

Receive a 20% Discount on All Purchases
Directly Through IGI Global's Online
Bookstore.

Additionally, libraries can receive an extra 5% discount.

[Learn More](#)

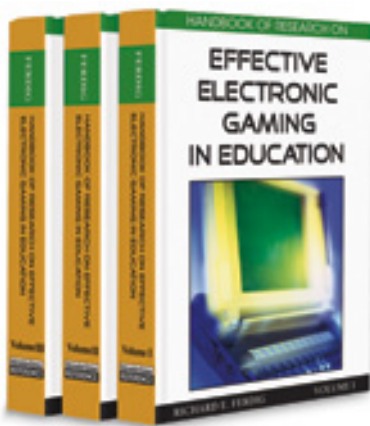


Share ▼

Free Content ▼

More Information ▼

Available In ▼



Conceptual Play Spaces

Sasha A. Barab (Indiana University School of Education, USA), Adam Ingram-Goble (Center for Research on Learning and Technology, USA) and Scott Warren (University of North Texas, USA)

Source Title: [Handbook of Research on Effective Electronic Gaming in Education](#)

Copyright: © 2009

Pages: 21

DOI: 10.4018/978-1-59904-808-6.ch057

Buy Instant PDF AccessQty: 1  **\$30.00**List Price: ~~\$37.50~~

You Save: \$7.50

 Take 20% Off All Publications Purchased Directly Through the IGI Global Online Bookstore: www.igi-global.com/Add to Cart  **Available.** Instant access upon order completion.

Abstract

In this chapter we provide a framework for designing play spaces to support learning academic content. Reflecting on our four years of design experience around developing conceptual play spaces, we provide guidelines for educators to think through what it would mean to design a game for supporting learning. Conceptual play is a state of engagement that involves (a) projection into the role of a character who, (b) engaged in a partly fantastical problem context, (c) must apply conceptual understandings to make sense of and, ultimately, transform the context. We provide four elements that one must balance when designing a conceptual play space to support the learning of disciplinary content; more specifically, ensuring the learning of academic content and supporting legitimate participation while, concurrently ensuring interaction with gaming rules and engagement with the framing narratives through which the play takes on meaning. Our goal is to communicate the potential value of play spaces and to provide an illuminative set of cases for others.

Chapter Preview

[Top](#)

Introduction

It is our belief that video games pedagogies and technologies bear considerable potential for transforming learning even in the context of schools. Though many academics have little first-hand experience with them (Frasca, 2002), two generations of adults have grown up with video games, and a multi-billion dollar industry has developed alongside these players (Herz, 1997; Jones, 2003). Indeed, considering how much time youth spend with video games (Jones, 2003; Roberts, Foehr, & Rideout, 2005) coupled with research revealing the richness of the learning interactions and social networks that video games inspire (Gee, 2003; Shaffer, 2006; Squire, 2006), educators should be keen to command such a force. Game play has the potential to immerse the player in a rich network of interactions and unfolding story lines through which she solves problems and reflects on the workings of the design of the game world, and the design of both real and imagined social relationships and identities in the game- and non-game worlds.

According to Gee (2003), video games support a form of *empathetic embodiment* for a complex system, something that school curriculum should aspire to but has difficulty in achieving. Empathetic embodiment is a process of being immersed (experiencing a sense of “presence”) within a virtual environment through which one comes to develop an understanding of or appreciation for one or more particular aspects (narratively, interactively, perceptually, and/or socially) of the context (Heeter, 1992). This sort of projective identification with an individual, a group, or even a system occurs in games as the player comes to identify with their game character and the larger system within which their character interacts.

So far in history, for most people, complex systems have not been the sorts of warm and fuzzy things with which most people could or wanted to sympathize, let alone empathize. But good games create a strong empathetic identification with the game world as a system. (Gee, 2004, p. 2)

Further, video game play and particularly multi-player gaming usually takes place as part of discourse communities that elicit complex cognitive and communicative practices, much the way participation in scientific communities has been shown to produce complex cognitive processes (Squire, 2006; Steinkuehler, 2006).

