International Society for Technology in Education

ISTE SEAL OF ALIGNMENT REVIEW FINDINGS REPORT

Glynlyon Odysseyware Curriculum—Selected Courses

AUGUST 2018

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ABOUT

ABOUT ISTE

The International Society for Technology in Education (ISTE) is the premier nonprofit membership organization serving educators and education leaders. ISTE is committed to empowering connected learners in a connected world and serves more than 100,000 education stakeholders throughout the world.

As the creator and steward of the definitive education technology standards, our mission is to empower learners to nourish in a connected world by cultivating a passionate professional learning community, linking educators and partners, leveraging knowledge and expertise, advocating for strategic policies, and continually improving learning and teaching

ISTE SEAL OF ALIGNMENT

Resources and products designed with the ISTE Standards in mind are choosing to demonstrate their commitment to support critical digital age learning skills and knowledge. Regardless of a solution's intended grade level, purpose or content area, by addressing the ISTE Standards and earning a Seal of Alignment, a solution is shown to consciously, purposefully and meaningfully support best practices for digital age teaching and learning.

ISTE considers a solution aligned to the ISTE Standards only after an extensive review conducted by trained ISTE Seal of Alignment reviewers, and it has been determined to meet all critical elements of a particular standard indicator in accordance with specific review criteria.

By earning a Seal of Alignment, ISTE verifies that this product:

- Promotes critical technology skills
- Supports the use of technology in appropriate ways
- Contributes to the pedagogically robust use of technology for teaching and learning
- Aligns to the ISTE Standards in specific ways as described in the review finding report

RESOURCE DESCRIPTION

WHAT IS THE ODYSSEYWARE CURRICULUM?

Odysseyware, a curriculum resource by Glynlyon Inc., offers approximately 200 courses for students in Grade levels 3-12 on their Odysseyware website. The content is made up of curricular materials in a variety of formats and media, as well as chapter quizzes, optional projects including virtual labs and unit exams.

Core courses consist of English Language Arts, History and Social Sciences, Science and Math. In addition to the core courses, there are also courses covering career and technical education topics as well as electives on a diverse set of topics. The courses are designed for use in public, virtual, charter, and alternative schools and each course ranges from an estimated completion time of between 95 to 180 hours. Odysseyware instructors are available for most courses. The courses can also be facilitated by other teachers in informal and other settings.

The course offerings are made available via a Learning Management System that also includes a teacher interface which enables them to create classes, organize materials, customize courses and create grade and other reports based on student activity. The courses in the LMS platform are also searchable by alignment to state, common core and NGSS frameworks.

ISTE SEAL OF ALIGNMENT REVIEW

Product: Odysseyware Curriculum (selected courses)
Company: Glynlyon, Inc.
Date of Award: August 2018

REVIEW METHODOOGY

ISTE Seal of Alignment reviews are conducted by a panel of education and instructional experts. Reviewers use data collected both separately and collectively to determine how a solution addresses specific elements described in each of the indicators of the ISTE Standards. Special instruments are used by reviewers to collect data on potential alignment across all resource materials. Alignment is determined based on the extent to which all or some of specific elements are addressed within the materials. Reviewers conduct regular calibrations to assure the validity and reliability of the results and final review findings are combined for an overall score for alignment on each individual indicator.

During the review process for the selected courses from the Odysseyware curriculum, reviewers:

- collected data on when and how each activity addressed specific skills and knowledge described in the ISTE Standards for Students.
- compiled findings to determine overall alignment across all ISTE Standards for Students and indicators.
- used aggregate findings to form the basis of the overall alignment results.

These selected courses from Odysseyware were reviewed for alignment against the ISTE Standards for Students, at the Proficiency level. Proficiency level reviews examine how a resource provides opportunity, encouragement, and resources for participants to show significant and substantive growth in the skills, dispositions, and behaviors identified in the ISTE Standards.

SCOPE OF REVIEW

This review consisted of a curated selection of 22 courses from the Odysseware curriculum covering a range of technology-related topics.

