
Get in the Game: Encouraging Play and Game Creation to Develop New Literacies in the Library

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ABSTRACT

Play is a well-documented educational tool, but one that has begun to decline in schools and early childhood education due to the increased pressure for cognitive-based school readiness programs. Play such as pretend play and video games engages children and helps them to develop literacies and competencies outside of the classroom. Additionally, play is a hands-on approach to curriculum that creates deeper understandings and relationships with the subject matter. In this article, two programs are highlighted that combine elements of play to foster these kinds of connections. In live action video games, aspects of video gaming and pretend play bring children into the world of the video game and teach them collaboration, resource management, and creative problem solving. In a strategy game that was designed to replace a book discussion, teens connected more deeply to the story by discussing their own responses, the structure of the narrative, and their feelings about the protagonist's choices. These programs are an attempt to bring play back into learning to encourage the development of new competencies and foster a love of learning.

INTRODUCTION

Play is one of the first ways that children learn about the world around them and how to interact with it. From games of make believe to traditional board games to advanced video games, play can take all kinds of forms. Children learn many different kinds of skills from play, including turn-taking, sharing, and strategy. Evidence suggests that play also may have important implications for a child's development of emotional competence skills (Colwell & Linsey, 2003). These skills such as self-regulation

and the ability to recognize others' emotions and perspectives are incredibly important to a child's development of peer relationships. In addition to peer relationships, children and young adults create relationships between different media as they play (Baker, 2008). For example, influences from stories and video games can be brought into games of make believe. Welsch quotes a study by Heath on this topic saying, "Research indicates that play around stories may encourage the development of critical comprehension skills while simultaneously developing students' love of stories and their ability to connect with books on a personal level" (2008, p. 138). Studies have also found that lack of unstructured play can prevent children from developing into well-adjusted adults. In her article entitled "The Serious Need for Play," Wenner states that "'free play,' as scientists call it, is critical for becoming socially adept, coping with stress, and building cognitive skills such as problem-solving" (2009, p. 23).

However, research has also shown that stories in television and more sophisticated toys have begun to shrink the imaginative space in which children create props and scripts for their make-believe play (Spiegel, 2008). Parents and teachers have also focused play more on lessons and different types of structured play such as sports teams. This structured play prevents children from practicing the skills that can be learned in unstructured imaginative play (Spiegel, 2008). In classrooms throughout preschools and elementary schools, increasing emphasis has been placed on cognitively focused activities. Welsch (2008, p. 147) suggests that "both younger and older students would likely welcome and benefit from opportunities to self-regulate their play activities." Many parents and teachers still identify literacy skills with books and other print materials, despite research that has attempted to broaden this definition (Sanford & Madill, 2007). How can we, as libraries, help to bridge the gap between the literacies developed in play: social, cultural, technical, etc. and the traditional literacies regarding print materials?

Game creation surrounding literature as well as blending various forms of media and discussing these media with students could create these connections. O'Hanlon (2011, p. 16) states:

Game creation as a learning tool is really just a digital-age take on the old learning-by-doing approach to teaching. Students pick up concepts more easily and retain more information when they are hands-on with their subject matter.

While O'Hanlon was discussing the implications of video game creation with students, this concept extends to all forms of play. For example, children creating a board game similar to that in the book *Jumanji* by Chris VanAllsburg learned about game mechanics, such as turn-taking, movement, and numeracy skills based on dice rolls. They also learned about different types of animals and insects and their habitats as well as

practiced motor skills in pretending to be different animals. Children engaged in “live action” versions of popular video games discussed the ways in which the real world would have an effect on the outcome of the games, and teens involved in a game in which they assumed the role of the protagonist in Vivian Vande Velde’s *Heir Apparent* discussed narrative structure as well as the outcomes of decisions that the protagonist made and explored their own feelings and reactions to similar situations.

In this article, two forms of play and their synthesis to create connections between play and literacies will be discussed: video games and pretend play. In his article on using video games in curriculum, Len Annetta (2007, p. 10) stressed the importance of video games in education by saying,

With end-of-grade, back to basics, multiple choice testing for the masses and mechanical instruction methods, there’s growing concern that children are not learning to problem solve as much as they are mastering memorization of isolated facts in order to answer text questions. Yet, when they get home from school, children eagerly devour new information and concepts through the virtual environments of video games.

