use of related technologies and techniques; for instance, highlighting the role of research and development in various manufacturing fields.	[Insert reviewer evaluation here.]

III. FOCUS AREA:	NOTES

Appendix A: Machining Technology POS Standards by Course

Navigate to the following links to access Tennessee CTE State Standards in courses aligned to this instrument.

Principles of Manufacturing (5922)

<http://www.tn.gov/education/cte/phase2/PrinciplesManufacturing.pdf>

Principles of Machining I (5929)

<http://www.tn.gov/education/cte/phase2/PrinciplesMachining.pdf>

Principles of Machining II (5923)

<http://www.tn.gov/education/cte/clusters/PrinciplesMachiningII.pdf>

Manufacturing Practicum (5926)

<http://www.tn.gov/education/cte/phase2/ManufacturingPracticum.pdf>

Robotics & Automated Systems (6143)*

<http://www.tn.gov/education/cte/clusters/RoboticsAutomatedSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

**Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
MECHATRONICS PROGRAM OF STUDY
ADVANCED MANUFACTURING CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool

(<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Mechatronics program of study (POS):

Principles of Manufacturing (5922)

Digital Electronics (5925)

Mechatronics I (6156)

Mechatronics II (6157)

Manufacturing Practicum (5926)

Robotics & Automated Systems (6143)*

Work-Based Learning: Career Practicum (6105)*

**Indicates courses available for elective credit*

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STATEMENT OF STUDENT PROFICIENCY

The Mechatronics program of study is designed for students interested in becoming a mechatronics technician, electrical technician, mechanical engineering technician, robotics technician, or mechatronics engineer. Course content focuses on the components of manufacturing systems, collection and analysis of quality data, electronics, mechanics, fluid power systems, computers and control systems, and technical documentation and troubleshooting. Upon completion of this POS, proficient students will be prepared to pursue industry certification at a technology college or more advanced coursework at a two-year or four-year postsecondary institution.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes ____ No ____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

Were all three non-negotiables in section I met? (Was each component marked "yes"?)	Yes _____ No _____
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards 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.</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, <i>Robotics & Automated Systems</i> materials routinely make reference to and reinforce connections with the Engineering Design Process or the Science and Engineering Practices, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Digital Electronics</i> materials routinely make reference to and reinforce connections with the Institute of Electrical and Electronics Engineers (IEEE).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Mechatronics program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN ROBOTICS	NOTES
A. Materials include coverage of robotics and their application in today's manufacturing environments, with particular emphasis on evolving technologies in mechatronics.	[Insert reviewer evaluation here.]
B. Materials draw clear connections between robotics content and career opportunities in mechatronics-related fields, such as automobile manufacturing.	[Insert reviewer evaluation here.]

III. FOCUS AREA:	NOTES

Appendix A: Mechatronics POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Principles of Manufacturing (5922)

<http://www.tn.gov/education/cte/phase2/PrinciplesManufacturing.pdf>

Digital Electronics (5925)

<http://www.tn.gov/education/cte/phase2/DigitalElectronics.pdf>

Mechatronics I (6156)

<http://www.tn.gov/education/cte/clusters/MechatronicsI.pdf>

Mechatronics II (6157)

<http://www.tn.gov/education/cte/clusters/MechatronicsII.pdf>

Manufacturing Practicum (5926)

<http://www.tn.gov/education/cte/phase2/ManufacturingPracticum.pdf>

Robotics & Automated Systems (6143)*

<http://www.tn.gov/education/cte/clusters/RoboticsAutomatedSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

** Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
NETWORKING SYSTEMS PROGRAM OF STUDY
INFORMATION TECHNOLOGY CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Networking Systems program of study (POS):

- Information Technology Foundations (6095)**
- Computer Systems (6094)**
- Networking (6097)**
- Cabling & Internetworking (6093)**
- IT Clinical Internship (6096)**
- Introduction to Geographic Information Systems (6142)***
- Work-Based Learning: Career Practicum (6105)***

** Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Networking Systems program of study is designed for students interested in careers such as network administrator, network technician, computer systems analyst, information systems operator, or PC support specialist. The course content is competency-based, introducing students to fundamental information technology concepts, then progressing to cover key topics such as industry standards and specifications; troubleshooting, replacing, and upgrading computers; designing, managing, and diagnosing network hardware and software; cabling system design; and cabling installations. Upon completion of the POS, proficient students will have an opportunity to gain work-based learning training through the IT Clinical capstone course, and be prepared for postsecondary study in computer networking technology, computer engineering technology, or computer information technology.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes _____	No _____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes _____	No _____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes _____	No _____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes _____	No _____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes _____ No _____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
(Was each component marked "yes"?)

