## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: APEX

**Course Name**: Computer Science

**Grade Level; Core/CTE**: 9-12 Core

**Status**: **NOT RECOMMENDED**

**Justification**:
The APEX curriculum was found to be weak in programming, integrated technology, metacognitive connections, and teacher usability. The course does not meet the rigor of the standards.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification:** Program is weak in programming and integrated technology. Materials do not adequately address the rigor of the standards dealing with algorithms. Control structures and modularity lessons do not provide opportunities for students use and justify concepts in their own programs (9-12.AP.C.1, 9-12.AP.C.2, 9-12.M.1, 9-12.M.2). Student experiences with Hardware and Software (9-12.CS.HS.1) are limited to one activity involving exporting data from Microbits. Lessons related to networks provide only surface level examples and do not offer opportunities for students to build or customize learning environments related to networking. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Modularity is well explained in 2.3.3, but students do not have structured opportunities to promote modularity in their own projects. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification:** Teacher usability is weak. Teacher resources are limited to keys for scoring student work and assessments. Glossaries and study guides provide subject-specific technical language, but it is not varied to provide a robust definition of relevant terms outside the context of the lesson/activity. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification:** Very few opportunities for discussion. Course is designed predominately for independent learning without structured opportunities for students in engage in discourse about the content. Course does not include tools such as a discussion board and opportunities for collaboration in lessons is very limited or non-existent. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification:** No critical thinking or prompts for critical analysis. Weak in metacognitive connections with students. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification:** Very weak in dialogue and collaboration. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification**: Support structures for students to work independently and apply knowledge are not present. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | | | |
| | **Justification:** Opportunities for collaboration are not present. Delivery of information is consistent throughout, but does not allow for any adaptations to meet other learning modalities (i.e. collaboration, discussion, video). | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification:** Opportunities for real world connections relevant to student lives are not evident. Research strategies are limited to students' digital footprint with few opportunities to solve real-world problems. | | | |
| | ***Column Totals*** | | 2 | 0 |
| | | | **OVERALL SCORE** | 2 |

Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification:** Opportunities for collaboration are not provided. Activities/projects do not provide opportunity for students to build on or share experiences or backgrounds, or to address a societal issue. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification:** Materials and learning progressions are focused on task lists, not on students. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification:** No opportunities for student discourse are provided. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification:** No opportunities for students to express learning with respect to culture, language, values, or customs. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification:** Real life connections are limited to mainstream viewpoints. | | | |
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification:** No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | |
| | | | **OVERALL SCORE** | 0 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: Cengage

**Course Name**: MindTap Invitation to Computer Science (8th Ed.)

**Grade Level; Core/CTE**: 9-12 CTE

**Status**: **NOT RECOMMENDED**

**Justification**:
The Cengage curriculum does not address all required standards and there is no clear application of all standards. This course relies on an online textbook with minimal student engagement or opportunity to engage in computer science practices outlined in the standards. Students are not provided opportunity to collaborate or receive feedback from peers.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification**: The following CTE standards are not addressed: Algorithms: 1.1.1, 1.1.3, 1.1.5; Control: 1.2.1, 1.2.2; Program Development: 1.5.1-1.5.4, 1.5.2; Variables: 1.3.1-1.3.4; Troubleshooting: 2.3.1; Evaluation Storage Solutions: 3.1.2; CVT: 3.2.1, 3.2.3; Inferences and Models: 3.3.1; Culture: 4.1.2, 4.1.5, 4.1.6; Social Interactions: 4.2.1, 4.2.2, Safety, Law, and Ethics: 4.3.2 | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to create computational artifacts or models. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification**: Instructional pathway is clear, but the lack of standards alignment leaves gaps in knowledge necessary for connecting concepts to the larger scope of computer science, especially with respect to influences in the real world. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for discussion are based on the textbook and do not foster deep dialogue around computer science | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification**: Students are not prompted to look at concepts through a critical lens. Materials are limited in scope and do not present the broader spectrum of computing as it relates to the course. | | | |
| | B3. Materials spark student dialogue and support further exploration. | 2 | 1 | 0 |
| | **Justification**: No opportunities are provided for students to engage in the iterative design process around a computational artifact. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification**: The textbook generally introduces and discusses concepts without giving student opportunity to apply them, specifically in coding. A reference is | | | |

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|---|---|---|---|---|
| | made to a “Coding IDE lab”, but the only materials available include PDFs of additional texts that introduce concepts related to an array of programming languages. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification**: The text discussions opportunities for collaboration as they relate to the software development process in a general sense. No opportunities are structured for students to collaborate around an actual project. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to create computational artifacts or connect activities to societal issues perceived by the student. Examples are superficial and are not relevant to many students' lives. | | | |
| | ***Column Totals*** | | 0 | 0 |
| | | | **OVERALL SCORE** | 0 |

# Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson. | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to collaborate. | | | |
| | Materials provide learning and tasks that is predominantly student centered. | 2 | 1 | 0 |
| | **Justification**: Materials are text-based and are not conducive to a student-centered approach to learning. | | | |
| **B. Equity** | Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student. | 2 | 1 | 0 |
| | **Justification**: No opportunities for student discourse. | | | |
| **C. Accessibility** | Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs. | 2 | 1 | 0 |
| | **Justification**: Students are not presented with opportunities to account for inclusive computing practices in the materials. | | | |
| **D. Connections** | Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences. | 2 | 1 | 0 |
| | **Justification**: Real life connections are not representative of various cultures and life experiences. | | | |
| **E. Culturally Centered** | Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | artifacts, rituals and routines, and structures that promote inclusion of students' background. | | | |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | |
| | | | **OVERALL SCORE** | 0 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: Code Central

**Course Name**: Computer Science Grades 6-8

**Grade Level; Core/CTE**: 6-8 Core

**Status**: **RECOMMENDED**

**Justification**:
This curriculum meets all the rubric criteria and aligns with standards. The materials are organized and the layout is very intuitive for students and teachers.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | A1. Materials target the most critical and impactful content in all grade level standards. | 2 | 1 | 0 |
| | **Justification**: All course standards are covered in the materials with multiple opportunities to engage in learning through activities or projects that align to standards. Students have multiple opportunities to engage with each standard. | | | |
| | A2. Materials are accurate, well written, and appropriate for the grade level or span. | 2 | 1 | 0 |
| | **Justification**: Materials are written for the appropriate grade level. Scaffolds are built into each lesson to support learning. | | | |
| | A3. Materials include a clear, actionable, scope and sequence, and instructional pathways. | 2 | 1 | 0 |
| | **Justification**: There are many opportunities for students to engage with the standards. Students are provided inquiry-based opportunities. | | | |
| **B. Depth** | B1. Materials provide educators with tools to foster deep academic discussions. | 2 | 1 | 0 |
| | **Justification**: Students are provided 4 or more opportunities to question what they've learned and to research topics based on situations presented in various situations. | | | |
| | B2. Materials help students think more critically about a topic. | 2 | 1 | 0 |
| | **Justification**: Students are prompted to think critically when evaluating projects and identify alternate perceptions. | | | |
| | B3. Materials spark student dialogue and support further exploration. | 2 | 1 | 0 |
| | **Justification**: Students are prompted to represent, share, justify, and revise their thinking in several lessons/activities. | | | |
| **C. Application** | C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content. | 2 | 1 | 0 |
| | **Justification**: Lessons include multiple opportunities for students to create or refine computational artifacts through an iterative design process. | | | |
| | C2. Materials foster creative, collab-orative problem solving that builds college and career/workplace skills (e.g., | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | cooperation, teamwork, negotiation, consensus-building). | | | |
| | **Justification**: Projects focus on a collaborative experience for students. Materials are open-ended and allow teachers to choose when students can work collaboratively. | | | |
| | C3. Materials are relevant to students' lives. | 2 | 1 | 0 |
| | **Justification**: Students are presented with various project ideas that are open-ended and allow students to self-select the design and focus that meets their interest or need. | | | |
| | ***Column Totals*** | 18 | 0 | 0 |
| | | | **OVERALL SCORE** | 18 |

# Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson. | 2 | 1 | 0 |
| | **Justification**: Students are encouraged to contribute to projects based on interest and/or self-selection of images, characters, or stories. | | | |
| | Materials provide learning and tasks that is predominantly student centered. | 2 | 1 | 0 |
| | **Justification**: Most activities and projects highlight student choice and lean on students' interest, making it appealing to students. | | | |
| **B. Equity** | Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student. | 2 | 1 | 0 |
| | **Justification**: Materials take a "culturally neutral" approach that provide the most inclusive opportunities possible. | | | |
| **C. Accessibility** | Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs. | 2 | 1 | 0 |
| | **Justification**: Students are provided many opportunities to customize projects based on interest and choice. | | | |
| **D. Connections** | Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences. | 2 | 1 | 0 |
| | **Justification**: Materials present a variety of cultures and diverse experiences in lessons, text, and projects. | | | |
| **E. Culturally Centered** | Materials provide ten or more varying authors and philosophies that reflect the | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background. | | | |
| | **Justification**: Materials represent more than ten authors and/or philosophies that reflect diverse cultures, language, traditions, beliefs, etc. for students. | | | |
| | ***Column Totals*** | 12 | 0 | 0 |
| | | | **OVERALL SCORE** | 12 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: CodeHS

**Course Name**: Intro to Computer Science in JavaScript
Intro to computer Science in Python
Intro to Computer Science in Java
Introduction to Web Design
Computing Ideas
Nevada Computer Science II

**Grade Level; Core/CTE**:
Intro to Computer Science in JavaScript – 9-12 Core
Intro to computer Science in Python – 9-12 CTE
Intro to Computer Science in Java – 9-12 Core
Introduction to Web Design – 9-12 Core
Computing Ideas – 6-8 & 9-12 Core
Nevada Computer Science II – 9-12 CTE

**Status**:

**RECOMMEND FOR CTE COURSE MATERIALS**:
Nevada Computer Science II – 9-12 CTE

**NOT RECOMMENDED:**
Introduction to Web Design – 9-12 Core
Intro to Computer Science in JavaScript – 9-12 Core
Intro to computer Science in Python – 9-12 CTE
Intro to Computer Science in Java – 9-12 Core
Computing Ideas – 6-8 & 9-12 Core

**Justification**:
Four courses are recommended for approval as supplementary materials. While these materials do not fully align to all required course standards, the activities are thorough and would be useful in supplementing Computer Science instruction.

