At a campus that percolates the power and promise of play, the Champlain College Library asked students from our Electronic Game Design Program and the Emergent Media Center to create a game to complement our Information Literacy (IL) program. Little did we know that this collaboration would lead us to question and re-envision what we mean by information literacy. As a result of this library-student collaboration, Champlain is experimenting with new, dynamic, and interesting ways to engage and invigorate our students’ interest in accessing, navigating, selecting, and using information in the digital world.

Context
After attending the July 2007 ALA TechSource Gaming, Learning and Libraries Symposium, Champlain’s Information Literacy Librarian was convinced that Champlain students could create a game for the college’s nascent IL program that was dynamic, shareable, educational, and fun. The literature in both information literacy and educational gaming confirmed our belief that an IL program at Champlain, where our students are professionally focused and interested in the applicability of their studies, would need to nurture students’ thinking critically about information in an increasingly rapid, complex, 2.0 world.

At that time, Champlain’s Information Literacy program was just beginning. Previously, students at Champlain had received traditional library instruction only in classes that requested it. In late 2007, Champlain initiated an embedded information literacy program into its new general education “Core” curriculum. The Core provides a four-year, sequential, interdisciplinary course of study. The Information Literacy program, like the Core Curriculum itself, is designed to be incremental and inquiry based. While we wanted the program to continue to promote library resources to our students, we felt that it was equally as important to ask students to think critically about the information they use every day.

A project such as an information literacy game would also propagate the library’s increasing role as a venue for offering students creative professional experiences. Champlain College considers professional experience as central to our students’ education. The Library, over the last five years, has become a campus partner in creating avenues for students in game design, and other majors, to apply and contribute their
professional skills to real-world projects and priorities. The Library has found these collaborations enormously beneficial in terms of capitalizing on students’ creativity, building relationships with departments and students, and gaining allies within the student body with whom we test ideas, gain feedback and suggestions. The inroads we have made among the gaming students have been particularly salient to the rise in gaming in libraries.

Gaming has yet to be fully embraced in higher education, though the literature advocating for its implementation, especially in libraries, is growing steadily. A number of libraries have initiated programs to add gaming to their public programming and found great success in extending their reach by bringing students into the library with game nights. However, there is also a need for libraries to take advantage of skills students already apply regularly in game settings and integrate them with information literacy instruction. Recognizing the learning potential games provide our students already, why not use a setting students enjoy to expose and refine their information literacy skills?

At Champlain, the ability of our students to extrapolate their information literacy skills in multiple contexts and environments was vital. Our hope was that we could create a game that captured the information literacy process, applied it in a non-academic setting, but that appealed to today’s students and their sense of fun. The game setting encourages students to focus their attention on seeking and using the best information in a non-traditional context rather than focusing on getting the right answer. Most importantly, a game offers students the kinds of characteristics they want in their learning such as experiential learning, trial and error problem solving, and involving. For all of these reasons, we approached Anne DeMarle, the director of Champlain’s Emergent Media Center (EMC) with this question: “Could students design a game to complement our information literacy program and reinforce IL outcomes?” Her interest and enthusiasm in creating an educational game for the library with potential interest within the wider academic community led us into an 18-month project that as of Dec. 2008 was in its final stages of completion.

The Design and Process
Once the library had signed on with the EMC, the Information Literacy Librarian and Library Director met with more than two dozen students to develop a sense of what we meant by information literacy, brainstorm ideas for types of games that related to the topic, and develop working groups to hash out those ideas into actual concepts. This meeting focused on defining information literacy while also throwing out ideas about what types of games might best suit the project goals.

A few weeks following this initial meeting, where librarians provided students with models, definitions, and introductions to the literature, designers presented the librarians with a game concept. Once the librarians provided feedback, students developed their concepts further, resulting in a game proposal. Librarians and the leadership team at the EMC reviewed the game proposals in order to narrow the number of proposals to two that could be developed into design documents, and eventually games.

Perhaps the most surprising aspect of this project has been realizing the parallels between the process of conceptualizing, creating, and finishing a game and the information search process. Even in the final reviews of the games, as the producers, supervisors, and librarians met to discuss the games’ progress, the teams’ frustration with the speed of the project, and the reviewing and revamping of game play with the IL concept, the similarities between the projects and the process were striking.