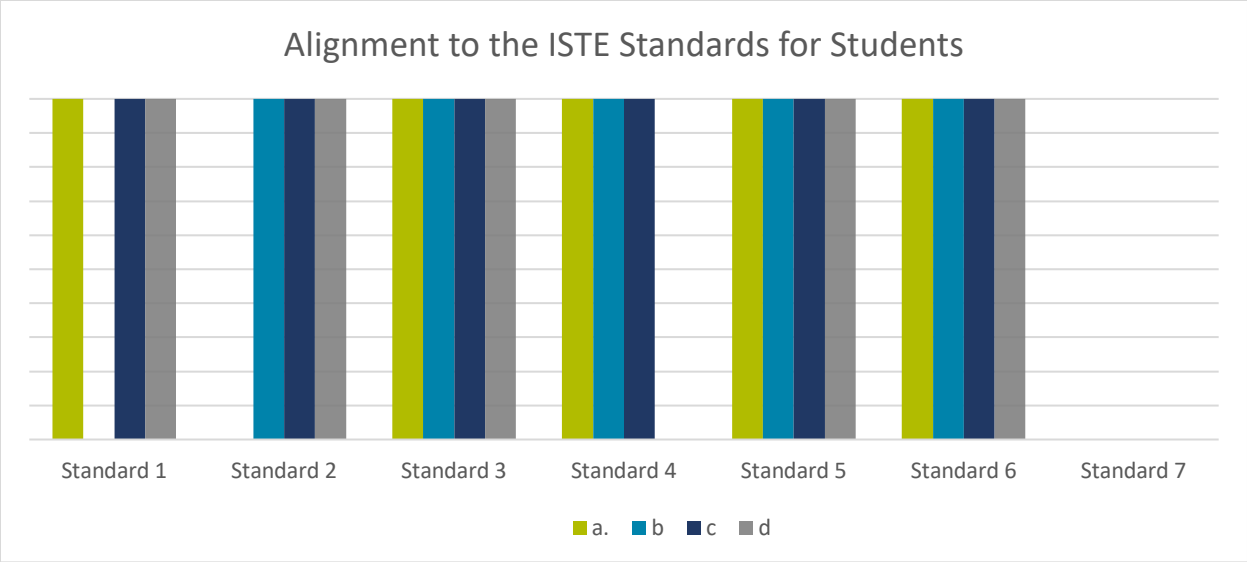
The following courses were reviewed in consideration for a Seal of Alignment:

1. Business Computer Information Systems
2. Digital Arts

3. Technology and Research
4. A/V Technology and Film Careers
5. Fundamentals of Computer Systems
6. Fundamentals of Programming and Software Development
7. Introduction to Careers in Arts, A/V Technology, and Communications
8. Introduction to Information Technology
9. Introduction to Information Technology Support and Services
10. Introduction to Network Systems
11. Introduction to STEM
12. Network System Design
13. New Applications: Web Development in the 21st Century
14. Office 2010 Applications I
15. Office 2010 Applications II
16. Office 2013 Applications I
17. Office 2013 Applications II
18. Principles of Coding
19. Principles of Technology and Engineering
20. Software Development Tools
21. STEM and Problem Solving
22. Technology and Business

REVIEW FINDINGS

The selected courses from the Odysseyware curriculum were found to align to the following indicators of the ISTE Standards for Students at the Proficiency level:



The courses reviewed from the Odysseyware Curriculum library align to the ISTE Standards for Students at the proficiency level in the following ways:

ISTE Standard	Finding Statement
1. Empowered Learner	
1.a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.	Students research the skills needed for careers such as web development, network management and engineering, reflect on their own skills and interests, and create an action plan for pursuing one of these careers.
1.b. Build networks and customize their learning environments in ways that support the learning process.	
1.c. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.	Students use the Odysseyware Learning Management System to demonstrate their learning by taking online quizzes and exams, submitting essays, computer programs, projects and other artifacts and have the opportunity to solicit feedback from other

	students and facilitators to improve their practice.
1.d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	Students learn about a wide range of technology topics including operating systems, software applications, mobile apps, security and cloud computing. They undertake projects such as configuring computers and networks for specific uses, diagnosing hardware and software problems, and troubleshooting internet connectivity.
2. Digital Citizen	
2.a. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.	
2.b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.	Students learn best practices for protecting the security of both computers and networks. They are introduced to the principles of cyber ethics in general and cyber bullying in particular and develop examples of acceptable use policies for both school and business.
2.c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.	Aspects of intellectual property are addressed in a number of courses that require students to understand plagiarism, select sources appropriately and cite sources correctly for papers and projects.
2.d. Manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.	Students practice developing acceptable use policies in the business domain as a safeguard against security threats to employees. They also explore potential scams and other security threats at home and explore practices to protect their personal information on social media, job hunting, shopping and financial sites.
3. Knowledge Constructor	

