



Guide to the Application of Modern Game-Based Learning Techniques in Education

1. Gamification in the Educational Field	3
1.1 Difference Between Gamification and Game-Based Learning	4
2. Objectives of Gamification	5
3. Gamification Tools	6
4. Implementation of Gamification	7
4.1. Establishing Rules	7
4.2. Kevin Werbach's DMC Model	7
4.3. The Player's Journey	9
4.4. Activity Cycles	10
5. Developing a Gamification Strategy	11
6. Practical Cases	14
6.1. Kahoot!	14
6.2. ClassDojo	16
7. References	20

1. Gamification in the Educational Field

Gamification is a learning technique that involves applying game mechanics in education, businesses, and other sectors to optimize performance, increase motivation, and strengthen the sense of belonging.

This strategy has gained considerable interest in recent years in the educational field due to its ability to transform learning into a more motivating and effective experience. As Scolari (2013) recognizes, “the educational community is focusing its attention on the integration of technology with education and has begun to appreciate the potential of gamification as an auxiliary element of methodological renewal for 21st-century educators.”

The integration of game elements in education not only captures students' interest but can also lead to significant improvements in their engagement and performance. The reasons behind the importance of gamification in education and the benefits it offers are explored below.

Motivation and Engagement

Gamification fosters motivation and engagement among students through the integration of playful elements such as points, badges, and leaderboards (Dichev and Dicheva, 2017). These components provide a sense of progress and success, which are powerful incentives. As students perceive that they are making progress and being recognized for their efforts, they tend to maintain greater interest and activity in their educational process.

Active Learning

As Zepeda Hernández et al. (2016) argue, gamification promotes active learning by requiring students to directly engage in challenging and attractive activities. This approach is more effective than passive teaching methods because it involves students in their own learning, thus fostering greater knowledge retention and a deeper understanding of the content.

Immediate Feedback

Games provide immediate feedback, allowing students to know when they are doing something correctly or need to improve. This feedback is vital for the learning process, as it helps students adjust their strategies and approaches in real time, thereby strengthening learning and skill acquisition (Fui-Hoon Nah et al., 2014).

Development of 21st century skills

Gamification can help develop 21st-century skills, such as problem-solving, critical thinking, creativity, and collaboration (Mårell-Olsson, 2021). Many educational games require students to work together to solve problems or compete in challenges, which helps them learn to communicate and cooperate effectively with others.

Inclusive Education

Gamification elements can make learning more accessible and appealing to a diverse range of students, including those with special needs (Manzano-León et al., 2022).

Games often incorporate visual and auditory elements that can assist students who struggle with more traditional teaching methods.

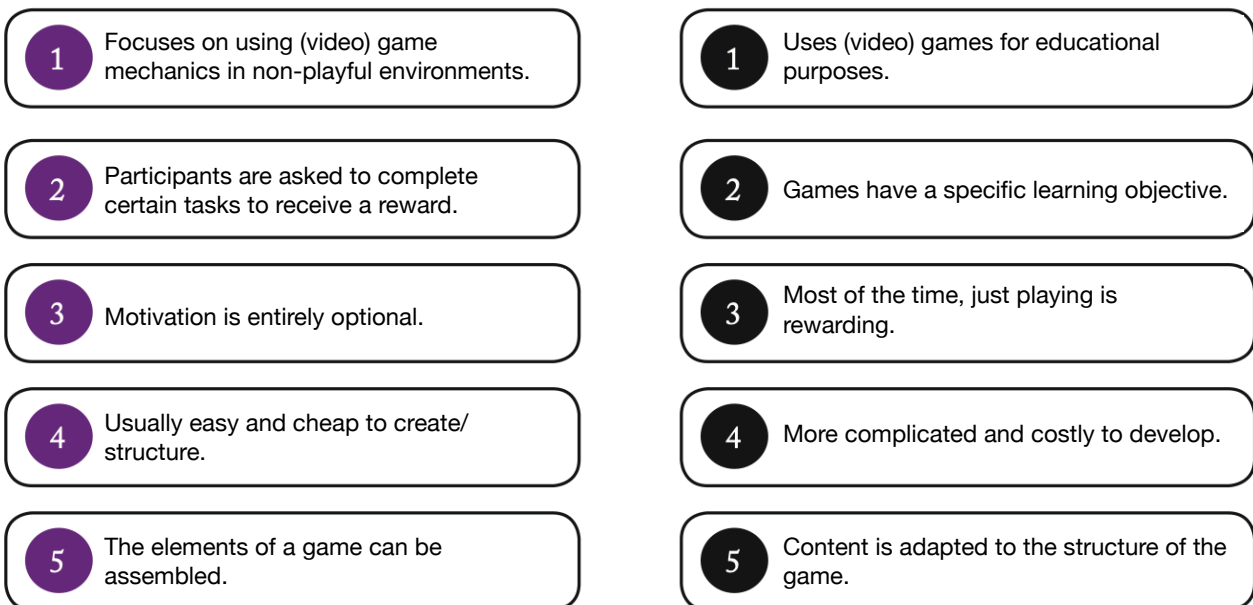
Improved Results

Research has shown that gamification in education can lead to better academic outcomes. Students who are more engaged and motivated through gamification techniques tend to achieve better grades and have a more positive attitude towards learning (Echavarría-Echavarría and Leigh-González, 2023)."

