

## EDITORIAL PREFACE

# And This One Was Just Right: In Search of Goldilocks in Player Experience

*Brock Dubbels, McMaster University, Hamilton, Ontario, Canada*

In psychology as well as astrophysics, the Goldilocks principle states that something must fall within certain margins, as opposed to reaching extremes. When the effects of the principle are observed, it is known as the Goldilocks effect (“Goldilocks principle,” 2015). Mihaly Csikszentmihalyi’s concept of flow has become a widely used framework for the interpretation and description of the mental state of game play (Cowley, Charles, Black, & Hickey, 2008; Nacke & Lindley, 2008; Webster, Trevino, & Ryan, 1994). Flow is very similar to play by definition, however, Flow is not an activity. According to Csikszentmihalyi, it is a mood, or a mental state also known as “Zone” or autotelic behavior, where a person is fully immersed in a feeling of energized focus, full involvement, and enjoyment in the process of an activity—in many ways, it describes the story of Goldilocks. In psychology as well as astrophysics, the Goldilocks principle states that something must fall within certain margins, as opposed to reaching extremes. When the effects of the principle are observed, it is known as the Goldilocks effect (“Goldilocks principle,” 2015).

Flow can happen during an activity, but it is not the activity (Csikszentmihalyi, 1992; Csikszentmihalyi & Bennett, 1971). This is very similar to what Brian Sutton-Smith stated about play. He said “play might be most closely related to what happens in the mind when an adult is daydreaming—we lose track of time, place, and even perhaps reality of the moment as we are at play in our brain” (Meckley, 2008). Although the descriptions of play and flow are similar, Sutton-Smith (2001) stated that play and flow are necessarily different concepts.

However, there are many common features between flow and play, and what is described as flow when it happens during work activities. What might be significant is that both play and flow require the player to focus on process and experience, rather than outcome and consequence in an activity. It may be this attention to experience and process that yields the timeless feeling of both (Dubbels, 2014). This leads to questions about what we mean when we talk about concepts like Flow, Play, Work, and Game what we mean when we attempt to describe them as activities; or to try and identify them in an activity. This line of questioning may be

useful to help to distinguish and design activities for engagement.

In Flow Genres, the authors Hrabec and Chrz examine the history and construction of the concept of Flow as varieties of experience in video game play. They present the concept as being independent in nature . . . that it is not dependent upon personality or the structural elements of an activity, but as a description of experience where the person is immersed in the activity. The review in this article provides insight into criticism, overlap, and congruence with other descriptions of the inner motivation for playing video games, and provide a revised description of Flow into *Genres of Experience*, where. According to the authors, Flow genres support the idea for the formation of specific experience for a specific target audience. The model is intended as a design strategy to support development. They offer models of climax,ilinx, or ludic trance in order to inform a general concept to potentially provide a framework in the field of game studies.

Sharek and Wiebe examine player engagement through the creation of model built upon elements for theories of engagement, Flow Theory, and Cognitive Load Theory with analysis of player performance and engagement using a puzzle-based video game. This paper looks particularly at adaptive engagement, which they describe as a design feature in video games where the software conducts analysis on player performance, and adapts to keep the player feeling like Goldilocks – not too hard, not too easy, but just right. The system computes whether the player is over-challenged, or under-challenged. In the puzzle-game genre, difficulty is presented where each puzzle is ranked for difficulty, and as players successfully complete one puzzle, the player is presented a puzzle ranked for greater difficulty.

In this paper, the authors seek to examine an adaptive game environment and, more broadly, create games that increase and sustain engagement. To do this, they posit that it is essential to monitor engagement during gameplay. While adaptive systems have been built around real-time performance measures, they share that

they have not found empirical studies that have researched the measure of real-time engagement guided by the combination of FT, CLT and related theories on engagement and motivation. By using these constructs, they hope to provide data and analysis to guide theory development around how to effectively sustain and explore the potential of adaptive systems to increase player engagement, where optimized challenge levels may lead to higher engagement that can be sustained over time.

In article three, Novak and Johnson examine the potential benefits of competition and narrative to present instructional content. Storyline and competition were chosen as game characteristics to examine motivation and engagement. According to their review, an effective storyline, or intrinsic fantasy can sustain player engagement through stating clear objectives, providing choice in the narrative experience in the story line to achieve those objectives. Additionally, competition can increase motivation and engagement based upon who one plays against. Their review states that competition with friends is greater than competition with strangers, against the computer, against prior performance, and least motivating, against a time limit. To study this, the authors developed three versions of an instructional participatory simulation that differed in the presence or absence of competition and narrative (storyline) as gaming characteristics (GC). They created three conditions: (1) Simulation+No GC, (2) Simulation+Competition GC, and (3) Simulation+Competition+Storyline GC. These conditions were implemented to investigate the effects of the competition and storyline GC to teach students concepts such as standard deviation and empirical rule—content from statistics education.

Harari, Graham, and Gosling explore the issue of player identity, and whether player avatars convey accurate information about their players' personalities. They examined consensus and accuracy of personality impressions of WoW players based on player avatars. Their study replicated Graham & Gosling (2012) by isolating the individual and joint impact on consensus

and accuracy of avatars and usernames, with two new conditions, in addition to avatar cues that may be influencing observer impressions. Condition one examined observer impressions based on WoW avatars alone; condition two examined observer impressions based on WoW avatars in conjunction with usernames (as they would be viewed in game-playing situations).

We end with a review of *Reality is Broken: Why Games Make Us Better and How They Can Change the World* by Baralt & Ritzhaupt. The reviewers suggest that, although the book offers no evidence supporting the views expressed, the book offers ideas for educators interested in learning about video games, and ideas for why using games for their classroom practice might be useful.

As software design becomes more adaptive in evaluating player performance, we may predict that more of us will experience some form of the goldilocks principle in effect as video game players, and users of interactive media. The article in this issue each offer insight into adapting in-game experience to in-game performance, either through exploring the theories of Flow, Engagement, and Cognitive Load, Storyline, Competition, and player identity. As we learn more, we may create more game play built upon our own unique choices and performance so that every experience is just right.

*Brock Dubbels*  
*Editor in Chief*  
*IJGCMS*