2023 Instructional Material Summer Review Institute

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	iCEV Principles of Technology (Individual Course); Core Online Bundle; 1 year license-25 students, 1 teacher	Publisher	CEV Multimedia, LLC
SE ISBN		TE ISBN	9798888640401
SW ISBN		Grade Level/Content	10-12 CTE

Core Instructional Ma including basal mater which the department	terial Design ial, which con has adopted	ation (Core instructional material (Cli stitutes the necessary instructional co content standards and benchmarks.)	M) is the compl omponents of a	rehensive print and/o full academic cours	or digital educatior e of study in those	nal material, subjects for
Recommended (90% and above)		Recommended with Reservations (80-89%)		Not Recomm Not Ado (below	ended and opted 80%)	
		<u>Total Score</u> - The	final score for t	he materials is	Average	Score
	averaged between the team of reviewers.			eviewers.	90%	
<u>Cultural and Linguisti</u> students in the materi 85% or above on the C	<mark>c Relevance F</mark> al regarding CLR portion of	Recognition - Materials are reviewed <u>cultural relevance</u> and the inclusion of the review are recognized as cultura	for relevant crit f a culturally re lly and linguisti	teria pertaining to th sponsive lens. Those ically relevant.	e support for teacl e materials receivir	ners and ng a score of
CLR Recognized					Average S	Score
					42%	5
FOCUS AREA 3 CULTU Instructional material multiple perspectives Statements of apprais	RAL AND LIN s represent a al and suppo	GUISTIC PERSPECTIVES AND RESPON variety of cultural and linguistic per	ISIVENESS: spectives and l	highlight diversity in	culture and langu	age through
The instructional mate short in terms of inclu certain cultures, it lac perspectives. Althoug	erial provides ding ethnic d ks integration h it allows stu	interview videos that delve into diffe escriptions as supporting evidence. V of New Mexican cultures. There is a idents to conduct research connectin	rent viewpoint Vhile it offers e notable absenc g to various pe	s on societal events vidence on student e ce of information cor rspectives, there is a	and experiences, y engagement activit ncerning multiple c lack of inclusion w	et it falls ies related to ultures and vhen it comes

to diverse cultures.

<u>CTE Standards Review</u> - Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.

Average Score

92%

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:

Students are provided with multiple projects to research and reflect on a variety of topics, including certification requirements, technical skills, and STEM-related careers. Activities aid students in learning of reading techniques and practical strategies. Students are given information and must analyze and apply mathematics in real-life problem-solving scenarios. There are multiple opportunities for students to interact with course materials.

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)		
Choose CTE Content Strand (optional)		

<u>CCTC Standards Review</u> - Materials are reviewed for alignment with the state adopted Common Career Technical Core Career Cluster and Career Pathway standards.

Average Score

100%

OVERALL ALIGNMENT

Materials align with the CCTC standards.

Statements of appraisal and supporting evidence:

Students are encouraged to engage in projects where they create products and use management plans encompassing their design's initiation, planning, construction, and completion. The material supports data analysis and reporting skills as students are prompted to communicate their findings through the Data to Communicate activity, utilizing technology to acquire, manipulate, analyze, and report data. The material facilitates career exploration within the engineering design pathway as students are allowed to select a career of interest and gather relevant information about it.

CAREER CLUSTER

Materials align to the CCTC standards for the Career Cluster reviewed.

Statements of appraisal and supporting evidence:

Students are required to complete capstone projects. The course materials provide informative slides on effective communication within science. Within the materials, students collaborate with their peers to identify standard tools and equipment typically found in a laboratory, such as a breadboard and a multimeter. Students can conceptualize a design solution that aligns with the Engineering Design Practices lessons' goals, objectives, parameters, and constraints. Students are also tasked with creating drafts and submitting prototypes for different projects.

CAREER PATHWAY(s)

Materials align to the CCTC standards for the Career Pathway reviewed.

Statements of appraisal and supporting evidence:

The materials introduce the use of Socratic seminars as a means for students to deepen their understanding of STEM-related information. During these seminars, students take responsibility for fostering high-quality conversations and exploring texts to provide thoughtful insights. By applying their STEM knowledge, students actively contribute to the discussions and propose ethically and legally sound solutions to various human and societal problems. The materials provide applications for ethical reasoning in careers in the science field. **<u>CTE Content Review</u>** - Materials are reviewed against relevant criteria pertaining to the support for teachers and students in the specific content area reviewed.

Average Score

100%

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 instructional materials emphasize the importance of continuing the CTE pathway into high school and beyond, highlighting the value of long-term engagement in these career-focused courses. The materials promote a deep understanding of the subject by encouraging students to connect their existing knowledge with new concepts. The lessons are structured and scaffolded, allowing students to develop their understanding and build upon their prior learning progressively.

FOCUS AREA 2 ENGAGING INSTRUCTION

Instructional materials are engaging for students.

Statements of appraisal and supporting evidence:

The material includes collaborative projects that allow students to work together and accomplish shared goals. Each project is accompanied by comprehensive instruction guides providing clear directions for students and teachers. In each segment, students are exposed to videos featuring professionals in the relevant field, providing exposure to STEM fields/careers and real-world perspectives. Moreover, the material offers opportunities for students to explore STEM/CTE career options, engagement activities, and connections to potential future paths. The teacher materials also provide a list of recommended websites that can be utilized to direct students or offer additional avenues for exploration.