Numerous studies have shown the educational benefits of playing video games. Two studies that will be discussed later (Minchin, 2011, Chuang & Chen, 2009) point to improved critical thinking and higher cognition through the use of video games, and Sanford and Madill (2007, p. 432) point out that both video game creation and play combine “numerous complex literacy skills in one activity.” The popularity of video games with children cannot be denied, although some worry that video game addiction can lead to impeded academic achievement and interfere with age-appropriate socialization (Merlo, 2009). Also, video games are not often created as a tool to examine values and world views. In playing a video game, players must accept a certain set of game mechanics, and these are founded in the game creator’s particular worldviews and values. “Unless taught how to notice and critique social values and assumptions in a game, video game players are mostly unaware of the broader social practices embedded in video game content and play” (Sanford & Madill, 2007, p. 432). Discussion of video games as well as game creation allows students to reflect on the subject matter of the video games that they play and its implications in the real world. When creating a game, students use the fundamentals of game design and demonstrate knowledge of various topics (O’Hanlon, 2011) as well as have the opportunity to express their own worldviews and values (Sanford & Madill, 2007).

Pretend play is similar to video games in that it is also a well-established method of instruction that has dramatically declined due to the back-to-basics approach to curriculum. Pretend play typically emerges at two-years-old and begins to decline at age six (Kelly, Hammond, Dissanayake, & Ihsen, 2011). This type of play has its own developmental progres-

sion as well, moving from simple object substitution to “a complex social system of group imaginative play” (Curran, 1999, p. 47.) Pretend play goes by many other names, such as dramatic play, sociodramatic play, and symbolic play, all of which refer to play that involves substituting symbols for physical reality. For example, a child “becomes” a dog or a pet owner or a pile of blocks represents a bear’s cave (Katz & Mendoza, 2008). This type of play involves three basic activities:

- Play with an object
- Play at being like someone or something
- Making up people, places, and things (Welsch, 2008)

During pretend play, the child is able to perceive external physical reality but also pretend a different reality and can discriminate between the two (Kelly et al., 2011). This type of play requires the ability to perceive objects and actions as symbols as opposed to reality. Such transformation is furthered by interactive social dialogue and negotiation as well as role-taking, script knowledge, and improvisation (Bergen, 2002). Bergen states that this type of play “engages many areas of the brain because it involves cognition, language, and sensorimotor actions. Thus, it may promote the development of dense synaptic connections” (p. 29). Children who pretend also practice sharing, taking turns, listening, and negotiating as well as explore social roles and new ways to interact (James, 2009). Bergen cites a study by Lillard (1998) that shows that pretend play involves negotiations that take place outside of the world of the game between plays with varying views, role-play that requires acting out the thoughts and actions of others, and the portrayal of emotions appropriate to various situations (2002). As such, children are creating a shared meaning within the space of the game that encourages both social and emotional competence (Welsch, 2008). “Pretend indicates an expectation for following another’s rules while still incorporating a divergent thinking set” (Curran, 1999, pp. 54–55).

Both types of play have demonstrated curricular uses as well as the ability to engage children. Each type of play also brings a unique way in which children engage with both the game and the subject of the game. For example, pretend play is much more unstructured than video game play because children negotiate their roles and rules. In a video game, the player is subject to the roles and rules assigned by the video game’s creator. In the next section, research will be discussed regarding the multiple types of literacies whose development is enhanced by these two types of play.

LITERATURE REVIEW

Playing video games encourages imagination, problem-solving skills, and positive interactions with computers. When players interact in a multi-player video game, they demonstrate leadership, teamwork, collaboration,

and competition (Sanford & Madill, 2007). Sanford and Madill (p. 432) state, "Significant and powerful learning is happening through the play and creation of video games." Sanford and Madill studied a camp in which teen instructors (aged 11–16) helped students (aged 8–12) create a video game in a week. Although the teen instructors insisted that the camp environment was not similar to a school environment, Sanford and Madill found that both students and instructors were engaged in many different types of literacy practices throughout the course of the camp, including more traditional literacy practices such as writing and sketching in journals. Sanford and Madill noted three different literacies used predominantly by the instructors and students of the video game camp. These are operational literacy, cultural literacy, and critical literacy. Lankshear's work (2006) is a reference used in defining these literacies.

