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Exploring the Endgame of Gamification

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Abstract:

Many gamification systems are built around the “grinding” concept of a Massively Multiplayer Online Roleplaying Game (MMORPG) where players fight monsters to get experience points and powerful treasures, so that they can then fight more powerful monsters to get even more experience points and more powerful treasures. In gamification, this translates into doing activities to earn points or badges, which then improves the player’s level and status, which then encourages them to earn more points and badges. In MMORPGs, however, there is an “endgame,” where players stop grinding and move into other forms of engagement with the game. The purpose of this article is to explore the different types of endgame activities in MMORPGs, and translate those into models for the “endgame” of gamification. Gamification designers can use this concept to move people from focusing on rewards to finding a deeper personal connection with a real-world context so that the gamification system is no longer needed.

Motto:

Instead of immersing players into a neverending grind for rewards, meaningful gamification can be user to immerse players into the real world.

Gamification is the application of gameful or playful layers to motivate involvement within a specific context. Most current applications of gamification focus on offering points and rewards to

motivate users. This reward-based gamification takes only a small part of gaming – a scoring system – and uses it to create the same type of loyalty system that has been in existence for decades.

These systems are designed around the concept of a core currency, such as a “point”. The name of this currency may be different. It may be *gold* or *experience* or *happiness*, but for purposes of simplification in this article, the word *point* will be used to represent the basic unit of exchange that players earn for taking on certain behaviours. The underlying concept of reward-based gamification is simple – offer points to manipulate players.

Considering the Point

Motivating players through points is no different than motivating people through other forms of incentives like money or grades; people are used to doing things for a reward. Using a virtual reward like points is less expensive than using a tangible reward, and can, at least in the short term, have the same effect. Many citizen science projects, where researchers use game mechanisms to allow players to perform a task that moves a large-scale research project forward, are thin veneers of narrative, points, and other virtual rewards used to motivate people to do work that is traditionally done by students in a lab for a stipend or extra credit.

From a game design perspective, points are used to manipulate the actions of a player. Players are offered points or other in-game awards for taking certain actions and receive punishments (which, according to Kohn [1999, 50], are the same as rewards) for taking other actions. Video game design used to be about taking “lives” from the player as a punishment, but now many games just take time from the player’s real life as the player has to repeat a section of the game. Few gamification systems employ the punishment aspects of game design, and focus mainly on the reward.

Since gamification is based upon game design elements, the concept of points being used to control behaviour is not surprising. But what are points used for? In many loyalty programs, points are good for tangible rewards, but to avoid giving out tangible rewards, gamification designers focus more on virtual rewards. The mechanics of Massively Multiplayer Online Roleplaying Games (MMORPGs) have served as an inspiration for many reward-based gamification systems.

The Grind of MMORPGs

Many MMORPGs follow a uniform pattern of rewarding and motivating players:

- Experience Points – Players earn points for taking on challenges in a game. In many MMORPGs, the highest number of points per hour of play are awarded through combat, and more difficult combats award more points. Some games award experience points for exploration, for using craft skills to create new objects, or for helping others. More recently developed games better balance experience points for these different types of activities so that players can do what they find most enjoyable and meaningful.
- Levels – As players reach a certain number of experience points, they go up to a new level. New levels provide players with additional skills and higher status in the game. The level structure is designed so that as players advance, it takes progressively more points to move from level to level. Players must then take on more difficult challenges and play for longer periods of time before reaching a new level. This system is designed to get players addicted to the excitement of achievement early by providing them with new abilities frequently. Then, as the player advances, it becomes increasingly harder to reach additional levels.
- Items – Another form of rewards in MMORPGs is item distribution. By defeating enemies, players can gain items and earn in-game currency that can be used to purchase more powerful items that make their character stronger so that they can take on more difficult challenges. The games are designed around a player having an appropriate number of these items for his or her level in order to defeat monsters.

This combination of points, levels, challenges, and items creates a style of play that is known as *grinding*. In most MMORPGs a monster reappears a short time after it is defeated. In addition, in-game locations are designed with a certain level in mind, so that players do not run into challenges that are too easy, and therefore reward few experience points, or challenges that are far too hard. Players remain in one area of the virtual world until they finish the storyline in that area through quests. They might also find out that fighting monsters offers little reward and then move on to a new location. Since the monsters continually re-appear on the map, the player can grind simply by hunting and killing the same monster types again and again until he or she has gained enough experience to move on.