Yes _____ No _____

<p>Were all three non-negotiables in section I met? (Was each component marked "yes"?)</p>	<p>Yes _____ No _____</p>
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, <i>Information Technology Foundations</i> materials routinely make reference to and reinforce connections with national industry certification standards published by the Computing Technology Industry Association (CompTIA).</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, materials routinely make reference to and reinforce connections with quality assurance and testing processes common among website developers, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, course materials routinely make reference to and reinforce connections with the Association for Computing Machinery (ACM).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Networking Systems program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN CYBERSECURITY	NOTES
<p>A. Materials include coverage of emerging trends and threats in cybersecurity, including new methods for protecting networks from hacking and cyber terrorism.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between cybersecurity knowledge and skills and the career opportunities available to students who master them.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Networking Systems POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Information Technology Foundations (6095)

<http://www.tn.gov/education/cte/phase2/ITFoundations.pdf>

Computer Systems (6094)

<http://www.tn.gov/education/cte/phase2/ComputerSys.pdf>

Networking (6097)

<http://www.tn.gov/education/cte/phase2/Networking.pdf>

Cabling & Internetworking (6093)

<http://www.tn.gov/education/cte/clusters/CablingInternetworking.pdf>

IT Clinical Internship (6096)

<http://www.tn.gov/education/cte/phase2/ITClinicalInternship.pdf>

Introduction to Geographic Information Systems (GIS) (6142)*

<http://www.tn.gov/education/cte/clusters/GeographicInformationSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

** Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
PROGRAMMING & SOFTWARE DEVELOPMENT PROGRAM OF STUDY
INFORMATION TECHNOLOGY CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Programming & Software Development program of study (POS):

- Information Technology Foundations (6095)**
- Programming & Logic I (6098)**
- Programming & Logic II (6099)**
- Programming & Software Development Practicum (5908)**
- AP Computer Science (3635)**
- Introduction to Geographic Information Systems (6142)***
- Work-Based Learning: Career Practicum (6105)***

** Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Programming and Software Development program of study is intended for students who wish to pursue careers such as computer programmer, programmer analyst, software engineer, software developer, or video game designer. Course content introduces students to fundamental information technology concepts, then progresses to topics such as object-oriented programming, software development life-cycle, software testing, quality assurance, ethics, and project management. Upon completion of this POS, proficient students will have gained valuable training in a practicum or AP capstone course, and will be prepared for postsecondary study in computer science or management information systems.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes _____	No _____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes _____	No _____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes _____	No _____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes _____	No _____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes _____ No _____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

Were all three non-negotiables in section I met? (Was each component marked "yes"?)	Yes _____ No _____
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, <i>Information Technology Foundations</i> materials routinely make reference to and reinforce connections with national industry certification standards published by the Computing Technology Industry Association (CompTIA).</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, materials routinely make reference to and reinforce connections with quality assurance and testing processes common among computer programmers, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Programming & Logic I</i> and <i>II</i> materials routinely make reference to and reinforce connections with the Association for Computing Machinery (ACM).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Programming & Software Development program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN PYTHON (or other programming language)	NOTES
<p>A. Materials are specifically designed for students and teachers working with the Python programming language. While references to other languages are made, this textbook is targeted for the intermediate Python user and is most appropriate for an upper-level Programming & Software Development course.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between Python skills/competencies and career opportunities that require proficiency in the Python programming language.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Programming & Software Development POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Information Technology Foundations (6095)

<http://www.tn.gov/education/cte/phase2/ITFoundations.pdf>

Programming & Logic I (6098)

<http://www.tn.gov/education/cte/clusters/ProgrammingLogicI.pdf>

Programming & Logic II (6099)

<http://www.tn.gov/education/cte/clusters/ProgrammingLogicII.pdf>

Programming & Software Development Practicum (5908)