Operational literacy deals with the tools and techniques needed to accurately use a written language system, and it includes the ability to read and write in a range of contexts where appropriate. Sanford and Madill noted that both students and teachers demonstrated operational literacy throughout the camp by reading both visual and print-textual instructions, using and adapting systems of signs and symbols to meet their needs, creating icons that would enable them to communicate with future players of the game. Sanford and Madill also noted that students recognized the differences in how to approach creating print text versus video game making (2007, p. 441).

Cultural literacy involves understanding the meaning and context of certain social practices as well as knowing the appropriate ways of reading or writing within that social practice. Sanford and Madill saw cultural literacy demonstrated by the teens at the video game camp in their awareness of how the media, their own families, and society felt about video games. The teens also noted that there were positive and negative aspects of video game play but were articulate about what they themselves had learned from video games. When creating video games, the teens also showed cultural literacy by juxtaposing different character types and colors to suggest action and character development. These juxtapositions also provided a critique about culture and society by including such themes and characters as cheerleaders and popular school figures, war and violence, and pollution. Sanford and Madill state, "This grasp of the cultural dimension overlaps with the critical literacy dimension" (2007, p. 432).

Critical literacy is the awareness that all social practices and literacies may include some values, rules, and perspectives but exclude others. Sanford and Madill found that while playing video games did not contribute much to this literacy, the creation of video games allowed for the instructors of the camp and their students to express their own interpretations of worldviews and values. For example, when a student created a video game, he or she often modeled the game after a popular game that he or

she had enjoyed, adding their interpretation of the original game maker's views and attitudes. Sanford and Madill note that the difference between video game playing and video game creation is the difference between consumption and production of the medium and that such creation can be empowering (2007, p. 451).

O'Hanlon discussed different types of video game creation software, saying, "These programs aim to have students practice communication, problem solving, and teamwork—skills that they can't obtain from a textbook" (2011, p. 16). In her article, O'Hanlon references a program run by Teresa Valdez at East Austin College Prep Academy in Texas. During the program, Valdez has the students create a video game based on what they learned. Valdez noted that the students who participated in this video game creation program exuded a sense of determination to get their games to run properly (O'Hanlon, 2011, p. 18).

A study of third graders in Taiwan conducted by Tsung-Yen Chuang and Wei-Fan Chen (2009) found that video games facilitate children's cognitive development. They found that playing video games promoted problem-solving skills by recognizing multiple solutions and that video games improved critical thinking and higher level cognition.

In his discussion on the importance of video games in libraries, Minchin states, "Playing games develops a systems literacy—ability to 'read' a system, think about the way components interact, anticipate outcomes, and make decisions accordingly" (2011). This is a vital skill in adult life given the complex social, political, and commercial systems that one must interact with on a daily basis.

Similar to video games, there is a large amount of research that suggests that high-quality pretend play helps students to translate their perceptions of the real world into actions and symbols that define the world of play, much like the creation of video games allowed for such expression. Through creating their play world, students develop a better understanding of the real world (Welsch, 2008). Also, taking on responsible adult roles through pretend play helps children to develop confidence in their abilities and potential when they are introduced to new skills (James, 2011). Bergen stated, "The body of theory and research suggests that high quality pretend play is an important facilitator of perspective-taking and later abstract thought" (2002, p. 10). Curran (1999) noted that children showed increased skills in perspective taking as they communicated throughout pretend play sequences (p. 55). Joint planning, negotiation, problem solving, and goal seeking are all also developed in pretend play (Bergen, 2002).

