"Laughter is timeless, imagination has no age, dreams are forever."

Walt Disney

Founder of Disney, Animation Producer

II. FUN

What is fun? When you play a game with your friends, or even alone, you are having fun. Can you explain it? Fun is a pleasant feeling we experience while doing some activities we prefer or like, consciously or unconsciously. When you are playing a game with friends, whether online or offline, all of you tend to be happy when you win a match. Sometimes, you also realize that some of your friends are even happier when they accomplish something you may never want to do. For example, your friend Jake likes to follow the narration and is curious about the story, while Kenny is thrilled when he unlocks a new badge as an achievement. We all have different preferences for the things we like in a game. You can never make a game that will satisfy all of the players. You need to identify target players through proper market research.

In game design, it's crucial to prioritize replayability to enhance the learning content's comprehension. This is achieved through the gameplay experience, which is the foundation of replayability. However, the player's replayability depends on their characteristics or preferences. Games offer an enjoyable experience, and immersion plays a significant role in designing games that provide this experience. Thus, providing the fit experience to the players resulting in better immersion, meaning better engagement (Gamayanto et al., 2021; Haryanto et al., 2021).

Howard Gardner, a professor of psychology, provided a theory that divided intelligence into seven regions, while Armstrong added one. I want to show the concept of multiple intelligences because it is interesting, and you may find a correlation with the players' preferences.

2.1 Theory of Multiple Intelligences

Gardner originally proposed his theory in a book titled Frame of Mind: The Theory of Multiple Intelligences in 1983, where he suggested people have different kinds of intelligence. Moreover, he was unsatisfied because the traditional psychometric views of intelligence are very limited (Bakić-Mirić, 2010). Therefore, a person may possess more than one type of intelligence. Referring to this concept, here are my strengths in the theory of

multiple intelligences: visual-spatial, bodily-kinesthetics, intrapersonal, and naturalist. In addition, Howard Gardner divided intelligence into seven regions, while Armstrong added one. I want to show the concept of multiple intelligences because it is interesting, and you may find a correlation with player preferences. Figure 2 shows a beautiful comic cover by Andrew Wales posted on his website.

1. Linguistic-verbal

When writing and speaking to others, a person with strength in linguistic verbal intelligence can use words excellently. The person is also good at memorizing information they have seen or heard and also very good at writing stories. The person seeks enjoyment from reading, writing, and persuasive speaking.

2. Logical-mathematical

People with logical-mathematical have a tendency to think in measurable numbers, relationships, and patterns. They have the strengths to reason, recognize patterns, and logically analyze situations or problems (Singh et al., 2017). Therefore, people with these strengths are great at problem-solving, love conducting experiments, calculate numbers in mind, and enjoy thinking about concepts or abstract ideas.

3. Bodily-kinesthetic

The individuals who belong to this type are great with physical activities, such as body movement and balance control. The people strong in this area have excellent body parts coordination and high dexterity (Singh et al., 2017). They are good at activities like dancing and sport. They also enjoy crafting and prefer understanding things by doing rather than only hearing or seeing.

4. Visual-spatial

Individuals with strength in visual-spatial intelligence are very good at visualizing things surrounding them. They are very good at following instructions or directional signs, compasses, maps, pictures, videos, or any visual (Levine et al., 2012). Usually, a player with this characteristic of intelligence likes to read the situation and write something personal in the game, such as a meaningful name, a pet's name, the name of a city, and many more. They like to see part of "themselves" in the game. The player is also good at putting shards of puzzles together. Generally, they can recognize visual patterns better than any other type.

5. Musical

People with dominance in musical intelligence are good at thinking and analyzing rhythmical patterns or sounds. No wonder there is a high possibility they also have logical-mathematical intelligence as a strength. Due to their deep appreciation of musical aspects, they are great composers or performers (Sternberg, 2012). Some say that music melody is like a language, and people with strength in musical intelligence can easily remember it.

