

## BOOST RETENTION RATES WITH SERIOUS GAME-BASED LEARNING

by Glen Low



Serious game-based learning has rapidly become the most effective, economical way of accomplishing knowledge transfer and retention in the biopharmaceutical industry. Unparalleled knowledge transfer and retention rates are just two of the many reasons why game-based learning is quickly becoming a standard in biopharma training.

### WHAT IS SERIOUS GAME-BASED LEARNING?

Serious game-based learning is simply defined as “learning while playing a game.” Years of research into the science of adult learning established the platform for serious game-based systems. It incorporates the latest research in instructional design to offer a new way to engage, motivate, and educate sales representatives and managers. Serious game-based learning imprints information in learners’ brains so they “own” it. Content is firmly impressed into participants’ memories while they work interactively with knowledge in a game environment. The more opportunities learners have to play with knowledge, the better their learning retention will be.

Serious game-based learning systems can be used 24 hours a day, seven days a week, in home or office settings. This 24/7, location-independent feature allows sales representatives to be trained without having to spend time out of the field.

Sales representatives can study at their own pace before coming into a corporate training setting. Training material can be updated

electronically, saving companies the significant cost of printing and shipping hard copy modules, as well as making any updates completely seamless to learners.

Serious game-based systems that use customizable instructional game templates offer tremendous flexibility in the training environment. Customizable game templates enable the development of games to support virtually any subject matter, delivered in any media form—including instructor-led training, PowerPoint slides, books, and webinars.

### EXTRAORDINARY KNOWLEDGE TRANSFER AND RETENTION RATES

Two key factors are important in understanding the many advantages and benefits of serious game-based learning.

#### *Knowledge Transfer*

When using traditional, passive learning methods alone—such as books, PowerPoint presentations, webinars, or flash slides—participants generally are not actively engaged in learning, and the amount of knowledge successfully transferred is relatively low. However, knowledge transfer within a serious game-based environment is four times greater than through traditional learning methods.

#### *Knowledge Retention*

Employees will usually retain only about 4 percent of what they have learned after about six weeks with traditional learning techniques. With serious game-based learning, however, participants retain 40 percent of what they have learned after six weeks—10 times more knowledge (Kimball, A., & Thiagararan, S. (2003). *Qube Learning Study of Indiana University Graduate Student Retention Rates with and without Learning Games*. Unpublished manuscript).





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## TYPES OF SERIOUS GAMES

Serious games are designed for increasing and measuring knowledge, as well as gathering best practices. Three types of serious games can be created:

- Games that *enhance* knowledge can be played over and over, increasing knowledge incrementally with each play.
- Games that *assess* knowledge do so in a way that is instructionally valid and reliable.
- Games designed to *gather sales force “best practices”* can demonstrate specifics on how to resolve specific objections, or differentiate specific products in different markets.

## EFFECTIVE SERIOUS GAME-BASED LEARNING

Three prerequisites are critical for effective serious game-based learning to take place: great content, quality games, and learner motivation.

### *Serious Game-Based Content*

As with any training, informational, or entertainment media, content is crucial. A fatal flaw in implementing successful serious game-based systems is to think that the “sizzle” of the training vehicle will carry the day. Any serious game-based system must have excellent content.

### *Game Quality*

Serious game-based learning uses a variety of instructionally proven game templates that can be deployed for any number of employees, allowing them to perform at different levels of knowledge mastery. The games are quick, taking only two or three minutes to play. Participants are fully engaged during each game and are not distracted from the immediate task. Learners receive immediate feedback about how well they are performing. If they are not doing well, they can review the content again.

### *Learner Motivation*

Paramount to inspiring people to learn is the ability for learners to gauge how they are doing against themselves and others, as well as to identify the top performers. Game-based learning provides this motivation, which contributes to the exceptional knowledge transfer and retention rates.

## APPLICATION OF SERIOUS GAMES IN BIOPHARMA

Serious game-based learning is suitable for virtually any training content. From teaching sales representatives about product information and drug interactions to handling sales call objections and other selling-related techniques, serious game-based learning offers significant benefits in biopharma training.

Open-ended games, such as a digital scavenger hunt, are ideal methods for teaching information, asking probing questions, and requiring learners to search for answers. Serious game-based systems provide opportunities for learners to contend with information—to have to do something in an active way—further enhancing knowledge transfer and retention.

Selling within the biopharma industry is a different kind of “sell” from other business-to-business or customer-based selling. Serious games are ideal for teaching employees who are new to the biopharma industry about its accepted language and culture. These novices need to be able to communicate at an expert level with healthcare providers with years of education in a highly specialized field. Furthermore, they need to be assertive in an environment where physicians are busy with patients. Sales representatives must be aware of managed markets and any other limitations that physicians may have in selecting treatments and products.

## THE FUTURE OF SERIOUS GAME-BASED LEARNING

Future enhancements to serious game-based learning are rapidly advancing and include more applications for mobile and virtual environments. By using iPods®, BlackBerry® devices, or similar mobile communications tools, representatives can learn in virtually any location, while in a physicians’ waiting room, while waiting for a train, or while working out on a treadmill. Greater use of mobile environments for e-learning also aligns with our society’s increasing desire to accomplish more through multitasking.

Additionally, immersive environments, such as Second Life, present extensions for learning via serious games. Such a 3-D virtual world atmosphere can enhance motivation and engagement.

While serious game-based learning is evolving in biopharma training, it is clear that this extremely effective and efficient training system will continue to offer significant advantages in today’s challenging new marketplace.

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