Sue Brokmeier, a kindergarten teacher at the Fishback Center for Early Childhood Education in South Dakota, transformed her classroom's dramatic play area into a zoo with the help of her class. The children participated in brainstorming and group meetings. They reported their finding

to their peers and adults. The activities involved in creating the zoo allowed students to give voice to their ideas and encouraged them to listen to the ideas of their peers. In addition to these types of social literacy skills, the kindergarteners had many opportunities to practice traditional literacy skills by putting their ideas into writing by contributing to lists, making signs for the zoo's cages, and creating invitations to the zoo's grand opening. Also, reading played an important role in encouraging the kindergarteners to create the zoo (Katz & Mendoza, 2008). When the zoo opened, it was reported by parents that children had created their own animal habitats at home and were exercising better problem solving skills by attempting multiple solutions to discover the best outcome (Bowne & Brokmeier, 2008).

A study of the effects of pretend play on emotional competence by Colwell and Linsey also indicated that high levels of pretend play were associated with high emotion-understanding scores for children (2003). In addition to helping children develop their understanding of the world around them, pretend play, when guided by the children's own rules, allows them to develop self-regulation (Ashbrook, 2010). Self-regulation is part of a larger set of skills known as executive function and is the ability to control one's emotions and behavior (Spiegel, 2008). During pretend play, children practice self-regulation through private speech. Private speech is when children layout the rules of their play by talking to themselves. According to Spiegel (2008), this form of self-regulating language is highest in make-believe play. A study by Karfft and Berk in 1998 that has been referenced by Bergen confirms this. Krafft and Berk found that "more private speech occurred in the play oriented setting, especially during pretend play with fantasy characters" (Bergen, 2002, p. 30-31). Bergen also posits reasons for this, referencing a study by Winsler and Diaz that states social pretend play requires children to set goals and carry them out. Such activities provide more opportunities for self-regulating speech than other types of play or tasks with predetermined goals (Bergen, 2002). According to Spiegel, "Self-regulation is a better predictor of success in school than IQ" (Spiegel, 2008).

With regard to school learning and more traditional literacies, there has been much research on the combination of literature with pretend play. Such studies have found that focusing play around familiar stories causes pretend episodes to be centered on the story lines of the literature shared and encourages students to develop deeper personal relationships with stories and positive reading experiences (Welsch, 2008). Welsch regards book-related pretend play as a "richer method of monitoring students' understanding of stories, moving beyond the typical questions and simple retelling" (p. 145). Studies have also shown that by having literacy materials embedded in play areas, children in preschool, kindergarten, and multiage programs have been found using literary materials and

engaging in literary acts, such as reading or writing (Bergen, 2002). Bergen cites a study by Vukelich in 1994 that found kindergarten children's ability to read print was increased when such materials were embedded in their play environment. Another study by Kim (as cited in Bergen, 2002) found that children who engaged in pretend play had a higher level of narrative structure (Bergen, 2002). When pretend play was focused around stories, preschoolers explored their perspectives on story characters and were able to sort out the author's themes as well as investigate social relationships and other interests through the context of a story (Welsch, 2008).

Studies have found that students use pretend play as a springboard to investigate art materials, their peers' ideas, and the world outside the classroom (Katz & Mendoza, 2008). In Welsch's (2008) classroom, which included play areas filled with props from popular story books, students relied on stories and props only as a framework for their play. Then, they developed more imaginative and personally relevant explorations of the stories' meaning. Welsch (pp. 145–146) states, "Play experiences available contributed to students' development in multiple areas and may result in a positive influence on later experience with books and reading." Similarly, in Brokmeier's classroom, children developed other academic skills such as sorting and classifying; they used research techniques and secondary sources to develop their classroom zoo (Bowne & Brokmeier, 2008).

METHODOLOGY

Two different programs enacted at a south Florida library combine the elements of video games, pretend play, and literature to increase different types of literacy skills through play. One program, known as live action video games, uses pretend play and popular video games to open up discussion about the real-world implications of video games as well as to expose children to different types of literacies outside the world of the video game. Another program, based on the book *Heir Apparent* by Vivian VandeVelde (Division of Library and Information Services, 2011), exposed teens to literary concepts as well as encouraged them to examine their own worldviews through the lens of a video game.