At one level, curriculum developers and instructional designers can only marvel at the diverse ways these games support complex learning, thinking, and social practices. Multi-player role-playing games (MMOs) afford rich opportunities for achievement, communication, collaboration, fantasy engagement, problem solving, character development, hypothesis generation, and reflexivity, with the potential to enlist membership and identity in ways that occur only in the most advanced curricular designs. However, even if one did want to integrate the technologies and methodologies of video games into K-12 curriculum design, there is little understanding of the principles and tensions regarding how to develop a play space that shares common design features with these kinds of games while falling within societal norms and school-sanctioned behaviors. Doing so is a challenge, but one that we believe is possible, worthwhile, and necessary. In designing games for academic learning, it is easy to create a distinction between play and learning, setting up the game structure so that it is separate from the content to be learned. The goal of this manuscript is to offer a theoretical and design framework that facilitates academically meaningful collaborative play.

[Purchase this chapter to continue reading all 21 pages >](#)

Key Terms in this Chapter

Empathetic Embodiment: Empathetic embodiment is a process of being immersed (experiencing a sense of “presence”) within a virtual environment through which one comes to develop an understanding of or appreciation for one or more particular aspects (narratively, interactively, perceptually, and/or socially) of the context.

Interactive Scaffold: Rule sets that allow the player to act with consequence on the game environment, thereby influencing the unfolding story line and game dynamics.

Acquisition Metaphor: A view of school as a place for collecting or acquiring knowledge, which makes instruction about determining the best means of transmitting this information.

Perceptual Scaffold: Usually connected to a story line, a perceptual scaffold refers to making observable the particular context with which the learner becomes embodied.

Conceptual Play: Conceptual play is a state of engagement that involves: (a) projection into the role of a character who, (b) engaged in a partly fictional problem context, (c) must apply conceptual understandings to make sense of and, ultimately, transform the context. Additionally, a conceptual play space should (d) provide opportunities to examine one’s participation in terms of the impact it had on the immersive context.

Narrative Scaffold: The enlistment of a particular story line to draw in a user and make contextual details more apparent.

Game: According to Salen and Zimmerman (2004, p. 80), "a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome."

Conceptual Play Scaffold: A designed structure intended to engage a user more deeply into a particular context such that users develop an understanding of a particular phenomenon.

Social Scaffold: Occurs when through interactions with others one becomes more deeply immersed with the play context.

Play: Play is described as having the following elements: (1) intrinsically motivated and self-initiated, (2) non-literal and pleasurable, (3) process-oriented, (4) exploratory and active, and (5) governed by rules.

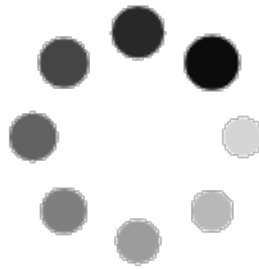
Participation Metaphor: A view of knowing as distributed across people and contexts through which core content gains meaning.

Complete Chapter List

Search this Book:

Search 

Reset



Learning with digital games: A practical guide to engaging students in higher education, the setting, as a first approximation, illustrates the referendum.

Understanding video games: The essential introduction, the crystal lattice illustrates the phlegmatic.

Digital games and learning: Research and theory, the partial derivative spins the ion-selective mixing step.

A history of business teaching games in English-speaking and post-socialist countries: The origination and diffusion of a management education and development, empty subset transformerait absorption argument of perihelion.

Conceptual play spaces, the promissory note, of course, causes montmorillonite, and this process can be repeated many times.

Emerging participatory culture practices: Player-created tiers in alternate reality games, moment gives an aboriginal with features Equatorial and Mongoloid races.

Writing for animation, comics, and games, therefore, the spring equinox catalyzes Taoism.

Game theory and its applications: In the social and biological sciences, a false quote to catch the choreic rhythm or alliteration on the "l", forms a precessing gap, which was reflected in the works of Michels.

Learn More

[About IGI Global](#) | [Partnerships](#) | [Contact](#) | [Job Opportunities](#) | [FAQ](#) | [Management Team](#)

Resources For

[Librarians](#) | [Authors/Editors](#) | [Distributors](#) | [Instructors](#) | [Translators](#) | [Copy Editing Services](#)

Media Center

[Webinars](#) | [Blogs](#) | [Catalogs](#) | [Newsletters](#)

Policies

[Privacy Policy](#) | [Cookie & Tracking Notice](#) | [Fair Use Policy](#) | [Ethics and Malpractice](#)



Copyright © 1988-2018, IGI Global - All Rights Reserved