<http://www.tn.gov/education/cte/phase2/ProgrammingSoftwareDev.pdf>

AP Computer Science (3635)

<https://apstudent.collegeboard.org/apcourse/ap-computer-science-a>

Introduction to Geographic Information Systems (GIS) (6142)*

<http://www.tn.gov/education/cte/clusters/GeographicInformationSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

** Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
SECTION A MIDDLE SCHOOL COURSES IN ADVANCED MANUFACTURING,
EDUCATION & TRAINING, HUMAN SERVICES, AND INFORMATION TECHNOLOGY**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool

(<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Introduction to Social Health (0562)

STEM Explorers (0649)

STEM Innovators (0749)

STEM Designers (0849)

Career Exploration (TBD)

STATEMENT OF STUDENT PROFICIENCY

Upon completion of middle school coursework in CTE subjects, students are proficient in the foundational knowledge for success in high school CTE courses.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes ____ No ____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

Were all three non-negotiables in section I met? (Was each component marked "yes"?)	Yes _____ No _____
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, materials routinely make reference to and reinforce connections with psychology theories (<i>Introduction to Social Health</i>) or scientific processes (<i>STEM Designers</i>), as specified in the standards.</p>	<p>2 1 0</p>	
<p>B. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, middle school STEM materials routinely make reference to and reinforce connections with the National Science Teachers Association (NSTA).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 *STEM Designer* course is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN GEOGRAPHIC INFORMATION SYSTEMS	NOTES
<p>A. Materials include coverage of the role of geographic information systems (GIS) in today's STEM fields and professions, including materials that introduce students to the importance of geospatial reasoning in more advanced STEM coursework.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between GIS content and career opportunities in STEM-related fields, such as aerospace engineering.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Section A CTE Middle School Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Introduction to Social Health (0562)

<http://www.tn.gov/education/cte/clusters/IntroSocialHealth.pdf>

STEM Explorers (0649)

<http://www.tn.gov/education/cte/clusters/STEMExplorers.pdf>

STEM Innovators (0749)

<http://www.tn.gov/education/cte/clusters/STEMInnovators.pdf>

STEM Designers (0849)

<http://www.tn.gov/education/cte/clusters/STEMDesigners.pdf>

Career Exploration (TBD)

<http://www.tn.gov/education/cte/pos/CareerExploration.pdf>

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
SOCIAL HEALTH SERVICES PROGRAM OF STUDY
HUMAN SERVICES CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Social Health Services program of study (POS):

- Introduction to Human Studies (6137)**
- Lifespan Development (6013)**
- Family Studies (6136)**
- Human Services Practicum (6138)**
- Psychology (3433)**
- Sociology (3432)**
- Work-Based Learning: Career Practicum (6105)***

** Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Social Health Services program of study focuses on the skills and knowledge needed for occupations that support the everyday functioning of society, such as social services workers, counselors, and family mediators. In this program of study, students investigate human needs and their impact on lifespan development, an overview of the human and social services fields, communication skills, and the historical and social changes of the modern family. Upon completion of this POS, proficient students will be prepared to pursue industry certification at a technology college or more advanced coursework at a two-year or four-year postsecondary institution.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

Were all three non-negotiables in section I met? (Was each component marked "yes"?)	Yes _____ No _____
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, sections devoted to human development content routinely make reference to and reinforce connections with psychology theories and scientific processes, as specified in the standards.</p>	<p>2 1 0</p>	
<p>B. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Human Services Practicum</i> materials routinely make reference to and reinforce connections with the National Association of Social Workers (NASW).</p>	<p>2 1 0</p>	

Section II(2). SEQUENCE AND PROGRESSION OF STANDARDS	SCORE	JUSTIFICATION/NOTES
<p>A. Connections are made within a course between knowledge and skills, where these connections are appropriate and natural, as set forth by the standards.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Section II(3). TEACHER SUPPORTS	SCORE	JUSTIFICATION/NOTES
<p>A. Materials support teachers in ways such as the following: planning (including ideas for pacing), sample lessons, laboratory applications, projects, vocabulary, and instructional strategies.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Social Health Services program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN HUMAN DEVELOPMENT	NOTES
<p>A. Materials include coverage of human development and interpersonal relationships, and apply theories toward the understanding of historical and social changes in the modern family.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between human development content and related career opportunities, such as social services worker, counselor, and family mediator.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Social Health Services POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Introduction to Human Studies (6137)