As the player progresses from level to level, grinding becomes more time-consuming and tedious, as each level requires more points to achieve than the previous level. Sometimes monsters will randomly drop a specific item that a player wants, so the player must repeatedly hunt and kill the same monster type (frequently while other players are doing the same thing) with the hopes of finding that rare item. What keeps the players going is the promise of new

abilities, continuing the storyline and new areas to explore. This grinding process is shown in Figure 1.



Figure 1: The grind in a traditional MMORPG

In recent years, MMORPGs have added achievements and badges to their offerings of virtual rewards. Achievements are specific tasks that may or may not also give the player other rewards in the game. Badges are public displays of accomplishments. Sometimes to earn an achievement or a badge, the player has to go against the normal paths to get points, which creates new experiences for the player.

This system came into existence because many MMORPGs charge a monthly fee. Because of this, the designers of these games need to develop a game system that encourages players to continue playing (and subscribing) without a “Game Over” feature. Traditional digital role-playing games have a similar structure where players move from one location to another, but these journeys are designed with a finish line in mind as soon as the narrative comes to an end. With the MMORPG structure, the game company needs the players to continue paying each month even after players have finished the main storyline. While players are interacting with the current game world, the designers are creating additional content to keep them engaged. As a result, players will engage with an MMORPG game for years and years, long after other standalone digital games they purchased at the same time have been retired to the shelf.

The Grind of Gamification

Many gamification systems have been developed around traditional MMORPG concepts, so much so that I coined the term BLAP for reward-based gamification focused on Badges, Levels and Leaderboards, Achievements, and Points (Nicholson 2012a). Users perform actions determined by the designer to earn points and badges. These may be used to rank players on a leaderboard and may also be converted to levels. Achievements encourage the player to explore the game in different ways. Badges are used as public indicators of accomplishments. This is shown in Figure 2.



Figure 2: The grind in a gamification system

But what about the new powers and skills granted by an MMORPG? In theory, this is where the real-world setting for gamification comes into play. The user makes purchases, does chores, gains knowledge, or does whatever activity is worth points in the system, and in doing so, changes himself or herself or the world in some way. The gamification system can help the player realize when he or she has leveled up in life by acknowledging when a new skill has been mastered. This concept of mastery is one of the three key elements of Self-Determination Theory, which is a theory that explains how people develop a positive self-image (Deci & Ryan, 2004).

There is an element of the MMORPG model that is missing in many gamification structures: the concept of moving to a new area. Without this element, players grow weary of a grind with no end in sight. Some gamification systems create new areas by providing different types of

content. For example, **Code Academy** is a gamified system where users can learn how to program. After users grind in one area, they can move into a different area and learn more complex tasks. **FoldIt** is a citizen science project where users first explore puzzles and end up developing new protein sequences to meet specific needs; the best sequences are synthesized, which is said to have led to real-world advances in scientific research (Burke 2012).

Sometimes, reward systems can be appropriate. If the system is designed to bring about a short-term goal, such as marketing an event, then rewards can be a simple way to do this. Even with a marketing goal, however, focusing on building longer-term loyalty for engagement with an organization can be more beneficial in the long term than continually bribing participants with rewards. Pink (2011) argues that rewards raise performance if the task requires no creativity or personal engagement. Some successful reward-based gamification systems are developed as short-term systems to teach a specific skill where the utility of being able to use that skill is greater than the value of waiting to be rewarded to use the skill. However, if the goal of the gamification involves a long-term change or work that involves creativity, a basic reward-based system can fail to keep users engaged (Pink, 2011)

There are several problems with using a basic reward-based system for long-term change. Once a user becomes accustomed to receiving a reward for an activity, the intrinsic motivation to perform that activity is replaced with extrinsic motivation. This means that the gamification system will have to run forever to keep the user engaged (Zichermann and Cunningham, 2011). In addition, users will grow weary of one reward level and will expect the reward to change or increase over time to keep their interest. If the goal is to move users into the real-world setting without a continued reliance on the gamification system, then something has to be changed from the traditional BLAP-based system to engage users in a different way.

