

Innovative Online Instruction: Synthesizing Learning and Video Game Consoles

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In this chapter we describe how educators can use internet-connected video game systems to support student learning. Specifically, we explain how teachers can leverage the private and party chat functions in the current models of the Xbox and PlayStation consoles for remote instruction. Private chat is a no-cost feature on Xbox and PlayStation consoles that allows the user to invite one other person to a private chat-room. Party chat allows the user to invite up to eight people to a private group chat-room. Resources are included for educators interested in learning more about using video game consoles and how to get started learning about online games. Future directions for researching teaching and learning using video game consoles are offered.

Keywords: distance learning, video games, online tutoring, synchronous communication, party chat, remote teaching, virtual collaboration, blended learning

INTRODUCTION

In this paper we offer a novel approach to distance teaching and tutoring by describing how teachers can use the private and party chat functions in the current models of the Xbox and PlayStation consoles for remote instruction. Private chat is a no-cost feature on Xbox and PlayStation consoles that allows the user to invite one other person to a private chat-room. Party chat allows the user to invite up to eight people to a private group chat-room. Party chat is free on the PlayStation; Xbox users must purchase an Xbox Live membership to participate in group chat.

By engaging with students over a video game console, teachers can draw on the understandings, skills, and experiences learners have acquired outside the classroom – their *funds of knowledge* – to leverage the cultural and personal knowledge that informs and shapes students’ lives (González, Moll, & Amanti, 2005). Tapping students’ funds of knowledge aligns with the tenets of 21st century learning that call for educators to “eliminate borders without requiring young people to give up or hide important features of their lives” (Phelan et al., 1991, p. 85).

INNOVATION

Technology offers new pathways for virtual interactions to take place, individually and collectively, across different media platforms. Harnessing the full power of technology for online instruction, however, will require teachers to strengthen their capacity for flexible thinking and creative problem solving. As Henriksen, Mishra, and Fisser (2016) point out, “...there is a reciprocal relationship between creativity and digital technologies. Here we mean that technologies allow for new and creative pedagogical practices, but also that educators must develop a creative mindset to teaching and learning” (p. 31).

Because they are staples of many American households, video game consoles are an ideal tool for educational repurposing. There are over 160 million video game console owners in the United States alone, and 84% of those consoles are connected to the internet (The Nielsen Company, 2018). Teachers who own, or whose children own a video game console can use the device to provide one-on-one and/or small group guidance to connect with some of their students.

With the sudden shift to online instruction teachers, students, and families who are adjusting to “home-schooling” may also be dealing with feelings of isolation and disconnection. Modifying instruction in order to maintain relationships with students is one way teachers can attend to learners’ social and emotional well being (Kingsley & Olefumi, 2015). For example, educators are increasingly turning to video games like Assassin’s Creed and Minecraft to reach students who are interested in online gaming (Favis, 2020).

In addition to actual gameplay, video game consoles can serve another purpose. When used in conjunction with collaborative educational platforms like Google Docs, teachers can use video game consoles as a communication tool to connect with students who need individual coaching or tutoring. In this case, the consoles provide an audio-only alternative to video conferencing. Instructional videos are available to support educators interested in getting started with Xbox One and PlayStation 4 video game consoles (see Table 1).

Table 1
Digital Resources for Using Party Chat on Xbox One or PlayStation 4

Getting started with Xbox One	https://www.youtube.com/watch?v=5784JpxM6C8
Set up party chat on Xbox One	https://www.youtube.com/watch?v=1_TtvHB2YGw
How to set up a PlayStation 4	https://www.youtube.com/watch?v=-rmUxcuPoBY
Set up party chat on PlayStation 4	https://www.youtube.com/watch?v=0snrhqfjoSg

The approach to scaffolded learning described here is informed by Routman’s Optimal Learning Model (2018), where a teacher gradually releases control of learning to students. Routman argues that students are more likely to risk making mistakes while learning when they know they have the teacher’s support if needed. Communicating via a gaming console reassures students that they have a tether to the teacher if they run into problems, have questions, or need guidance with an assignment.

RESULTS

The inspiration for this chapter stems from an experience one of the authors had as a National Board certified high school language arts teacher. He worked with a student who was struggling with a writing assignment and needed one-on-one coaching. Transportation issues and scheduling conflicts precluded meeting before or after school. Knowing that the student was a gamer, the author tutored this student online via the party chat function of the Xbox One gaming console.

To accomplish this the teacher shared his gamertag, the unique identifier a player uses to distinguish her/himself from other players, with the student and agreed upon a time to “meet.” The student initiated the party chat at the designated time, and both were able to communicate orally via headsets to access and collaborate on the student’s work via Google Docs. The teacher used his technological, content, and pedagogical knowledge, along with the devices and tools he was familiar with, to leverage the student’s passion for gaming and his desire to grow as a writer to design instruction directed at the needs, interests, and identity of the learner (Henriksen et al., 2016).

Coaching and tutoring students using a technology tool that they are comfortable with can be a way for teachers to attend to a student’s academic needs. In working one-on-one with the student on his own virtual “home turf,” the teacher positioned himself as the *guide on the side* rather than the sage on the stage (King, 1993). This inversion of roles places the student at the center of the writing process, while the teacher provides context, resources, and supportive feedback using constructivist approaches that “prepares students for the independent action of a self-guided learner” (Koenig, 2010, p. 32).