Nevada Computer Science II is recommended for approval. The course aligns to program standards and includes relevant activities for students to engage in programming.

Introduction to Web Design is not recommended for approval. There are not any existing core courses that align with this instructional material and the standards do not align with the existing CTE program standards.

# Nevada Computer Science II

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification**: All course standards are covered in the materials with multiple opportunities to engage in learning through activities or projects that align to standards. Students have multiple opportunities to engage with each standard. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Materials are written for the appropriate grade level. Scaffolds are built into each lesson to support learning. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification**: There are multiple opportunities for students to engage with the standards. Students are provided inquiry-based and critical thinking learning opportunities. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification**: Materials are designed with opportunities to question what they've learned and to research topics based on situations presented in various situations. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification**: Students are prompted to think critically when evaluating projects and identify alternate perceptions, evaluate algorithms, compare/contrast, and impacts on society. Structured opportunities are provided for students to seek and take actions based on feedback from peers. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification**: Materials include opportunities for teachers to expand on lessons with collaboration and discussion. Students exercise choice in open-ended activities that require application of knowledge and skills. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **Justification**: Lessons include multiple opportunities for students to create or refine computational artifacts through an iterative design process. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification**: Projects focus on a collaborative experience for students. Materials are open-ended and allow teachers to choose when students can work collaboratively. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification**: Students are presented with various project ideas that are open-ended and allow students to self-select the design and focus that meets their interest or need. | | | |
| | ***Column Totals*** | 18 | 0 | 0 |
| | | | **OVERALL SCORE** | 18 |

# Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Students are encouraged to design projects based on interest and/or self-selection of images, characters, or stories. Structured opportunities are provided for students to collaborate and provide feedback. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Most activities and projects highlight student choice and lean on students' interest, making it appealing to students. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Materials focus on cultural inclusivity and encourage students to stay mindful of unique perspectives of others and how perspectives influence computing needs. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are provided multiple opportunities to customize projects based on interest and choice. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **Justification**: Materials present a variety of cultures and diverse experiences in lessons, text, and projects. | | | |
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: Materials represent more than ten authors and/or philosophies that reflect diverse cultures, language, traditions, beliefs, etc. for students. | | | |
| | ***Column Totals*** | 12 | 0 | 0 |
| | | | **OVERALL SCORE** | 12 |

# Introduction to Web Design
# Intro to Computer Science in JavaScript
# Intro to Computer Science in Python
# Intro to Computer Science in Java

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification:** Materials do not address the scope of computer science courses. Programming standards are covered through an in-depth focus on specific programming languages. Data analysis, impacts of computing, computing systems, and networks and internet standards are not addressed in the materials. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification:** Materials for programming lessons are well-written and grade appropriate. However, gaps in standards alignment leave areas for improvement in grade level requirements. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification:** Materials do not provide a clear instructional path through all required course standards. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification:** Very few opportunities for student discussion is provided throughout the course. Lessons and activities focus on developing computational artifacts and do not include opportunities for discussion. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification:** Information is presented to students, but they are not provided opportunities to think critically, expand on the concept, or apply the concept through the iterative design process outside of creating prescribed artifacts. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification:** Materials are designed for independent learners and do not include opportunities to apply knowledge or skills outside the lessen parameters. Lessons focus on prescribed programming activities. | | | |

| | | | | |
|---|---|---|---|---|
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification:** Materials do not meet high school course requirements and leave gaps in required standards, and do not foster appropriate learning opportunities that meet course requirements. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification:** Opportunities for creativity and collaboration are limited to prescribed programming lessons. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification:** Materials do not present diverse populations or experiences relevant to students' lives. | | | |
| | ***Column Totals*** | | 3 | 0 |
| | | | **OVERALL SCORE** | 3 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **F. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for collaboration are not provided. Activities do not provide opportunity for students to build on or share experiences, backgrounds, or interests. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Materials are focused on independent learning through skill-based application and do not provide opportunity for student-centered learning. | | | |
| **G. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for student discourse are not provided. | | | |
| **H. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to express learning with respect to culture, language, values, or customs. | | | |
| **I. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Real-life connections representing various cultures and/or experiences is not present in the materials. | | | |
| **J. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | 0 |
| | | | **OVERALL SCORE** | 0 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: Codelicious

**Course Name**: Computer Science Foundations K
Computer Science Foundations 1
Computer Science Foundations 3
Computer Science Foundations 4
Intro to CS Apps 6
CS Applications JavaScript
CS Applications Java

**Grade Level; Core/CTE**:
Computer Science Foundations K – Kindergarten Core
Computer Science Foundations 1 – 1st Grade Core
Computer Science Foundations 3 – 3rd Grade Core
Computer Science Foundations 4 – 4th Grade Core
Intro to CS Apps 6 – 6th Grade Core
CS Applications JavaScript – 7th Grade Core
CS Applications Java – 8th Grade Core