<http://www.tn.gov/education/cte/clusters/IntroHumanStudies.pdf>

Lifespan Development (6013)

<http://www.tn.gov/education/cte/clusters/LifespanDevelopment.pdf>

Family Studies (6136)

<http://www.tn.gov/education/cte/clusters/FamilyStudies.pdf>

Human Services Practicum (6138)

<http://www.tn.gov/education/cte/clusters/HumanServicesPracticum.pdf>

Psychology (3433)

http://www.tn.gov/education/standards/social_studies/SS_Psychology.pdf

Sociology (3432)

http://www.tennessee.gov/education/standards/social_studies/SS_Sociology.pdf

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

** Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
WEB DESIGN PROGRAM OF STUDY
INFORMATION TECHNOLOGY CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Web Design program of study (POS):

- Information Technology Foundations (6095)**
- Web Design Foundations (6100)**
- Web Site Development (6101)**
- Web Design Practicum (6171)**
- Introduction to Geographic Information Systems (6142)***
- Work-Based Learning: Career Practicum (6105)***

**Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Web Design program of study is for students who wish to pursue careers such as web designer, web developer, social networking specialist, search engine optimization specialist, or search engine marketing specialist. Course content covers key topics including pixelated and vector-based web design, web graphics, web animation, web hosting, and eCommerce. Upon completion of this POS, proficient students will be prepared to pursue a two- or four-year degree or certificate from a postsecondary institution, as well as industry recognized certifications.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes ____</p>	<p>No ____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes ____ No ____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes ____	No ____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes ____	No ____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes ____	No ____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes ____	No ____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes ____ No ____</p>
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Justification/Notes

Were all three non-negotiables in section I met?
 (Was each component marked "yes"?)

Yes _____ No _____

Were all three non-negotiables in section I met? (Was each component marked "yes"?)	Yes _____ No _____
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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, <i>Information Technology Foundations</i> materials routinely make reference to and reinforce connections with national industry certification standards published by the Computing Technology Industry Association (CompTIA).</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, materials routinely make reference to and reinforce connections with quality assurance and testing processes common among website developers, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, course materials routinely make reference to and reinforce connections with the Association for Computing Machinery (ACM).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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 1 0	

<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	

Please note any concerns with sensitivity below:

Section II(5). ASSESSMENTS	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Web Design program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN RESPONSIVE DESIGN	NOTES
<p>A. Materials showcase methods for increasing compatibility on multiple user platforms, including mobile devices. Materials cover responsive design principles using advanced CSS techniques.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>
<p>B. Materials draw clear connections between programming skills required to code for responsive design and the career opportunities available to students who master them.</p>	<p><i>[Insert reviewer evaluation here.]</i></p>

III. FOCUS AREA:	NOTES

Appendix A: Web Design POS Standards by Course

Navigate to the following links to access Tennessee State Standards in courses aligned to this instrument.

Information Technology Foundations (6095)

<http://www.tn.gov/education/cte/phase2/ITFoundations.pdf>

Web Design Foundations (6100)

<http://www.tn.gov/education/cte/phase2/WebDesignFoundations.pdf>

Web Site Development (6101)

<http://www.tn.gov/education/cte/phase2/WebSiteDev.pdf>

Web Design Practicum (6171)

<http://www.tn.gov/education/cte/phase2/WebDesignPracticum.pdf>

Introduction to Geographic Information Systems (GIS) (6142)*

<http://www.tn.gov/education/cte/clusters/GeographicInformationSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

**Indicates courses available for elective credit*

**TENNESSEE CAREER AND TECHNICAL EDUCATION TEXTBOOK SCREENING INSTRUMENT,
WELDING PROGRAM OF STUDY
ADVANCED MANUFACTURING CAREER CLUSTER**

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. It is recommended that evaluators refer to the Publishers’ Criteria while using this tool (<http://achievethecore.org/page/686/publishers-criteria>), in particular **pages 14-19** of the Publishers’ Criteria for English Language Arts and Literacy, grades 3-12.

