Institute for Interactive Technologies

White Paper:

What Every Chief Learning Officer Needs to Know about Games and Gamification for Learning

Karl M. Kapp, Ed.D., CFPIM, CIRM
And
John Coné

INTRODUCTION

Recently there has been a lot of buzz around the word gamification. Conferences have sprung up, marketers have seized the concept and venture capitalists are urging startup companies to add gamification to their offerings. So what are the implications for learning and development organizations? But what does the word really mean? Is gamification just another fad or can it provide serious positive impact to the field of learning and development. Also, as the gamification concept becomes more well known in the learning and development field, confusion has begun to arise as to what is a game and what is gamification.

DEFINING A GAME

Before we can get too deep into the concept of gamification, it first makes sense to define the term "game" and examine how games are used to help people learn. A well designed game is a system in which players engage in an abstract challenge, defined by rules, interactivity and feedback that result in a quantifiable outcome often eliciting an emotional reaction. Games can be designed and delivered in an online environment with multimedia graphics, interactive characters and automated score keeping or they can be face-to-face and conducted in a classroom with simple interactions and engagement.

Games, and their close cousin—simulations, have been used for decades to provide learners with experiences designed to trained them in a variety of areas. Over the past five years, games have taken off in the learning and development field with a number of companies integrating game-based learning into their curriculums. Additionally, a number of research studies have recently provided evidence to suggest that game-based learning can be effective in a number of areas.

One large downside, however, is that games are expensive to both deliver and integrate into a curriculum of an organization. Creating a game tends to take longer than developing a lecture or other classroom instruction. Add to the mix an online game and the programming and development costs become a large part of the overall costs of the game.

Additionally, once a game is developed, it typically requires a long time commitment to ensure the players have enough time to play the game and then learn the desired outcomes. This means that the game needs to have a large impact to be considered as viable for use within an organization's curriculum.

ENTER GAMIFICATION

One solution being proposed is the addition of points, badges and leaderboards to traditional instruction. Many call that Gamification. But learning and development professionals need to thing of the definition of gamification as being much broader than merely adding on a few game rewards. Gamification should be thought of as the concept of using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems.

This broader definition means that learning professionals should spend more time on the "deeper" elements of games. Points, badges and leaderboards are nice parts of games but they are not the most engaging elements. People don't play games because of points or badges rather, those are element are peripheral to the overall playing of a game.

Instead, people play games because of the challenge, the excitement and the uncertain outcome. When incorporating game elements into instruction, the focus needs to be on what makes games meaningful. Game elements that should be incorporated into the field of learning and instruction are elements like continual corrective feedback, storytelling, challenge and the freedom to fail. Creating instructional games with those elements is what makes gamification effective and instructive.

WHAT YOU SHOULD KNOW

So based on the definition of games and gamification, here is what you should know about incorporating these elements into your organization's curriculum.

1. You don't have to do it; but you probably ought to want to.

Utilizing games in learning is not something that CLOs have to do to "cope with new learners." The emerging workforce can learn in classrooms and on line just as readily as folks have in the past. Gamification is not a requirement, it is an opportunity. It takes advantage of the experience, habits and preferences of new workers - the way they communicate, collaborate and learn already. It is a strategy, not a remedy.

2. Games and gamification teach.

Games in our training programs are not a break from learning - they are learning. They are everything we say should be a part of great instructional design. They engage the learner, are interactive, and they enable the learner to get immediate feedback and to demonstrate mastery. Gamification, when done correctly, focuses learners on overcoming challenges, taking on important roles and overcoming obstacles during the learning process. Gamification can lead to higher order thinking skills and toward a focus on engagement and immersion of the learner—two elements critical to longer term retention and application of knowledge.

3. We already know how to do this.

At their heart, games and gamification are not new. We've been using case studies, pen and paper simulations, board games, outdoor ropes courses and dozens of other similar techniques for

decades. We know what games do and how to leverage them for learning. What's new is the technology that makes it much more practical to do more of it and get more from it.