Live action video games combines elements of pretend play, such as role-taking, script knowledge, symbolic substitution, costumes, and props, with the concepts of popular video games to combine the literacy benefits of video game and pretend play. Two examples of live action video games that have been created use the basis of a popular tower-defense game and a popular puzzle game. In a tower-defense game, players are taught to manage resources because they are only allotted a specific number and type of resources to defend their tower against an invading force. Fifteen children, aged eight to twelve, participated in the live action tower-defense game. All the children had played and were fans of the video game on

which the live action version was based, although there were varying levels of skills with the video game in the group. There was a relatively even mix of boys and girls. A grid made of painter's tape indicated the area of play. At the beginning of the session, the children were asked to create two sets of hats that would identify them as either the defending team or the invading team. The defending team also got to create paper balls that they would use to defend their "tower" against the invading team. The defending team had to position themselves near enough to the cache of paper balls that served as their "weapons" to reach them or hand them to another player. Once the player on the defending team entered the grid, they could not move from their square and all movement had to take place within the confines of that square. The attacking team could move forward any time that a member of the defending team entered the grid or any time that a member of the defending team tossed a paper ball at an invader.

Unfortunately, the uneven number of players created uneven teams, which quickly led to a victory for whichever team had greater numbers. To eliminate disparity, the children asked the librarian who was running the program to participate. When the teams had equal numbers, the defending team still found themselves hampered by the fact that their "weapons" were at one side of the grid and that once they placed themselves, they were unable to move. Even though the children were cooperating with one another to circulate the "weapons," they could not outstrip the invading team. One child suggested moving the cache of weapons to the center of the grid and placing players in formation around it to allow for easier distribution. Once this strategy was developed and grasped by the other players on the defending team, it was a quick win. During the next game, the invading team asked the librarian in charge of the program if they were allowed to duck to avoid the incoming paper. The librarian told them that as long as they did not leave their square when their turn was over, they could. For example, they could dodge or jump, but they could not run across the grid because they would not be able to return to their square by the end of their turn. The children worked together to establish better moves for avoiding attacks and better formations for defending their tower. When the rules did not work for them, they would question the establishment of a rule and suggest revisions. As the games progressed, they became pretty evenly matched.

In the live action version of the popular puzzle game, children definitely noticed the difference between real-world applications and the world of the game. In this program, a group of fourteen children, aged eight to thirteen, participated in the hour-long program. There were twelve boys and two girls. The children were divided into pairs. Each pair made a set of creatures out of wiggly eyes, foam, and various sizes of craft pom-poms. The children then made a catapult using a medium-sized binder clip, rub-

ber band, and a pencil (www.instructables.com). They experimented with different lengths of rubber band to see how each would affect the firing of the catapult. After about ten minutes of experimentation and practice, the children were asked to create structure out of Styrofoam cups, books, and scrap paper. Then, they were asked to place this structure at the end of their worktable. The teams faced off against each other. The attacking team had three chances with each of their three pom-pom crafts (a total of nine chances) to knock down the opposing team's structure. The teams rotated around the room with the teams being allowed to change their structures as the rounds progressed.

In both cases of the live action game, the children who participated in the program were already familiar with its video game counterpart and were attracted to the live action program because of their familiarity with the video game. The live action video game program attracted at least three children who said that they had not previously participated in library programs.

After each session of the live action video games programs, the children were asked their impressions of the live action version versus the video game. Many children who participated in the tower-defense program found the live action version more difficult than the video game because when they were defending, they had fewer and less varied resources to work with than in the video game. This encouraged cooperation and communication on the best way to distribute these resources. As such, before the defending team even moved onto the grid, there was extensive preplanning and negotiation that went on to determine the best defense. Similarly, children also stated that as the invading team, they had to plan ahead according to what move the defending team made. These decisions were made by the computer program in the video game, as the only role that the player could assume in this video game was that of the defender. The decision of which team was allowed to move first made a noticeable difference in the game play, and as such, the librarian agreed to alternate which team moved first during the four rounds that were played.