1.1 Difference Between Gamification and Game-Based Learning

It should be clarified that gamification is not the only strategy in the educational field that uses game mechanics. As Oliva (2016) explains, while gamification involves applying strategies from games (in any of their formats) to non-playful contexts, game-based learning combines learning with playful resources (especially video games) to reinforce lessons learned.

The author presents the main differences between these two educational approaches in the following scheme:



Gamification versus game-based learning

2. Objectives of Gamification

An effective gamification strategy must be designed with clear objectives in mind. That is, the designer must identify and define the specific outcomes they aim to achieve by implementing game elements in non-playful contexts. Establishing clear and measurable objectives is crucial for the success of any gamification initiative, as it guides the game design and provides a way to assess its effectiveness.

Among the main objectives of a gamification strategy, we can find:

- **Reinforce positive behaviors:** It encourages desirable behaviors in habits such as health, hygiene, consumption patterns, or social practices through reward systems and positive reinforcement techniques.
- **Facilitate knowledge acquisition:** It makes learning more enjoyable and accessible through the use of progressive challenges, immediate feedback, and rewards.
- **Develop specific skills:** It helps improve both technical skills and so-called soft skills through an interactive and attractive environment.
- **Promote teamwork:** Ideal for team building activities and collaboration through games that require teamwork and activities that reward cooperation and group interaction.
- **Enhance engagement and commitment:** Gamification is often used to increase user participation in a specific activity. Indeed, greater engagement can lead to better information retention, job satisfaction, and customer loyalty. For this, mechanics such as points, badges, and leaderboards are used to encourage active and regular participation.

Defining clear objectives not only helps to structure the design of gamification but also allows measuring the success of the project. By setting specific, measurable, achievable, relevant, and time-bound (SMART) goals, gamification designers can ensure that the system they are developing will effectively serve the desired purposes and can be adjusted as necessary based on concrete results.

Objectives also guide the selection of specific mechanics and components that will be most effective in achieving the desired outcomes, ensuring that all elements of the game are aligned with the final goals of the gamification project.

3. Gamification Tools

In the educational field, gamification tools are used to enrich the learning process, making it more interactive, engaging, and effective. These tools incorporate typical game elements such as points, levels, badges, and competitions to motivate students and enhance their engagement with the learning material.

Among the most popular and effective gamification tools used in education, we can find:

- **Kahoot!:** A game-based learning platform that allows educators to create interactive quizzes that students can answer in real-time as part of a dynamic competition. It is mainly used for reviewing knowledge, conducting diagnostic tests, or simply energizing students with playful activities that reinforce learning.
- **Quizlet:** It offers tools to create digital educational cards in various game formats, which help in memorizing information through repetitive learning activities and challenges. Its most widespread use can be found in language learning, sciences, and other subjects that require memorization and constant practice.
- **ClassDojo:** A classroom management tool that helps teachers improve behavior in their classes through a point system and real-time feedback. It is used to foster skills such as participation, teamwork, and responsibility, and to keep parents informed of their children's progress and behavior.
- **Minecraft: Education Edition:** An educational version of Minecraft that allows educators and students to explore, build, and learn in an open-world environment that promotes creativity, problem-solving, and collaboration. It is used to teach a wide range of subjects, from mathematics and science to history and literature, through model building and the exploration of concepts in a virtual world.
- **Duolingo:** A language learning platform that uses gamification techniques such as points, levels, and lives to keep users motivated while learning a new language. It is ideal for students of all ages who are looking to learn or improve their language skills independently or as a supplement to their formal studies.
- **Socrative:** It allows teachers to create exercises or question games that students can complete on their mobile devices, providing instant feedback for both students and teachers. It is used to assess students' understanding in real-time and adapt lessons according to the group's needs.
- **Edmodo:** It functions both as a learning management platform and a gamification tool, integrating elements such as badges and acknowledgments to celebrate students' achievements. Its main utility is to connect students, teachers, and parents, facilitating communication and task submission, and providing a platform for collaborative learning.
- Blooklet, Bamboozle, Jeopardy, Mentimeter, Charlat, Quizizz, Edpuzzle, Genially, Wordwall, Canva, Jigsawplanet, Octostudio, code.org, Pixton, Powtoon, Storyjumper, Makebeliefscomics, Chatterpix, Voki...

These gamification tools transform learning into a more attractive and personalized experience. By integrating play into education, teachers can enhance student motivation and engagement, leading to better learning outcomes. Gamification in education can also help develop important skills such as collaboration, communication, and critical thinking, ensuring that students not only learn the subject matter but also acquire key competencies for their future.

