Gamefully Adaptive Strategies in the Adaptations Classroom

Christopher Jeansonne and Christopher Althoff

This paper provides a qualitative account of the pedagogical approach used in a co-listed undergraduate/graduate course on 'Adaptations in Games and Media' at Rensselaer Polytechnic Institute in Troy, New York. Using that class as a case study, we suggest that classroom strategies can themselves be adaptive, embodying theoretical understandings of adaptation as both process and product (Cardwell 2002, Hutcheon 2006). The research is on-going, representing a version of the course taught in Spring 2024 and a course currently underway [Spring 2025].

As Kamilla Elliott purports in her adaptive definition—which she notes "has been adapted from prior scholarship and is subject to further adaptation"—a key tenant of adaptation theory is that it "adapts both from and to (Leitch 2005); it encompasses both entities and environments, texts and contexts (Geraghty 2008)" (Elliott 2020, 198). In order to adhere to these (non-exhaustive) tenants, teaching adaptations should be equally encompassing yet open-ended, highlighting adaptations as both on-going processes and iterative products. Using elements of 'gameful learning' alongside strategies from critical and responsive pedagogies, our approach attempts to weave students' educational experiences, abilities, and interests into the curriculum, and at the same time adapt the curriculum to the students, integrating these elements into a productively flexible learning environment. \

At the heart of our approach is a wholistic view of 'gameful learning' (Hayward and Fishman, 2020), which suggests that all educational endeavors are already game-like in structure, and that pedagogues can learn a great deal from contemporary approaches to game design in both digital and analogue modes (although in-person teaching situations may have more in common with analogue games). A key premise of gameful learning is that courses are not unlike games in eternal playtest wherein instructors design mechanics to structure student experience—knowing that they cannot be entirely prescriptive of student/player experience, but rather should iteratively and responsively adapt their instructional tactics to fit particular contexts, contents, and students.

Significantly, the student make-up of the class that we were/are using as a case study includes games studies majors, communication and media studies majors, and other majors from across the STEM-heavy institution; it also includes both graduate students and undergraduates. Further, while the class begins with an student-led applications of terms

and principles important to the field (such as fidelity, medium specificity, receivers and adaptors, intertextuality, and so on—including complications of those terms), the class emphasizes investigations of adaptations between ludic and narrative forms. The presence of these disparate perspectives was both challenging and productive, both complicating and revealing. For example, we found that the act of dialogue between those students more familiar with ludic forms and those students familiar with narrative forms provided insights that neither group might have come up with independently. On a meta level, this runs parallel to the kinds of insights we might find by comparing two adapted works from the same lineage.

There are clear parallels between this approach to teaching and Elliott's contemporary theoretical approach to adaptation as "adaptive and adapting" (Elliott 198), and we suggest that our approach can serve as a model for how theory and content can be integrated in teaching adaptations as a subject.

Works Cited

Cardwell, Sarah. Adaptation Revisited: Television and the Classic Novel. Manchester: Manchester University Press, 2002.

Elliott, Kamilla. Theorizing Adaptation. Oxford: Oxford University Press, 2020.

Geraghty, Christine. Now a Major Motion Picture: Film Adaptations of Literature and Drama. Lanham, MD: Rowman and Littlefield, 2008.

Hayward, C. & Fishman, B. Gameful Learning: Designing with Motivation in Mind. In Gresalfi, M. and Horn, I. S. (Eds.), The Interdisciplinarity of the Learning Sciences, 14th International Conference of the Learning Sciences (ICLS) 2020, Volume 2 (pp. 1007-1014). Nashville, Tennessee: International Society of the Learning Sciences, 2020.

Hutcheon, Linda. A Theory of Adaptation. 2nd Edition. Abingdon, Oxfordshire: Routledge, 2013.

Leitch, Thomas. "Everything You Always Wanted to Know about Adaptation Especially if You're Looking Forwards Rather than Back." Literature/Film Quarterly 33:3, p.233-245. 2005.

Author Statements

Christopher Jeansonne is a Lecturer in the Communication and Media Department at Rensselaer Polytechnic Institute. His research focuses on critical media pedagogy, gameful learning, and interpretive analysis of popular culture media, particularly transmedial and transcultural forms. He has co-authored, with Maurice Suckling, a forthcoming book-length analysis of the adapted board game War of the Ring for University of Michigan Press's Tabletop Gaming series. Other publications include a chapter on "Agent Peggy Carter: Captain America's Moral Compass" in the collection The Human in Superhuman: The Power of the Sidekick in Popular Culture and an article on the transnational J-horror remake The Grudge for Transnational Screens journal. His dissertation Superheroes in the Classroom, Or: An Autoethnography of Great Power, Responsibility, and Community in a Critical Media Pedagogy was the recipient of the 2019 Manuel Barkan Dissertation Award.

