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LAYERED LITERACIES

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Layered Perspectives of Adolescent Literacies

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n this column, we build upon the understanding that today's learners engage in a layering of literacies as they move among and across online and offline experiences (Abrams, 2015). Researcher and educator Erica Holan Lucci serves as a contributor to this piece and highlights how the layered perspectives of videogames in particular can provide insight into adolescents' literate practices. Through her experiences as a teacher and a gamer—a dual identity that has informed her understanding of the spaces, practices, and literacies inherent in most adolescent gamers' lives—Lucci advances understandings of young adult literature and pedagogy by focusing on world building in the popular videogame Minecraft as a tool for helping students deepen their understandings of Veronica Roth's Divergent series (2011–2013).

In what follows, Lucci presents "Teacher-Gamers and Mining a Literary Craft," which not only provides a layered perspective of gaming, but also highlights how videogames can serve as valuable texts that support interpersonal connections and critical meaning making among students. Lucci homes in on the importance of understanding adolescents' layered literacies and offers examples of how teacher-gamers embrace flexibility and creativity when they pair videogames and young adult literature to support agentive and meaningful learning.

Teacher-Gamers and Mining a Literary Craft

Erica Holan Lucci

What advantages do videogames have as pedagogical tools? How do they connect with adolescent students in particular? My husband recently posed these questions to me during a discussion of this article's theme, and I began to think about how I should respond:

- from a teacher's perspective;
- from a gamer's perspective;
- from a researcher's perspective;
- from a teacher-gamer's perspective (Holan, 2013; Lucci, 2015a, 2015b)?

Ultimately, I decided that all four perspectives are relevant and worth considering in light of how popular young adult texts, which include videogames, can lead to critical discussions both in and out of the classroom. Videogames such as *Minecraft*, which has over 100 million subscribers (Makuch, 2014), are complex and multilayered texts; they require players to engage with and interpret a wide array of information, internal and external, online and offline, all at once. Originally created for computer use and since expanding to various other platforms, including Xbox and mobile formats, *Minecraft* is a "sandbox" game, and, as such, can be explored by roaming the game universe freely at the player's will.

In *Minecraft*, users have the option of playing in five modes: "Survival," "Creative," "Adventure," "Hardcore," and "Spectator," with each supporting different forms of interaction. For the purposes of

the assignment discussed within this article, Creative Mode would be the ideal format for "world building." Creative Mode, like most of the other modes, enables players to construct simulated objects without the constraints that would normally interfere with their freedom, such as monster attacks (aggressive attacks by "evil" creatures, such as "cave spiders" or "creepers," that occur during the "night" hours of the game) or limited access to virtual building materials (given that players must collect materials by scavenging the virtual landscape of the game—some items are available more frequently than others). Additionally, Minecraft has an ".EDU" version, which is worth exploring for its discounted student membership and server subscription that enable all students to belong to a class's dedicated Minecraft world. That said, it is not necessary to use the .EDU version to complete the assignments discussed in this article. More information regarding the various forms of *Minecraft* play can be found at: http://minecraft.gamepedia.com/Gameplay.

As an educator, I see extraordinary opportunities for learning through the use of videogames and game design in a classroom setting. Though some have been skeptical of videogames in the classroom (cf. Rice, 2007), others have acknowledged the value of videogames as pedagogical tools (Abrams & Russo, 2015; Gerber & Price, 2013; Kenny & McDaniel, 2009; Schrader, Zheng, & Young, 2006; Squire, 2011). Systems thinking (e.g., engineering), 21st century skills, digital literacies, social media savvy, and collaboration skills are just some of the benefits that students can develop through game-based pedagogy (De Aguilera & Méndiz, 2003; Gallagher & Prestwich, 2013; Gee, 2013; Squire, 2007; Squire & Barab, 2004). Moreover, by involving important literacy practices that typically are relatable to teens, videogaming can inspire critical discourse among adolescents, teachers, and scholars.

