SCHOOL LIBRARY SYSTEM OF GENESEE VALLEY BOCES

A direct alignment of modern board games with the new AASL Standards for the 21st century learner. Author: Brian Mayer

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CORRESPONDING COMMON BELIEFS FROM AASL STANDARDS FOR THE 21ST-CENTURY LEARNER

Reading is a window to the world.

The importance of reading skills to educational success simply cannot be understated. As information grows more transitory, students need opportunities to engage in active information interactions by reading, decoding, analyzing, assessing and taking action on information that is not static in nature. It is also important that students are being exposed to reading and print in media where they might not expect to have to read.

Games set the stage for learning. They not only introduce literacy and curricular skills in a complex and vibrant manner, they also provide the motivation for exploring and refining those skills. They are another source of information that, if selected appropriately, can introduce and reinforce needed curricular content and skills for students who can sometimes be missed by traditional classroom measures.

Ethical Behavior in the use of information must be taught.

The social nature of game play provides the opportunity for students to explore ethical choices and their consequence when gathering and using information. With games, students are presented the opportunity to learn from the negative consequences of unethical choices, in a less damaging environment, before they make the same bad choices in a classroom setting.

The definition of information literacy has become more complex as resources and technologies have changed.

In games, players need to draw out information and build knowledge from graphical, social, audible, textual and even hidden informational sources. Educators can model how to locate and interact with this complex web of information while continuing to address the needs of the classroom curriculum.

Individuals need to acquire the thinking skills that will enable them to learn on their own.

Games often make use of similar skill sets but vary the interface and mechanics through which they are employed allowing players to selectively apply and reinforce prior knowledge.

Learning has a social context.

Today's community of learners has become more expansive than the classroom. They are global and membership requires students to participate socially, on a large scale, in a safe, informed and effective manner. Whether interacting cooperatively or competitively, games provide opportunities for individuals to develop and practice the skills necessary to successfully share and learn with others.

School libraries are essential to the development of learning skills.

Curricularly aligned games serve as another resource in the librarian's arsenal of tools which can be used to connect with students' interests and foster collaboration with fellow educators, all in an effort to enhance student learning.

ALIGNMENT WITH THE AASL STANDARDS FOR THE 21ST-CENTURY LEARNER

Inquire, think critically and gain knowledge

1.1 Skills

1.1.1 Follow an inquiry-based process in seeking knowledge in curricular subjects, and make the real-world connection for using this process in own life.

By including curriculum aligned games in their resource collections, school libraries provide an avenue for applying the inquiry skills being developed in school that has meaning and context outside of what is seen by the students as the educational environment.

1.1.2 Use prior and background knowledge as context for new learning.

Most games utilize some form of a theme, using it to develop a setting or back story that provides some context for the gaming experience. By students already having knowledge of elements utilized within the game they are able to bring information with them to the table. That information provides a starting point from which they can engage in the inquiry process; building and strengthening new knowledge along the way.



1960: The Making of the President provides an excellent example of how, when students bring background knowledge into a game, it helps to facilitate inquiry and new learning.

1.1.5 Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.

As educators, school librarians and teachers need to help their students not only understand these skills in the context of research, but also to help them put the skills to practice in their everyday lives. Games provide an activity which can allow students to see that the need to evaluate information is not limited to classroom activities. Instead, it transcends the curriculum, falling into the broader category of life skill. 1.1.6 Read, view, and listen for information presented in any format in order to make inferences and gather meaning.

Students actively participate in the gaming experience, taking in information that can manifest itself in a variety of formats within a game. Rather than evaluating these sources in isolation, games require students to construct meaning through obvious and inferred informational sources and then synthesize a strategy for action based on the combined effect of all learned factors.

1.1.9 Collaborate with others to broaden and deepen understanding

Games naturally elicit social interaction and so, can provide a comfortable platform for students to engage in collaboration. With individuals discussing and working in teams, students have the opportunity to deepen their understanding of not only the content and skills involved with the activity, but of each other as well.

1.2 Dispositions in Action

1.2.2 Demonstrate confidence and self-direction by making independent choices in the selection of resources and information.

Games are an excellent tool for empowering students to engage in self-directed inquiry and discovery at a young age. Because games provide a safe and familiar environment, students can gain the confidence to try different choices in their efforts to find a successful path.

1.2.4 Maintain a critical stance by questioning the validity and accuracy of all information.

Students need to critically evaluate information from print and social sources to help them make decisions within a game. In these situations, students are able to explore the causal relationships behind why bias, self-interest and misperception is used in the representation of information.

1.2.5 Demonstrate adaptability by changing the inquiry focus, questions, resources or strategies when necessary to achieve success.

Because board and card games are an interactive activity, actions are not always predictable and the decisions needed are rarely the same with repeated plays. As a result, situations can and will change as a game progresses, requiring students to be flexible in the approaches and actions they take as they work towards achieving goals within the game.

