Review Team Appraisal of Title

Grades 7-12 Career and Technical Education

This appraisal form is provided for use by educators responsible for the selection of instructional materials for implementation with districts and charter schools across New Mexico to meet the need of their student populations.

NMPED Adoption Information

Text Title	Introduction to Computers and Information Technology, 4th Edition -- Student Edition with six (6) MyLab student access code cards	Publisher	Savvas Learning Company LLC
SE ISBN	9780137607105	TE ISBN	9780137622665
SW ISBN		Grade Level/Content	6-8 CTE

Core Instructional Material Designation *(Core instructional material (CIM) is the comprehensive print and/or digital educational material, including basal material, which constitutes the necessary instructional components of a full academic course of study in those subjects for which the department has adopted content standards and benchmarks.)*

Recommended (90% and above)	☐	Recommended with Reservations (80-89%)	☐	**Not Recommended and Not Adopted** (below 80%)	☑

Total Score - *The final score for the materials is averaged between the team of reviewers.*	Average Score
	76%

Cultural and Linguistic Relevance Recognition - *Materials are reviewed for relevant criteria pertaining to the support for teachers and students in the material regarding cultural relevance and the inclusion of a culturally responsive lens. Those materials receiving a score of 85% or above on the CLR portion of the review are recognized as culturally and linguistically relevant.*

CLR Recognized	☐	Average Score
		83%

FOCUS AREA 3 CULTURAL AND LINGUISTIC PERSPECTIVES AND RESPONSIVENESS:
Instructional materials represent a variety of cultural and linguistic perspectives and highlight diversity in culture and language through multiple perspectives.
Statements of appraisal and supporting evidence:

The material includes activities that involve partner work, allowing students to engage and collaborate with their peers. Online materials provide teachers with the necessary resources to effectively incorporate diversity in culture and language into the content, ensuring that it is appropriately related and inclusive. Each lesson has "Connections" and "Career Corner" sections for students to explore. The "Connections" section provides examples of how the current lesson relates to other topics, such as the arts. The "Career Corner" demonstrates how the material being taught applies to various industries. The projects within the material include reflections that encourage students to consider and connect the content to their personal lives, fostering a deeper understanding and relevance. The material mentions the Navajo Nation regarding WAN, providing context and highlighting a real-world example. Tools and resources are found in the content area of the material, which is culturally and linguistically diverse.

CTE Standards Review - *Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.*		
	Average Score	
	60%	

OVERALL ALIGNMENT
Materials align with the CTE standards overall, including strands 1-10: Academic Foundations; Communications; Problem Solving and Critical Thinking; Information Technology Applications; Systems; Safety, Health, and Environmental Management; Leadership and Teamwork; Ethics and Legal Responsibilities; Employability and Career Development; and Technical Skills.
Statements of appraisal and supporting evidence:
The content standards are mentioned but lack application in the material. For example, every standard begins with the "students will" and then contains a verb such as complete, demonstrate, select, employ, locate, use, organize, reference, evaluate, develop, deliver, interpret, listen, and speak. The material does not permit students to see career connections in a real-world setting.

STRAND ALIGNMENT	
Materials align with specific CTE content strands. *(Optional)*	
Strand:	*Statements of appraisal and supporting evidence:*
Choose CTE Content Strand (optional)	
Choose CTE Content Strand (optional)	
Choose CTE Content Strand (optional)	
Choose CTE Content Strand (optional)	

Computer Science Standards Review - *Materials are reviewed for alignment with the state adopted Common Career Technical Core Career Cluster and Career Pathway standards.*

Average Score
61%

OVERALL ALIGNMENT
Materials align with the computer science standards overall.
Statements of appraisal and supporting evidence:

The text provides students multiple opportunities to practice Computer Science skills through IC3 prep questions and projects. Although mathematics is not explicitly taught, there are concepts from mathematics, such as Boolean Algebra, throughout the text. The text provides multiple examples of technology and definitions. However, there is no demonstration of knowledge from the students within or shortly after these examples.