As a gamer, I realize that the videogame medium has helped me connect with my middle school students because of our shared interest (cf. Black, 2006). I can anticipate many of the assumptions and strategies that go into game play in general. For instance, when playing *Minecraft*, I know what it means to figure out if there is a programming error (also known as a glitch) or if I am simply not understanding what to do (and I understand such frustration). I also understand the copious time and effort necessary to engage

in related game-based literacy practices, such as reading through pages of forum chat, responding to people who comment in the forums, avoiding people who try to create discord with inflammatory remarks (also known as trolls), contributing my own posts, and even creating entries into game wikis (see Fig. 1 for an example of the *Minecraft* wiki). Being a gamer is hard work and, because I value, recognize, and share similar experiences as my gamer-students, I find that I have yet another way to support them as learners; I am able to be part of *and* draw upon an effective form of interest-based learning (cf. Ito et al., 2009).

As a researcher, I have read an extensive body of literature on the topic of videogames and learning, and I focus on the integration of videogame design into the traditional classroom curriculum. I bring a unique perspective to the relationship between literature and adolescence because I consider how a teacher's self-identification as a gamer can affect his or her pedagogy (Holan, 2013; Lucci, 2015a, 2015b).

As a teacher-gamer, I see videogaming as a valid literacy practice (Squire, 2008) that can can help me connect with my students in relevant and innovative ways. And I am not the only one. Other teachergamers, such as Frank (all names are pseudonyms by request), who teaches high school Latin, also use videogames to help students develop their understanding of academic material. More specifically, Frank has adapted a standard assignment—that of crafting model Roman houses—by giving students the option to do so digitally using videogames, such as the world-building game Minecraft (discussed further below) and the life simulation game The Sims. His students were immediately engaged when introduced to this possibility and began to discuss approaches to the project with great enthusiasm. These same students ended up devoting many hours to making their models as painstakingly detailed as possible, and the results were impressive. Because Frank was able to connect with his students as gamers, he could channel their passion and extend learning—and pedagogy—beyond traditional realms. Although not the focus of the assignment, the role of adolescents in the Roman household became a topic of conversation when Frank's students considered how their Roman counterparts might have experienced life and how this compared to their own lived experiences.

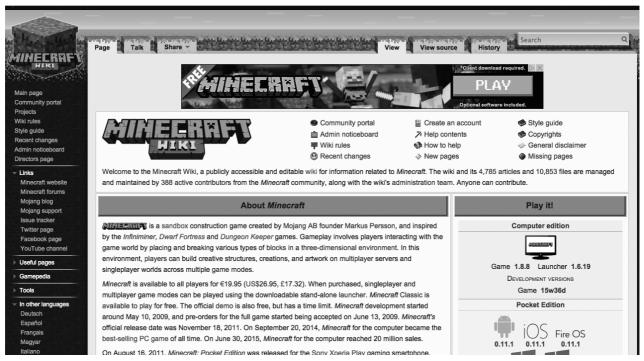


Figure 1. Entry for *Minecraft* on the official Minecraft wiki (Retrieved 19 August, 2015, from http://minecraft.game pedia.com/Minecraft.)

Mining a Literary Craft: Using *Minecraft* to Enhance Understandings of Young Adult Literature

Layering Student Literacies

Even without requiring videogame use or game design in class, important connections can be forged through assignments that layer students' literacies (Abrams, 2015). For example, one seventh-grade teacher-gamer, Lena, encouraged those of her students who are avid fans of Minecraft to collaboratively use the game to recreate scenes from the texts they read for class. Lena's literary project builds upon interest-based learning and enables her students to showcase their skills within Minecraft while fulfilling the requirements of the assigned task. More specifically, the students participated in the "traditional" literate activity of reading the text, and they formed pairs to work together, collaboratively creating a simulated environment from the narrative and adding details specific to the task Lena had assigned.

In addition to world building, the students engaged in higher-order thinking, including applica-

tion, synthesis, and evaluation. Student-generated narrations not only revealed the methods by which they constructed the worlds, but also supported self-evaluation and evidence-based learning; that is, students needed to provide a rationale for their work by explaining how and why they represented their ideas as they did. The students presented their projects using screencasts, a method of capturing video footage of their constructed worlds, accompanied by student-narrated audio recordings that explained the rationale for each design choice they made. Students finally uploaded their screencasts to YouTube in order to share their work across various digital platforms, furthering their knowledge of social media. In other words, Lena supported a sophisticated layering of literacies over the course of the project, which led to dynamic, multilayered learning.