Aligned courses in the Welding program of study (POS):

- Principles of Manufacturing (5922)**
- Welding I (6078)**
- Welding II (6033)**
- Manufacturing Practicum (5926)**
- Robotics & Automated Systems (6143)***
- Work-Based Learning: Career Practicum (6105)***

**Indicates courses available for elective credit*

STATEMENT OF STUDENT PROFICIENCY

The Welding program of study is designed to prepare and certify students as entry-level welders. Basic arc welding and thermal cutting skills are developed throughout the program of study, which position students to complete a series of industry certification tests. Advanced coursework includes coverage of gas metal arc welding (GMAW), flux cored arc welding (FCAW), gas tungsten arc welding (GTAW), and quality control methods. Upon completion of the third-level *Welding II* course, including successful passage of the industry certification tests, proficient students will be certified as an Entry Level Welder as defined by American Welding Society QC10.

Note to reviewers: *All materials reviewed as part of this application must align to the statement of student proficiency provided above.*

ORGANIZATION OF THIS DOCUMENT

SECTION I: NON-NEGOTIABLE ALIGNMENT CRITERIA

All submissions must meet all of the non-negotiable criteria for each course before passing on to Section II.

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.

REVIEW

Evaluator: _____ Book: _____ Level(s)/Course(s): _____

Publisher: _____ Year: _____

SECTION I(1): FOCUS: Students and teachers using the materials as designed devote the majority of time in each level to the course standards.*		
METRICS:		
A. In any single course level, materials are designed where there is 80%** alignment to the course standards (see Appendix A, p. 12).	Yes ____	No ____
B. All materials are appropriate for the designated course level, both in terms of content and in terms of language. For materials spanning multiple course levels and/or grade bands, content is presented at the appropriate grain size (i.e., level of detail) commensurate to expectations in the standard.	Yes ____	No ____
C. Materials focus equally on the <i>conceptual knowledge</i> as well as the <i>technical skill</i> outlined in the standards.	Yes ____	No ____
D. Topics do not deviate from the content outlined in the course standards. Topics may go “above and beyond” stated learning expectations, but not in a manner that distracts from the focus on specific knowledge and skills as determined by the standards.	Yes ____	No ____
To be aligned to the Tennessee Standards, materials for each level must attend to all four indicators of Focus. All four indicators must be marked Yes.	Meet? Yes ____ No ____	
Justification/Notes		

*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 I(2):

RIGOR:

Each level’s instructional materials reflect high expectations for all students. They follow faithfully the level of rigor intended in the standards and support student learning through high-quality presentation of content and challenging application.

METRICS:

<p>A. Materials effectively meet the level of rigor intended in the standards.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>B. High-quality problems and questions designed to invite exploration and support conceptual understanding are included throughout. A variety of problems, both conceptual and technical, enable students to connect course content and transfer understandings to new situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>C. All materials reinforce literacy and mathematics instruction in career and technical education environments. Texts are of an appropriately challenging Lexile level; mathematics problems push students to apply quantitative reasoning to specific technical situations.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>D. Materials support the development of fluency, including regular opportunities to practice knowledge and skills, appropriately apply tools, and use technology.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>E. Domain-specific vocabulary and industry terminology are frequently used to explain topics, or to make connections to key workplace activities.</p>	<p>Yes _____</p>	<p>No _____</p>
<p>To be aligned to the standards, all five indicators of Rigor must be marked Yes.</p>	<p style="text-align: center;">Meet? Yes _____ No _____</p>	

Justification/Notes

SECTION I(3):
POSTSECONDARY AND CAREER READINESS:
 Materials promote multiple pathways to student success beyond high school, highlighting a range of career opportunities aligned with entry and exit points to and from appropriate postsecondary programs. Aligned pathways are presented in a fair and balanced fashion that underscores the need for advanced training beyond high school, but does not privilege one set of credentials over another and is consistent with occupational requirements.