**Status**: **RECOMMENDED**

**Justification**:
These instructional materials include over 30 learning modules. The modules include instructional models, unplugged lessons, collaborative activities, simulations, troubleshooting toolkit, teacher resources, and incorporate a spiral instructional design. There are extensive teacher resources and the materials are organized.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | A1. Materials target the most critical and impactful content in all grade level standards. | 2 | 1 | 0 |
| | **Justification**: All course standards are covered in the materials with multiple opportunities to engage in learning through activities or projects that align to standards. Students have multiple opportunities to engage with each standard. | | | |
| | A2. Materials are accurate, well written, and appropriate for the grade level or span. | 2 | 1 | 0 |
| | **Justification**: Materials are written for the appropriate grade level. Scaffolds are built into each lesson to support learning. | | | |
| | A3. Materials include a clear, actionable, scope and sequence, and instructional pathways. | 2 | 1 | 0 |
| | **Justification**: There are many opportunities for students to engage with the standards. Students are provided inquiry-based and critical thinking learning opportunities. | | | |
| **B. Depth** | B1. Materials provide educators with tools to foster deep academic discussions. | 2 | 1 | 0 |
| | **Justification**: Students are provided many opportunities to question what they've learned and to research topics based on situations presented in various situations. | | | |
| | B2. Materials help students think more critically about a topic. | 2 | 1 | 0 |
| | **Justification**: Students are prompted to think critically when evaluating projects and identify alternate perceptions, including compare/contrast, advantages/disadvantages, and impacts on society. | | | |
| | B3. Materials spark student dialogue and support further exploration. | 2 | 1 | 0 |
| | **Justification**: Students are prompted to represent, share, justify, and revise their thinking in several lessons/activities. | | | |
| **C. Application** | C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content. | 2 | 1 | 0 |
| | **Justification**: Lessons include multiple opportunities for students to create or refine computational artifacts through an iterative design process. | | | |
| | C2. Materials foster creative, collab-orative problem solving that builds college and career/workplace skills (e.g., | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | cooperation, teamwork, negotiation, consensus-building). | | | |
| | **Justification**: Projects focus on a collaborative experience for students. Materials are open-ended and allow teachers to choose when students can work collaboratively. | | | |
| | C3. Materials are relevant to students' lives. | 2 | 1 | 0 |
| | **Justification**: Students are presented with various project ideas that are open-ended and allow students to self-select the design and focus that meets their interest or need. | | | |
| | ***Column Totals*** | 18 | 0 | 0 |
| | | | **OVERALL SCORE** | 18 |

# Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson. | 2 | 1 | 0 |
| | **Justification**: Students are encouraged to contribute to projects based on interest and/or self-selection of images, characters, or stories. Debugging activities are structured for collaborative learning. | | | |
| | Materials provide learning and tasks that is predominantly student centered. | 2 | 1 | 0 |
| | **Justification**: Most activities and projects highlight student choice and lean on students' interest, making it appealing to students. | | | |
| **B. Equity** | Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student. | 2 | 1 | 0 |
| | **Justification**: Materials focus on cultural inclusivity and encourage students to stay mindful of unique perspectives of others and how perspectives influence computing needs. | | | |
| **C. Accessibility** | Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs. | 2 | 1 | 0 |
| | **Justification**: Students are provided multiple opportunities to customize projects based on interest and choice. | | | |
| **D. Connections** | Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences. | 2 | 1 | 0 |
| | **Justification**: Materials present a variety of cultures and diverse experiences in lessons, text, and projects. | | | |

| | | | | |
|---|---|---|---|---|
| **E. Culturally Centered** | Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background. | 2 | 1 | 0 |
| | **Justification**: Materials represent more than ten authors and/or philosophies that reflect diverse cultures, language, traditions, beliefs, etc. for students. | | | |
| | ***Column Totals*** | 12 | 0 | 0 |
| | | | **OVERALL SCORE** | 12 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: CompuScholar

**Course Name**: Windows Programming with C# (Level 1)
Windows Programming with C# (Level 2)
Windows Programming with C# (Level 3)
Java Programming (Level 1)
Java Programming (Level 2)
Java Programming (Level 3) – AP CS A

**Grade Level; Core/CTE**:
Windows Programming with C# (Level 1) – 9-10 CTE
Windows Programming with C# (Level 2) – 10-11 CTE
Windows Programming with C# (Level 3) – 11-12 CTE
Java Programming (Level 1) – 9-10 CTE
Java Programming (Level 2) – 10-11 CTE
Java Programming (Level 3) – AP CS A – 11-12 CTE

**Status**:

**RECOMMEND FOR CTE COURSE MATERIALS**:
Java Programming (Level 3) – AP CS A

**NOT RECOMMENDED**
Windows Programming with C# (Level 1)
Windows Programming with C# (Level 2)
Windows Programming with C# (Level 3)
Java Programming (Level 1)
Java Programming (Level 2)

**Justification**:
Java Programming (Level 3) is recommended for approval. This course is already approved by College Board, which includes an extensive review and alignment with program standards and expectations.

The remaining five course do not align with program standards.