Frank and Lena are but two examples of educators who call upon videogames to support students' understanding of young adult literature and to assess the depth of students' knowledge of a text. In what follows, I show another approach that uses the Divergent trilogy as central texts; here, I build upon the

extant examples and explain how students can use landscaping (world building) to create characters and/or places or show alternative settings and plots for the book. I also address additional options, such as including cinema and fan fiction, to inspire whole-class participation. To make this accessible to teachers who aren't gamers, I have provided a how-to link and a sidebar box about how teachers can go about learning the logistics of *Minecraft*.

Divergent Themes and World Building

Taking advantage of students' interest in the popular Divergent trilogy (2011–2013) by Veronica Roth, teachers can use Minecraft world building as an opportunity for students to literally and figuratively expand upon the themes discussed within the text. The Divergent trilogy, like other popular young adult texts such as The Hunger Games trilogy (Collins, 2008–2010), is set in a dystopian world. The (dis)similarities to our own world encourage students to imaginatively recreate the text, especially in a digital context (cf. Curwood & Fink, 2013). In a similar vein to Curwood and Fink's research, this type of activity (i.e., world building) ". . . shows how technology can facilitate young people's active participation in online spaces and promote their development of 21st century literacy skills" (p. 417). In fact, even a quick Google search will reveal dozens of adolescent-created Minecraft environments based on the Divergent series, some of which are addressed below.

The Divergent trilogy is particularly appropriate for a *Minecraft* world-building activity because its characters are categorized into five factions that define their social status and are based on their personality traits:

- Abnegation—the selfless
- Dauntless—the brave
- Erudite—the intelligent
- Amity—the peaceful
- Candor—the honest

These five factions exist to keep all members of society in line and deprive them of free will, which would otherwise endanger the safety of the population. There are a number of richly realized themes within the trilogy, such as identity, fear, society and class, family, friendship, and competition. An in-class discussion of the factions outlined above might support students' explorations of their own personality traits and questions about stereotyping and social status.

How To Get Started

The link https://minecraft.net/game/howtoplay takes you to Minecraft.net, a website created for the purposes of introducing people to the game. The site includes descriptions and videos to help you get started on your *Minecraft* journey. I recommend highly that, when starting out with this game, you find someone (a gamer, colleague, significant other, a student) who has already played and can help you if you get stuck.

Using Minecraft to World Build

Though teachers can create their own activities, they also can build upon extant activities, such as Gabrielle Thompson's "Creative Prompt 1" (available at http:// gthompsonportfolio.weebly.com/divergent-unit.html), that encourage students to apply their understandings beyond the text. Thompson requires her students to write an essay envisioning their own faction, which "can be based on anything from a way of thinking, to the way people look, ethnicities, gender, creativity, favorite hobby, etc." Her prompt inspires higherorder thinking, as guiding questions help students to describe their faction in great detail, develop a faction manifesto, and explain how the faction has a personal connection. The final component of this assignment is especially relevant to a *Minecraft* context: Thompson requires her students to draw a picture of their faction.

The image she asks students to draw can be taken a step further through the use of Minecraft. More specifically, students can collaborate in an online space accessible only to them (known as a "private server") and turn what otherwise would be a two-dimensional drawing of their faction into an intricate three-dimensional virtual world in which members of their faction can "live." For example, they might design, build, and furnish headquarters for their chosen faction. These can be extremely complex, as seen in the screenshot in Figure 2, which depicts fan-made versions of the headquarters of the five factions from the books. Within these headquarters, students can develop a "library" of documents—which they themselves write containing the faction's manifesto, one of the requirements of Thompson's lesson plan, among others.



Figure 2. Screenshot from the *Minecraft* "DivergentMC" server (Retrieved from http://www.planetminecraft.com/forums/divergentmc-based-off-divergent-series-t200119.html.)

Minecraft users might also create mods (modifications of the original game) that enable students to upload images from their computers for display in their virtual headquarters. These images could include student-generated "posters" depicting their faction's logo, propaganda, and the like. In Minecraft, students can affix these posters to almost any space or surface, from a building to a wall. (The YouTube video at https://www.youtube.com/watch?v = uluwx3TegNs might serve as inspiration.) Of course, such posters don't have to be created on the computer; students who are more comfortable with traditional media can draw posters and then use a digital camera to capture and upload the image to the Minecraft world. Further, teachers can support such student-driven meaning making by encouraging student modding (i.e., modification making) to the space (and perhaps to the assignment). In doing so, students take ownership of their learning, and teachers embrace students' agentive creations that stem from the layering of their literacies; because students have the freedom to draw upon their digital and non-digital experiences, they can develop personally relevant, reimagined spaces.

