# ISTE Seal Review Findings Report

## Cyber in Minecraft

2025

# TABLE OF CONTENTS

# ABOUT

## ABOUT ISTE

The International Society for Technology in Education (ISTE) is home to a community of global educators and solution providers who are passionate about using technology to revolutionize learning. Our vision is to create a bold community where education innovators are supported in reimagining and redesigning learning with a focus on using technology to create transformational and equitable experiences for learners. We're making this vision a reality by delivering practical guidance, evidence-based professional learning, virtual networks, thought-provoking events and the ISTE Standards.

## ISTE SEAL

The ISTE Seal serves as a mark of high-quality product design for solutions that enable and guide high-quality learning. By choosing to demonstrate their commitment to supporting best practices for teaching and learning, these products show a purposeful and meaningful dedication to practical usability, digital pedagogical implementation,  and the ISTE Standards. With a focus on user experience, product usability, and the most essential elements of instructional technology today, the ISTE Seal provides a set of criteria and simple indicators to guide educators, students, and technology directors toward the very best products on the market.

ISTE awards a seal only after an extensive analysis conducted by trained ISTE reviewers that ensures a product meets all critical elements under specific review criteria.

By earning an ISTE Seal, ISTE verifies that this product:

- Promotes critical technology skills.
- Supports the use of technology in appropriate ways.
- Incorporates digital pedagogy and the learning sciences.
- Addresses key elements of tech usability, user experience and user interface.
- Aligns to ISTE Standards in specific ways.

# RESOURCE DESCRIPTION

## WHAT IS *Cyber in Minecraft*?

Cyber in Minecraft is a credential program with supporting curriculum that engages students in cybersecurity fundamentals through a Minecraft environment. The program builds a foundation in cybersecurity skills while helping students navigate safely in today's digital world. The program consists of three comprehensive units: Digital Citizenship, Networking, and Security. It incorporates formative and summative assessments on a dedicated platform where students demonstrate their developing cybersecurity competencies. Upon successful completion of all three units, students can take the capstone credential exam, a proctored online assessment that validates their cybersecurity skills with an industry-recognized credential.

## HOW IS *Cyber in Minecraft* IMPLEMENTED?

Cyber in Minecraft adapts to various educational contexts, functioning well in classroom settings or as after-school activities. The program employs a student-led approach where learners complete activities individually or collaboratively within a ready-to-use Minecraft environment, with educators serving as learning facilitators. The learning pathway offers flexibility. Students can complete any unit independently or progress through all three to qualify for the capstone credential exam. Throughout each course, students complete in-game learning activities and submit assessments to an online portal. Educators can evaluate submissions and provide feedback through this portal, supported by comprehensive resources and sample answers. This structure enables educators with limited experience in computer science, cybersecurity, or Minecraft to effectively assess student work.

# ISTE SEAL REVIEW

**Product:** Cyber in Minecraft
**Product Type:** Assessment Tool
**Organization:** Prodigy Learning
**Date of Award:** May 2025

## REVIEW METHODOLOGY

ISTE Seal reviews are conducted by a distinguished panel of experts in education, instruction, and technology. These experts utilize the most up-to-date data provided by the organization to conduct thorough evaluations of each solution. The evaluations focus on assessing the solution's performance in addressing specific elements outlined in the technical and pedagogical usability framework and the ISTE Standards.

To complete their rigorous evaluations, the reviewers utilize a comprehensive rating system, categorizing each solution as either "meets expectations" or "does not meet expectations." This assessment covers both the required and optional "Look Fors" outlined in the application. To ensure the validity and reliability of their results, the reviewers regularly engage in calibrations. Final review findings are then analyzed and combined, providing an overall score for alignment with each indicator.

At ISTE, we take great pride in our unwavering commitment to delivering results that schools and districts can have full confidence in. To be deemed education-ready learning solutions, products must meet the high standards in learning sciences, user experience and interface, accessibility, and content quality.

### SCOPE OF REVIEW

Cyber in Minecraft was reviewed against the technical, pedagogical usability framework and the ISTE Standards to determine whether **the solution is education-ready**. ISTE reviewers examined all evidence provided by the organization and interacted directly with the product.

## REVIEW FINDINGS

| **ISTE STANDARDS: The ISTE Standards provide the competencies for learning, teaching, and leading in the digital age, providing a comprehensive roadmap for the effective use of technology in schools worldwide. Grounded in learning science research and based on practitioner experience, the ISTE Standards ensure that using technology for learning can create high-impact, sustainable, scalable, and equitable learning experiences for all learners.** |
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| **Empowered Learner 1.1.d**<br>Students understand fundamental concepts of how technology works, demonstrate the ability to choose and use current technologies effectively, and are adept at thoughtfully exploring emerging technologies. |
| **Digital Citizen 1.2.a, 1.2.c & 1.2.d**<br>Students manage their digital identity and understand the lasting impact of their online behaviors on themselves and others and make safe, legal and ethical decisions in the digital world. Students safeguard their well-being by being intentional about what they do online and how much time they spend online. Students take action to protect their digital privacy on devices and manage their personal data and security while online. |
| **Creative Communicator 1.6.a & 1.6.b** |

