International Society for Technology in Education

ISTE SEAL OF ALIGNMENT REVIEW FINDINGS REPORT

BrainPOP

JUNE 2019

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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 BRAINPOP?

BrainPOP is a digital learning platform for students covering topics within Science, Math, Social Studies, Digital Citizenship, Social-Emotional Learning, Engineering, Technology, the Arts, English Language Arts, and English as a Second Language. Topics center on an animated movie, sparking self-directed learning through the use of narrative, humor, and characters with relatable voices. Movies are accompanied by a variety of features like interactive quizzes, games, playful and customizable assessments, and other activities. BrainPOP's suite of creation and reflection tools — including movie making, coding projects, concept mapping, and writing and drawing activities — helps teachers tailor lessons and engage students. The BrainPOP resources are comprised of BrainPOP Jr. (K-3), BrainPOP (available in English, Spanish, and French), and BrainPOP ELL, along with support materials for educators.

HOW IS BRAINPOP IMPLEMENTED?

BrainPOP fits into a variety of classroom arrangements and can be easily integrated into curriculum and standards. Topics and activities can be assigned individually or as part of a larger lesson, and students may also manage their own learning paths, depending on their individual needs and strengths. BrainPOP can be used to begin or review a lesson; extend learning; introduce coding, and facilitate planning, organizing, writing, collaborating, and analyzing. Its offerings also help students develop and connect ideas; explain their thought process; make predictions; and build systems thinking and cognitive skills. Teachers can customize assessment, keep track of learning, and take advantage of both lesson plans and professional development.

ISTE SEAL OF ALIGNMENT REVIEW

Product: BrainPOP
Organization: BrainPOP LLC
Date of Award: June 2019

REVIEW METHODOLOGY

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 BrainPOP, reviewers:

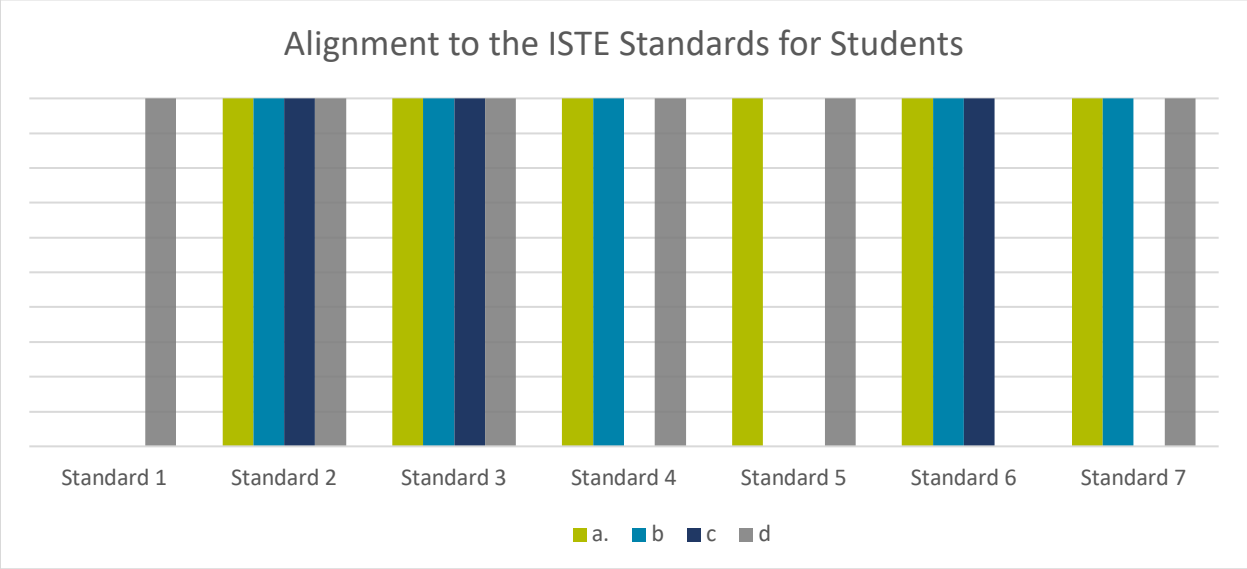
- collected data on when and how each activity addressed specific skills and knowledge described in the ISTE Standards for Educators at either a foundational or applied level
- compiled findings to determine overall alignment across all ISTE Student standards and indicators.
- used aggregate findings to form the basis of the overall alignment results.