The Endgame of MMORPGs

There is a point in MMORPGs where a player reaches the end of the grind. This usually happens when he or she has reached the highest level that the game designers have planned for. The player can continue to fight monsters and take on quests, but the experience points gained are now meaningless. This creates a design challenge – how does a designer keep players interested when the grind that they have been engaged with for months or years has come to an end? This concept is known as the “endgame” and represents a different way that the player now engages with the game.

In some ways, this can be quite the existential challenge for a player. He or she has come to the game every day to earn more points and levels in order to defeat bigger monsters so that they

can earn more points and levels. Then, with a final flash of light and Level Up message, the player's primary way of tracking accomplishments is over. Some want to settle back into the comfort of the grind and start a new character. Many MMORPGS have different races, factions, and character classes, each with different stories to explore. In these cases this becomes a valid path of exploration. Many of the games allow players to pass money, items, or other benefits on to their new characters to reduce the typical penny-pinching grind found in the early stages of many MMORPGS.

Another way the games continue to engage players is by replacing one grind for another. In **World of Warcraft**, for example, once players hit the level cap, they begin to focus their grind for specific items. These items may complement their play-style or may be upgrades to things they already have. Many of these rare items will be dropped at random from a specific monster, so some players will then fight the same monster again and again until they get the item. There are activities that can be done once per day that give awards of various currency, so players at their level cap will find the game can become one of doing the same set of things every day in order to build up their character.

There are two main reasons players want to build up their characters – to engage in battles with other players or to engage in the most challenging endgame content. Many MMORPGs encourage players to battle with others during the grind to level cap and some of them will allow players to raise in levels just as effectively through player vs. player activities as they do if they engage with the main storyline of the game. But once players reach the top level, they must then get more powerful items if they wish to be competitive with other players at the highest level in the game.

Another method for keeping players engaged after they reach the highest level in the game is to provide them with content designed specifically for them, which is known as endgame content. This content is designed for small or large groups of players to work together in order to overcome significant challenges. Many times, these challenges introduce new types of obstacles and risks that the players did not face during the grind to the level cap. For example, in **World of Warcraft**, some of the original endgame content had teams running from place to place to avoid ground-based obstacles while fighting a large boss. As the designers increased the level cap, this old content originally designed for the endgame became part of what players could do while leveling up, and so the challenge of ground-based obstacles became more commonplace. Designers then had to come up with more complex endgame challenges to go up against higher level characters. This cycle has resulted in extremely complex team-based challenges requiring players to study video strategy guides and spend hours to prepare for a short, but intense,

combat. This also has resulted in a much tighter community-based structure, as players come together from different guilds to share strategies on how to defeat these challenges.

Many players participate in all of these endgame activities: player vs. player, team-based challenges, and grinding through the levels as they move toward the endgame. Well designed MMORPGs provide them with a multitude of choices to play the game, and then funnel players together for a shared endgame experience. Poorly designed MMORPGs do not have different storylines or well developed endgame content and end up losing players once they work through the storyline, as there is nothing left to challenge them in the game world.

One important aspect of MMORPGs that keeps players in the game is something that designers cannot control: the social aspect. Some players engage in MMORPGs with current friends or acquaintances from a previous stage in their lives. . The game can serve as an activity that people share with friends from around the globe or across the street. In this way, playing with others turns it into a chat room built around a shared activity. Another social aspect is engaging with online friends. Many MMORPGs use the concept of guilds that provide the players with an opportunity to meet a specific group of other players. The guilds may schedule activities and expect players to perform a specific role when working together to take on challenges in the game. People who are part of the same guild can become friends after taking on challenge after challenge together.

In this way, the MMORPG constitutes a community of practice, which may be defined as a “group of people who share a concern or passion for something they do and learn how to do it better as they interact regularly” (Wenger-Trayner, 2006,1) By their design, MMORPGs are cloaked in mystery. Many aspects of the game are not explained through rules. Instead, the players must work together to figure out the different subsystems in the game, and communicate through chat within the game and on external forums attempting to figure out how the game works. Guilds form subcommunities who come together to share resources, plan ahead of time and meet at a specific time to attempt to complete the game’s challenging endgame content. A player who is immersed in an MMORPG community is more likely to return and engage with others than a player who is working through the game by himself or herself.

