

2023 Instructional Material Summer Review Institute

Review Team Appraisal of Title
Grades K-12 Computer Science

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	Middle School Coding 1a/1b one year student license	Publisher	eDynamic Holdings LP
SE ISBN	9781737396567	TE ISBN	
SW ISBN		Grade Level/Content	6-8 Computer Science

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

71%

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

56%

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:

Students are invited to reflect on their experiences, bringing their culture to the class, but the materials don't provide a diversity of perspectives themselves. There is no New Mexico-specific content available.

Computer Science Standards Review - Materials are reviewed for alignment with the state adopted content standards, benchmarks and performance standards.

Average Score

71%

OVERALL ALIGNMENT

Materials align with the computer science standards overall.

Statements of appraisal and supporting evidence:

Materials give students an introduction to concepts like debugging and digital citizenship, but in many cases the lessons don't extend beyond quiz questions or a journal prompt. Students write pseudocode to later develop programs, including ones incorporating databases for web programs. No evidence of nested loops or compound conditionals are found in the materials.

COMPUTING SYSTEMS

Materials align to the computing systems standards for computer science.

Statements of appraisal and supporting evidence:

Materials provide students opportunities to program and debug computer programs. No evidence of material supporting students in learning about hardware or computing devices is found in the materials.

NETWORKS AND THE INTERNET

Materials align to the networks and internet standards for computer science.

Statements of appraisal and supporting evidence:

Students learn about website development, including features like javascript and databases, and concepts like digital safety. However, the materials don't address concepts like networks, protocols, or encryption.

DATA AND ANALYSIS

Materials align to the data and analysis standards for computer science.

Statements of appraisal and supporting evidence:

Materials provide students opportunities to export and import data from databases and spreadsheets, convert strings to numbers to find trends in charts, and to analyze data from surveys.

ALGORITHMS AND PROGRAMMING

Materials align to the algorithms and programming standards for computer science.

Statements of appraisal and supporting evidence:

Students use flowcharts and pseudocode to solve complex problems as well as clearly named variables and stepwise refinement to develop programs with sequential, conditional, and loop control structures.

IMPACTS OF COMPUTING

Materials align to the impacts of computing standards for computer science.

Statements of appraisal and supporting evidence:

Students read about concepts like spam and malware, but there is no evidence of the material providing opportunities for the students to engage in steps to identify it or adopt practices to avoid these issues. Similarly, students write about human/computer collaboration, but there is no evidence of the material providing opportunities for the students to actively participate in it.

Computer Science Content Review- Materials are reviewed against relevant criteria pertaining to the support for teachers and students in the specific content area reviewed.

Average Score

79%

FOCUS AREA 1 COMPUTATIONAL CONCEPTS

Instructional materials provide strategies to develop students' skills that are crucial to understanding computational concepts, including sequencing, looping, parallelism, events, conditionals, operators, and data.

Statements of appraisal and supporting evidence:

Scratch and Python are used to teach basic programming structures like loops and conditionals. Databases are used and incorporated into web programs to teach about data. Parallelism isn't addressed in the materials.

FOCUS AREA 2 COMPUTATIONAL PRACTICES

Instructional materials provide strategies to develop students' skills that are crucial to understanding computational practices, including experimenting and iterating; testing and debugging; and reusing and remixing.

Statements of appraisal and supporting evidence:

Students iterate on programs by starting from pseudocode and moving into the development of functional programs. There are a couple exercises where students are given specific guidance in debugging, but it isn't incorporated into a regular practice. A couple of lessons address functions, but functions with parameters is not addressed.

FOCUS AREA 3 COMPUTATIONAL PERSPECTIVES

Instructional materials provide strategies to develop students' skills that are crucial to understanding computational perspectives, including expressing, connecting, and questioning.

Statements of appraisal and supporting evidence:

Students are guided through block programming of game-like scenarios in Scratch, complete with event handling and sprites.

FOCUS AREA 4 ACCESSIBILITY AND EQUITY

Statements of appraisal and supporting evidence:

The materials provide natural voice audio (slow, medium, fast speeds) and a picture tool for chapter-specific vocabulary lists whose terms can be read out loud to the student by the platform. The teaching guides include a blended learning, online and continuous, inquiry-based, and interpersonal and employability skills learning guides. The blended learning guide helps teachers with teaching classes where students are at all levels.

FOCUS AREA 5 TEACHER SUPPORT

Statements of appraisal and supporting evidence:

A list of the required websites, apps and logins is provided. The required word processing software and a device to record audio and video are also listed in the material.

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
56%	64%

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:

Lesson pacing guides as well as several teaching guides are included, such as a blended (students at all levels) online and continuous learning guide, an inquiry-based learning guide, a project-based learning guide, and an interpersonal and employability skills learning guide. Unit-specific vocabulary lists and accompanying audio and picture tools are provided to assist student understanding of vocabulary terms. Standards are not included, but the platform does allow teachers to add and align them.

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:

Rubrics for activities are provided, as are multiple-choice midterm and final exam. Assessment modifications for EL, Culturally and Linguistically Diverse, advanced, or gifted students are not provided. Standards are not listed in the assessments or elsewhere in the curriculum.

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:

Students are invited to reflect on their experiences, bringing their culture to the class, but the materials don't provide a diversity of perspectives themselves. There is no New Mexico-specific content available.

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 #: 80

Background and experience:

I have a master's in mathematics from the University of South Florida, a math and physics B.A. from Goshen College, a computer science B.A. equivalent and some English Language studies from Eastern Kentucky University. I have taught high school math for 13 years and during 3 of those years, I also taught regular and AP computer science. During the 10 years I worked as a university website administrator, I also taught JavaScript and undergraduate math classes part time.

Professional summary of material:

This material scaffolds students iteratively through learning Scratch, Javascript, Python, and some database concepts. Computer science concepts such as procedures, remixing, and documenting code are covered. There is inconsistent evidence for student collaboration in programming teams and student conversations about diverse user experiences. The platform provides banks of questions that teachers can customize to administer automated assessments.

Reviewer #: 81

Background and experience:

I have a bachelor's in computer science from the University of New Mexico. In my 15 years of teaching, I've mostly taught math and CS at the university and high school levels since 2015. Prior to teaching, I worked in system administration, web development, and computer programming. I am a National Board Certified Teacher.

Professional summary of material:

This material covers a range of programming environments, including Scratch, websites with javascript and databases, and some introductory Python. There are few non-digital tasks, few supports for gifted or culturally diverse students, and no standards alignment in the materials.