IMPLICATIONS

The technological, pedagogical, and content knowledge (TPACK) framework is a useful tool for helping educators think creatively about how to adapt digital devices for teaching and learning. As Mishra and Koehler (2009) have noted: “The idea of creative repurposing is important because most technologies that teachers use typically have not been designed for educational purposes” (p. 16). For learners who are also gamers, seeing a teacher’s willingness to use a game console for online instruction can be motivating and empowering. When educators consider game consoles as a tool for teaching, they are embracing a technology that plays a significant role in the lives of many young people.

To utilize video game consoles for instruction, teachers must know their student’s gamertag. Teachers can use their student’s gamertag to send a message or invitation to a private or party chat via the gaming system. Party chat is useful

when the teacher initiates the party and wants students to be able to join the conversation at any time. Private chat is a better option for students who need individual tutoring or coaching. Alternatively, teachers can share their own gamertag with one or more students so that any of them can initiate a real-time electronic conversation. Table 2 contains resources for educators who want to integrate video games into their practice.

Table 2
Resources to Facilitate Video Game Integration

How to Integrate and Manage Video Games in Your Classroom (Aviles, 2018)	http://www.techedupteacher.com/how-to-integrate-and-manage-video-games-in-your-classroom/
7 Ways to Integrate Video Games into Your Classroom (Clark, 2019)	https://www.classcraft.com/blog/features/video-games-in-the-classroom/
How to Find Games for Classroom Learning (Farber, 2020)	https://www.edutopia.org/article/how-find-games-classroom-learning
How To Integrate Video Games In The Classroom (Heick, 2017)	https://www.teachthought.com/technology/how-to-integrate-video-games-in-the-classroom/
Game And Learn: An Introduction to Educational Gaming - Podcast	https://podcasts.apple.com/us/podcast/game-learn-introduction-to-educational-gaming-audio/id429426265

The virtual chat room is independent of any specific video game, and no actual game play is required to take advantage of this feature. By engaging in the party or private chat while simultaneously working within a web-based, collaborative space like a Google Doc, the party members can communicate verbally while collaborating digitally. In the case of writing instruction, the author was able to access the student’s writing assignment through Google Docs in order to provide real-time, oral feedback on specific sentences and passages to help the student grow as a writer. It also allowed him to model, in the moment, how to create citations for references and include hyperlinks for a blog post. The strategy of tutoring via video game console while using a learning platform can be employed by both pre- and inservice teachers.

For teachers interested in the professional literature on how digital games support teaching, learning and assessment, Table 3 provides suggested readings.

Table 3
Resources Related to Teacher Education and Video Games

Teaching to Teach (with) Game Design: Game Design and Learning Workshops for Preservice Teachers (Akcaoglu & Kale, 2016)	https://citejournal.org/volume-16/issue-1-16/general/teaching-to-teach-with-game-design-game-design-and-learning-workshops-for-preservice-teachers/
Why Digital Game Based Learning Should be Included in Teacher Education (Gabriel, 2016)	https://pdfs.semanticscholar.org/0452/13525dd3a021cf0339232b68a23ea6364303.pdf
Player Professional Development: A case Study of Teacher Resiliency within a Community of Practice (Garcia & Gomez, 2017)	https://www.sciencedirect.com/science/article/abs/pii/S0742051X17307898?via%3Dihub
Digital Game-Based Learning: It’s Not Just the Digital Natives Who Are Restless (Van Eck, 2006)	https://er.educause.edu/articles/2006/1/digital-game-based-learning-its-not-just-the-digital-natives-who-are-restless
Digital Games and Learning: Research and Theory (Whitton, 2014)	https://www.amazon.com/Digital-Games-Learning-Research-Theory/dp/041562939X

Although a discussion about privacy and online security is beyond the scope of this paper, cyber safety is a relevant issue for all educators working in online environments. The choice to use gaming systems for teaching and tutoring should be left to individual educators, schools, and/or districts. All teachers should familiarize themselves with their school’s acceptable use policies, however, and should obtain approval before using game consoles for educational purposes.

FUTURE RESEARCH

Looking forward, researchers might explore how video game consoles can be used to support an array of instructional approaches for students who have access to internet connected game systems. It may be helpful to identify which students might benefit most from virtual learning using video game consoles in blended and online environments. This might include, for example, English learners, students with special needs, or children who have historically been disenfranchised by mainstream education. More research is needed on issues of privacy and consent as they relate to online educational communications. Researchers may also want to explore teacher and student preferences for distance education tools, including teacher beliefs regarding the use of video game consoles with students. Best practices for integrating digital game based learning into teacher preparation programs should also be explored.

In the meantime, it is incumbent on teacher educators to develop the knowledge, skills and dispositions needed to guide preservice and inservice teachers through the challenge of retooling, repurposing, and reconceiving, again and again, technology designed for other purposes (Henriksen et al, 2016). Twenty first-century teaching necessitates that all educators update their praxis to infuse contemporary digital tools into their blended and online teaching.

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