

# Chapter 43

## Game Design as Literacy– First Activity: Digital Tools With/In Literacy Instruction

**Fawn Canady**

*Sonoma State University, USA*

**Ed Nagelhout**

*University of Nevada, Las Vegas, USA*

### ABSTRACT

*This chapter explores pedagogical goals and classroom practices for literacy instruction with/in a digital learning environment that extends beyond the classroom. To do this, the authors developed a process for literate practices illustrated through game design. Game design is one example of a disciplinary activity that masks the complexity of writing yet provides teachers with opportunities to make visible the writing practices and genres inherent in all disciplines. Game developers are writers and game development is a 'literacy-first' activity, a process that underscores the complex and considered choices authors or designers make in specific rhetorical contexts. Pedagogical goals and classroom practices at all levels of literacy education must encourage greater collaboration, privilege informal and situated learning, and promote decision-making, student self-monitoring, and lifelong learning. The chapter concludes by describing a project framework that can be adapted at all educational levels using game design as a model.*

### INTRODUCTION

As our students' worlds become immersed in the digital, as our classroom practices become enacted by the digital, as our educational research spans the thresholds of the digital, and, most importantly, as learning too often becomes appended to the digital, our pedagogy must focus first and foremost on literate practices rather than digital tools. This also means that we expand the definition of literacy, which has implications for literacy pedagogies in K-12 settings and beyond.

DOI: 10.4018/978-1-6684-7589-8.ch043

This chapter explores pedagogical goals and classroom practices for literacy instruction with/in a digital learning environment that extends beyond the “classroom” to construct more transparent relationships across the range of student experiences. For us, pedagogical goals and classroom practices at all levels of education must encourage greater collaboration, privilege informal and situated learning, and promote decision-making, student self-monitoring, and lifelong learning. More importantly, these pedagogical goals and classroom practices must lead to literate practices that are personalized, rhetorical, and contextualized. To do this, we developed a process for literate practices illustrated through game design, just one example of a complex activity with the potential to make visible the writing practices and genres inherent in all disciplines.

The first section begins with the belief that literacy is not monolithic, nor is literacy simply reading or writing. Through the twin lenses of participatory cultures and multimodality, we argue that literacy is best understood in the classroom as literate practices: the results of making considered choices as part of the complex interactions among writer(s), readers, texts, and contexts (Brandt, 2011; Selber, 2004). Literacy is rhetorical. Therefore, pedagogical goals for literacy instruction must create classroom spaces and classroom activities that provide opportunities for students to make those considered choices, that allow students to interact orally, graphically, and visually in specific ways for specific purposes, and that help students develop the skills, tools, and habits of mind necessary for successful literate practices in the classroom and, more importantly, beyond the classroom.

The next section of the chapter presents literate practices as a process, one that focuses learning on development and reflection. To do this, we have created a framework that begins by rethinking game design. Game design is more than just writing code. And while writing the code for a game can certainly enhance the work of the writing classroom, the work of writers is central to game design and development. Game developers are writers, and game development is a ‘literacy-first’ activity, grounded in literacy research on best practices. As a process, game development underscores the complex and considered choices writers/designers make in specific rhetorical contexts through inquiry-based research, genre study, and the telling of compelling stories through multiple modes. While games inevitably invoke technology, game development draws on digital tools to support a writing process that saves the ‘coding’ for last: a conceptual model of literate practices augmented by, but not dependent on, technology.

The chapter concludes by describing a game development project that invites students to adapt a book for a video game. This project is appropriate for all educational levels, promotes literacy-first, and provides multimodal options. More importantly, this project serves as a conceptual framework for literacy instruction that mirrors existing literacy curricular and pedagogical objectives across contexts, allows for the use of different digital tools with/in the framework, and can be tailored for a variety of projects (e.g., digital comics, transmedia storytelling, fundraising proposal, etc.) in order to meet student-learning goals more effectively in the future.

## **DEFINING LITERATE PRACTICES FOR LITERACY PEDAGOGY**

The “rapid digitalization of literacy” has resulted in what Mills (2010, 2016) calls the “digital turn” (p. 1). Literate practices mediated by digital media and technologies have necessitated a more expansive definition of literacy to reflect communication that is increasingly situated, contextual, and, more importantly, multimodal. Multimodality, or combining modes (e.g., aural, visual, linguistic, gestural, spatial) to make meaning, is not exclusively digital, however; the affordances of digital technology make it increasingly

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/game-design-as-literacy-first-activity/315521](http://www.igi-global.com/chapter/game-design-as-literacy-first-activity/315521)

## Related Content

---

### Developing a Framework for Interactions in CBT-Based Serious Games on Smartphones

Poe Sriwatanathamma, Veerawat Sirivesmas, Sone Simatrangand Nobonita Himani Bhowmik (2024).

*International Journal of Gaming and Computer-Mediated Simulations* (pp. 1-18).

[www.irma-international.org/article/developing-a-framework-for-interactions-in-cbt-based-serious-games-on-smartphones/337896](http://www.irma-international.org/article/developing-a-framework-for-interactions-in-cbt-based-serious-games-on-smartphones/337896)

### Software Requirements Definition Processes in Gamification Development for Immersive Environments

Paulo Veloso Gomes, João Dongaand Vítor J. Sá (2023). *Research Anthology on Game Design, Development, Usage, and Social Impact* (pp. 187-197).

[www.irma-international.org/chapter/software-requirements-definition-processes-in-gamification-development-for-immersive-environments/315487](http://www.irma-international.org/chapter/software-requirements-definition-processes-in-gamification-development-for-immersive-environments/315487)

### From Fiction to Reality and Back: Ontology of Ludic Simulations

Ivan Mosca (2013). *International Journal of Gaming and Computer-Mediated Simulations* (pp. 13-31).

[www.irma-international.org/article/from-fiction-to-reality-and-back/79928](http://www.irma-international.org/article/from-fiction-to-reality-and-back/79928)

### Physical Modelling for Sound Synthesis

Eoin Mullan (2011). *Game Sound Technology and Player Interaction: Concepts and Developments* (pp. 340-360).

[www.irma-international.org/chapter/physical-modelling-sound-synthesis/46799](http://www.irma-international.org/chapter/physical-modelling-sound-synthesis/46799)

### Digital Games for Computing Education: What Are the Benefits?

Giani Petri, Christiane Gresse von Wangenheim, Adriano Ferreti Borgatto, Alejandro Calderónand Mercedes Ruiz (2019). *Handbook of Research on Immersive Digital Games in Educational Environments* (pp. 35-62).

[www.irma-international.org/chapter/digital-games-for-computing-education/210989](http://www.irma-international.org/chapter/digital-games-for-computing-education/210989)