The Games
Searchlight
Searchlight creates a metaphor in its gameplay by equating information with light and drawing parallels between resources and islands in an archipelago. The player takes the role of Clara, a young girl who must rebuild a lighthouse before nightfall. She does this by collecting light from the islands around her in order to build the lighthouse according a set of blueprints. She collects light that is of a focused color, which allows it to be seen clearly by people traveling in the dangerous night-time waters. Each island has a diverse theme characterized by the people and information found there (e.g. friends and family, the Internet, the Professor).

Students can engage with Searchlight by exploring the islands for information and using their gathered resources to construct a culminating representation of their findings. By selecting a focus for the game, students are pushed to consider their purpose and understand that different problems call for use of dif-
different resources. This is accomplished by asking the player to choose a color of light that they wish to find; each color can only be found on a select few islands, prompting the player to learn where various resources come from and to use that knowledge to optimize their information-seeking process.

Players should come away from *Searchlight* with a clear understanding of the basic concept of IL. Students balance their freedom to explore a wide variety of sources with using tools to guide them towards an end goal. Students can develop their ability to quickly gather, evaluate, and incorporate information to complete the game or they can practice individual aspects of the information seeking process by reflecting on the elements of the game as they gain a better understanding of IL through play.

**Dustin King: Locked and Literate**

*Dustin King: Locked and Literate* places the player into the shoes of agent Dustin King. The premise of the game is that Agent King must discover what Spade Co. is up to. During one of his many missions investigating Spade Co., he is taken captive and locked into a storeroom. With the help of his high tech wristwatch and the information he collects and puts to use, King is able to communicate with the rest of the team and escape the locked storeroom.

Each of the three levels (plus the tutorial level) presents increasingly difficult questions for which the player must gather information in order to construct an answer. Information can come from three types of sources: electronic based sources such as computers and databases, printed materials such as books and notes, and information from peers by speaking with your team members. The conclusions that the player creates from the information they gather ultimately affects the ending the players receive at the game’s conclusion.

This game challenges players to discover solutions to difficult questions by gathering and interpreting various pieces of information. In addition to the game’s emphasis on information seeking and interpretation, students need to select and present information appropriate to a particular audience—in Dustin King’s case, his superiors. *Dustin King: Locked and Literate* asks students to apply their information literacy skills to accomplish increasingly difficult tasks and work towards the larger goal of investigating a company the player needs to know more about.

**Challenges and Turning Points**

There have been a number of challenges throughout the design and creation process that have mirrored the information seeking process as a whole. The first was in defining the task or problem ahead—for us, this was in clearly articulating a working definition of information literacy. Students’ reaction and articulation of information literacy during the design process showed that the way the Library was speaking about IL was not being understood. This became the greatest obstacle throughout the design process. For example, the first concepts that the students presented promoted traditional library resources rather than a game that asked players to analyze the relevance of resources to their needs. While the concepts articulated key information literacy concepts, it became clear to the Library that words like authority, credibility, reliability, and currency were being used superficially. There was no connection between those terms, let alone those concepts, and the information seeking behavior the game simulated. The students were unclear what we meant by information literacy. To them, it was the same thing as library instruction. What was the difference that we were trying to capture? How could we connect the process of information seeking and the goal of life long learning to the ideas students had for fun games?

Essentially, we wanted the games to focus less on the library and more on the skills students apply in the library as well as on Google, in Wikipedia, and among their peers. To achieve this, we asked students to re-conceptualize their thinking about IL in two ways: first, think about the skills and process of information seeking rather than the sources from the library. Second, as they revamp their designs, how can we focus attention onto an awareness of the information seeking process itself? We reminded students that information seeking is something we all do, all the time. It was the awareness of how we look for information that we want to focus on so that we can develop, refine, and improve it. The students’ initial ideas proposed games about how to write a research paper. This was understandable: students were drawing on their experiences doing research for their college classes. However, Champlain’s vision of information literacy was broader. We wanted a game that asked students to think about how they use information every day and why they use the information they do. To demonstrate the real world application of informa-

*ACRL Fourteenth National Conference*
tion literacy, the librarians presented the student designers with two models, both of which combined the language and literature of information literacy with key concepts in gaming.

Carol Kuhlthau’s Model of the Information Search Process illustrated the personal and emotional challenges students face when dealing with vast amounts of information. The model’s emphasis on the level of uncertainty felt during tasks hit home with the gamers. They easily connected it to the emotional responses felt when playing games for the first time. During one of our discussion sessions, we even pinpointed our own experience in the design process to the model and talked about ways of moving forward in the process. This discussion session not only influenced the redistribution of skills, process, and emotional aspects of information seeking within the game but it also influenced the librarians’ understanding of what our students need when it comes to thinking about information today.