When not in Minecraft, students can continue to layer their understandings of the Divergent trilogy by drawing upon other multimodal activities. Another of Gabrielle Thompson's prompts ("Creative Prompt 2"), in which students representing each of the five factions deliver a group presentation about their faction, includes options for visual aids. Expanding upon Thompson's suggestions for students to use a PowerPoint presentation or collage of pictures, educators could also prompt students or groups of students to present to the class a "screencast" of the world they have created in Minecraft. A screencast is used during students' presentations about their projects to offer their audience a "walk-through" of their gamespace using screencasting software. Screencasting in this way would serve as another means of fostering students' 21st century skill building; at the least, they would gain experience in using screencast software, but they might also edit and upload videos to You-Tube or Vimeo, or even share the videos via various social media forums, such as a class Twitter account. In addition to 21st century skill building, the creation of screencasts fosters students' critical thinking

and decision making: students carefully select their screencasts, highlight specific elements, and purposefully use video and narration to develop an argument. Further, research has suggested that students embrace the writing process more enthusiastically when they edit videos, while digital storytelling helps students to hone traditional literacy skills (Skinner & Hagood, 2008).

Looking to the Future: Teacher-Gamers, Layered Literacies, and Young Adult Texts

Students can develop collaborative, creative, and critical thinking skills by using Minecraft and drawing on their knowledge of Web 2.0 tools to deepen understandings of young adult literature. In reconstructing a particular space (e.g., creating the futuristic setting of Chicago from the Divergent series) or developing a structure entirely of their own design (such as additional factions beyond the five described in the novels), students need to consider the tools and resources available to them within the game; as such, they need to critically evaluate how these resources may support or limit their initial architectural blueprints for the landscapes they intend to create. Assistance from fellow classmates may not only help to uncover alternative routes they can take to generate their faction superstructures, but also can foster collaborative creation among students. Students may discover together, for example, how the resources available in Minecraft can be used to create habitats (e.g., the use of cobblestone versus wood to build shelter).

These world-building activities honor the layering of students' out-of-school literacy practices, which include their gaming practices and their identities as gamers, learners, and adolescents. Such autonomous educational experiences typically have been acceptable beyond school hours or during students' down time. However, the layering of literacies in the classroom can help students develop a critical and personal understanding of the text because they recreated it in the *Minecraft* world.

As a teacher-gamer, I am drawn to the innovative use of *Minecraft* to make the Divergent trilogy come alive. I appreciate the unique connections between teacher and student that such assignments can promote. Setting the stage for schema building, teachers

can develop well-crafted questions asking students to reflect on their personal interpretations of the text. As the story progresses and themes emerge, specific

objects discussed throughout the text symbolize the bevy of emotions the characters feel but cannot always express, or they represent the characters' stances on certain issues (e.g., the factions they are born into). Further, a multilayered, game-based assignment has the ability to bring together the interests of both teacher(-gamer) and student on school grounds in an educational context.

Because students have the freedom to draw upon their digital and non-digital experiences, they can develop personally relevant, reimagined spaces.

Conclusion

Although most language arts classrooms focus on the texts themselves, and students' comprehension of the texts is usually assessed through the creation of an essay, book report, or examination, teachers can build upon the above ideas to foster the growth and development of their students' 21st century skills through innovative approaches to assessment. These approaches need not be limited to the Divergent series and can be applied to practically any YA text.

Teachers can take more commonly known creative assignments, like the creation of book trailers (see Davila, 2010) or fanfiction (see Mathew & Adams, 2009), and have students work together to create a virtual platform in *Minecraft* for all of the works they've produced. The virtual buildings described above might house libraries containing digital versions of fanfiction or theaters projecting video clips of book trailers or reviews. In other words, students can use their *Minecraft* worlds to integrate and display a wide variety of assignments pertaining to all kinds of young adult literature.