This was another departure from the video game that the children noticed. While the video game world had fixed rules that a player had to follow, the live action version frequently allowed players to make up their own rules, providing that they were not unfair to the opposing team. Rules such as taking turns being first, ducking, and moving the "weapons" to a better location encouraged children to think outside the preexisting parameters of the game and come up with alternative strategies. This combines the problem-solving abilities of video game playing with the negotiation and social aspects of pretend play.

In the live action version of the puzzle game, many of the comments had to do with the weight of the objects and how that affected the way that the objects exited the catapult. Also, there was much discussion on the

effect that the weight of materials used to create the structure had on its stability. The children expressed a wish that the objects that they had created could do things like the objects in the video game, such as explode, as that would have improved their chances at knocking some structures down. This led to a discussion of force and mass. Several children at the end of the program wanted to experiment with their catapults to see if they could get more force out of them, but safety concerns prevented them from taking the catapults out into the library. During the live action version of the puzzle game, several children also expressed interest in the craft-making portion of the program and said that they had not previously been interested in it but now enjoyed crafting because they saw more potential video game applications.

During both live action games, children demonstrated their familiarity with the systems of the video games that the live action versions emulated. They also developed problem-solving skills necessary to complete each game successfully, such as resource management, pattern recognition, spatial recognition, and trajectory. In addition to this, they demonstrated skills learned in pretend play, such as communication, shared meaning, collaboration, and creative problem solving. As each of the video games that the live action versions were modeled on were single player games, children got to practice teamwork and competition in the live action versions. They also learned to think outside of the established rules of the video game and to come up with their own rules of play. This sets the stage for them to think critically about the media they interact with and to become creators of media.

Another program by the same library in south Florida that combined aspects of literature and video games was the strategy game that two librarians created using Microsoft PowerPoint to discuss Vivian Vande Velde's *Heir Apparent* (Division of Library and Information Services, 2011). In lieu of a traditional book discussion, the librarians created a strategy game similar to the role-playing game in which the main character becomes trapped in the book. Thirteen teens, aged twelve to seventeen, attended the program. Choices similar to the ones that the protagonist had to make in *Heir Apparent* were presented with each slide in the game. The teens would discuss the choices and arrive at a consensus about which solution they believed would lead them safely through the game. There was much discussion about what the protagonist of *Heir Apparent* would have done, what the teen themselves would have done, and which choice was the "right" answer. The discussion was incredibly lively, and often teens would ask for a chance to choose another choice just to see what the outcome would have been. There was discussion about narrative structure, in terms of the fact that some choices that were presented would automatically end the story.

Because Microsoft PowerPoint is already a tool that most teens are familiar with in completing their schoolwork, the possibility of allowing

teens to create similar games to respond to other types of literature was also entertained.

CONCLUSION

All forms of play encourage creative thinking and cognitive development in an entertaining way. Even if play has not yet been demonstrated to be the cause of long-term school success, there is clear evidence that it is a vital part of children's developmental progress (Bergen, 2002). Bergen states, "If children lack opportunities to experience play, their long-term capacities related to meta-cognition, problem solving, and social cognition as well as to academic areas such as literacy, mathematics, and science may be diminished" (p. 35). Although play has been a well-documented aspect of education, an increasing emphasis on accountability and quantifiable measures of learning has led to a decline in the general understanding of the impact that high-quality play can have on a child's cognitive development (Bergen, 2002). Recent practices in educational policy appear to reflect a "devaluing of play in general, especially in schools and other out of home settings" (Katz & Mendoza, 2008). Sanford and Madill (2007) argued that adults in children's lives, particularly teachers and parents, have an obligation to learn more about video games so that they can create spaces for children to examine these games in the context of their own values and beliefs, to help children challenge the potentially harmful aspects of video games while embracing their educational benefits.

What about librarians? It is the mission of the library to encourage all forms of education, and many libraries have already embraced video and table top board gaming because of their proven educational work. Additionally, many studies about the changing roles of libraries have focused on the library as a "third place," a place that is not school or home (Elmborg, 2011). Why not be the place that puts the fun back into learning by bringing in different elements of play and connecting them to literacies and competencies that enhance a child's education?