1.26 Display emotional resilience by persisting in information searching despite challenges.

Games offer positive experiences which can teach persistence and help students to learn that it is alright to fail. They walk away knowing that they can learn from their mistakes and still grow as learners. This is a hard lesson to impart in an environment where so much matters, but games succeed by providing an opportunity where students can fail and still continue on to succeed within a single learning experience.



Battlestar Galactica and other cooperative games allow students to gain the skills and confidence to offer advice and provide leadership.

1.3 Responsibilities

1.3.4 Contribute to the exchange of ideas within the learning community.

Students can participate in the game experience by offering advice and leadership during cooperative play or giving feedback and suggestions after decisions are made while engaged in competitive activities. Student contributions can also take place away from the table as they discuss strategies as they relate to the game.

1.4 Self Assessment Strategies

1.4.1 Monitor own information-seeking processes for effectiveness and progress, and adapt as necessary.

Games often have a learning curve that builds towards proficiency. Initial plays are explorations in the system, becoming familiar with the theme and mechanics of the game. However, students have the potential to excel within a game through a continual process of self-monitoring and adaptation of how they are utilizing information during their experience.

1.4.2 Use interaction with and feedback from teachers and peers to guide own inquiry process.

By participating within learning communities, students have the opportunity to develop their inquiry skills through feedback and interaction with their teachers and peers. With guided game play, teachers can utilize selected gaming resources to introduce new skills or reinforce specific ones that need attention. Students can also serve as peer mentors, initiating other students who are unfamiliar with a game and providing advice on how to interpret and interact with information throughout the gaming experience.

ALIGNMENT WITH THE AASL STANDARDS FOR THE 21ST-CENTURY LEARNER

Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge

2.1 Skills

2.1.1 Continue an inquiry-based research process by applying critical-thinking skills to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge.

Games requires students to analyze what information is being used and to determine how much of their background knowledge will be of use. Students then need to combine this with any new information provided in the game to synthesize a general inquiry approach and overall strategy. Throughout the course of the game, students will continually need to evaluate their progress to determine if they need to make any adjustments as they work towards their goals.

Because students are applying classroom content and skills to a unique environment, they are developing new understandings of the knowledge they already have. Additionally, new concepts and skills are being introduced in connection with game play, allowing students to build their knowledge base from their gaming endeavors.

2.1.3 Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.

Student growth through game play and exploration extends to life skills such as risk assessment, critical thinking, and money management. Discovered knowledge can spark an interest in other areas of study when it was not there before. Additionally, social skills are developed as students learn to more effectively collaborate, make independent choices, work in teams, take turns, share, and stay open to different ideas and perspectives. And lastly, students build the skills needed for future inquiry; making persistence, independence, and adaptability a part of their inquiry repertoire.

2.1.5 Collaborate with others to exchange ideas, develop new understandings, make decisions, and solve problems.

Games provide the opportunity for students to work with and observe other students interacting with information and solving problems. By participating in these cooperative learning experiences, students are able to take part in collaborative groups and observe other players model successful choices. These experiences have a positive effect on future problem-solving efforts by the students, helping them grow as learners by providing them with a reference point when making choices of their own.

2.2 Dispositions in Action

2..2.1 Demonstrate flexibility in the use of resources by adapting information strategies to each specific resource and by seeking additional resources when clear conclusions can not be drawn.

The game experience itself also demands flexibility in where information is gathered and how it is utilized. Potential sources of information include other players, the game itself, past play experiences, and suggested strategies for play. How much each source factors into the player's decisions varies with each game. Additionally, factor in that many games offer a variety of paths to victory and you now have a very fluid learning environment.

2.2.4 Demonstrate personal productivity by completing products to express learning.

The intrinsic enjoyment that comes from playing games is a powerful force in helping motivate students to demonstrate personal results through game growth and success. This is not necessarily measured by a student's rank at the end of the experience, but instead by the journey that brought them there. If you look closely, there is a valuable life lesson to be found in games; winning is not always necessary to be successful.



Power Grid allows students to experiment with economic and environmental concepts in a environment whose situations can easily mirror those found in news headlines.

2.3 Responsibilities

2.3.1 Connect understanding to the real world.

Games can then be used as springboards for conversations surrounding important topics of the day. If the game is well designed, the students will not simply be learning about these topics but will experience and interact with them. They can have the opportunity to see how ideas like: equality, ideology, supply and demand, resource scarcity, energy consumption and religion can have an effect



Ticket to Ride provides students with an opportunity to develop the flexibility and persistence needed when engaging in inquiry activities for both their academic and personal interests.

on situations and circumstances. And in the end, these experiences help students grow as learners by adding to their understanding of how the world's connects.

2.3.2 Consider diverse and global perspectives in drawing conclusions.

While books have writers, games are created by designers and many of these designers come from countries and cultures of which the students are unfamiliar. Like multicultural literature, through the use of: theme, setting and the designer's heritage; games present students with situations and problems that may require a more globally sensitive perspective to achieve a successful experience.

2.4 Self Assessment Strategies

2.4.1 Determine how to act on information (accept, reject, modify)

All games require players to take action, but how information is acted upon depends on experience, exposure and opportunity. What applicable background knowledge and previous experiences do the players bring to the table? How much information do they have openly available to them? What needs to be inferred or speculated? And lastly, what opportunities do students have to access and evaluate the information?