# Java Programming (Level 3) – AP CS A

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification**: All course standards are covered in the materials with multiple opportunities to engage in learning through activities or projects that align to CTE standards. Students have multiple opportunities to engage with each standard through development and refinement of computational artifacts. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Materials are written for the appropriate grade level. Scaffolds are built into each lesson to support learning. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification**: There are multiple opportunities for students to engage with the standards. Students are provided inquiry-based and critical thinking learning opportunities. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification**: Materials are designed with opportunities to question what they've learned and to research topics based on situations presented in various situations. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification**: Students are prompted to think critically when evaluating projects and identify alternate perceptions, evaluate algorithms, compare/contrast, and impacts on society. Structured opportunities are provided for students to seek and take actions based on feedback from peers. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification**: Materials include opportunities for teachers to expand on lessons with collaboration and discussion. Students exercise choice in open-ended activities that require application of knowledge and skills. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |

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|---|---|---|---|---|
| | **Justification**: Lessons include multiple opportunities for students to create or refine computational artifacts through an iterative design process. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification**: Projects focus on a collaborative experience for students. Materials are open-ended and allow teachers to choose when students can work collaboratively. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification**: Students are presented with multiple project opportunities open-ended and allow students to self-select the design and focus that meets their interest or need. | | | |
| | ***Column Totals*** | 18 | 0 | 0 |
| | | | **OVERALL SCORE** | 18 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Students are design and refine computational artifacts based on interest and/or self-selection of images, characters, or stories. Structured opportunities are provided for students to collaborate and provide feedback. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: All activities and projects highlight student choice and lean on students' interest, making it appealing to students. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Materials focus on cultural inclusivity and encourage students to stay mindful of unique perspectives of others and how perspectives influence computing needs. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are provided multiple opportunities to customize projects based on interest and choice. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Materials present a variety of cultures and diverse experiences in lessons, text, and projects. | | | |

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|---|---|---|---|---|
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: Materials represent more than ten authors and/or philosophies that reflect diverse cultures, language, traditions, beliefs, etc. for students. | | | |
| | ***Column Totals*** | 12 | 0 | 0 |
| | | | **OVERALL SCORE** | 12 |

# Windows Programming with C# (Level 1)
# Windows Programming with C# (Level 2)
# Windows Programming with C# (Level 3)
# Java Programming (Level 1)
# Java Programming (Level 2)

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification:** Materials do not address the scope of computer science courses or align with CTE program standards. Programming standards are covered through an in-depth focus on specific programming languages. Computer science concepts not covered in the materials include data analysis, impacts of computing, computing systems, and networks and internet. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification:** Materials for programming lessons are grade appropriate. However, gaps in standards alignment leave areas for improvement in grade level requirements. Teacher materials are vague and not detailed enough to clearly follow the course materials. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification:** Materials do not provide a clear instructional path through all required course standards. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification:** Very few opportunities for student discussion is provided throughout the course. Lessons and activities focus on developing computational artifacts within the scope of a specific programming language. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification:** Information is presented to students, but they are not provided opportunities to think critically, expand on the concept, or apply the concept through the iterative design process outside of creating prescribed artifacts. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **Justification:** Materials are designed for independent learners and do not include opportunities to apply knowledge or skills outside the lessen parameters. Lessons focus on prescribed programming activities. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification:** Materials do not meet high school course requirements and leave gaps in required standards, and do not foster appropriate learning opportunities that meet course requirements. | | | |
| | **C2. Materials foster creative, collab-orative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification:** Opportunities for creativity and collaboration are limited to prescribed programming lessons. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification:** Materials do not present diverse populations or experiences relevant to students' lives. | | | |
| | ***Column Totals*** | | 3 | 0 |
| | | | **OVERALL SCORE** | 3 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **F. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Team projects support students working through the software development process, but opportunities to not include collaborative work or evaluating feedback from others. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Materials are focused on independent learning through skill-based application and do not provide opportunity for student-centered learning. Reading material is at a single reading level and not accessible for all students. | | | |
| **G. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for student discourse are limited to specific segments and do not represent diverse backgrounds or cultures. | | | |
| **H. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to express learning with respect to culture, language, values, or customs. | | | |
| **I. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Real-life connections representing various cultures and/or experiences is not present in the materials. | | | |
| **J. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |

| | | | |
|---|---|---|---|
| ***Column Totals*** | | 1 | 0 |
| | | **OVERALL SCORE** | 1 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: Intelitek-CoderZ