REFERENCES

- Annetta, L. (2007). Virtually a new way of learning: Video games and simulations as teaching tools. *Multimedia & Internet @ Schools*, 14(6), 9-13.
- Ashbrook, P. (2010). Inquiry at play. *Science and Children*, 48(1), 26.
- Baker, Andrew. (2008). Understanding the role of co-creation in fantasy and fun. *Advances in Consumer Research*, 35(124), 44-48. Retrieved October 12, 2011, from http://www.acrwebsite.org/volumes/v35/naacr_vol35_124.pdf
- Bergen, D. (2002). The role of pretend play in children's cognitive development. *Early Childhood Research and Practice*, 4(1). Retrieved June 12, 2013, from <http://www.ecrp.uiuc.edu/v4n1/bergen.html>
- Bosky, A., & Curtis, A. (2011). Between rival teams: Sports and games unit 2. Retrieved May 1, 2012, from <http://flyp.pbworks.com/w/page/33505321/BeTween%20Rival%20Teams%3A%20Sports%20and%20Games%20Unit%20>
- Bowne, M., & Brokmeier, S. (2008). At the zoo: Kindergarteners reinvent a dramatic play area. *Early Childhood Research and Practice*, 10(2). Retrieved June 12, 2013, from <http://ecrp.uiuc.edu/v10n2/bowne.html>

- Chuang, T.-Y., & Chen, W.-F. (2009). Effect of computer-based video games on children: An experimental study. *Educational Technology and Society*, 12(2), 1–10. Retrieved February 3, 2012 from Academic OneFile database.
- Colwell, M. J., & Linsey, E. (2003). Preschooler's emotional competence: Links to pretend and physical play. *Child Study Journal*, 33(1), 39–52.
- Curran, J. (1999). Constraints of pretend play: Explicit and implicit rules. *Journal of Research in Childhood Education*, 14(1), 47–55.
- Division of Library and Information Services (2011). *Florida Library Youth Program Materials*. Available online at <http://flyp.pbworks.com/w/page/12212464/FrontPage>
- Elmberg, J. (2011). Libraries as the spaces between us: Recognizing and valuing the third space. *Reference & User Services Quarterly* 50(4). 338–350.
- James, E. M. (2009, July 2). The benefits of imaginative play: The whys and hows of encouraging meaningful play in children. Message posted to <http://voices.yahoo.com/the-benefits-imaginative-play-3661801.html>
- Katz, L., & Mendoza, J. (2008). Introduction to special section on dramatic play. *Early Childhood Research and Practice*, 10(2). Retrieved June 12, 2013, from <http://ecrp.uiuc.edu/v10n2/introduction.html>
- Kelly, R., & Hammond, S., & Dissanayake, C., & Ihsen, E. (2011). The relationship between symbolic play and executive function in young children. *Australasian Journal of Early Childhood*, 36(2), 21–27.
- Lankshear, C., & Knobel, M. (2006). *New Literacies: Everyday Practices and Classroom Learning* (3rd Edition). Maidenhead, UK: Open University Press.
- Merlo. (2009). Video games: Moderation is the key. *Clinical Psychiatry News*, 37(12), 16.
- Minchin, P. (2011, November 3). A view from down under. Message posted to <http://blog.libraryjournal.com/gamesgamersgaming/2011/11/03/a-view-from-down-under/>
- O'Hanlon, C. (2011). Don't play it, make it: A new generation of gamers is not just picking up skills by playing video games—they're learning by designing and creating the games themselves. *T.H.E. (Technical Horizons in Education) Journal*, 38(8), 16, 18.
- Sanford, K., & Madill, L. (2007). Understanding the power of play literacies through video game play and design. *Canadian Journal of Education* 30(2). 432–455.
- Spiegel, A. (2008, February 21). Old fashioned play builds serious skills. Message posted to <http://www.npr.org/templates/story/story.php?storyId=19212514>
- Welsch, J. (2008). Playing within and beyond the story: Encouraging book-related pretend play. *The Reading Teacher*. 62(2), 138–148.
- Wenner, M. (2009, January 28). The serious need for play. Message posted to <https://www.scientificamerican.com/article.cfm?id=the-serious-need-for-play>

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