2.4.2, 2.4.3 & 2.4.4 Reflect on systematic process, and assess for completeness of investigation; Recognize new knowledge and understanding; and Develop directions for future investigations.

Collectively, these standards comprise the learning and growth cycle which takes place during game play. While each piece of this process can be addressed individually, it is as a whole that they reflect the value that gaming has as an educational resource. Just as individual library skills can be taught in isolation, it is the sum of their parts put into practice that demonstrate their true merit.

ALIGNMENT WITH THE AASL STANDARDS FOR THE 21ST-CENTURY LEARNER

Share knowledge and participate ethically and productively as members of our democratic society

3.1 Skills

3.1.1 Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning.

In most games, each of the participating players have the same goals with similar challenges and choices to be made. As those challenges arise and choices are made, unless they are identical, each player's path towards a successful resolution will diverge from the others. This overlap and division creates points of reference for the students to reflect on, comparing inquiry approaches and choices. It also establishes a shared experience framework around which students can learn and grow through discussion and dialog.

3.1.2 Participate and collaborate as members of a social and intellectual network of learners.

Whether in the classroom or online, games facilitate the sharing of concepts and strategies through collaboration amongst players and an active reflection on personal performance. These moments of interaction and collaboration are not confined to sporadic moments of socialization, but instead transpire throughout the course of the game.

3.2 Dispositions in Action

3.2.1 Demonstrate leadership and confidence by presenting ideas to others in both formal and informal situations.

Games, and play itself, provide a powerful scaffolding platform for preparing students to be successful in presentational situations.By taking their first steps within the relative safety of a game, students learn to trust their instincts and voice their opinions. They learn to speak out with confidence, arguing persuasively based on inquiry and the critical analysis of information within the game.

3.2.3 Demonstrate teamwork by working productively with others.

Cooperative games are a specific subset of gaming that uses teamwork as the primary driving factor for game play. Most cooperative games pit the students against the game, allowing little room for mistakes. Without communication and coordination, players will very quickly begin to loose their footing and students will quickly learn



Shadows Over Camelot requires cooperation, communication, and selfsacrifice.

that unless they truly work together they will never be able to achieve success.

3.3 Responsibilities

3.3.2 Respect the differing interests and experiences of others, and seek a variety of viewpoints.

Games present of buffet of choices to players, with a variety of mechanics, themes, length, and playing styles available. As a result, students have an opportunity to try different experiences outside of their usual choices. Through dialogue with other students and an openness to experimentation, students are able to try out new experiences; taking advantage of their peer's interests and increasing their exposure to different thematic content and skills.

3.4 Self-Assessment Strategies

3.4.1 Assess the processes by which learning was achieved in order to revise strategies and learn more effectively in the future.

Effective games, inspire students to mentally revisit the events of their gaming experience, asking themselves key questions such as: "How did I do?" and "How can I be more effective the next time I play?" These questions provide guiding answers that help students grow as learners. Organizing the results for reflection, students are able to develop a direction for improvement in future games.

3.4.3 Assess own ability to work with others in a group setting by evaluating varied roles, leadership, and demonstrations of respect for other viewpoints

The community of play established by games, like many communities, creates a variety of roles which need to be filled. In each case, the choice is not made in isolation but is instead in response to the needs of the community. Students fall into opportune roles based on situational needs, taking on the guise of teacher, observer, participant, or mediator as needed. They may often wear several hats throughout a single gaming experience.

Pursue personal and aesthetic growth

4.1 Skills

4.1.1 Read, view, and listen for pleasure and personal growth.

The enjoyable nature of games encourages reading, viewing and listening for pleasure and personal growth.

4.1.5 Connect ideas to own interests and previous knowledge and experience.

Well designed games can be breathtaking. The right marriage of theme and mechanics provide for an engaging and ultimately rewarding experience. Through the use of well developed themes, games can connect ideas to the interests of students and build upon knowledge and experiences developed in the classroom.

4.1.7 Use social networks and information tools to gather and share information.

User driven resources like Board Game Geek (http://www.boardgamegeek.com), provide students an outlet to post and read information about the games they enjoy. Additionally, they have the ability to provide feedback and share their opinions through reviews, ratings and tags. These resources can serve as a research base for the student's interests, allowing them the opportunity to begin the inquiry process before they sit down and start playing a game. Students can research the best strategies or look for clarification on a poorly translated rule set. The exchange of information can continue after game play as students discuss and share their experiences with their peers.

4.2 Dispositions in Action

4.2.4 Display curiosity by pursuing interests through multiple resources.

One of the benefits of the wide variety of designer games is the potential for exploring interests through multiple levels and styles. Students can also be encouraged to explore elements from games by reading books or other materials that provide additional background information.



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Be sure to check out Libraries Got Game: Aligned Learning through Modern Board Games available at: <u>http://www.alastore.ala.org/detail.aspx?ID=2770</u>