4. Implementation of Gamification

In order to effectively implement gamification, it is crucial to plan and develop a strategy based on clear objectives, ensuring that the activity is perceived as voluntary and meaningful by participants.

4.1. Establishing Rules

The rules in gamification are the guidelines that determine what players can or cannot do during the game. These rules are essential for maintaining a controlled and equitable environment, where players clearly understand their limits and possibilities. The rules also define the game's objectives, the procedures for interacting with the game elements, the nature of their participation (individual, team, cooperative, competitive, or a mix of the previous), and the conditions for victory or completion.

Careful design of the rules is vital because it can significantly influence the motivation and commitment of the players. Having well-designed rules helps create engaging challenges and manage difficulty so that players feel continuously tested yet capable of progressing.

According to Schell (2008), the rules should have three key components:

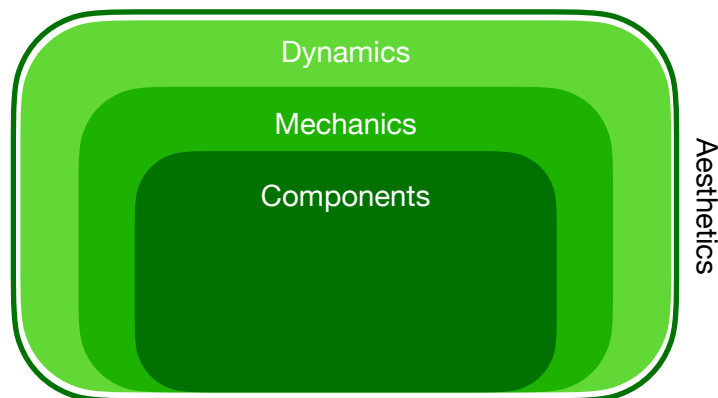
- **Transparency:** The rules must be clear and understandable to all participants to avoid confusion and ensure that everyone has the same opportunities for success. Transparency is of vital importance in maintaining the motivation and commitment of the participants. To achieve transparency, it is important to communicate the rules clearly and accessibly, possibly through tutorials, FAQs, and easy reference materials. It is also useful to have a system for players to ask questions or clarify doubts about the rules.
- **Consistency:** The rules must be applied uniformly to all participants to maintain fairness and integrity in the learning environment, without favoritism or arbitrary changes. This also means that the rules must be coherent in themselves, without internal contradictions that may cause confusion. Consistent rules help build trust in the gamification system and ensure that players feel confident that everyone has the same chances of success. For this, the game design must be carefully reviewed to eliminate any ambiguity or contradiction in the rules. Additionally, it is crucial to have mechanisms that allow monitoring and ensuring that the rules are applied the same way for everyone.
- **Flexibility:** Although the rules must be clear, they should also allow some degree of flexibility to adapt to different learning situations or players' needs. To implement flexibility, rules can be designed with certain margins for adjustments or incorporate regular instances of game review where rules can be evaluated and modified if necessary. This must be done in a way that does not compromise the clarity or fairness of the system.

4.2. Kevin Werbach's DMC Model

The "DMC Model of Kevin Werbach" (Werbach and Hunter, 2014) is a fundamental framework in the field of gamification, used to design effective game experiences that can be applied in both educational and business contexts. The model breaks down into three main components: Dynamics, Mechanics, and Components, and was popularized by Kevin Werbach, a professor at the Wharton School of the University of Pennsylvania, in his book "For the Win: How Game Thinking Can Revolutionize Your Business," co-written with Dan Hunter.

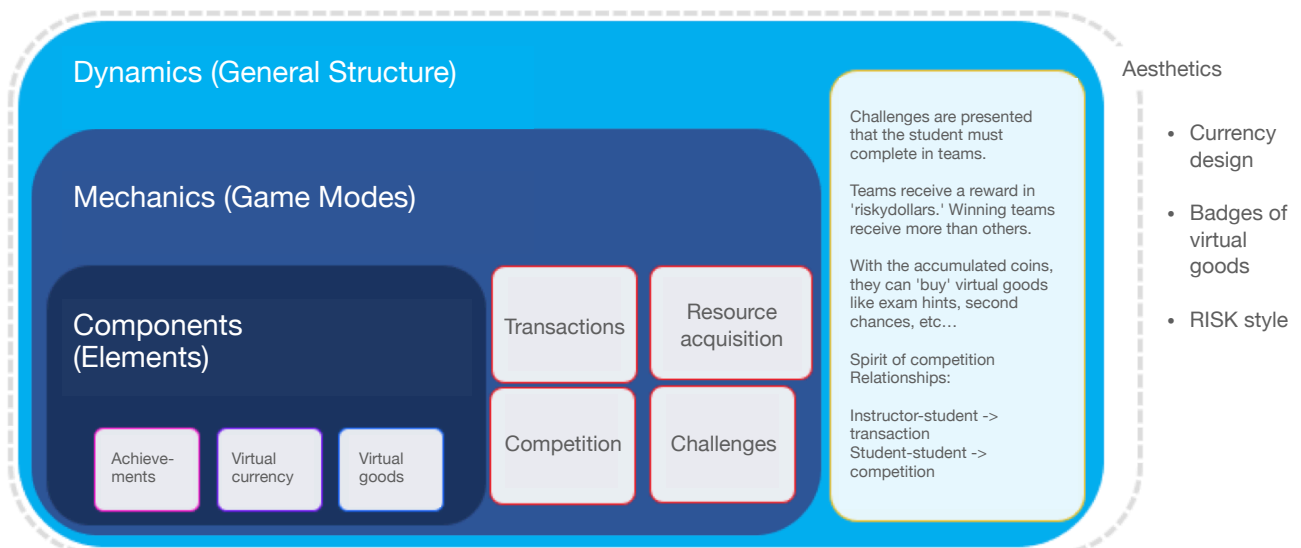
This model has 4 main elements:

- **Dynamics:** It refers to the abstract aspects of gamification design that directly affect player behavior. This includes motivation, emotions, narratives, and character development. Dynamics are fundamental in emotionally and psychologically engaging players, fostering a deeper connection with the activity.
- **Mechanics:** These are the processes that guide the progression of the game and the interactions of the players. They include rules, objectives, point systems, rewards, competitions, and feedback. Mechanics structure the game activity, facilitating challenges and clear goals that motivate participants to continue participating and striving.
- **Components:** These are the tangible elements of the game, such as avatars, badges, levels, leaderboards, and missions. These elements are crucial for the concrete operation of the game, providing tools and resources that players can use to interact with the game and each other.
- **Aesthetics:** Scheme of Riskydollars by Tecnológico Monterrey It refers to the visual and sensory elements of gamification design that contribute to the overall player experience. This includes art, graphic design, music, sound, and the general user interaction with the game. Aesthetics play a crucial role in how players perceive and feel about the game, directly influencing their level of engagement and pleasure.



Visual representation of the relationship between dynamics, mechanics, components and aesthetics

As a concrete example, we can look at the case proposed by the Monterrey Technology Centre with the Riskydollars initiative to better understand the concepts described in the previous paragraphs:



4.3. The Player's Journey

This concept refers to the process of experience and progression that a player goes through throughout the game. This path is structured to guide the player from a novice to a competent participant and, finally, to an expert within the game environment.

According to Chou (2019), the player's journey has four well-differentiated stages:

- **Discovery:** This is the initial stage where players are introduced to the game. It includes the presentation of the rules, objectives, and basic components of the game. The main goal of the Discovery stage is to capture the player's interest and provide enough information to get started.
- **Onboarding:** During this phase, players learn how to play effectively. They are taught through tutorials, practical examples, and initial feedback. In this way, Onboarding aims to equip players with the necessary skills to actively participate and ensure they understand how to progress in the game.
- **Scaffolding:** This phase involves providing ongoing support as players explore the game more deeply. The support is gradually withdrawn as the player's competence increases. The goal of this phase is to reinforce learning, maintain engagement, and optimize challenges as players gain skills.
- **Endgame:** In the final stage, players face the most difficult challenges and have opportunities for unique achievements. It is crucial for retaining advanced players, providing continuous and satisfying challenges to prevent disinterest and motivate players to achieve full mastery.

In short, the Player's Journey is of utmost importance for structuring the game experience in a way that maximizes engagement, learning, and player satisfaction. By carefully designing this path, educators and designers can ensure that the game is accessible to novices and, at the same time, challenging for more experienced players.

4.4. Activity Cycles

These cycles are the recurring patterns of behavior designed to keep players engaged in the learning process or interaction with the game. These cycles are fundamental to sustaining motivation and fostering ongoing commitment, ensuring that players continue interacting with the game system in a meaningful and gratifying way (Chou, 2019).

Below, we break down the two main types of activity cycles:

- **Engagement Loops:** These are feedback cycles where players perform an action, see a result, and receive some type of reward or consequence that motivates the next action.
- **Progression Loops:** These are cycles that structure how players progress through different levels or stages of the game, often increasing the difficulty and offering greater rewards. In other words, it is the cycle.

5. Developing a Gamification Strategy

This is a meticulous process that involves planning and executing game elements in a non-playful environment to achieve specific objectives, such as increasing user engagement or improving learning. This process requires a detailed and systematic approach to ensure that all gamification elements work together to deliver measurable and meaningful results.