6. Interpersonal

Interpersonally intelligent people are good at understanding and interacting with others. These people are adept at understanding the motives, feelings, and intentions of those around them. They have excellent verbal and nonverbal communication skills. They may see a situation from a broader perspective, giving them the benefit

of performing necessary action. Because of those reasons, they have positive relationships with others.

7. Intrapersonal

Intrapersonal intelligence refers to the ability to identify and comprehend one's own emotional states, feelings, and motivations. Individuals with this type of intelligence enjoy self-reflection and analysis, fantasizing, examining interpersonal interactions, and assessing personal capabilities. People with interpersonal intelligence can analyze the opportunities and challenges they will face, construct theories, have high awareness, and, most importantly, understand their feelings.

8. Naturalist

According to Gardner, people with this type of intelligence are particularly attuned to nature and enjoy nurturing, exploring the environment, and learning about different species. They are known for noticing even small changes in their surroundings. They are excellent at gathering puzzles and easy to find the correlation of one thing to another in nature.

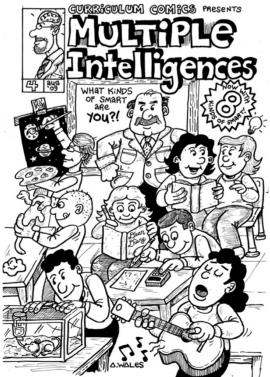


Figure 2. Beautiful comic cover by Andrew Wales. (This illustration is taken from http://andrewwales.blogspot.com/2009/08/curriculum-comics-multiple.html)

The theory of multiple intelligences by Gardner has been criticized by psychologists and educators. Critics claim that his definition of intelligence is too broad and that his eight "intelligences" are simply a group of talents, personality traits, and abilities. Moreover, empirical validation of the concept is inadequate. I have observed the propositions and the rebuttals of the theory and agree with the criticisms. However, in my perception, some of the things from the concept are not wrong, and many educators (including me) have been utilizing it in their classes and taking benefits out of it.

Although not all researcher in the related domain agrees with Gardner, at least you now understand that as a player, we are so distinct from everybody else in terms of what we like in the game. Therefore, the way that the players get fun is also different from each other. Psst! By the way, you can still use the theory to generate game ideas. For example, you randomly chose the naturalist, visual-spatial, and body-kinesthetics from the list, and you came out with a game idea like this: an adventurer who is also an acoustic guitarist at the elf world that has vibrant-colored plants needs to move and strike the infiltrators. What do you think? Remember, game ideas may come from anything. Even something around you that you see every day.

2.2 Four Types of Fun

Nicole Lazzaro, a well-known game experience designer, uses her own framework of four different kinds of fun. The idea demonstrates the various positive emotions that gamers may experience while playing. The framework was obtained by observing around 60 players (gamers and non-gamers). In the end, she identified four key categories of enjoyment that explain why we play games: people fun, hard fun, easy fun, and serious fun (Lazzaro, 2021; XEODesign®, 2023). Generally, the experiences given to a player will create a bubble of emotions. That bubble is actually the fun that you, as the game designer want to design. Figure 3 depicts the map of four types of fun.

1. People Fun (Friendship)

People fun discusses the amusement from competition and cooperation from players. In this type of fun, socializing or hanging out with friends is the most reason people play games. Human nature is unique and complex, and providing suitable game mechanics to the players will be addictive and build social bonds and teamwork over time. Everybody wants to stay and play games with the one they love. In people fun, the players' actions such as communication, cooperation, and competition, will emerge emotions such as amusement and admiration. If you want to make your balloon of people fun to be bigger, add more caretaking and compassion to your game. However, the game actions requiring more skills will usually make the bubble smaller. You can see from Figure 3 people fun is more group-oriented while hard funs is more challenge-oriented.