The Critical Role of Digital Media in Teaching How to Roleplay

Jules Patalita (he/him)
Affiliation: Graduated from Bowling Green State University, Independent Academic

Dr. Jules Patalita graduated from Bowling Green State University with a PhD in Media and Communications, with his dissertation focusing on Qualitative methods to study the way that digital media impacts the ways that players approach *Dungeons & Dragons.* He is currently contracted to release a published book on the topic in 2025, combining contemporary Media Studies with the Analog Games perspective found in most tabletop research. Today, Dr. Patalita works for a Center for Independent Living, using his skills to educate the community of disability rights and making local spaces more accessible.

Dungeons & Dragons is a challenging game to play for the first time, with its 300+ page rulebook and the many circumstances that those rules change. One of the most difficult elements of tabletop roleplaying games (TRPGs) for many new players to learn, however, is the art of the performance of roleplaying. Many gamers may be ready for the mechanical elements of the game, understanding rules and doing attack calculations, but the idea of needing to roleplay a character is enough to dissuade many would-be players. The foundation of the narratives of TRPGs, a genre defined by its player agency and the unparalleled ways that they can impact the story, begin and end with roleplaying. Part of this struggle is the way that the official rulebooks and guides for TRPGs are forced to use text to explain concepts of performance that are hard to put into words. With the rise of digital media, however, we have new forms of teaching players the art of performing tabletops. This is a fascinating new frontier as we see players of a

traditional analog game influenced by digital media, with the digital migration of TRPG itself expanded on during COVID-19. Videos online, from TikToks to Actual Play podcasts like *Critical Role*, can show how to play rather than tell, giving players a better look at what it means to play their favorite roleplaying games. This analysis of media objects enabling this better model of TRPG education comes mainly from Meyrowitz's Medium Theory, which studies media based on the core attributes of that media. This model looks at what elements of these new digital media objects make them a better instructional tool than the text-based guidebooks of previous generations. Testimony from focus groups, conducted with groups that all actively played *Dungeons & Dragons* together, provides lived experiences from TRPG players as they speak on what media objects helped and hindered their entry into the community and how they now build group narratives while playing.

What we find is that digital media stands as a much better tool to assist players in learning to play TRPGs. While online videos can serve as useful tools for learning the mechanical aspects of these games, it is in the roleplaying performance that digital media truly shines. Being able to watch a video of someone roleplaying as their character, and the manner in which they transition from different frames from the character to themselves as the player, is helpful in showing nervous newcomers the way to approach this challenging aspect of TRPGs. Actual Play podcasts, podcasts where the cast play a TRPG in real-life for entertainment, are some of the best media for this purpose. They often feature professional entertainers, but show roleplaying in context of the game session, and they show how to either stay in character or how to flip between themselves and the character at will. The rise of TRPG digital media has been documented, but not in the way that it serves as a better way to educate players on performance, the building block for narrative in tabletop games.

Couldry, N. (2008). *The place of media power: Pilgrims and witnesses of the media age.* London: Routledge.

Meyrowitz, J. (1998). Multiple media literacies. *Journal of Communication*, *48*(1), 96–108. https://doi.org/10.1111/j.1460-2466.1998.tb02740.x

Sidhu, P., & Carter, M. (2020). The Critical Role of media representations, reduced stigma, and increased access in D&D's resurgence. *Proceedings of DiGRA 2020: Play Everywhere*. Retrieved from http://www.digra.org/digital-library/publications/the-critical-role-of-media-representations-reduced-stigma-and-increased-access-in-dds-resurgence/

Stanton, R., & Johnson, M. (2021). The audiences of The Adventure Zone: Analysing actual play as inclusive gaming media. In *Proceedings of DiGRA Australia 2021*. Retrieved from http://digraa.org/wp-content/uploads/2021/02/DiGRAA2021_paper_12.pdf

Whitten, S. (2020, March 14). *How critical role helped spark a Dungeons & Dragons Renaissance*. CNBC. Retrieved from https://www.cnbc.com/2020/03/14/critical-role-helped-spark-a-dungeons-dragons-renaissance.html

Adapting the Worldbuilding Gameplay of Minecraft into Data Visualizations

This presentation will explore how video games could be used to adapt the physical learning experiences of constructive visualization for digital worlds (such games with emergent narratives like *Minecraft*). Constructive visualization is a specific process for creating any sort of representation of data. In the field of information visualization, these approaches to learning have manifested in the form of constructive visualization, a paradigm for creating visualizations based on our inherent understanding of physical building blocks [2]. Through its simplicity, expressivity, and dynamicity, constructive visualization allows data non-experts to engage with datasets—and thereby create data-driven narratives—in ways that would not have otherwise been possible.

