Gamification: Level up your eLearning

elm

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WE CREATED THIS EBOOK TO SET THE RECORD STRAIGHT

The word "gamification" has received a lot of hype over the last few years, and as designers and developers we continue seeing the term misused and misunderstood in the media and in conversation. Gamification deserves a much better fate than becoming a watered down buzzword with no substance, and we will explain why.

Businesses face a consistent struggle to engage and motivate people, whether it's their own staff, or the target audience they are looking to serve, and seek an effective solution to this potential barrier. Gamification in its true application can be a viable and effective solution to these two inevitable problems.

To really understand anything you have to go back to the origin.

The term "gamification" was originally coined back in 2002 by a British computer programmer named Nick Pelling. The term hit mainstream when location-sharing service Foursquare came out in 2009, employing gamification elements like points, badges, and mayorships to motivate people to engage more with the service and "check in". The term hit buzzword fame in 2011 when Gartner (the go to company that assesses and decides whether to invest in specific technologies) officially added it to its "Hype Cycle" list. Since then, the conversation around gamification and its application in things like marketing and learning continue to rise in popularity as more and more businesses look to gamify different aspects of their work with the intention to increase both engagement and motivation.

Contrary to popular belief, gamification is not…

- Simply creating a game.
- A catchall for interactivity.
- Simply adding points and badges to an activity and expecting it to magically become more engaging.
- A design style.
- An easy thing to do or to learn (an understanding of psychology, human behavior and much more goes into it).
- The solution for everything.

So what is Gamification?

Gartner defines gamification as: *"The use of game mechanics and experience design to digitally engage and motivate people to achieve their goals."*

At ELM we define

GAMIFICATION

As the craft of applying the best parts of gameplay (the mechanics and experience design that trigger intrinsic motivation factors and emotional connection) to digitally engage and motivate people to achieve certain behaviors or goals."

The key is in the mechanics like points, levels, and rewards, and applying specific mechanics when it makes sense based on your specific learners motivations and goals surrounding the learning material.

The mechanics are the various actions, behaviors, and control mechanisms that play into human psychology which are afforded to a player in a game context. They represent the moment-to-moment activity of players, and core mechanics are deployed to create specific patterns of repeated behavior.

So when you think about gamification for learning, you are really thinking about how you can take the mechanics from gameplay and apply them to your learning experience to both engage and motivate your participants to drive a meaningful behavior change.

There have been some spectacular successes when gamification is applied to learning, but your thinking behind its application must go beyond just developing a points system or a leadership board for simply the sake of it.

To begin the shift in your thinking around the gamification of learning, let's go into two of the most frequently asked questions we've received from learning leaders at a wide variety of businesses.

THE TWO MOST COMMONLY ASKED QUESTIONS ON GAMIFICATION APPLIED TO LEARNING

As gamification has continued its rise in the media, more and more of our fortune 500 clients ask us about how they can apply gamification to their employee training. Out of all of the questions, the following two top the charts when it comes to "most asked."

Question 1: What are the levels of gamification I can choose from to add to our eLearning?

The answer is: there are none.

When someone asks this question it is immediately transparent that they do not fully understand how or why gamification works when applied to an appropriate learning experience. The answer to our second most commonly asked question explains why "levels of gamification" simply doesn't apply or make sense.

Question 2: Is gamification the right solution for our eLearning goals?

Contrary to many articles in the media, gamification is not a "one size fits all" solution. To figure out if gamification makes sense for your particular learning module, you have to look at both what the goal aiming to be achieved is, and what motivates your target audience (aka your learners). The same as a good instructional designer performs a full performer motivation analysis, gamification requires a deep understanding of your audience's specific motivation triggers, what the step by step action would look like, and what game mechanics match up with that motivation so the learner is driven towards specific behavior change aligning with the goal.

This is why the previous question regarding "levels" of gamification does not make sense. For example, let's say that "level 1 gamification" (again which doesn't exist) is discovery. There would be no guarantee that the content or what motivates the target audience will match up with the elements presented.

Gamification is not a good choice when the topic is too sensitive or serious either, like sexual harassment training. It's also doesn't work when the context includes too many elements fighting gamification. Make sure you know what makes your learner tick before choosing a gamification strategy for your training.

THE PSYCHOLOGY BEHIND WHY GAMIFICAITON WORKS

Gamification includes a number of psychological concepts, especially in regards to motivation, behavior, and personality. Game dynamics play on deep intrinsic motivation factors that satisfy universal human desires.

People across generations, genders, and cultures share the deep rooted desires for achievement, self expression, rewards, status, competition, and altruism amongst other needs.

Choosing the right set of game mechanics for your learning creates a solution that plays upon and satisfies one or more of these desires.

Here are a few examples.