COMPUTING SYSTEMS
Materials align to the computing systems standards for computer science.
Statements of appraisal and supporting evidence:

The text gives multiple examples of technology used in computing systems. However, students have minimal opportunities to practice implementing and utilizing these technologies. Students are primarily presented with information, but there are no associated reflection or application questions. The material does not require students to recommend device improvements, although it discusses potential enhancements. The text discusses possible solutions to a printer problem without further specifications.

NETWORKS AND THE INTERNET
Materials align to the networks and internet standards for computer science.
Statements of appraisal and supporting evidence:

Students are provided with information about networking and internet usage. There are multiple projects for students to practice internet usage; however, the majority of the networking segments in the text are informational only and do not provide opportunities for students to engage or practice networking. The text requires students to research and evaluate wireless standards, protocols, and procedures for configuring a wireless device to a network. It also encourages them to set up and configure a network using standard protocols and share their experience with a partner or the class. However, students can only explain how physical and digital measures protect electronic information, despite the text providing examples of actions, particularly in e-commerce.

DATA AND ANALYSIS
Materials align to the data and analysis standards for computer science.
Statements of appraisal and supporting evidence:

The text provides multiple examples of data analysis. However, student opportunities to interact with, create, and analyze data are limited in scope and depth. The text includes discussions on ASCII and Unicode, but students are not required to represent the data in other schemes. It also discusses the standard without necessitating the collection of data.

ALGORITHMS AND PROGRAMMING
Materials align to the algorithms and programming standards for computer science.
*Statements of appraisal and supporting evidence***:**

The text provides information about algorithms and programming. Students are provided some opportunities to practice these skills and explore their implementation. The material permits students to learn about algorithms and programming when it comes to producing material that shows learning. Some parts of the material require students to design a flowchart based on the standard, illustrating a linear sequence of daily actions and incorporating key programming components such as sequence, decision, and loop. They are also instructed to create an IF statement demonstrating iterative instructions within the flowchart. In other parts of the text, the student is prompted to describe iterative programming structures like for, while, and do-while without necessitating design or development. Other portions of the text discuss methods to organize code for improved reusability, but no creation is required. The suggestion is given to students to seek feedback from teachers, peers, employers, and family members to enhance their digital competency. Some prompts in the text do not mandate incorporating code, media, or libraries but discuss the fair use doctrine. Many activities do not require the student to produce something to show their knowledge of the material as the standard requires.

IMPACTS OF COMPUTING
Materials align to the impacts of computing standards for computer science.
Statements of appraisal and supporting evidence:

The activities allow students to investigate criteria and debate the advantages and disadvantages of the web as a resource. It encourages students to conduct online or library research to gather information, evaluate its accuracy and relevance, and take notes from reliable sources. Other activities acknowledge that the web has been praised for its wealth of knowledge and criticized for potential dangers and temptations. However, the discussion does not include possible career options. Other items provide examples of accessibility issues but do not permit student collaboration.

CTE Content Review - *Materials are reviewed against relevant criteria pertaining to the support for teachers and students in the specific content area reviewed.*	
	Average Score
	97%

FOCUS AREA 1 SEQUENCING AND ARTICULATION
Instructional materials show sequencing and articulation within and across grade bands and/or pathways.
Statements of appraisal and supporting evidence:

The text has a proper sequence and alignment and is non-duplicative. IC3 certification information and preparation are found throughout the material. As the material progresses, students must possess and use previously learned knowledge with the new knowledge obtained through it. The student is instructed to upload and download content from a Cloud Storage provider in one material section. Then, the student is prompted to drag and drop files to upload to a website. The material allows students to explore how continuing education expands options in the technology industry as part of lifelong learning.