Each MMORPG is working to create alternatives to the grind and endgame model. **Eve Online** does not use levels; but rather is based upon skill development, so players can always continue to work to develop their character. **Guild Wars 2** provides a continuing chain of special events, and allows players to join any group working on an event, so players can always be involved in something different instead of repeating the same task. Tabletop RPGs do not have grinding issues because a game master’s task is keeping the adventure new for each play session. This

concept is challenging for a game with millions of players, but will serve to provide players with an alternative to grinding.

The Endgame of Gamification

What is the endgame of gamification? The endgame of an MMORPG occurs when the user is no longer involved with the grind, and, instead, moves into other ways to engage with the game. If the goal of gamification is to engage a user in a non-game setting, then the endgame of gamification is the process by which the user is moved from the gamification reward-based grind into the non-game setting. This matters most when the gamification is focused on long-term change, such as losing weight, exercising, making better financial choices, or brand loyalty. Without a planned endgame, the users are trapped within an ongoing grind that requires a continual outlay of rewards (Zichermann and Cunningham 2011).

Looking at different alternatives to the grind in MMORPGs can provide gamification designers with different paths to keep users engaged with their gamification system. Before players tire of earning the basic points in the gamification system, designers need to provide players with other ways to engage with the real-world setting. For a robust gamification system, the designers should provide players with a wide variety of activities to choose from instead of creating linear paths to follow (Nicholson 2012a).

The different design concepts used by MMORPGs for endgame content are useful in thinking about different ways of creating post-reward gamification activities that can move people from the reward-based grind into deeper engagement with the real world.

Creating a different Grind – The easiest way to move players out of one grind is to give them another grind. This starts the cycle again and can keep people engaged for a longer period of time, but the same problem will come up once they reach the end of or tire of the new grind. Theoretically, once the user has worked through the first grind, they have some knowledge and expertise that can be tapped in order to make the next grind more transparent in connecting it with the real-world situation. The user may be more ready to take on information and grind more directly toward the real-world benefit than they were at the beginning. In addition, as the user understands more about the real-world setting, he or she can be given more meaningful choices about the goals of the new grind.

Nike+ uses this model. When users start, they are just collecting points as they do activities. As they get into the gamification system, they are given a chance to set their own fitness goals and grind toward those goals. The overall points are still being counted in the background, but they are less important than the goals that the user sets for himself or herself.

One way to do this is to value new experiences and activities. Many gamification systems have a single system, so that players who are experienced are seeing the same challenges as they saw when they started. To add variety, designers can develop different types of challenges and create mini-grinds around each challenge. The users will be more likely to stay engaged because of the novelty effect. **SuperBetter** does this by presenting a continuous stream of new challenges and ties in the information about why these challenges matter. By creating moments of information and reflection, designers can raise the chance for players to find their own connection to the real world context.

Creating Larger Challenges – Another approach to creating the gamification endgame is to present users with larger-scale challenges. Players will either need to tap significant expertise or work with others to accomplish these difficult goals. If these large-scale challenges are more directly tied into the needs of the real world, then this can serve as a segue to move players from a focus on the gamification system to a focus on the real world.

The aforementioned **FoldIt** does exactly this. Users grind through challenges and puzzles in a game-like setting, but as they do so, they are gaining the knowledge and expertise needed to then engage with real research problems with unknown answers. The result is that the researchers have training and motivated research partners who are engaged in real-world problem solving.

In *The Multiplayer Classroom* (2011), Sheldon has used a similar model in his gamification of the classroom. Throughout the class, the students grind through challenges and quests. After the students acquire knowledge and skills, the class has to come together to work against a *boss fight*, which is a greater challenge that requires cooperation. This works to bring students out of the daily grind and into larger challenges that can be more meaningful.