**Course Name**: Adventures (3rd 0r 4th); Code Farm (5th)

**Grade Level; Core/CTE**: 3-5 Core

**Status**: **NOT RECOMMENDED**

**Justification**:
These instructional materials only include a few weeks of lessons; therefore, many standards are not addressed or go to the depth needed to meet NVACS. However, the gamified format and included lessons are beneficial to teachers wanting to supplement CS instruction or use in after school clubs.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification:** Materials do not address the scope of computer science courses. Lessons and activities focus on coding and programming at an introductory level. Data analysis, impacts of computing, computing systems, and networks and internet standards are not addressed in the materials. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification:** Materials for programming lessons are grade appropriate and appeal to the appropriate age. However, gaps in standards alignment leave areas for improvement in grade level requirements. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification:** Materials do not provide a clear instructional path through all required course standards. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification:** Very few opportunities for student discussion is provided throughout the course. Lessons and activities focus on developing computational artifacts and do not include opportunities for discussion. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification:** Information is presented to students, but they are not provided opportunities to think critically, expand on the concept, or apply the concept through the iterative design process outside of creating prescribed artifacts. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification:** Materials are gamified and do not include opportunities to apply knowledge or skills outside the lessen parameters. Lessons focus on prescribed programming activities. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **Justification:** Materials do not meet course requirements and leave gaps in required standards, and do not foster appropriate learning opportunities that meet course requirements. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification:** Opportunities for creativity and collaboration are limited to prescribed programming lessons. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification:** Materials do not present diverse populations or experiences relevant to students' lives. | | | |
| | ***Column Totals*** | | 3 | 0 |
| | | | **OVERALL SCORE** | 3 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for collaboration are not provided. Activities do not provide opportunity for students to build on or share experiences, backgrounds, or interests. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Materials are focused on independent learning through skill-based application and do not provide opportunity for student-centered learning. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for student discourse are not provided. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to express learning with respect to culture, language, values, or customs. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Real-life connections representing various cultures and/or experiences is not present in the materials. | | | |
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | 0 |
| | | | **OVERALL SCORE** | 0 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: Savvas

**Course Name**: Intro to Computer and Information Technology (4th Ed.) – MyLab
Computer Programming: Fundamental Concepts using Java 2017

**Grade Level; Core/CTE**:
Intro to Computer and Information Technology (4th Ed.) – MyLab – 6-8 Core
Computer Programming: Fundamental Concepts using Java 2017 – 9-12 CTE

**Status**: **NOT RECOMMENDED**

**Justification**:
The Savvas materials do not align to standards. The Intro to Computer and Information Technology course focuses on digital literacy and does not teach any computer science concepts. The Computer Programming: Fundamental Concepts using Java course is textbook-based with weak alignment in collaboration and rigor of standards.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification**: Materials are not aligned to course standards. The 6-8 course focuses only on digital literacy skills and does not address any of the computer science standards required. Materials in programming course introduce programming topics (algorithms, control structures, program development, troubleshooting), but do not provide in-depth instruction around the topics. Data visualization standards are not covered in the materials. Standards related to impacts of computing are not addressed in the materials. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Materials introduce topics (algorithms, control structures, program development) in a theoretical sense with few opportunities to build practical knowledge of the concepts. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification**: Materials are textbook-based and follow the progression as outlined in the text. Minimal opportunities are provided to engage with the content outside of traditional textbook reading and answering questions. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for discussion are based on the textbook and do not foster deep dialogue around computer science. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification**: Students are not prompted to look at concepts through a critical lens. Materials are limited in scope and do not present the broader spectrum of computing as it relates to the course. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification**: No opportunities are provided for students to engage in the iterative design process around a computational artifact. Students are not provided opportunities to compare levels of abstraction, evaluate control structures, or generate models representing different elements of data. | | | |

| | | | | |
|---|---|---|---|---|
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification**: The textbook generally introduces and discusses concepts without giving student opportunity to apply them, specifically in coding. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification**: The text contains limited opportunities for students to work collaboratively. Students work in the context of practice problems provided in the text. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to create computational artifacts or connect activities to societal issues perceived by the student. Examples are superficial and are not relevant to many students' lives. | | | |
| | ***Column Totals*** | | 0 | 0 |
| | | | **OVERALL SCORE** | 0 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to collaborate. Practice work is centered around text-based practice problems. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Materials are text-based and are not conducive to a student-centered approach to learning. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: No opportunities for student discourse. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are not presented with opportunities to account for inclusive computing practices in the materials. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Real life connections are not representative of various cultures and life experiences. | | | |
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture,** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | | | |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | |
| | | | **OVERALL SCORE** | 0 |

## Nevada Instructional Materials Review Process

# Computer Science (Spring 2022)

**Vendor Name**: SchoolsPLP

**Course Name**: Computer Science

**Grade Level; Core/CTE**: 9-12 Core

**Status**: **NOT RECOMMENDED**

**Justification**:
The SchoolsPLP Computer Science course does not align to all course standards. Many standards in the Data Analysis and Impacts of Computing concepts are not covered in the materials. The course is not organized well and pulls activities from multiple sources, making it challenging for teachers and students to navigate.

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification**: Materials cover standards at a superficial and introductory level. Data analysis standards and impacts of computing standards are not addressed in the materials. Standards around data storage encyclopedic, giving information about different types of memory, but do not include deeper analysis of how data elements should be organized or stored. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Materials are introductory and do not provide opportunity to engage with the materials at a grade appropriate level. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification**: Materials are not organized and are difficult to follow. Activities are pulled from multiple sources, making the pathway unclear. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification**: No structured opportunities for discussion or collaboration. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification**: Limited opportunities for students to decompose complex, real-world problems. Students are guided through creation of a computational artifact, but are not prompted to evaluate or justify decisions for efficiency or accuracy. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification**: No opportunities for students to discuss or explore complex, real-world problems or expand on presented information in the materials. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification**: Materials do not provide opportunities for students to design, evaluate, or revised computational artifacts. Students are not provided adequate opportunities to consider diverse needs or accessibility issues. | | | |

| | | | | |
|---|---|---|---|---|
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification**: No opportunities for collaboration or teamwork are provided in the materials. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification**: Materials do not present diverse populations or experiences relevant to students' lives. | | | |
| | ***Column Totals*** | | 0 | 0 |
| | | | **OVERALL SCORE** | 0 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for collaboration are not provided. Activities do not provide opportunity for students to build on or share experiences, backgrounds, or interests. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Materials are focused on independent learning through skill-based application and do not provide opportunity for student-centered learning. Materials offer limited opportunities for students to engage in designing a computational artifact. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for student discourse are not provided. Materials do not mention addressing issues of bias or inequitable access in computer science. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to express learning with respect to culture, language, values, or customs. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Real-life connections representing various cultures and/or experiences is not present in the materials. | | | |
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | 0 |
| | | | **OVERALL SCORE** | 0 |