FOCUS AREA 2 ENGAGING INSTRUCTION
Instructional materials are engaging for students.
Statements of appraisal and supporting evidence:

The material offers opportunities for students to engage in project-based learning by completing projects like a website project with a partner or group. Students are regularly tasked with planning, designing, developing, and publishing different types of work. Students are encouraged to explore available templates, employ storyboarding techniques for planning and navigation, and select appropriate tools such as HTML editors. They are also expected to apply principles of design and color theory to ensure consistency, appeal, and readability of website pages. The material permits students to investigate their interests, values, and abilities and establish connections between them and potential career pathways.

FOCUS AREA 3 CAREER DEVELOPMENT
Instructional materials provide career development information for students.
Statements of appraisal and supporting evidence:

The instructional materials provide opportunities and information on obtaining certifications, learning about cross-disciplinary collaboration, and including relevant technology and equipment. The material prompts the student numerous times to practice IC3 skills for certification. Students are allowed to use open-access software such as GIMP for photo editing. The material includes "Career Corner" entries that can empower the learner to make connections about cross-disciplinary collaboration. The material provides opportunities for students to incorporate their skills in image editing programs using PC, Mac or any app on their phone.

FOCUS AREA 4 TECHNOLOGY
Instructional materials incorporate opportunities to use industry appropriate technology.
*Statements of appraisal and supporting evidence***:**

The material provides opportunities that allow students to learn about ways technology can enhance productivity and advance knowledge about future trends in the industry. The material covers the importance of shared files. The student is allowed to learn about upcoming trends in data storage and explore future trends in the technology industry. Throughout the text, students are encouraged to utilize new skills through project-based learning included in the "Extend Your Knowledge" segments.

All Content Review - *Materials are reviewed against relevant criteria pertaining to the support for teachers and students in the material regarding the progression of the standards, pacing, assessment, individual learners, and cultural and linguistic relevance and responsiveness.*		

CLR Recognition Average Score		Average Score
83%		85%

FOCUS AREA 1 RESOURCES AND SUPPORTS FOR TEACHERS AND STUDENTS:
Instructional materials provide teacher resources to support planning and supports for all students.
Statements of appraisal and supporting evidence:

The material does not provide a list of lessons; however, the contents allow the teacher to know what lessons are available in the material by using the contents page. The material lacks a list of standards the text addresses and an estimated instructional time needed for the lessons. Throughout the material, digital activities and interactions are incorporated. These activities are typically located at the end of each chapter under the header "Extend your Knowledge." The material also offers preparation for IC3, suggesting activities for students. A digital resource called TestGen Application and User Guide is provided to facilitate digital assessment. The teacher's edition offers teaching tips and IC3 pointers, which can be shared with students. Both the teacher and student editions include vocabulary relevant to the industry and the text, allowing learners to familiarize themselves with commonly used terminology. Regarding support for English Learners, only one instance of such support is found in the Teacher's Edition—not much other support in the Teacher's Edition is observed. Online materials are available to aid teachers in supporting English Learners, Culturally and Linguistically Diverse students, and students of varying abilities; however, there is not a version of the text that is translated into other languages.

FOCUS AREA 2 ASSESSMENT
Instructional materials offer teachers a variety of assessment resources and tools to collect ongoing data about student progress related to the standards.
Statements of appraisal and supporting evidence:

The material incorporates CTE Foundation Skills: Preparing for Career Success strands into its assessments. Specifically, assessments related to Strand 9: Employability and Career Development are included in every chapter, allowing students to practice and demonstrate their skills. Each lesson concludes with a summative assessment, comprehensively evaluating student understanding and progress. However, the material does not include formative assessments within the lesson subsections. Regarding support for English Learners and other special populations, the Teacher's Edition offers limited assistance. However, the SE displays linguistic supports for ELs and students with IEPs. Online materials are available to aid teachers in providing support to English Learners and Culturally and Linguistically Diverse students.