Creating Competition between Users – Another route is to let the users create challenges for one another. In many games, after players have spent many hours working through challenges and improving their characters, they are eager to see how their characters stack up against those controlled by other players. In a gamification system, the designer could create competitive challenges where users work alone or with others to compete over real-world goals. **FoldIt** uses this method to keep expert users of the system engaged. While users are given real world challenges, only the most promising proteins created by users are synthesized and tested. It is important to note that this level of competition is only tapped once users have become confident with the tools. If users are put into a competitive space too early and are quickly crushed, it can be a disincentive to continue. This is one of the problems with leaderboards; while they can motivate those at the top, they can demotivate those at the bottom.

Another scenario where this model makes sense is where there is already competition, such as a sales force in a company. When participants are already used to competition and rewards, adding a game layer to help track more nuances of the competition can enhance the existing structures.

Making Gamification Meaningful

The larger concept that all of these ideas play into is what I call meaningful gamification. The concept of meaningful gamification is that it focuses on using game design elements to help users find a meaningful connection to the real-world setting. It reduces the emphasis on or avoids rewards, and, instead, focuses on the non-reward based aspects of game design (Nicholson 2012b).

In order to help designers consider alternatives to point-based rewards, I created a framework known as the RECIPE for Meaningful Gamification (Nicholson 2012c), where the letters of the word RECIPE spell out different ways of using game design elements to build meaning:

- *Reflection* – creating situations where users reflect to discover personal connections with the real-world setting
- *Exposition* – using narrative and user-created stories to create deeper connections to the real-world setting
- *Choice* – allowing the user to select paths and develop goals within the real-world setting that are more meaningful to him or her
- *Information* – providing the user with information about the connections between the gamification activities and the real-world setting
- *Play* – creating a safe space and set of boundaries where the user can choose how he or she wishes to engage with different gamification activities in the real-world setting
- *Engagement* – using the gamification system to connect users to a community of practice that surrounds the real-world setting

By thinking about the endgame of gamification, designers can create systems that may start with rewards, but are designed to bring players into more meaningful connections. By doing this, chances are that the user will find a connection into the real-world setting and will no longer require the gamification system for engagement. The gamification system could be developed as a short-term activity, as shown in figure 3. It could be hoped that as a result of this users will make differences in the real world because instead of just trying to earn one more point.