SCOPE OF REVIEW

BrainPOP was reviewed for alignment against the ISTE Standards for Students. ISTE reviewers examined content from BrainPOP, BrainPOP Jr. and BrainPOP ELL as well as resources specifically for the teacher.

REVIEW FINDINGS

BrainPOP was found to address the following standards and indicators of the ISTE Standards for Students:



The BrainPOP addresses the ISTE Standards for Students in the following ways:

- Foundational - Resources and activities aligned at the *foundational* level primarily focus on skills and knowledge that facilitate skill acquisition to eventually meet ISTE Standard indicators.
- Applied – Resources and activities aligned at the *applied* level primarily focus on practical, real-world, and/or relevant opportunities to practice the skills and knowledge learned in the curriculum.

ISTE Standard	Foundational Finding Statement	Applied Finding Statement
1. Empowered Learner		
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.	Tools, concepts, and operations are introduced to students through videos in the self-contained platform.	
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.	The Digital Citizenship modules introduce and reinforce digital identity concepts from the point of view of security.	
2.b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.	The Digital Citizenship modules introduce students to the concepts and skills related to safe and legal behavior online.	
2.c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.	The Digital Citizenship modules introduce students to the concepts and skills related to intellectual property and students create content within the platform.	
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.	The Digital Citizenship modules introduce students to the concepts and skills related to privacy and Internet safety.	
3. Knowledge Constructor		
3.a. Plan and employ effective research strategies to locate information and other resources	Search strategies and types of media are explored to introduce students to key	

for their intellectual or creative pursuits.	concepts in locating appropriate sources.	
3.b. Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.	Students are guided through research strategies and information literacy practice to prepare them for independent work.	
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.	A variety of tools are available to create demonstrations of learning; tools are embedded in the platform limiting curation to images and resources available within the platform.	
3.d. Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.		Real-world issues and problems are the central idea in all tasks. Lesson plans are available to help the teacher extend learning.
4. Innovative Designer		
4.a. Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.	Students are introduced to the design process in BrainPOP Jr. and are scaffolded through BrainPOP. Lesson plans extend the design process outside the platform.	
4.b. Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	Mapping tools are used to plan and manage the process; the concept of design constraints is covered in BrainPOP.	
4.d. Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.	Coding activities and challenges provide practice in perseverance and open-ended problems.	
5. Computational Thinker		
5.a. Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic		Coding challenges and game design are built into most topics and teachers are provided with support materials to support

thinking in exploring and finding solutions.		student learning and application of skills.
5.d. Understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.		Coding activities and projects are available as options to demonstrate learning.
6. Creative Communicator		
6.a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	A variety of tools within the platform are available to demonstrate learning.	
6.b. Create original works or responsibly repurpose or remix digital resources into new creations.	Digital resources can be reused, edited and remixed to include in the creation of new content within the platform.	
6.c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	A variety of tools within the platform are available to demonstrate learning in a number of formats.	
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.	Communication tools are introduced but not used. Lesson plans suggest ways to use these tools outside the platform.	
7.b. Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	A variety of communication tools are introduced.	
7.d. Explore local and global issues and use collaborative technologies to work with others to investigate solutions.	Communication tools are introduced but not used; lesson plans connect these strategies for collaboration.	

CONCLUSION

The BrainPOP platform provides students with engaging activities to explore digital tools. Their extensive library of activities for Science, English Language Arts, Math, and Social Studies topics allows students to use digital tools within the platform to explore topics for deeper learning. Not only do students explore digital tools but they also practice using digital tools to demonstrate learning. The Digital Citizenship, Engineering, and Computer Science modules introduce students to important, critical skills and concepts for living in a digital world.

Activities facilitate practice with many online media skills and their extensive collection of content-related topics helps teachers use technology and media skills integrated into current issues and core subjects. The content is intentionally universal, reflecting issues and ideas that allow the activities to be implemented globally.

Overall, BrainPOP is a well-designed, engaging and comprehensive solution that gives students a solid understanding and familiarity with the key concepts and critical skills that are embodied in ISTE's Standards for Students.