4. You are NOT competing with other media.

You are the Chief Learning Officer, not the Chief Gaming Officer. You don't have to create massive, multi-player games that rival the cinematography and special effects of "The Hunger Games." Tiny little games that last all of five minutes can be powerful. You don't have to create entire worlds or complex story lines. Instructional design trumps graphic design every time. Start small, but start.

5. This is a design choice, not a delivery method.

The question is not: "How could we use a game in this training?" It is: "Would the use of a game make this training better?" The answer might be no. Or it could be a single exercise in a much bigger blended program. The decision is one of pedagogy, not of delivery methodology. It's not that long ago that our infatuation with e-learning led to the creation of a lot of pretty lousy training. Let's not repeat that mistake.

CONCLUSION

Chief Learning Officers and other Learning professionals must understand the growing trend of applying game-based sensibilities to the development of instruction through creating time-based activities, leveling up of learning experiences, storytelling, avatars, and other techniques. Yes, points and leaderboards will be a part of that, but they are not the main focus; all elements of games need to be brought to bear intelligently and carefully.

The growing use of avatars, the increasing popularity of massively multiplayer online role play games, and the addition of point systems, badges, and leaderboards in realms such as economics, retail sales, and finance are leading to a proliferation of gamified collaborative and learning techniques. This is not a waning trend; rather it is gaining momentum and acceptance in more and more fields. Learning and development professionals must follow that trend or be left behind. This is especially true when applied to areas not typically thought of as material appropriate for "games."

This is also crucial because traditional methods of learning are losing favor, most page-turning e-learning modules are boring people who have grown up playing video games for an average of twelve years. Time and attention of learners is limited, and learning professionals must focus on providing an engaging and goal-oriented solution to the training and teaching dilemma. A focus on gamification increases engagement, relevance, and immersion and assists with the transfer of learning to the actual situation.

ABOUT THE AUTHORS
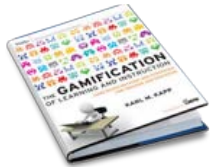
Karl M. Kapp, Ed.D., CFPIM, CIRM, is a consultant, scholar, and expert on the convergence of learning, technology and business operations. He speaks at many corporations on the topic of Games and Gamification for learning. His background teaching e-learning classes, knowledge of adult learning theory, and experience training CEOs and front line staff provides him with a unique perspective on organizational learning. His experience with technology companies and high-tech initiatives provides him with insights into the future of technology. He shares those insights and perspectives through writing, teaching at Bloomsburg University, consulting and coaching clients and students. He is author of the book "The Gamification of Learning and Instruction."

John Coné consults on organizational learning, with special emphasis on strategy and on organizing and managing complex organizations. He serves as advisor to CLOs and on several learning advisory groups. He was VP of Learning and Development at Dell Computer Corporation. At Dell he implemented a philosophy that leveraged technology, put the learner in control, and made learning an integral part of working. He was credited with designing the first executive education program in the Fortune 500 in which the faculty consisted exclusively of the CEO and members of the executive committee. During his tenure, Dell Learning received the "World Class Innovator" award from Innovation Associates and Fast Company Magazine, was named Corporate University of the Year by the National Alliance of Business, and was one of the first winners of the Excellence Awards presented by Corporate University Exchange and the Financial Times. Training magazine named Dell Learning to their top 50 in corporate education, and John as an e-learning evangelist. John has served as Chair of the Board of ASTD, Interim CEO, and was also Chair of ASTD's Certification Institute. He has also served on the Editorial Board of Strategic HR Review, and the board of SumTotal Systems.

Prior to Dell, John was VP of HR for Sequent Computer Systems Inc. He joined Sequent as President of Sequent University, which he formed. In that role, he also created the company's first comprehensive quality strategy. Prior to Sequent, John was one of the founders and creators of Motorola University (MU) and served as Director of Corporate Educational Services. In his tenure he managed the development of each major component of the function, including strategic marketing. In his last two years with Motorola he led the company's Senior Executive Program and the VP Task Force on Change. He helped create and still teaches the Managing the Learning Function training program for ASTD.