| Students choose the appropriate platforms and digital tools for meeting the desired objectives of their creation or communication. Students create original works or responsibly repurpose or remix digital resources into new creations. | |
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| **FEEDBACK** | **OUTCOME** |
| • Students learn foundational technology concepts through structured lessons on networking, cybersecurity, and digital systems that include researching IoT (Internet of Things) devices and evaluating their benefits.<br>• Activities support digital well-being by building students' awareness of online privacy and the consequences of sharing personal information.<br>• Students engage in activities about digital footprints that illustrate the lasting impact of online behavior.<br>• The program supports student choice by allowing learners to select digital tools and platforms that best suit their goals. |  |
| **DIMENSION 1: USER INTERFACE AND AGENCY**<br>**Definition: The design of the product interface and user experience helps teachers quickly and reliably achieve instructional goals. This dimension includes features related to interface design, learnability, navigation, maximizing time on task, control over actions, and general usability.** | |
| **FEEDBACK** | **OUTCOME** |

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| • The navigation experience maintains clarity and consistency for both students and teachers, with the student portal mirroring learning content structure to help track progress.<br>• A search bar, left-hand menu, and filtering allow students to locate content efficiently.<br>• Teachers can switch to a student view anytime using a role-selection dropdown to experience the course from a student's perspective.<br>• A publicly accessible privacy policy on the homepage outlines minimal data collection, secure storage, and authentication via Microsoft 365 for enhanced security. |  |
| **DIMENSION 2: LEARNING DESIGN**<br>**Definition: The product has features that exhibit and promote design and customization of learning episodes in ways that align with research-based best practices, including those rooted in the learning sciences.** | |
| **FEEDBACK** | **OUTCOME** |
| • Learning outcomes aligned to instructional standards appear at the start of each unit and throughout the course materials.<br>• Each course unit is broken down into smaller lessons and in-game activities, allowing students to engage with manageable pieces of content. |  |

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| • Students reinforce key concepts learned by completing embedded formative checks and end-of-lesson quizzes.<br><br>• The program connects cybersecurity concepts to authentic scenarios through real-world examples. | |
| **DIMENSION 3: DIGITAL PEDAGOGY**<br><br>**Definition: The product is designed to support the development of digital age learning skills, capacities and knowledge. This dimension focuses on how technology can help students and teachers experience the best possible learning experiences, including the social and learning affordances that digital educational products uniquely offer.** | |
| **FEEDBACK** | **OUTCOME** |
| • Students create original work to respond to authentic cybersecurity challenges.<br><br>• Activities require students to research, evaluate, and use information from provided scenarios and external sources.<br><br>• Students can complete activities collaboratively or independently.<br><br>• Multiple learning experiences focus on digital identity, online safety, and ethical behavior through lessons covering data privacy, cyberbullying, and personally identifiable information. |  |

| **Dimension 4: Inclusivity**<br>**Definition: The product helps teachers provide learning experiences that are relevant to students of many cultures, backgrounds, and abilities, and support learner motivation and agency in the learning process. The product meets current guidelines around accessibility, and supports a positive classroom culture.** | |
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| **FEEDBACK** | **OUTCOME** |
| • Content features diverse characters and customizable avatars that help students see themselves represented in the learning experience.<br>• Accessibility features include closed captions, speed control, high contrast mode, keyboard navigation, and integration with Immersive Reader. |  |
| **Dimension 5: Assessment and Data**<br>**Definition: The product uses formative assessments – learning experiences that help make visible what students know and don't yet know – to generate data that inform teachers about student knowledge and skill gaps, and provide students assessment feedback that is specific, actionable, and constructive. As such, it guides teachers' instructional decisions and students' learning journeys.** | |
| **FEEDBACK** | **OUTCOME** |
| • Each lesson contains embedded formative assessments and allows for teacher evaluation and feedback. |  |

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| • End-of-lesson quizzes provide checks for understanding, and the capstone credential exam aligns with the stated objectives of the program.<br><br>• Students demonstrate learning through varied formats, including code files, documents, images, and videos.<br><br>• Teachers view student results and performance through reporting tools that provide immediate, filterable data. | |

## CONCLUSION

Cyber in Minecraft delivers an engaging, comprehensive cybersecurity program that effectively balances academic rigor with student engagement through immersive gameplay. The program excels in teaching fundamental technology concepts through a carefully structured progression covering digital citizenship, networking, and security, all within an environment familiar and appealing to students. The learning design thoughtfully breaks content into manageable, age-appropriate segments with clear learning objectives and frequent opportunities for assessment.

The program stands out in its approach to digital pedagogy, grounding cybersecurity concepts in authentic contexts that encourage students to create original work addressing real-world challenges. This connection to practical applications helps students understand the relevance of what they're learning while building critical thinking skills. The platform's collaborative features support peer interaction while providing teachers with tools to offer meaningful feedback on student work.

Cyber in Minecraft effectively combines formative and summative evaluations that align clearly with learning objectives, offering students multiple ways to demonstrate understanding through various digital formats. Teachers benefit from immediate access to student performance data that can be filtered and analyzed to support instructional decisions. Through its thoughtful design, robust cybersecurity curriculum, and flexible implementation options, Cyber in Minecraft provides an education-ready solution that effectively prepares students for the challenges of today's digital world while making the learning process engaging and accessible.