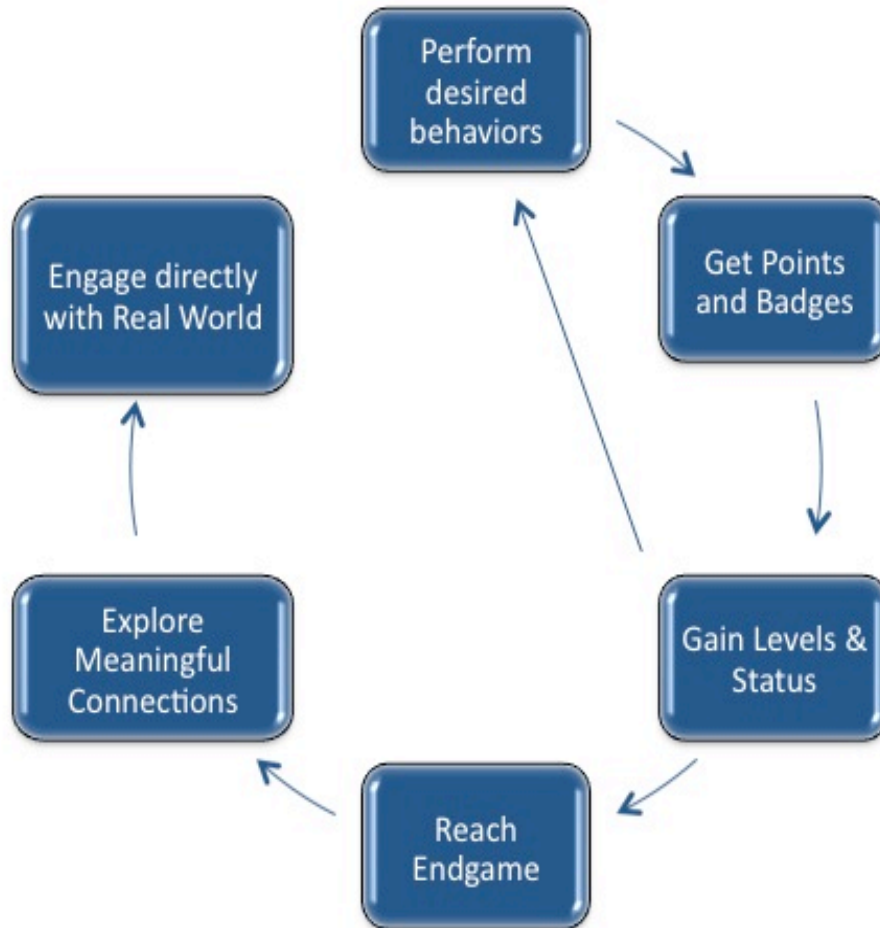


Figure 3: Bringing together BLAP and Meaningful Gamification

The goal of gamification is to motivate people to engage in a context. In the short-term, using rewards like points, levels, and badges can be used as the sole motivational tool to bring about this engagement. But if the purpose of the system is to bring about long-term change, these shallow rewards are not enough to maintain the interest of most users, and can even do harm to someone's pre-existing motivations (Deci & Ryan, 2004). Some gamification systems allow players to earn real-world rewards and benefits, and this can serve as an ongoing motivational tool; however, this can be a costly long-term proposition.

For long-term change, the gamification designer needs to create a system that is designed to engage someone in an authentic manner directly with the real-world setting. This means that the gamification system is designed to help people get engaged with existing communities and information resources that already surround the real-world context. As the player becomes more of an expert user of the gamification system, there is less and less of the system to engage with and more of the real-world context. The eventual goal is to help the player find the aspects of

the real world that are meaningful and to diminish the role of gamification, until the player is left in the real world context. Instead of trapping users in a reward-based grind, using these concepts allow designers to create a gamification journey, where the end of the journey leaves the user immersed in and connected to the real world.

Bibliography

- Burke, Katie. 2012. *Behind the Scenes of Foldit, Pioneering Science Gamification*.
<http://www.americanscientist.org/science/pub/behind-the-scenes-of-foldit-pioneering-science-gamification>.
- Deci, Edward and Ryan, Richard. 2004. *Handbook of Self-Determination Research*. Rochester, NY: University of Rochester Press.
- Deterding, Sebastian, Dan Dixon, Rilla Khaled, and Lennart Nacke. 2011. "From game design elements to gamefulness: Defining "Gamification"." In *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments (MindTrek '11)*, 9-15. New York: ACM.
- Kohn, Alfie. 1999. *Punished by Rewards: The Trouble with Gold Stars, Incentive Plans, A's, Praise, and Other Bribes*. Boston: Houghton Mifflin.
- Nicholson, Scott. 2012a. *Strategies for meaningful gamification: Concepts behind transformative play and participatory museums*.
<http://scottnicholson.com/pubs/meaningfulstrategies.pdf>.
- Nicholson, Scott. 2012b. *A User-Centered Theoretical Framework for Meaningful Gamification*.
<http://scottnicholson.com/pubs/meaningfulframework.pdf>.
- Nicholson, Scott. 2012c. *A RECIPE for Meaningful Gamification*.
http://www.youtube.com/watch?v=f4qikCx_SSc.
- Sheldon, Lee. 2011. *The Multiplayer Classroom*. Stamford, CT: Cengage Learning.
- Pink, Daniel. 2011. *Drive: The Surprising Truth about What Motivates Us*. New York: Riverhead Books.
- Wenger-Trayner, Etienne. 2006. *Communities of practice: A brief introduction*.
<http://wenger-trayner.com/theory/>.
- Zichermann, Gabe, and Christopher Cunningham. 2011. *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*. Sebastopol: O'Reilly Media.
- Game Entries:
Codecademy (2011), Codecademy, Codecademy, Web
Eve Online (2003), CCP Games, CCP Games, Computer
Foldit (2008), University of Washington Center for Game Science , University of Washington Center for Game Science & Department of Biochemistry, Computer
Guild Wars 2 (2012), NCSoft, ArenaNet, Computer
Nike+ (2009), Nike, Nike, Web

SuperBetter (2012). Superbetter labs, Superbetter labs, Web
World of Warcraft (2004), Blizzard Entertainment, Blizzard Entertainment, Computer.