

Online Training, the treasure within

C. Online Training 4. Alternative learning methods: games/gamification

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Let's start

Alternative learning methods make the learners active participants in the learning process, acquiring knowledge through their own activities. Teaching methods are constantly changing and trainers need to adjust their style to learners` learning needs and requirements. Trainers have to use different teaching methods to motivate and engage learners. One of the modern techniques in education is gamification, a new approach due to advancements in technology.

What am I learning here and why?

In a digital era, learners often gamify classroom activities through the use of technology. In this chapter, you will learn the benefits of gamification.

What content will I find here?

You will be able to define the key notion of this chapter, gamification. Also, you will learn how to analyze and evaluate the methods and techniques of gamification, from the perspective of applying to your discipline and you will be able to develop, for a specific subject-matter, a didactic strategy based on gamification.

Gamification and its benefits



Gamification is "using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems." 1

Gamification is the integration of game elements and game thinking in activities that are not games. There are some different features which play a key role in gamification: users - learners; challenges/tasks that users perform and progress towards defined objectives; points that are accumulated as a result of executing tasks; levels which users pass depending on the points; badges which serve as rewards for completing actions; leaderboards of users according to their achievements. In general, learners collect points of success and failure. Points also classify the players which may motivate for better performance. Badges, i.e. virtual rewards, can be used to recognize for good performance. Levels are used to motivate the players or a team to reach a higher level.

Online learning based on modern ICT creates favorite conditions for the implementation of gamification.

¹ Kapp, K. M. (2012): The Gamification of Learning and Instruction. Game-Based Methods and Strategies for Training and Education

The main **steps**² of an effective strategy to apply gamification in education, as they are described by Kiryakova, Gabriela & Angelova, Nadezhda & Yordanova, Lina in Gamification in education are:

Determinate learners' characteristics

- define learners` profiles in order to determine whether the new tools would be suitable
- establish what skills are required by the learners to achieve the objectives determinate if the tasks and activities require special skills

Define learning objectives

- learning objectives have to be plain and distinctly defined
- learning objectives are **general** (to complete an assignment, a test/quiz/exam, a project, to encourage training); **specific**: (to understand a concept, to be able to perform a task after the training, to complete the learning program); **behavioral** (to help the learner to focus, to complete assignments faster)

Create

educational content and

activities for

gamification

- the educational content should be **interactive**, **engaging** and rich in multimedia elements
- the learning activities need to be designed so that learners can repeat them in case of an unsuccessful attempt
- the learning activities should be **achievable**, **tailored** and **adapted** to learners' skill levels
- increasing difficulty level each subsequent task is expected to be more complex learners need to be able to reach the objectives by various paths

Add game elements and nechanisms

- game mechanics can be points, badges, levels, and leaderboards
- which elements will be included in training depends on the defined objectives (what knowledge and skills should be acquired as a result of the task)

Not everyone is willing to play and not all of the learners are eager to change their learning. Adult learners expect the games to be well-designed, curiosity awakening, and challenging, they should be able to solve real problems based on their studies. There are some obstacles that you need to be aware of when developing gamified courses for adults:

Adults consider training a serious activity in which they are investing their time and attention. Therefore, anything that does not look serious can have less credibility. Therefore, don't use unnecessary game-like aesthetics when your learners are conservative, use techniques with background in behavioral science and psychology, feedback, achievable goals.

² Kiryakova, Gabriela & Angelova, Nadezhda & Yordanova, Lina. (2014). Gamification in education

Adults have to understand the benefits of the game. Using complicated game design with a lot of game rules can outshine the real message of the training and can lose your learners' interest.

Gamification in education has benefits such as:

- it encourages learners to think differently;
- it makes lessons more interesting; encourages collaboration and teamwork;
- it lets learners develop new skills through simulation;
- it encourages the competitive nature;
- it engages learners into the process of studying;
- it increases comfort;
- it improves retention gamification retains learners` attention and motivates them, as they strive to reach a goal. When learners feel good about learning and know they will be rewarded for their efforts they will stop to be passive observers and become active participants.
- it helps learners to experiment the failure failure can be presented as a necessary step in the learning process. In a game, players often fail before succeeding. Using this element, by allowing learners to re-do assessments, can teach that failure it's another step in the learning process.
- it provides instant Feedback feedback allows trainers to gauge the learner's current understanding and make instructional decisions at the moment. It allows learners to evaluate their own learning and see the results of their efforts. In games, immediate feedback can be seen in earning points, advancing levels, unlocking achievements, earning badges, and moving up on a leaderboard
- complete homework gamification can make homework as exciting as games, attracting learners' attention and desire to learn more outside of the classroom.
- it takes the stress out of the assessment assessments are used to see if the learners understood the content covered in the course. Trainers use the results of the assessment to check if the course has met the training objectives. Using gamification for online learning assessments learners can enjoy a relaxed learning experience. Learners can provide immediate feedback and also can use peer feedback.