2. Easy Fun (Novelty)

This kind of entertainment primarily emphasizes the novel aspects of explorations, role plays, and creativity. According to Lazzaro, the bubble wrap of game design is the easy fun. Because it is on the surface level of player engagement and may lead to a deeper immersive experience if it pops up right. Fantasies help the player to temporarily escape the crowded (real) world. Players' ability to embark on adventures is fueled by their imagination. The fun failure states also reduce the player's frustration. Consider including funny animation

when the player's character dies. In this type of fun, player activities include exploration, fantasy, and creativity. You can increase curiosity and surprise by adding off-track play. While introducing badges and incentives may make players wonder and feel amazement, it will also lessen the bubble of easy fun.

3. Hard Fun (Challenge)

You should provide your gamers the chance to overcome obstacles, master or level up, and feel a sense of accomplishment in this type of fun. Hard fun is tightly related to the gameplay and game mechanics. Players will concentrate on achieving particular objectives while applying strategies and dealing with constraints in hard enjoyment. Player actions such as strategy to go to the goals and handle obstacles will create emotions like frustration and relief. The hard fun bubble will grow as you add more scoring systems and techniques, but you should take precautions because it also increases frustration. This type of fun may create a fiero, the optimal state when challenge and fun failure states are balanced. You can reduce the frustration by adding fun failure states, such as silly animation on the character's death.

4. Serious Fun (Meaning)

Serious fun is actually playing as therapy. It might be treatment for a condition or illness of any kind. In serious fun, participants participate in a game or game-like activity while being given certain explicit goals in the hopes that they may alter their ways of thinking, feeling, or doing afterward. For instance, using virtual reality technology, my friend Abas Setiawan created a birthing tutorial for nurses and midwives. It significantly reduces the risk of observing and performing out the birthing process. Make the medical students relieved and still fully comprehend the operational procedure. To study the ADHD (attention deficit hyperactivity disorder) syndrome in elementary students, my team and I also developed a virtual reality game. We keep track of gameplay information including how long it takes students to finish tasks, whether they follow the instructions, whether some tasks are challenging for some students to complete, and so on. Repetitive actions result in the player's relaxation by giving tangible and meaningful rewards. While collecting the in-game inventory will create more players' excitement by adding more experimentation. However, it will make the bubble of serious fun to be smaller. Finally, the solid-designed fun will allow the players to be in zen-focus, or others may call it "in the zone".

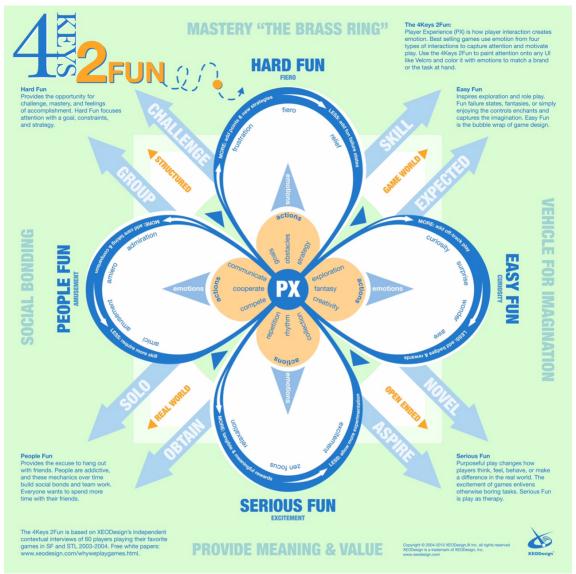


Figure 3. The map of the 4 keys 2 fun. (This illustration is taken from https://xeodesign.com/research/)

Whew, that's a lot, isn't it? Do you want more? Don't worry. I still have some recommendations to read about "fun". Here are some more theories you may want to know.