Below, we break down the key phases involved in developing an effective gamification strategy (Schell, 2008):

- **Dynamics:** It defines what players aim to achieve within the game. It can range from completing a series of tasks to reaching a level of mastery in a specific skill. This provides a sense of purpose and direction to the players, guiding all actions within the game towards a specific end. More specifically, dynamics determine:
 - **Player's Objective:** It defines what the player is expected to achieve by the end of the game.
 - **Progress:** It establishes how the player's progress will be measured and displayed throughout the game.
 - **Restrictions:** It identifies any limitations that must be imposed to keep the game challenging yet fair.
 - **Emotions:** It considers what emotions are intended to be evoked in players during the game..
 - **Narrative:** It develops a story that engages players and gives them a purpose within the game.
 - **Relationships:** It plans how players will interact with each other and with the game organizers.
- **Mechanics:** It involves defining the operational rules and structures that dictate how players interact with the game and each other. Mechanics are what effectively transform the dynamics and components into a coherent and attractive game experience. When establishing the game mechanics, it is essential that each element is aligned with the global objectives of the gamification project. For example, if the goal is educational, challenges and rewards should be designed to reinforce learning; whereas if the goal is to increase collaboration in a business environment, social interactions and rules should encourage cooperation over competition. Mechanics should be designed not only to be fun and challenging but also to be fair and accessible to all players, thus ensuring that the game can be enjoyed and beneficial for all participants, regardless of their previous experience or skill. Specifically, mechanics define:
 - **Challenges:** Tasks or problems that players must overcome within the game. These can vary in difficulty and complexity, designed to test specific skills or knowledge. They provide a sense of purpose and motivation for the players. Well-designed challenges encourage active and continuous participation, and upon overcoming them, players experience a sense of accomplishment.
 - **Rules:** The guidelines that players must follow while participating in the game. They define what is allowed and what is not, how the game is scored, and the conditions for victory or defeat. They establish a fair and transparent framework for interaction, ensuring that the game develops in an orderly and predictable manner.

Clear rules help prevent conflicts and misunderstandings, contributing to a positive gaming experience.

- **Point and Reward System:** These include the assignment of points, coins, or any form of marker that denotes the player's progress. Rewards can be virtual (badges, trophies) or tangible (prizes, recognitions). They motivate players by providing visible and quantifiable goals. Rewards should be attractive and achievable, encouraging players to strive and keep playing.
- **Feedback:** The information provided to players about their performance and decisions within the game. It can be immediate (as in video games) or periodic (as in a long-term learning program). It is essential for learning and continuous improvement. Timely and constructive feedback allows players to understand what they are doing well and what they need to adjust.
- **Social Interactions:** It refers to the ways in which players can interact with each other within the game, such as cooperation, competition, or simply communication. Social interactions not only increase engagement and fun but can also foster skills such as teamwork and communication.
- **Components:** These are the tangible and concrete elements that constitute the infrastructure of the game. These components are the building blocks that players use and interact with directly during the game. It is important that they are properly designed so that the gamification is effective and appealing, with a clear purpose to contribute to the general objectives of the project. It is also desirable for these components to integrate in a way that each one reinforces and complements the others, creating a cohesive and attractive experience. The main components of a gamification system are as follows:
 - **Activities:** The specific tasks that players perform during the game. These can range from completing a quiz to carrying out a mission or complex project. Activities are the means by which players interact with the game. They should be designed to be attractive and relevant to the objectives of the game, ensuring that players remain engaged and motivated.
 - **Achievements:** Acknowledgments that players receive for reaching certain milestones or completing specific tasks. These can be medals, badges, or certificates. Achievements serve as validation of the player's effort and skill. They are crucial for providing a sense of progress and personal accomplishment and can be very motivating, especially in a competitive environment.
 - **Rewards:** Incentives awarded to players for meeting certain criteria or achievements within the game. These can be tangible (prizes, bonuses) or intangible (points, levels).
 - **Avatars:** Visual representations of players within the game. They can be simple (icons or images) or complex (customizable three-dimensional characters). These components allow players to express their identity and personality within the game, enhancing immersion and personal engagement with the game experience.
 - **Rankings or Leaderboards:** It shows the scores and positions of players in comparison with others. These can be global, team-based, or individual. Rankings foster healthy competition and can motivate players to improve their performance. Additionally, they provide a benchmark for self-assessment and continuous improvement.

- **Levels and Stages:** These represent different degrees of difficulty or stages of progress in the game through which players can advance as they improve their skills or complete tasks. Levels help structure the gaming experience, providing clear goals and a sense of progression. They also allow segmenting the game to accommodate different skills and learning paces.
- **Integration:** It involves the combination and operation of all elements of the gamification design—dynamics, mechanics, and components—throughout the Player's Journey to create a coherent and effective gaming experience. This phase is crucial to ensuring that the game is attractive, functional, and aligned with the established objectives. Effective integration requires a systematic approach to ensure that all elements of the game work harmoniously, maximizing the impact and efficiency of gamification. To properly implement integration in a gamification project, it is essential to conduct pilot tests and collect user feedback to adjust and fine-tune the game elements. This includes ensuring that transitions between different phases of the game are smooth, that difficulty levels are well-calibrated, and that rewards are perceived as valuable by players. Furthermore, integration should consider long-term maintenance and the ability to update or modify the game to adapt to changing player needs or new educational or business objectives. Ultimately, integration requires certain main aspects that we detail below:
 - **Coherence between dynamics, mechanics, and components:** Dynamics establish the objectives and emotional tone of the game, mechanics define the rules and operation, and components are the tangible elements with which players interact. The coherence between these elements ensures that the game is not only entertaining but also effective in delivering learning or business results. There must be a clear alignment between what the game intends to teach or achieve and how it is presented and played.
 - **Game Flow:** It consists of the natural progression and user experience throughout the game. It involves how players move from one task to another, how challenges are scaled, and how rewards are delivered. Good flow keeps players engaged and motivated, minimizing frustration and maximizing satisfaction, while ensuring that players find the game challenging yet attainable.
 - **Player Interaction:** It includes how players interact with each other within the game environment, whether through competition, collaboration, or simply social communication. Well-planned interaction facilitates a vibrant and active community that can significantly increase the longevity and impact of the game, reinforcing lessons learned and enhancing overall engagement.
 - **Adaptability and Scalability:** The ability of the gamification system to adapt to different numbers of players, varieties of skills, and changing contexts. This aspect ensures that the game can expand or be modified without losing its effectiveness, allowing more users to benefit from it over time and in different situations.
 - **Feedback and Adjustments:** The ability to incorporate feedback and make adjustments based on player behavior and responses allows the gamification system to be dynamic and evolve according to user needs, continuously improving the experience and effectiveness of the game.