FOCUS AREA 3 CULTURAL AND LINGUISTIC PERSPECTIVES AND RESPONSIVENESS
Instructional materials represent a variety of cultural and linguistic perspectives and highlight diversity in culture and language through multiple perspectives.
Statements of appraisal and supporting evidence:

The material includes activities that involve partner work, allowing students to engage and collaborate with their peers. Online materials provide teachers with the necessary resources to effectively incorporate diversity in culture and language into the content, ensuring that it is appropriately related and inclusive. Each lesson has "Connections" and "Career Corner" sections for students to explore. The "Connections" section provides examples of how the current lesson relates to other topics, such as the arts. The "Career Corner" demonstrates how the material being taught applies to various industries. The projects within the material include reflections that encourage students to consider and connect the content to their personal lives, fostering a deeper understanding and relevance. The material mentions the Navajo Nation regarding WAN, providing context and highlighting a real-world example. Tools and resources are found in the content area of the material, which is culturally and linguistically diverse.

Reviewers' Professional Summary - *These materials are reviewed by Level II and Level III educators from across New Mexico. The reviewers have brought their knowledge, experience and expertise into the review of these materials. They offer here their individual summary of the material as a whole.*

Reviewer #:	61

Background and experience:

The reviewer has been a science teacher for 12 years and holds teaching certifications in Texas and New Mexico. The reviewer holds a Level-IIIA license in New Mexico. As a teacher, the reviewer has assisted in two material adoptions, one in Texas and the other in New Mexico. The reviewer has worked as a Laboratory Analyst at Marshfield Food Safety, conducting RT-PCR sample testing. The reviewer has also held numerous positions as a Lab Assistant and Research Fellow, with research in the fields of cancer biology and chemistry. The reviewer is currently working on a doctorate in Educational Leadership and holds an M.Ed. in Curriculum and Instruction and a B.S. in Molecular Biology.

Professional summary of material:

Introduction to Computers & Information Technology: Preparing for IC3 Certification, 4th Edition, provides students many learning opportunities. The user of the text can learn about many careers in the technology sector and can practice many relevant skills needed to pursue a job there. The student is given various opportunities to prepare for the IC3 exam. However, despite these many opportunities, the material needs more engagement.

Reviewer #:	62

Background and experience:

The reviewer graduated from New Mexico Institute of Mining and Technology with a Bachelor's of Science in Technical Communication and a Bachelor's of Science in Psychology. The reviewer has an Alternative Teaching Licensure from Eastern New Mexico University and a Master's of Science Teaching from New Mexico Institute of Mining and Technology. The reviewer completed a Master's of Science in Educational Leadership through Western Governors University. The reviewer has 14 years of experience as a classroom teacher in the fields of Mathematics, Science, and STEM. Over the course of these 14 years, the reviewer has worked collaboratively with colleagues to vertically and horizontally align curriculum, make decisions and suggestions for improvement of current curriculum materials, and review texts for possible adoption at both the building and district level.

Professional summary of material:

Savvas' Introduction to Computers and Information Technology provides key definitions and information for a wide array of technical topics and career options. However, there are limited opportunities for students to actively interact with the content. Many of the tasks presented for student consideration at the end of each unit ask students to recite information instead of synthesizing and applying. There are multiple opportunities for the text to connect students to highlighted careers or have students actively participate in learning opportunities, but the text often falls short and provides only limited information instead.

Reviewer #:	63

Background and experience:

The reviewer has a Bachelor's degree in Secondary Education in Mathematics and a Master's degree in Education with a focus on Mathematics. The reviewer has taught STEM courses for 10 years in the Philippines and an additional 4 years in New Mexico. The reviewer has Level III-A teaching licenses in both the Philippines and New Mexico. The reviewer serves as a coordinator of an After-Hour Academic Program addressing skill gaps in core subjects and providing intervention and remediation opportunities.

Professional summary of material:

Savvas's Introduction to Computers and Information Technology provides a range of terminologies, critical concepts of technology, and career options in the industry. There are no hands-on applications of theories and localized career connections. The students are provided assessments that enable them to prepare for the IC3 certification. The material lacks activities wherein students can apply their knowledge and skills acquired. Lastly, the material lacks examples of career opportunities in New Mexico so that students can see the connections locally.