Rewards
like points and leveling up work because humans are motivated by receiving something of value in exchange for their action because it makes them feel a sense of achievement.

Self-expression
Human's love to show off their style and form a unique identity because it helps feed a sense of autonomy. This is why mechanics like avatars can be extremely powerful in helping a learner connect emotionally with the content.

Status
Humans have been taught to strive for a higher status in life. This is why things like recognition and fame are so important to us. Most game mechanics play into this desire. It's another reason why leadership boards can be a powerful motivator, because we are competitive beings that have the desire to rank higher than our peers to feel an elevated sense of status and worth.

Achievement
Many people are motivated by a need to achieve something by overcoming an obstacle through repeated efforts. Wanting to overcome a challenge can feed into addictive behavior to continue efforts until the goal is achieved to satisfy this need. This is why the most satisfying type of reward recognizes something the person has overcome and achieved, hence, why increasing difficulty is a key factor is sustaining motivation overtime.

Rewards
Again, most elements of game mechanics are created to tap into this innate desire to outperform others. Ranking works by displaying the results and celebrating winners.

KEY COMPONENTS

Trust

Gamification only works when it motivates a person to do something, and building trust is essential to fostering motivation. That's why in game design the player learns that the game isn't going to take a blind sharp corner they aren't prepared at all to take. Similar to receiving an extra life to help a game player beat a difficult level, gamification in eLearning must build the user's trust. Just like games rely on the gamer's instinctive knowledge of reaction and response more than any set guidebook, gamified e-learning must apply lessons, in a chronological and incremental sense.

An example is taking something like a timed challenge, or beat-the-clock scenario and applying those same mechanics in a learning module. The way to use something like a timed challenge in learning is to force response, and the brain science behind it is that if a person knows something, their brain will immediately retrieve the correct information when under pressure.
So you wouldn't use this game mechanic with learners who are brand new to the information, because instead of helping the learner, they would become frustrated, stop believing they can master the information, and start losing trust in the module.

In gaming it's called cascading information theory (information is released in minimum possible snippets to gain the appropriate level of understanding at each point during a game narrative), and in elearning, it's called microlearning. It's the same concept where small chunks of information are released at a time to build to a larger learning goal. The synergies between game mechanics and learning are there, and often it's more about semantics (calling the same thing different names).

Game developers want you to win...eventually. Gamification of learning has the same goal, where the learner should want to learn and walk away feeling accomplished. Experience drives learning that results in accomplishment, the ability to do something better, or understand something more. Leveling up! That's the goal of gamification.

Motivation

To really understand why gamification works, you need to have a basic understanding of what happens to the brain when you have a deep sense of motivation. When you interact with a game mechanic like goals or rewards, the same feel-good chemical that is often attributed to things like exercise called dopamine is released in your brain, and gets passed from one neuron to the next. When dopamine is released you experience pleasure, explaining why rewards like points and leveling up amp up motivation and keep you engaged. It's the equivalent of dangling a carrot in front of rabbit. The more rewards you receive, the more dopamine is released, which makes it easier to stay motivated. This is what gamification aims to tap into.

KEY COMPONENTS (CONT)

For gamification to tap into learner motivation, you must conduct a target audience motivation analysis that considers:

- The game mechanics (i.e. goals, rewards, feedback, etc)
- The type of gamification (i.e. strategy, pattern recognition, discovery, etc)

Gamification of eLearning must tie to learners' specific motivators and also contain ever-increasing challenges with relevant content. These challenges must be optimally frustrating, containing enough difficulty to ward off boredom without being so hard that people give up. For example, Super Mario would first present a small cleft to jump over, then a larger one; two killer turtles, then five. In videogaming, this is called scaffolding. In eLearning, a similar incremental experience yields new knowledge or increased ability, which is the equivalent of a leveling up in a game.

Scientific American breaks down motivation into three elements:

- Autonomy (when you feel in charge you tend to stick around longer)
- Value (when you value a subject your motivation goes up)
- Competence (the better you get, the more likely you will continue doing something)

Effective gamification of eLearning contains all three of these elements.

Rewards and Objectives

To give the user a sense of purpose and accomplishment, designers of games and learning must mold the content with smart objectives. Game designers create elaborate stories, missions and goals players can work towards. Likewise, by the end of the teaching module learners should feel like they can use the information presented immediately in some shape or form, thereby improving their performance on specific metrics.

Finally a reward system that goes well beyond badges and points is necessary for successful gamification implementation. The key is again, understanding what will drive your audience to act in the ways that will achieve the goal you have set and sustaining that engagement over time with the right rewards.