The second model librarians shared with students was of the hero’s journey. Based on Joseph Campbell’s archetypal map, the hero’s journey has been described as a model for engaging students in the research process. The hero’s journey was familiar to the students as it is a major theme running through a myriad of games. Holmes’s equating the research process to the hero’s journey inspired the student designers to consider the research process as “a journey of transformation in which the researcher leaves behind the comfortable world that he or she knows, gains new knowledge, and then returns—changed in some way by his or her learning.”

While exposure to these resources improved students’ perception of information literacy and the desired emphasis for the game, keeping the focus on the iterative process of research has been a struggle. The librarians voiced concerns over making the information literacy metaphors adequately explicit in game play. For example, *Searchlight* emphasizes the quality of resources by comparing them to qualities of light while constructing a lighthouse. The game emphasizes the variety of places information is found and demands the player be selective in the kinds of light they pick. However, players were not instructed to revisit their lighthouse or its blueprints to affirm the light’s value, thereby lacking the iterative process essential to research. Alternatively, *Dustin King: Locked and Literate* asked players to review information and determine whether Spade Co’s corporate objectives are for good or evil. While this offers students the opportunity to interpret information and incorporate it into the player’s knowledge base, essential components to Champlain’s and ACRL’s Information Literacy Outcomes, the game lacked an evaluation of the source itself.

The game producers faced a number of challenges as well. Designing these games was particularly difficult because information literacy is so broadly interpreted and reflects a process rather than a set series of tasks. Logistically, they faced a series of drawbacks that is inherent is working with students: work study funding, retaining focus and follow through on the projects, students’ academic and personal obligations, and student transience. Simultaneously, they dealt with challenges in project management, time management, team cohesiveness, and quality control. The student producers, however, demonstrated continued commitment to the game’s concept and to creating a game created by and appealing to their peers. Moreover, the opportunity to provide students with a real world, rather than classroom oriented, experience has been invaluable to these students as they prepare for their careers in the gaming industry.

For the librarians, perhaps one of the greatest challenges throughout this process was considering how much can be encompassed into a game. Does it need to highlight every aspect one encounters during the research process? Can it? To answer this, we needed to ask ourselves what role a game has in our program. While the games developed by the students have not yet been incorporated into the IL Program’s curriculum, the goal of this project has been, and continues to be, to use a game that reinforces and complements Champlain’s program. As the games near completion, it seems that they complement each other and the IL program. Like many institutions, students arrive at Champlain with varying levels of IL knowledge or experience. We are considering whether *Searchlight* might help familiarize students with the basic concepts and skills of information literacy while *Dustin King* might give them a venue to apply those skills.

**IL Today**

Game Design students’ reactions and understanding of information literacy have shaped the pedagogical approach to information literacy on our campus. Their
contributions were invaluable in our understanding the skills students in the digital world already possess. As a result of our collaboration, Champlain’s Information Literacy program capitalizes and expands on students’ prepossessed knowledge and asks them to be cognizant of these skills in all situations.

Champlain’s IL program today encourages students to recognize and apply information literacy across multiple contexts. By identifying, discussing, and analyzing the information they use every day, students articulate their expectations and goals for the information they use. Those expectations and goals influence their information seeking in all situations. We create sessions, based in the inquiry method, that ask students to describe their experiences and methods of looking for information in their everyday lives as well as academic lives. While we continue to encourage the use of library resources, we do so as part of a larger conversation: why those sources meet students’ needs in a given situation. Thus, the emphasis of our program has shifted away from prescribed instruction such as how to use MLA, databases, or the library catalog, and towards inquiry-oriented, critical thinking about information itself. These are the principals that are highlighted and reflected in the Information Literacy Games.

If students are evaluating information and selecting sources in their everyday lives and in virtual play environments, why can’t we use a game to deepen their awareness of that process? Champlain’s two prototype games do just that: both games engage college age students to draw on their preexisting skills and information seeking activities, a method that reinforces Champlain’s emphasis on inquiry-based learning. The emphasis on inquiry empowers students to make connections between the small challenges they face in their searching and the larger task of problem they are attempting to solve—qualities that are key in learning and in professional environments. The end result of the games leaves students empowered to use and refine their information seeking behavior to become more sophisticated, efficient, and educated users.

Notes
8. Ibid., 19.