Methods of gamification in online education

Gamification can be a great tool to encourage learners and motivate them. To bring gamification in online education trainers can try these methods:

- 1. Video games. This element of gamification will work fine for small groups of learners (3-5 people): all of them will have a chance to play a video game and they have to discuss all its strong and weak points afterward. That is how you can motivate your learners to speak about something they really love (it works great if you are a teacher of some language for example) and use as many words from their vocabulary as possible. You have to find a video game that would fit the topic of your lesson.
- 2. **Team games.** Such games will encourage your learners' competitive nature and collaboration. Divide them into two groups, ask them to give a name for their team

- and a specific motto (they can do it, using a chat), and start a competition. Ask them questions concerning the topic of your lesson, and watch which team will be the first with the answer. Prepare some prizes or awards for winners. It may be good grades or some symbolic gifts (diplomas, one day without homework, etc.).
- 3. **Role playing.** You can think of some situations where your learners could feel themselves actors. For example, if you teach the foreign language you need to check how well they've learned the vocabulary of "In a museum" topic. Ask learners to compose a dialogue between a visitor and a guide for example, and let them put it on an act, virtually at least. Or you can put them to imagine that they are one historic character, and they have to describe him.
- 4. Question games. You can note a word connected to your lesson ("average" for math for example, "cell" for biology, "atoms" for chemistry, etc.). All learners should ask questions to get some hints about what this word could be. The winner will be the one who has guessed the word, and he becomes the next one to think of a new word for others to guess.
- 5. Puzzles. It can be both individual and group games. You could have a puzzle for every learner (a rebus, a riddle, a charade) or make it a team game to encourage teamwork between your learners. Or you can put every learner to make his own crossword for classmates, and solve these crosswords during a lesson afterward.
- 6. **Discussion** You can give your learner a task to watch a documentary and discuss it afterward.
- 7. **Table-top games.** Crosswords, scrabble can be a great helper, when you plan to make your lesson interesting and unusual for your learners. Such games are easy to find and play online so it works for online learning as well.
- 8. **Quizzes.** Make a quiz for your learners (it may be different for every separate learner, or the same quiz for everyone). The winner will be a learner who will be the first one who gives all the correct answers.

Example



If you want **to gamify your classroom with ready-made examples** there are some online educational platforms:

1. Plickers (https://plickers.com/). It is a platform that allows the trainer to real-time assess learner' knowledge and generate statistics per class and per student. It costs nothing, you have to create an account, watch the platform's functionality, sign up for the student class, generate the Plickers for students, share them (can be used many times), create a list of questions, install the Plickers app on your mobile phone, which has only one camera, and then ask students one question at the video projector or on the paper. Then you "read" remotely, in a mute game, with the phone installed the correct answer variants that the students show you with the cards. Because of the element of surprise learners enjoy this game. They can't inspire one another. The feedback you will give to the answers will motivate learners. As in any

game, learners suffer so if they do not perform. The "Plickers" game stimulates them to be "next time" better.

- 2. <u>AnswerGarden</u> (<u>https://answergarden.ch/</u>). It is an online platform for answers, with short questions to discuss without knowing the author of the answers. Learners introduce the answers from their mobile phones, in real time connected to the Internet. They do not have to even make an account, just they need to install a QR Code Reader on their phones. In the first phase, trainer is writing in real-time the question, which platform generates a QR Code that can be read by the students on the phone. Their response appears immediately on the screen, how many respond, so many answers. Discussions are being discussed, feedback is provided. It is a great platform because the shy learners may also be involved due to anonymity. In addition, the debates will no longer be "personal" but content-focused.
- 3. <u>Socrative (http://www.socrative.com/)</u>. It is a very useful platform that can replace classical paper tests at any topic through quizzes, quick question polls. Trainers and learners need to create separate accounts, for teachers and students.
- 4. <u>Classcraft</u> (<u>http://classcraft.com/</u>). It is a classroom management platform for virtually any topic that allows rewarding learning outcomes and desirable behaviors. You must create a teacher account and associate with the class you want. Learners have to create accounts their learning will be as an adventure, because they have different roles in groups and have different "powers" that they get from one level to another based on points (different categories).
- 5. <u>Free Rice</u> Spanning subjects found in most curricula, this website gamifies fact fluency and it uses an empathetic twist. For each question a player correctly answers, Free Rice donates 10 grains of the cereal to those with limited food access. Gratification is instant, and there are leaderboards to motivate competitive learners.
- 6. <u>Ribbon Hero</u> 2 This Microsoft Office integration helps students familiarize themselves with the software suite's features. Players must download and complete guided challenges within Word, Excel, OneNote or PowerPoint, continuously reaching higher levels with increasingly-complex scenarios. In doing so, they'll become proficient Office users.
- 7. <u>World Peace Game</u> This game is a political simulation. The goal is to free countries from dangerous political, economic and environmental situations. To extricate these countries, students group together to represent specific nations and find solutions to diverse problems.
- 8. Duolingo (https://en.duolingo.com/) It is a platform where everybody can learn a language, you receive points for correct answers which allows you to level up.

Exercises



Exercise 1: Why gamification?



<u>Describe</u> possibilities of applying gamification in your topic and <u>argue why</u> do you think gamification would increase the efficiency of your teaching.

Exercise 2: Adapt to online environment



Adjust your curriculum for an online training. Add auto-grading by using one of the existing platforms to assess your learners. Make a Facebook group where your learners can raise questions.

Summary

Trainers can go through few steps to implement gamification elements in learning programs. Trainer can apply game elements to influence learners` behaviors, to influence the process for learners to get good grades. The application of gamification techniques can help learners to achieve learning objectives and can motivate and engage them during the learning process.

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