CASE STUDY THE DELOITTE LEADERSHIP ACADEMY

Deloitte (the second largest professional services network in the world) launched a digital executive training program called "The Deloitte Leadership Academy" to make training more accessible for employees by utilizing top content from business schools like Harvard, Standford, etc. The program delivers lessons to 50,000+ executives in 150+ companies worldwide.

The Challenge: Deloitte faced the challenge of finding ways to motivate their employees and clients to log on and not only take but engage with the courses, and continue corporate training despite their super busy work schedules.

The Solution: Gamification including: giving consultants instant feedback on progress, creating clear learning paths, allowing for users to build a reputation, and other mechanics like rank, rewards, missions, and leaderboards.

The program content contains videos, "in-depth content", and self assessments ranging from interactive to PDFs. Every step of the experience offers a section for learners to interact with each other, and the learner's home screen is similar to Facebook where they receive updates from users they follow and can interact with those updates. Learners must complete their first "mission" before beginning the online programs by watching a short video that explains how to use the website, and instructs them to personalize the website to their individual needs and goals.

Learners receive badges upon completion of the onboarding mission and every completion of each learning program to mark achievement. There are also "secret" badges called "Snowflake" badges that are unlocked by achieving certain goals which are there to surprise and delight learners. The program also has a leaderboard which is set to only show the top ten performers that are at the same level as the user.

The Results: Since the integration of gamification in the Deloitte Leadership Academy there has been:

- a 37% increase in users returning weekly
- a 50% increase in the rate of course completion
- a 47% increase in returning users daily
- an average of 3 achievements unlocked per active user with top users earning 30+ achievements

WHAT SUPER MARIO BROS. TEACHES US ABOUT GAMIFICATION

The legendary Super Mario Bros. series, featuring the chubby and endearing plumber named Mario and his brother Luigi became a staple in homes around the globe in the 80's and 90's. You've probably played it at some point in your life, but might not have realized the genius behind the experience design of this iconic game and its implications for optimizing gamification in learning.

The first Super Mario Bros. level, World 1-1, was created by the developers of Mario as a learning field. The level was designed to be as intuitive as possible for new players to learn and grasp the game mechanics, and to experience delight and intrigue in what they find. Everyone that plays the level for the first time is pretty much guaranteed to be unsuccessful and the design teaches gamers the rules and mechanics through repetition, iteration, and escalation.

For example: no matter how much you tried to run from the first mushroom the level made it hard to escape so that the player would run into it and discover that Mario would get bigger, and in turn, learn something new about the game.
So you are actually learning how to play the game in level 1 through discovery without even noticing it. Similar to Super Mario, the most engaging learning happens when the person being trained doesn't even realize it.
To hold the attention of learners, Super Mario Bros. shows us how to deploy several game mechanics and design techniques that feed on a learner's intrinsic motivation. Just a few of these include:

WHAT SUPER MARIO BROS. TEACHES US ABOUT GAMIFICATION (CONT)

SCAFFOLDING

Super Mario would first present a small cleft to jump over, then a larger one. It would send out two killer turtles, then five. In videogaming, this is called scaffolding. In eLearning, a similar incremental experience yields new knowledge or increased ability, which is the equivalent of scaffolding called microlearning that allows the user to build trust and strengthen motivation.

LEVELING UP

Each level of Super Mario Bros. became increasingly more challenging which allowed the player to feel satisfaction through the intrinsic motivation of reward and achievement built through overcoming increasingly difficult, but not impossible challenges.

FREE LUNCH

“Free lunch” is where a player feels like they are getting something for free. This would encompass elements like the free lives to complete a difficult level in Super Mario. In gamification of learning, an example would be giving bits of information to use as tools to help a learner “win” or answer correctly along the way. It’s about building learner trust. the same way you would receive a random extra life to help you complete a difficult level in a game.

This is why Super Mario Bros is a brilliant example for ways to successfully apply gameplay mechanics to enhance your learning materials. The game didn’t require an instruction manual, but instead was designed in a way that you instantly learned and grasped, based on what the developers knew about human reaction and response. Sure, you weren’t learning math or compliance policy… but you were learning things like spatial recognition, color/shape match types, kinesthetic to visual response. The key was that the designers deeply understood human motivation, behavior, and personality, and the same understanding for your learners’ motivation is required to successfully apply gamification to your learning experiences.

RESOURCES

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https://hbr.org/2013/01/how-deloitte-made-learning-a-g/

http://mindofmiller.com/training-with-gamification/

WHO WE ARE

At eLearning Mind, we believe in better ideas created around even better solutions. It's part of our culture. We are an eLearning design agency that helps companies transform existing learning material into memorable eLearning experiences that engage learners. Our approach is a blend of modern UX principles and our NeuroLearning methodology.
We're disrupting the eLearning industry with true innovation and ideas based around modern brain science, neuroplasticity, user experience and stunning design.

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