# Nevada Instructional Materials Review Process

## Computer Science (Spring 2022)

**Vendor Name**: SkillStruck

**Course Name**:

CS Kindergarten
CS First Grade
CS Second Grade
CS Third Grade
CS Fourth Grade
CS Fifth Grade
Web Development
Python 1
JavaScript 1
Python
HTML_CSS
JavaScript
AP CSP

**Grade Level; Core/CTE**:

CS Kindergarten – Kindergarten Core
CS First Grade – 1st Grade Core
CS Second Grade – 2nd Grade Core
CS Third Grade – 3rd Grade Core
CS Fourth Grade – 4th Grade Core
CS Fifth Grade – 5th Grade Core
Web Development – 6-8 Core
Python 1 – 6-8 Core
JavaScript 1 – 6-8 Core
Python – 9-12 CTE
HTML_CSS – 9-12 CTE
JavaScript – 9-12 CTE
AP CSP – 9-12 CTE

**Status**:

**RECOMMENDED**:

CS Kindergarten – Kindergarten Core
CS First Grade – 1st Grade Core
CS Second Grade – 2nd Grade Core
CS Third Grade – 3rd Grade Core
CS Fourth Grade – 4th Grade Core
CS Fifth Grade – 5th Grade Core

Web Development – 6-8 Core
Python 1 – 6-8 Core
JavaScript 1 – 6-8 Core

**NOT RECOMMENDED:**

Python – 9-12 CTE
HTML_CSS – 9-12 CTE
JavaScript – 9-12 CTE
AP CSP – 9-12 CTE

**Justification**:
Materials recommended for approval meet all required standards. Teacher resources, videos, and support add to the intuitive nature of the materials. Activities incorporate multiple standards and standards are taught in many lessons throughout the materials. There are many opportunities to engage in learning.

The materials not recommended for approval are repetitive in nature. The Python and JavaScript courses are duplicates of the course designed for middle school and are not rigorous enough to meet high school standards. The AP CSP course is weak in data analysis and collaboration.

**CS Kindergarten – Kindergarten Core**
**CS First Grade – 1st Grade Core**
**CS Second Grade – 2nd Grade Core**
**CS Third Grade – 3rd Grade Core**
**CS Fourth Grade – 4th Grade Core**
**CS Fifth Grade – 5th Grade Core**
**Web Development – 6-8 Core**
**Python 1 – 6-8 Core**
**JavaScript 1 – 6-8 Core**

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification**: All course standards are covered in the materials with multiple opportunities to engage in learning through activities or projects that align to standards. Students have many opportunities to engage with each standard. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification**: Materials are written for the appropriate grade level. Scaffolds are built into each lesson to support learning. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification**: There are multiple opportunities for students to engage with the standards. Students are provided inquiry-based and critical thinking learning opportunities. Detailed teacher resources provide additional clarity to the scope and sequence. All materials are access through the same platform, making it easy to navigate. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification**: Materials are designed with many opportunities to question what they've learned and to research topics based on situations presented in various situations. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification**: Students are prompted to think critically when evaluating projects and identify alternate perceptions, evaluate algorithms, compare/contrast, and | | | |

| | | | | |
|---|---|---|---|---|
| | impacts on society. Structured opportunities are provided for students to seek and take actions based on feedback from peers. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification**: Materials include opportunities for teachers to expand on lessons with collaboration and discussion. Students exercise choice in open-ended activities that require application of knowledge and skills. | | | |
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification**: Lessons include multiple opportunities for students to create or refine computational artifacts through an iterative design process. | | | |
| | **C2. Materials foster creative, collab-orative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification**: Projects focus on a collaborative experience for students. Materials are open-ended and allow teachers to choose when students can work collaboratively. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification**: Students are presented with various project ideas that are open-ended and allow students to self-select the design and focus that meets their interest or need. | | | |
| | ***Column Totals*** | 18 | 0 | 0 |
| | | | **OVERALL SCORE** | 18 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **A. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Students are encouraged to design projects based on interest and/or self-selection of images, characters, or stories. Structured opportunities are provided for students to collaborate and provide feedback. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Most activities and projects highlight student choice and lean on students' interest, making it appealing to students. | | | |
| **B. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Materials focus on cultural inclusivity and encourage students to stay mindful of unique perspectives of others and how perspectives influence computing needs. | | | |
| **C. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are provided multiple opportunities to customize projects based on interest and choice. | | | |
| **D. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |

| | | | | |
|---|---|---|---|---|
| | **Justification**: Materials present a variety of cultures and diverse experiences in lessons, text, and projects. | | | |
| **E. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: Materials represent more than ten authors and/or philosophies that reflect diverse cultures, language, traditions, beliefs, etc. for students. | | | |
| | ***Column Totals*** | 12 | 0 | 0 |
| | | | **OVERALL SCORE** | 12 |