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References

- Abrams, S. S. (2015). Integrating virtual and traditional learning in 6–12 classrooms: A layered literacies approach to multimodal meaning making. London, UK: Routledge.
- Abrams, S. S., & Russo, M. P. (2015). Layering literacies and contemporary learning. *Journal of Adolescent & Adult Literacy*, *59*, 131–135.
- Black, J. (2006). Displacing student-teacher equilibrium in virtual learning environments. In J. Weiss, J. Nolan, J Hunsinger, & P. Trifones (Eds.), *The international handbook of virtual learning environments* (pp. 497–524). Dordrecht, The Netherlands: Springer.
- Collins, S. (2008–2010). The hunger games trilogy. New York, NY: Scholastic.
- Curwood, J. S., & Fink, L. (2013). *The hunger games*: Literature, literacy, and online affinity spaces. *Language Arts*, *90*, 417–427.
- Davila, D. (2010). Not so innocent: Book trailers as promotional text and anticipatory stories. *The ALAN Review, 38*(1), 32–42.
- De Aguilera, M., & Méndiz, A. (2003). Video games and education: Education in the face of a "parallel school." *Computers in Entertainment*, 1(1), 1–14.
- Gallagher, P. S., & Prestwich, S. H. (2013). Can game design be leveraged to enhance cognitive adaptability? *Electronic Journal of e-Learning 11*(1).
- Gee, J. P. (2013). Good video games + good learning: Collected essays on video games, learning, and literacy. New York, NY: Peter Lang.

- Gerber, H. R., & Price, D. P. (2013). Fighting baddies and collecting bananas: Teachers' perceptions of game-based literacy learning. *Educational Media International*, *50*, 51–62.
- Holan, E. M. (2013, April). Master versus noob: The interplay between teachers' out of school gaming practices and their pedagogy. Paper presented at the Annual Conference of the American Education Research Association (AERA), San Francisco, CA.
- Ito, M., Antin, J., Finn, M., Law, A., Manion, A., Mitnick, S., & Horst, H. A. (2009). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. Cambridge, MA: MIT Press.
- Kenny, R. F., & McDaniel, R. (2009). The role teachers' expectations and value assessments of video games play in their adopting and integrating them into their classrooms. *British Journal of Educational Technology*, 42, 197–213.
- Lucci, E. H. (2015a, May). *The real and the realm: Gaming, teaching, and learning in a 21st-century context*. Paper presented at the Annual Conference of Computers and Writing (C&W), University of Wisconsin–Stout, Menomonie, WI.
- Lucci, E. H. (2015b, May). The real in the realm: Examining pedagogical practices in the game/life continuum. Organized panel presented at the Annual Conference of Humanities, Arts, Science, and Technology, Advanced Collaboratory (HASTAC), East Lansing, MI.
- Makuch, E. (2014, February). Minecraft passes 100 million registered users, 14.3 million sales on PC. *Game Spot*. Retrieved from http://www.gamespot.com/articles/minecraft-passes-100-million-registered-users-14-3-million-sales-on-pc/1100-6417972/.
- Mathew, K., & Adams, C. (2009). I love your book, but I love my version more: Fanfiction in the English language arts classroom. *The ALAN Review*, *36*(3), 1–7.
- Rice, J. W. (2007). New media resistance: Barriers to implementation of computer video games in the classroom. *Journal of Educational Multimedia and Hypermedia*, *16*, 249–261.
- Roth, V. (2011–2013). Divergent trilogy. New York, NY: Katherine Tegen Books, HarperCollins.
- Schrader, P. G., Zheng, D., & Young, M. (2006). Teachers' perceptions of video games: MMOGs and the future of preservice teacher education. *Innovate: Journal of Online Education*, 2(3), Article 5.
- Skinner, E. N., & Hagood, M. C. (2008). Developing literate identities with English language learners through digital storytelling. *The Reading Matrix*, 8(2), 12–38.
- Squire, K. (2007). Video-game literacy: A literacy of expertise. In J. Coiro, M. Knobel, C. Lankshear, & D. Leu (Eds.), A handbook of research on new literacies (pp. 611–634). Mahway, NJ: Lawrence Erlbaum.
- Squire, K., & Barab, S. (2004, June). Replaying history: Engaging urban underserved students in learning world history through computer simulation games. In *Proceedings of the 6th international conference on learning sciences* (pp. 505–512). International Society of the Learning Sciences, Santa Monica, CA.
- Thompson, G. (n.d.) *Divergent* unit lesson plan. Retrieved from http://gthompsonportfolio.weebly.com/divergent-unit.html.