Understanding the world through experimenting and building with physical objects (i.e., "hands-on learning") is a method of learning based on the educational theories of constructivism and constructionism. Constructivism proposes that learning is an active process of constructing meaning [1]. Through experiences and sensory input, a learner constructs meaning by integrating new information with their existing knowledge. Constructionism builds on constructivist theory by suggesting that learning is most effective when the learner is constructing an entity "whether it's a sandcastle on the beach or a theory of the universe" [3]. These two theories both emphasize the importance of the learning experience and emphasize that a core part of the learning process is constructing meaning and constructing systems of meaning—in other words, narratives. To date, most research in this area has focused on the physical world—developing toolkits to enable visualization construction [6, 7], understanding the construction process and its patterns [7, 8], and exploring what and how people learn throughout the process [4, 5]. One major question that remains unanswered is: can video games and their mechanics be successfully leveraged to adapt the physical constructive visualization experience into a digital experience, and if so, how?

To try to answer this question, I will focus on the world of *Minecraft*. Through an experimental study of physical constructive visualization, *Minecraft* visualization, and non-constructive visualization, I seek to better understand these three visualization processes, how they compare and differ, and the extent to and manner in which they foster learning and the creation of data-driven narratives. The results of the study can then be used to create recommendations for how to adapt video games for constructive visualization. Time permitting, the recommendations could then be used to create a *Minecraft* mod to support constructive visualization and learning.

Keywords: data visualization, emerging narratives, video games

Works Cited

1. George E Hein. 1991. Constructivist learning theory. Institute for Inquiry. Available at:/http://www.exploratorium. edu/ifi/resources/constructivistlearning.htmlS (1991).
2. Samuel Huron, Sheelagh Carpendale, Alice Thudt, Anthony Tang, and Michael Mauerer. 2014. Constructive visualization. In *Proceedings of the 2014 conference on Designing interactive systems*, 433–442.
3. Seymour Papert. 1991. Situating Constructionism. *Constructionism*, Ablex (1991).
4. Charles Perin. 2021. What students learn with personal data physicalization. *IEEE Computer Graphics and Applications* 41, 6 (2021), 48–58.
5. Alice Thudt, Uta Hinrichs, Samuel Huron, and Sheelagh Carpendale. 2018. Self-reflection and personal physicalization construction. In *Proceedings of the 2018 CHI conference on human factors in computing systems*, 1–13.
6. Jelle Wijers, Hans Brombacher, and Steven Houben. 2024. DataChest: a Constructive Data Physicalization Toolkit. In *Proceedings of the Eighteenth International Conference on Tangible, Embedded, and Embodied Interaction*, 1–7.
7. Tiffany Wun, Lora Oehlberg, Miriam Sturdee, and Sheelagh Carpendale. 2019. You say potato, I say po-data: Physical template tools for authoring visualizations. In *Proceedings of the Thirteenth International Conference on Tangible, Embedded, and Embodied Interaction*, 297–306.
8. Tiffany Wun, Jennifer Payne, Samuel Huron, and Sheelagh Carpendale. 2016. Comparing bar chart authoring with microsoft excel and tangible tiles. In *Computer Graphics Forum*, Wiley Online Library, 111–120.

Author Statement

Arden Song is a MASc student at the University of Waterloo in the Department of Management Science and Engineering. She researches human-computer interaction with a focus on data-driven learning and reflections in digital worlds. Song has previously conducted research into the #vanlife movement and the adapting technological needs of vanlifers. She has also developed Proteus cards, an electronic paper display system that enables remote, online tabletop gaming experiences while retaining the physicality of traditional card decks. Song presented the Proteus card deck at the 2024 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY 2024) and continues to study the capabilities of the card deck system. Her primary research investigates the potential of *Minecraft* as a tool for data visualization construction and reflection.