This structured approach not only helps design an effective gamification strategy but also ensures a successful implementation that truly enhances learning and collaboration.

6. Practical Cases

Here you will find resources and strategies to successfully implement gamification strategies in your lessons.

6.1. Kahoot!

Kahoot! is a game-based learning platform that makes it easy to create, share and play learning games or trivia quizzes in minutes. Unleash the fun in classrooms, offices and living rooms!

Watch the explicative video on YouTube:

<https://youtu.be/7XzfWHdDS9Q?si=0ugK50JadNqy7OiL>

Learn how to create and play with Kahoot here:

<https://kahoot.com/what-is-kahoot/>

The objective is to enhance student engagement, motivation, and learning outcomes through interactive and competitive activities using Kahoot.

6.1.1. Components of the strategy of gamification with Kahoot:

Establishing the components of the strategy is essential because it creates a detailed and organized framework that guides the implementation, ensures alignment with educational objectives, promotes engagement, supports targeted interventions, and enables continuous improvement. This structured approach maximizes the benefits of gamification and helps achieve the desired educational outcomes effectively.

The components we recommend to take into account are:

1. Initial Assessment and Baseline Establishment

- **Objective:** Understand the starting level of knowledge and skills of students.
- **Activity:** Conduct a pre-course quiz using Kahoot to assess baseline knowledge on the subject.
- **Outcome:** Use results to tailor future Kahoot activities to address gaps and build on existing knowledge.

2. Lesson Integration

- **Objective:** Integrate Kahoot quizzes into daily or weekly lessons to reinforce learning.
- **Activity:** Create Kahoot quizzes at the end of each lesson to recap and test understanding of key concepts.
- **Outcome:** Immediate feedback for students and teachers on lesson comprehension.

3. Themed Competitions

- **Objective:** Make learning fun and thematic.
- **Activity:** Organize themed Kahoot competitions (e.g., "Science Week Challenge" or "Math Masters Tournament").

- **Outcome:** Increased engagement through thematic and relatable content.

4. Leaderboards and Rewards

- **Objective:** Foster a healthy competitive environment.
- **Activity:** Maintain class leaderboards based on Kahoot quiz scores. Offer rewards for top performers (e.g., certificates, extra credit, small prizes).
- **Outcome:** Motivation through recognition and tangible rewards.

5. Team Challenges

- **Objective:** Promote collaboration and teamwork.
- **Activity:** Conduct team-based Kahoot challenges where students work in groups to answer questions.
- **Outcome:** Development of teamwork skills and peer learning.

6. Review and Reinforcement

- **Objective:** Reinforce learning through repetition.
- **Activity:** Use Kahoot for periodic reviews (e.g., weekly or monthly) of previously covered material.
- **Outcome:** Better retention of information through regular revision.

7. Student-Created Quizzes

- **Objective:** Encourage student involvement and ownership of learning.
- **Activity:** Assign students to create their own Kahoot quizzes on topics they have learned and present them to the class.
- **Outcome:** Deepened understanding of the material and improved presentation skills.

8. Cross-Class Competitions

- **Objective:** Broaden the competitive field and enhance community spirit.
- **Activity:** Organize inter-class Kahoot tournaments.
- **Outcome:** Increased engagement and a sense of community across different classes.

9. Parent and Community Involvement

- **Objective:** Extend learning and engagement beyond the classroom.
- **Activity:** Host Kahoot nights where parents and community members can participate.
- **Outcome:** Strengthened school community and parental involvement in students' learning.

10. Progress Tracking and Analytics

- **Objective:** Track progress and identify areas for improvement.
- **Activity:** Use Kahoot's analytics tools to monitor student performance over time.
- **Outcome:** Data-driven insights for targeted interventions and support.