FOCUS AREA 3 CAREER DEVELOPMENT

Instructional materials provide career development information for students.

Statements of appraisal and supporting evidence:

The lesson plans in the material are thoughtfully constructed and offer students chances to investigate certifications and the requirements associated with various CTE fields. Including professional organization websites in the lesson plans provides information on career pathways and certifications. Additionally, the material emphasizes the integration of cross-curricular knowledge, allowing students to apply concepts and skills from different subjects in the design of their projects and during class discussions. Students are consistently encouraged to develop solutions to problems that involve utilizing a wide range of tools and technology. The material promotes interdisciplinary thinking.

FOCUS AREA 4 TECHNOLOGY

Instructional materials incorporate opportunities to use industry appropriate technology.

Statements of appraisal and supporting evidence:

The material leverages technology to support student learning, including a proprietary platform and integration with Google Classroom. Instructional materials in the curriculum offer opportunities for students to research industry innovations and trends. Students are tasked with applying these trends or reflecting on the potential impact of innovations on current engineering problems. The material supports critical thinking and discusses avenues for students to stay abreast of developments in their field. <u>All Content Review</u> - 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
	67%

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 instructional material offers a comprehensive curriculum spanning secondary education that integrates technical, academic, and employability knowledge and skills. It includes a structured sequence of courses and competencies, interactive assignments, researchbased projects, and computer-based assessments. Moreover, the iCEV material provides valuable support suggestions for differentiation and special population strategies, presenting educators with a document outlining effective methods for meeting the unique needs of special population students.

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 instructional materials offer resources for educators, including the Special Population Strategies document and the Social-Emotional Learning toolkit, accessible on the main page. These materials not only provide comprehensive methods for assessing students' learning in each standard but also offer a wide range of engaging tools such as key concept worksheets, activities, projects, and assessments. With a focus on project-based, inquiry-based, and challenge-based learning, iCEV facilitates interactive assignments, project-based learning, and researching and organizing information as various assessment measures to track students' progress effectively.

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 instructional material provides interview videos that delve into different viewpoints on societal events and experiences, yet it falls short in terms of including ethnic descriptions as supporting evidence. While it offers evidence on student engagement activities related to certain cultures, it lacks integration of New Mexican cultures. There is a notable absence of information concerning multiple cultures and perspectives. Although it allows students to conduct research connecting to various perspectives, there is a lack of inclusion when it comes to diverse cultures. <u>Reviewers' Professional Summary</u> - 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 #:

Background and experience:

61

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:

The Principles of Technology from iCEV contains a wealth of resources and features. The instructional guide provides a solid framework for educators, while the abundance of lessons caters to diverse learning needs. What sets this material apart is its emphasis on collaborative projects, fostering active student engagement and teamwork. Including downloadable slide presentations adds further value, enabling teachers to enhance their lessons with visually appealing and interactive content. Additionally, incorporating interviews with professionals from various careers provides students real-world insights, inspiring them to explore potential pathways. One notable aspect of these materials is their alignment with educational standards, ensuring the curriculum meets established benchmarks. Moreover, the seamless integration with popular Learning Management Systems, including Google Classroom, simplifies the implementation process for educators. Constant updates and additions to the lesson library demonstrate a commitment to staying current and relevant. Furthermore, the accessibility of the platform allows students to access the materials at any time, fostering independent learning and flexibility. Providing pre-built assessments is valuable for teachers, alleviating the burden of assessment creation. In summary, the iCEV Principles of Technology materials offer a comprehensive and user-friendly solution for educators seeking to deliver engaging and standards-aligned instruction. With its extensive resources, collaborative projects, downloadable slide presentations, career interviews, and seamless integration with Learning Management Systems, this platform empowers teachers and students in their educational journey.

Reviewer #:

Background and experience:

62

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:

The instructional materials consist of a pacing guide and lesson plans that align with connected standards and professional organization requirements. They offer a variety of projects that involve research, collaboration, and problem solving, facilitated by a proprietary digital platform. The materials also provide support for students with special needs, advanced learners, and English Learners through differentiation strategies, videos, and slide deck presentations. Various assessment strategies are outlined in the lesson plans, accommodating different learning needs and allowing teachers to set individualized goals. The materials include different formats of assessments such as quizzes, exit tickets, projects, worksheets, and discussion questions. They can be adapted to meet the needs of diverse learners and provide opportunities for students to demonstrate knowledge and comprehension. While students are encouraged to research their own interests, the materials do not specifically address multiple perspectives or cultures, including New Mexican cultures or ethnic perspectives.

Reviewer #:

Background and experience:

63

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:

The iCEV material combines technical, academic, and employability knowledge and skills into a cohesive curriculum. The material includes student handouts, vocabulary guides, and detailed lesson plans with teaching strategies for teachers. It also offers support suggestions for differentiating instruction and meeting the needs of special population students. In assessing student learning, the iCEV material provides tools such as crucial concept worksheets, activities, projects, and assessments. These assessments promote project-based, inquiry-based, and challenge-based learning approaches. Students are also encouraged to use various tools like Excel, Publisher, PowerPoint, and others to present their projects. However, the iCEV material lacks information or evidence regarding multiple cultures and perspectives. While it does include interview videos exploring different perspectives on societal events and experiences, there is no mention of ethnic descriptions or explicit support for understanding diverse cultures.