METRICS:

A. Technical skills are promoted within the context of applicable industries and work environments. They are <i>not</i> presented in isolation or without meaningful connections to aligned careers.	Yes _____	No _____
B. Materials showcase a diversity of career and postsecondary opportunities for students upon completion of high school, including all applicable levels of postsecondary training (i.e., technical schools, community colleges, four-year universities, etc.).	Yes _____	No _____
C. Connections to relevant certifications and other credentials are clearly explained, and their value in industry is communicated where appropriate.	Yes _____	No _____
D. Materials provide opportunities for students to practice and reflect upon 21st century (or “soft”) skills.	Yes _____	No _____

To be aligned to the standards, all four indicators of Postsecondary and Career Readiness must be marked Yes.	<p style="text-align: center;">Meet?</p> <p style="text-align: center;">Yes _____ No _____</p>
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Justification/Notes

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Were all three non-negotiables in section I met?
(Was each component marked "yes"?)

Yes _____ No _____

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SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY

Materials must meet all non-negotiable criteria in Section I to be aligned to the course standards and receive state approval.

Section II includes additional criteria for alignment to the course standards as well as indicators of quality. Instructional materials evaluated against the criteria in Section II will be rated on the following scale:

- **2** – (meets criteria): A score of 2 means that the materials meet the full intention of the criterion in all grades.
- **1** – (partially meets criteria): A score of 1 means that the materials meet the full intention of the criterion for some grades or meets the criterion in many aspects but not the full intent of the criterion.
- **0** – (does not meet criteria): A score of 0 means that the materials do not meet many aspects of the criterion.

Section II(1). ADDITIONAL ALIGNMENT CRITERIA	SCORE	JUSTIFICATION/NOTES
<p>A. Materials are aligned to relevant national and/or industry standards where appropriate. For example, <i>Welding II</i> materials routinely make reference to and reinforce connections with American Welding Society (AWS) quality standards.</p>	<p>2 1 0</p>	
<p>B. Materials are aligned to discipline-specific content or pedagogical frameworks frequently used by professionals in associated industries. For example, <i>Robotics & Automated Systems</i> materials routinely make reference to and reinforce connections with the Engineering Design Process or the Science and Engineering Practices, as specified in the standards.</p>	<p>2 1 0</p>	
<p>C. Connections are made to discipline-specific professional societies and organizations, and their value is clearly communicated in the materials. For example, <i>Welding I</i> materials routinely make reference to and reinforce connections with the American Welding Society (AWS).</p>	<p>2 1 0</p>	

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 1 0	
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 1 0	
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 1 0	

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 1 0	
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<p>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.</p>	<p>2 1 0</p>	
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Section II(4). USABILITY	SCORE	JUSTIFICATION/NOTES
<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include supports for all learners, e.g., ELs, students who are below grade level, advanced students.</p>	<p>2 1 0</p>	
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Please note any concerns with sensitivity below:

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<p>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.</p>	<p>2 1 0</p>	
<p>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.</p>	<p>2 1 0</p>	
<p>C. Materials include assessment accommodations for diverse learners, including sample items that capture multiple measures of student proficiency.</p>	<p>2 1 0</p>	

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 Welding program of study is provided in the following. If applicable, fill in the blank table with observations and notes.

III. EXAMPLE: FOCUS IN ADVANCED INDUSTRIES	NOTES
A. Materials include coverage of welding’s role in advanced industries, such as aerospace engineering and solar energy development.	[Insert reviewer evaluation here.]
B. Selected texts and illustrations are devoted to exotic metals and other advanced materials used in related industries; for instance, devoting coverage to honeycomb and similar high-performance alloys.	[Insert reviewer evaluation here.]

III. FOCUS AREA:	NOTES

Appendix A: Welding POS Standards by Course

Navigate to the following links to access Tennessee CTE State Standards in courses aligned to this instrument.

Principles of Manufacturing (5922)

<http://www.tn.gov/education/cte/phase2/PrinciplesManufacturing.pdf>

Welding I (6078)

<http://www.tn.gov/education/cte/phase2/WeldingI.pdf>

Welding II (6033)

<http://www.tn.gov/education/cte/phase2/WeldingII.pdf>

Manufacturing Practicum (5926)

<http://www.tn.gov/education/cte/phase2/ManufacturingPracticum.pdf>

Robotics & Automated Systems (6143)*

<http://www.tn.gov/education/cte/clusters/RoboticsAutomatedSystems.pdf>

Work-Based Learning: Career Practicum (6105)*

<http://www.tn.gov/education/cte/phase2/Work-BasedLearning.pdf>

**Indicates courses available for elective credit*