# Python – 9-12 CTE
# HTML_CSS – 9-12 CTE
# JavaScript – 9-12 CTE
# AP CSP – 9-12 CTE

| Category 1 Rubric – Alignment to Standards | | | | |
|---|---|---|---|---|
| **Criteria** | **Metrics** | **Meets Expectations** | **Needs Improvement** | **Inadequate** |
| **A. Breadth** | **A1. Materials target the most critical and impactful content in all grade level standards.** | 2 | 1 | 0 |
| | **Justification:** Materials do not address the scope of computer science courses or CTE program standards. Programming standards are covered through an in-depth focus on specific programming languages. Data analysis, impacts of computing, computing systems, and networks and internet standards are not addressed in the materials. | | | |
| | **A2. Materials are accurate, well written, and appropriate for the grade level or span.** | 2 | 1 | 0 |
| | **Justification:** Materials for programming lessons are grade appropriate. However, gaps in standards alignment leave areas for improvement in grade level requirements. | | | |
| | **A3. Materials include a clear, actionable, scope and sequence, and instructional pathways.** | 2 | 1 | 0 |
| | **Justification:** Materials do not provide a clear instructional path through all required course standards. | | | |
| **B. Depth** | **B1. Materials provide educators with tools to foster deep academic discussions.** | 2 | 1 | 0 |
| | **Justification:** Very few opportunities for student discussion is provided throughout the course. Lessons and activities focus on developing computational artifacts and do not include opportunities for discussion. | | | |
| | **B2. Materials help students think more critically about a topic.** | 2 | 1 | 0 |
| | **Justification:** Information is presented to students, but they are not provided opportunities to think critically, expand on the concept, or apply the concept through the iterative design process outside of creating prescribed artifacts. | | | |
| | **B3. Materials spark student dialogue and support further exploration.** | 2 | 1 | 0 |
| | **Justification:** Materials do not include opportunities to apply knowledge or skills outside the lesson parameters. Lessons focus on prescribed programming activities. | | | |

| | | | | |
|---|---|---|---|---|
| **C. Application** | **C1. Materials offer students opportunities to engage in meaningful, authentic learning activities that support course content.** | 2 | 1 | 0 |
| | **Justification:** Materials do not meet high school course requirements and leave gaps in required standards, and do not foster appropriate learning opportunities that meet course requirements. | | | |
| | **C2. Materials foster creative, collaborative problem solving that builds college and career/workplace skills (e.g., cooperation, teamwork, negotiation, consensus-building).** | 2 | 1 | 0 |
| | **Justification:** Opportunities for creativity and collaboration are limited to prescribed programming lessons. | | | |
| | **C3. Materials are relevant to students' lives.** | 2 | 1 | 0 |
| | **Justification:** Materials do not present diverse populations or experiences relevant to students' lives. | | | |
| | ***Column Totals*** | | 2 | 0 |
| | | | **OVERALL SCORE** | 2 |

## Category 2 Rubric – Alignment to Social Justice

| Criteria | Metrics | Meets | Needs Improvement | Does not Meet |
|---|---|---|---|---|
| **F. Student Voice** | **Materials provide the opportunity for students to work cooperatively or share their learning experiences, strengths, backgrounds, interests, and needs are deeply interwoven throughout the lesson.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for collaboration are not provided. Activities do not provide opportunity for students to build on or share experiences, backgrounds, or interests. | | | |
| | **Materials provide learning and tasks that is predominantly student centered.** | 2 | 1 | 0 |
| | **Justification**: Materials are focused on independent learning through skill-based application and do not provide opportunity for student-centered learning. | | | |
| **G. Equity** | **Materials provide discourse and perspectives are presented in a variety of inclusive ways that honor students of non-dominant backgrounds, create cultural bias-free, stereotype free, and barrier free instruction for every student.** | 2 | 1 | 0 |
| | **Justification**: Opportunities for student discourse are not provided. | | | |
| **H. Accessibility** | **Materials provide multiple opportunities for students to express their learning and interact with materials which have been informed by student input, cultures, languages, values, customs, and instructor knowledge of individual students' strengths and needs.** | 2 | 1 | 0 |
| | **Justification**: Students are not provided opportunities to express learning with respect to culture, language, values, or customs. | | | |
| **I. Connections** | **Materials provide more than three real—life connections made or represented from a variety of cultures and life experiences.** | 2 | 1 | 0 |
| | **Justification**: Real-life connections representing various cultures and/or experiences is not present in the materials. | | | |
| **J. Culturally Centered** | **Materials provide ten or more varying authors and philosophies that reflect the diversity in culture, languages, traditions, beliefs, values, and customs artifacts, rituals and routines, and structures that promote inclusion of students' background.** | 2 | 1 | 0 |
| | **Justification**: No evidence of culturally diverse authors or philosophies. | | | |
| | ***Column Totals*** | | | 0 |
| | | | **OVERALL SCORE** | 0 |