6.1.2. Implementation Plan

The implementation plan is critical because it ensures that the gamification strategy using Kahoot is executed in a structured, efficient, and effective manner. It provides clarity on roles and responsibilities, aligns with educational goals, manages resources, facilitates monitoring and evaluation, encourages stakeholder buy-in, and allows for flexibility and adaptation. This comprehensive approach maximizes the likelihood of achieving the desired educational outcomes and sustaining the benefits of gamification over the long term.

Phase 1: Preparation

- **Training:** Provide teachers with training on how to use Kahoot and create effective quizzes.
- **Setup:** Ensure all students have access to devices and the internet to participate in Kahoot activities.
- **Baseline Quiz:** Conduct the initial assessment to establish baseline knowledge.

Phase 2: Execution

- **Weekly Quizzes:** Integrate Kahoot quizzes into the weekly lesson plans.
- **Monthly Themes:** Organize themed competitions and update leaderboards.
- **Team Activities:** Regularly conduct team-based Kahoot challenges.

Phase 3: Evaluation and Adjustment

- **Feedback Collection:** Gather feedback from students and teachers on the Kahoot activities.
- **Progress Review:** Analyze quiz results and adjust strategies based on performance data.
- **Celebration:** Hold periodic events to celebrate top performers and successful participants.

We would also like to give some tips for the successful implementation of this gamification strategy through the Kahoot tool:

- **Variety:** Mix up question types (multiple choice, true/false, puzzles) to keep quizzes interesting.
- **Inclusivity:** Ensure all students feel included and encourage participation from everyone.
- **Feedback:** Provide constructive feedback and explanations for incorrect answers.

6.2. ClassDojo

ClassDojo is a global community of more than 50 million teachers and families who come together to share kids' most important learning moments, in school and at home—through photos, videos, messages, and more.

Watch the explicative video on YouTube:

<https://youtu.be/oufecIODPu0?si=uUbUMbNsk9j0dLxe>

Learn how to use ClassDojo here:

https://www.classdojo.com/resources/?utm_source=newnav?redirect=true

Here you will find strategies to enhance student engagement, motivation, and behavior through the use of ClassDojo's interactive and gamified platform.

6.2.1 Components of the Strategy:

This section provides a comprehensive framework that addresses all key aspects of student engagement and learning. It ensures that the strategy is implemented systematically, with clear objectives, targeted interventions, and a focus on continuous improvement. This holistic approach maximizes the effectiveness of the gamification strategy using ClassDojo, leading to better educational outcomes and a more positive and engaging learning environment for secondary school students.

1. Initial Setup and Orientation

- **Objective:** Familiarize students and teachers with ClassDojo and its features.
- **Activity:** Conduct a workshop or orientation session to introduce ClassDojo, explaining its purpose, features, and benefits.
- **Outcome:** Ensure all users are comfortable navigating and using ClassDojo effectively.

2. Customizable ClassDojo Avatars

- **Objective:** Create individual profiles for students on ClassDojo, allowing them to customize their avatars, personalizing the experience for students.
- **Activity:** Allow students to create and customize their own avatars.
- **Outcome:** Increased engagement and ownership of their learning profiles.

3. Points and Rewards System

- **Objective:** Motivate students through a structured points system, encouraging and rewarding positive behaviors and academic achievements..
- **Activity:** Assign points for various positive behaviors such as participation, teamwork, homework completion, and good behavior.
- **Outcome:** Promotes a positive classroom environment and encourages desired behaviors.

4. Class and Individual Goals

- **Objective:** Set clear objectives for both individual students and the entire class.
- **Activity:** Establish short-term and long-term goals, such as reading a certain number of books or improving test scores.
- **Outcome:** Provides students with clear targets to aim for, fostering a sense of purpose and direction.

5. Collaborative Projects and Teamwork

- **Objective:** Promote collaboration among students.

- **Activity:** Organize group projects and assign points for teamwork and collaboration.
- **Outcome:** Develops teamwork skills and enhances peer learning.

6. Instant Feedback and Reflection

- **Objective:** Provide immediate feedback to students.
- **Activity:** Use ClassDojo's instant messaging and feedback features to give real-time feedback on assignments and behavior.
- **Outcome:** Helps students understand their strengths and areas for improvement promptly.

7. Parent Involvement

- **Objective:** Engage parents in their children's education.
- **Activity:** Use ClassDojo to share students' progress with parents through updates, messages, and reports.
- **Outcome:** Strengthens the home-school connection and encourages parental support.

8. Weekly and Monthly Challenges

- **Objective:** Keep the engagement high through regular challenges.
- **Activity:** Create weekly or monthly challenges related to academic and extracurricular activities (e.g., "Math Whiz of the Month" or "Reading Marathon").
- **Outcome:** Maintains student interest and motivation through variety and competition.

9. ClassDojo Stories

- **Objective:** Build a sense of community and shared achievements.
- **Activity:** Use ClassDojo Stories to share class news, achievements, and highlight student work.
- **Outcome:** Fosters a positive classroom culture and celebrates successes.