3.a. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.	A number of courses include substantial research projects that involve skills such as the creation of effective search strings, the selection of appropriate source materials, and the application of evaluation criteria. Related topics such as search engine optimization add a deeper technical level of understanding.
3.b. Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.	A number of Information Fluency topics are addressed in research projects that students undertake including evaluation criteria such as distinguishing between fact and fiction, the difference between primary and secondary sources, and the advantages and disadvantages of online information from various web sources.
3.c. Curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.	To create a formal research paper, students learn about approaches including quantitative and qualitative research and employ those methods to create a formal research paper that organizes and presents data to support a conclusion. Students also learn to create software programs that use a collection of programming elements to produce a meaningful result.
3.d. Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.	In projects focused on real world issues such as environmental challenges, students learn to apply a number of problem-solving frameworks, including the scientific method and the four techniques for creative problem solving used by engineers, to engage with problems and develop workable solutions.
4. Innovative Designer	
4.a. Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.	In a number of courses, students apply a specific design process to develop ideas, test a theory and create a paper, product or artifact. Students also learn and apply the engineering design process, using cyclical steps in this process to Ask, Imagine, Plan, Create and Improve.
4.b. Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	In a number of courses focused on IT careers and related projects, students apply a detailed, step-by-step design/project

	management process to create real world projects such as a customer driven web site. These projects employ technology to manage team work including assigning roles, tracking design and development tasks, and a number of design constraints and tradeoffs.
4.c. Develop, test and refine prototypes as part of a cyclical design process.	Both the scientific method and the engineering design process that students use for various projects require the design, creation and refinement of tangible and theoretical prototypes as part of an iterative process.
4.d. Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.	
5. Computational Thinker	
5.a. Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.	In a number of courses, students learn the theory and practice of formulating problem definitions and then use statistical and data base software to analyze data and find patterns as they conduct research and report on their findings in project reports.
5.b. Collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.	Students collect data using surveys, interviews and hardware tools, represent them in charts and other statistical displays and use them to complete formal research projects.
5.c. Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.	In programming and other problem-solving projects, students decompose problems into logical parts that can be represented by elements of a model and then create tools such as diagrams and flow charts to guide the problem definition and problem-solving process.
5.d. Understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.	Students learn and apply a variety of software languages as they create projects such as web pages, data entry forms and games. Using programming languages such as Scratch, they apply algorithmic thinking to create and debug their solutions within projects in the courses.

6. Creative Communicator	
6.a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	Students select software tools including presentation, word processing and blogging software to create a web document to communicate to a specific audience and post it to the internet.
6.b. Create original works or responsibly repurpose or remix digital resources into new creations.	Most courses require students to create original or remixed products ranging from formal research papers based on extensive research to web pages customized for particular audiences.
6.c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	In the context of problem solving, students create concept maps and diagrams to organize information and create models of various designs or processes.
6.d. Publish or present content that customizes the message and medium for their intended audiences.	Students learn how technology supports businesses and use tools such as presentation software and spreadsheets to conduct background research and create a blog or web page that presents the information effectively to engage the audience to achieve a business goal.
7. Global Collaborator	
7.a. Use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.	
7.b. Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	
7.c. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.	
7.d. Explore local and global issues and use collaborative technologies to work with others to investigate solutions.	

CONCLUSION

The 22 courses reviewed from Glynlyon's Odysseyware curriculum suite are consistently of high quality, covering the subject matter described in the course titles in both depth and breadth. All the courses are polished and professional in both architecture and content.

The online quizzes and exams provide students with immediate feedback as they make their way through the material. The numerous hands-on projects included in the courses enable students to explore topics in a more constructivist way.

Most of the courses reviewed had a strong practical focus, many of them designed to introduce students to careers in technology-related fields. Theory and practice are well balanced, and the writing is clear and audience appropriate.

All in all, this is an impressive set of incredibly dense courses designed to be adaptable to a variety of audiences and settings and aligned extensively to the ISTE Standards for Students.