

## Chapter 12

# ESportsU Digital Warrior Camp: Creating an Esports–Based Culturally Relevant Computing Living Learning Camp

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### ABSTRACT

*The authors share two case studies that provide preliminary data for a National Science Foundation Innovative Technology Experiences for Students and Teachers award at the intersection of interactive media for STEM career development. The chapter explores the potential of culturally relevant Esports gaming activities to enhance students' motivation, attitudes, and awareness towards careers in the digital media aspects of traditional video gaming and Esports. Towards designing authentic learning environments, the findings from the two case studies revealed that play ecosystems help identify social, cultural, and historical attributes of gaming communities; students need opportunities to take on leadership roles in the design and development of the environment by trusting that they are capable of technological innovations; and that social and cultural nuance of tools, rules, and language define gaming communities.*

### INTRODUCTION

As the number of college students declines in the US, recruitment and retention will continue to be an ongoing challenge, especially after the experiences and difficulties exposed by Covid-19 to students of all ages (Sedmak, 2020). The level of quality of Esports national and internal events rival the scale of NBA games and other professional sports matches, suggesting the expansion and professional interests associated with Esports; as such, it is a natural development for Esports to become embedded and an

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engaging aspect of the higher education experience. Today's students need more active organic learning activities that reflect the native digital environments that they inhabit. Recognizing this level of digital native engagement, and the impact of play upon the learning process (Bai & Jin, 2020; Ellis, 1973; Johannes et al., 2021; Lynch et al., 2020; Nijhof et al., 2018; Pyle et al., 2018; Sandseter et al., 2021; Silver et al., 2017; Taylor, 2018; Toub et al., 2018; Zhang et al., 2019; Zosh et al., 2018) and playcology (Engerman, 2016; Engerman & Carr-Chellman, 2017; Kowch, 2019; McGrath, 2019), integrating Esports styles of curricular experience into the higher education coursework is worthy of consideration, towards creating an Esports-based culturally relevant computing digital living and learning camp experience.

Digital ecosystems such as gaming, Esports, video conferencing, streaming services, and e-commerce, among others, are evolving in the 21st Century. These virtual services have become necessary tools for colocation and telecommunication practices through well-known information communication technologies such as Zoom, Twitch, Disney +, Amazon and more. As we move into a new era of virtual opportunities, new sets of competencies are needed to keep up with demand and solve new challenges on the horizon. The current chapter will explore preliminary findings of an ongoing National Science Foundation funded project, within the Innovative Technology Experiences for Students and Teachers Program.

The ESportsU: Digital Warrior Camp will include an Esports-based culturally relevant computing (CRC) living learning experience for 16-19-year-old at-risk youth in a rural region that explores the impact of a play-based CRC instruction. Esports are competitive digital gaming enjoyed by millions worldwide. The authors defined characteristics of at-risk students as youth that exhibited emotional problems, truancy, low academic performance, showing a lack of interest in academics, and expressing a disconnection from the school environment. These include students that may have experienced homelessness, out of home placement, out of school placement, foster care or other forms of disconnection. Specifically, the initiative seeks to develop a new model of STEM learning for at-risk youth, to promote student awareness of, interest in, and capacities to participate in emerging digital media fields. Within the context of a living learning community at East Stroudsburg University (ESU) and supported by the Digital Media Technologies Department (DMET), the authors have been exploring the potential of an Esports game-based STEM living learning community, to engage, motivate and develop foundational skills needed for computer literacy.

The camp experience will promote exploration of STEM through game design, computer graphics, video production and digital media marketing. Abrams and Gerber (2014) discovered a multitude of ways that video games bridge literacies for 21st century skills including using play biographies with video games as pedagogical sources, demonstrating how English Language Learners develop literacy skills through their engagement in massive multiplayer online role playing games (MMORPGs), and that game based affinity spaces generate knowledge sharing that leads to content transformation. Likewise, the authors ultimately believe these developments will help build the precursor habits of mind, or foundational building blocks for STEM competencies, for deeper STEM based computer literacy skills and future academic success (Mishra et al., 2011).

To prepare the CRC curriculum needed for the upcoming STEM camps, the authors conducted case studies that investigated the needs of traditional game-based and Esports game-based ecosystems. The authors report on two of these case studies in the current chapter with the first entitled ESportsU: Pathways to Your Future and the second entitled GameDen Unleashed.

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