10. Progress Tracking and Data Analytics

- **Objective:** Monitor student progress and identify areas for intervention.
- **Activity:** Regularly review ClassDojo's analytics to track individual and class performance.
- **Outcome:** Data-driven insights help tailor instruction to meet students' needs.

6.2.2 Implementation Plan

This plan provides a structured roadmap for executing the gamification strategy. It ensures that all aspects of the strategy are systematically addressed, from resource management and role allocation to monitoring and evaluation. This comprehensive approach maximizes the likelihood of successful implementation, aligning the strategy with educational goals, engaging stakeholders, and allowing for continuous improvement. The implementation plan ultimately ensures that the gamification strategy using ClassDojo is effective, sustainable, and beneficial for secondary school students.

Phase 1: Preparation

- **Training:** Provide teachers with training on how to use ClassDojo effectively.

- **Setup:** Create ClassDojo profiles for all students and familiarize them with the platform.
- **Introduction:** Introduce the points system and explain the rules and rewards to students.

Phase 2: Execution

- **Daily Integration:** Integrate ClassDojo into daily classroom activities, tracking behavior and awarding points regularly.
- **Weekly Reviews:** Conduct weekly reviews of student progress and provide feedback.
- **Monthly Challenges:** Organize themed challenges and update class or group goals monthly.

Phase 3: Evaluation and Adjustment

- **Feedback Collection:** Gather feedback from students, teachers, and parents on the effectiveness of the strategy.
- **Progress Analysis:** Analyze the data from ClassDojo to assess the impact on student behavior and engagement.
- **Adjustments:** Make necessary adjustments to the strategy based on feedback and data analysis.

7. References

- Chou, Tu-Kai. (2019). Actionable Gamification: Beyond Points, Badges, and Leaderboards. Packt Publishing Ltd.
- Dichev, C. And Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. *International Journal of Educational Technology in Higher Education*, 14. <https://doi.org/10.1186/s41239-017-0042-5>
- Echavarría-Echavarría, P. and Leigh-González, C. (2023). Estrategias de gamificación para el aprendizaje en una carrera de formación artística en educación superior. *RILED*, número 7, 1-12
- Eyal, Nir. (2014). *Hooked: How to Build Habit-Forming Products*. Penguin.
- Gray, Dave. (2011). *Gamestorming: A Playbook for Innovators, Rulebreakers, and Changemakers* in *Reference & Research Book News*, 26(2). <https://link.gale.com/apps/doc/A253493722/AONE?u=anon~df8c325e&sid=sitemap&xid=bbe1326b>
- Kapp, Karl M., 1967-. (2014). *The gamification of learning and instruction fieldbook: ideas into practice*. Wiley.
- Manzano-León, Ana, José Manuel Aguilar-Parra, Javier Rodríguez-Moreno and Ana María Ortíz-Colón. (2022). Gamification in Initial Teacher Training to Promote Inclusive Practices: A Qualitative Study en *Teaching and Learning Process: Psychological Variables in Education, New Applied Technologies and Physical Activity*
- Mårell-Olsson, Eva. (2021). Using gamification as an online teaching strategy to develop students' 21st century skills en *IxD&A: Interaction Design and Architecture(s)*
- McGonigal, Jane. (2011). *Reality is broken: Why games make us better and how they can change the world*. Penguin Press.
- Nah, F.FH., Zeng, Q., Telaprolu, V.R., Ayyappa, A.P., Eschenbrenner, B. (2014). Gamification of Education: A Review of Literature in Nah, F.FH. (eds) *HCI in Business. HCIB 2014. Lecture Notes in Computer Science*, vol 8527. Springer, Cham. https://doi.org/10.1007/978-3-319-07293-7_39
- Oliva, Herberth A. (2016). La gamificación como estrategia metodológica en el contexto educativo universitario in *Realidad y Reflexión*. Año 16, N° 44. Julio-Diciembre 2016
- Pink, Daniel H. (2009). *Drive: The Surprising Truth About What Motivates Us*. Riverhead Books.
- Salen, Katie and Eric Zimmerman. (2003). *Rules of Play: Game Design Fundamentals*. MIT Press, Cambridge, Mass.
- Schell, Jesse. (2008). *The art of game design: a book of lenses*. Elsevier/Morgan Kaufmann.
- SCOLARI Carlos A. (2013). *Homo Videoludens 2.0. De Pacman a la gamificación*, Col·lecció Transmedia XXI, Universitat de Barcelona.
- Werbach, Kevin y Dan Hunter. (2014). *For the Win: How Game Thinking Can Revolutionize Your Business*. Wharton Digital Press.
- Zepeda Hernández, Sergio, Rocío Abascal Mena and Erick López Ornelas. (2016). Integración de gamificación y aprendizaje activo en el aula in *Ra Ximhai: revista científica de sociedad, cultura y desarrollo sostenible*, Vol. 12, N°. 6, 2016
- Zichermann, Gabe and Christopher Cunningham. (2011). *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*. O'Reilly Media.