2.3 Eight Types of Fun

There are eight kinds of fun by Hunicke, LeBlanc, and Zubek: sensation, fantasy, narrative, challenge, fellowship, discovery, expression, and submission (Hunicke et al., 2004). Here are some descriptions by Sniezak (Sniezak, 2016):

1. Sensation (game as sense-pleasure)

These games engage our senses directly. This type of fun includes RPGs with minis, terrain, handouts, and things we can physically touch, pick up, and interact with. People who enjoy incorporating music into their games find the sensation enjoyable. If you enjoy seeing, touching, and feeling things as part of your gaming experience, then the sensation is the place to be.

2. Fantasy (game as make-believe)

We have the ability to switch identities and visit imaginary locations that we can only dream of. One example of this is playing a fantasy game like Dungeons & Dragons (D&D), where players fight supernatural monsters and enemies in a world of magic and swords. Anything that lets us experience the fantasy world is enjoyable. If you want to escape the monotony of reality for a while, fantasy is the place to be. Like I said before, it is the alternative you and your environment.

3. Narrative (game as drama)

This element of enjoyment is all-encompassing in RPGs. We frequently play role-playing games (RPGs) to create or experience stories, from those elements built into the games we play to those that allow us to craft or control every aspect of the story and everything in between. The narrative is ideal for those who enjoy telling stories or listening to them.

4. Challenge (game as obstacle course)

Players play RPGs to overcome obstacles with the tools their characters have, but the challenge is an illusion in RPGs. Why? Because a challenge in an RPG could be more about expression, discovery, or narrative - telling the tale of how we overcome the challenge. However, if you're seeking a challenge, RPGs aren't the ideal genre to play. Try action games instead.

5. Fellowship (game as social framework)

Social contact is emphasized in many games. Cards Against Humanity is mostly about fostering social interaction among players, then the activity is the second priority. The experience, comedy, and laughter that take place during the game are more valuable than the game itself, even though those games contain a win condition to reach. RPGs are remarkably good at this. We communicate and interact with one another constantly, building relationships inside play that frequently go beyond it. Fellowship is the place to go if playing video games is more about the people and hanging out with your pals.

6. Discovery (game as undiscovered territory)

How interested are you in what lies beyond the next door or in the next space? Yes, that is the point of a game

of discovery. The answer to a problem is sometimes the catalyst for a breakthrough. Since the story and game will come to a halt if you are unable to solve the problem, it is more accurately described as a discovery than an obstacle. Because of this, we view difficulty not as an end in itself but as a means to an end (finding a solution or, at the very least, learning how to die).

7. Self-Expression (Game as a Means of Introspection)

Every time we play, we bring a little bit of ourselves to the table. Through the characters we develop, our solutions to problems, and every other aspect of a session's creation, we leave traces of ourselves in the stories we help create. To put it another way, if you get a thrill from making your mark and contributing creative thoughts, then games are primarily about the expression.

8. Submission (game as pastime)

Allow yourself in a consistent enjoyment; the satisfaction that comes from knowing you'll be able to see your friends at the weekend gaming night every week or every other week. It's because of these things that submission can be so rewarding. Then you can have a good time by taking part in an ongoing event that you or your friends have planned.

There are more theories of "fun" out there if you search, for instance, 14 elements of fun by Werbach and 14 forms of fun by Garneau. However, in creating the player's experience, we should not only focus on the fun theory as the only method. Dustin DiTommaso said that "fun is too diluted of a concept" (Lush, 2015). The unique psychological experience of the gameplay leads to sustained player engagement. Although sometimes, the social aspect (social rewards) of gaming is the one that keeps participants playing (Arbeau et al., 2020). I know, folks, this is a lot. But don't get confused. When you want to create a game, you can just start from anywhere as a trigger or even starting point. You can start with the character sheet that you think is great, the novel game mechanics that players will drop their jaw when playing your game, or you can also start with the art marvelous art style. Essential things you need to ask before you go, will there be a market for it? Or will the value of your game be loved by the player, hence fulfilling the sales goals? Let me give you a tip. Choose one or two of the type of fun by Lazzaro or the others, and try to analyze whether it fit your game design or vice versa.