





# Games 4 You

Game-based digital learning. Playing to teach

ERASMUS+2023-ES02-KA210-ADU-000174J66





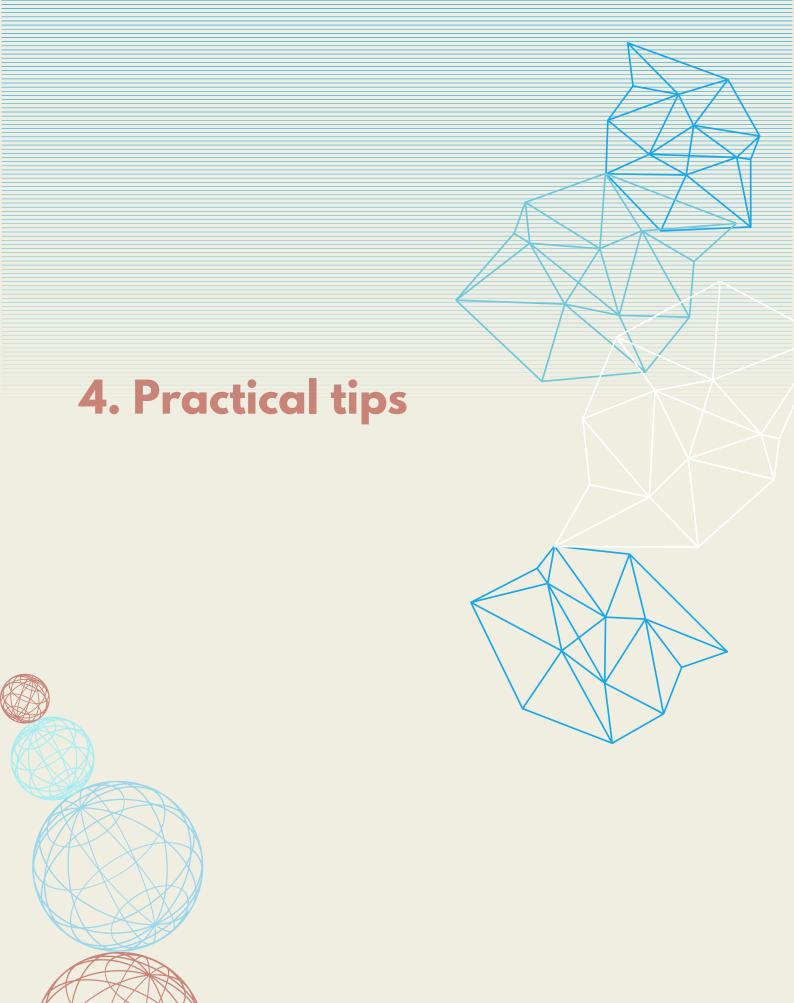




# **INDEX**

# **Module 4**

4.Practical Tips1
4.1.Distinguishing between gaming and training2
4.2. Ability to adapt to different characteristics - linguistic,
cultural, etc and levels of students19
4.3. Taking into account certain issues - linguistic, cultural,
etc40
Bibliography47





# PRACTICAL TIPS FOR INTEGRATION OF GAMIFICATION IN THE PROCESS OF ADULT EDUCATION

Adaptation to different linguistic and cultural characteristics, past experiences, specific problems and solutions

# 4.1. Distinguishing between gaming and training.

#### A.1. Definitions



#### **TRAINING**

The process of acquiring knowledge, skills and competencies in order to develop intellectual and practical abilities necessary for personal and professional development. The training aids in the understanding of new information and improves the ability to solve problems and make decisions. The training process can be implemented in three ways - through education, through experience or through mentoring. As for the environment in which it takes place, training can be formal (at school, university) or informal (self-study, practice).

#### **GAMIFICATION**

Application of game elements and mechanisms in situations and processes where the game is usually used very rarely or not at all. It has been proven that when gamification is used, the engagement and pleasure of the participants increases. Most often, game elements include points, rewards, levels, leaderboards, and challenges. Gamification is used in various fields, such as education, marketing, work, healthcare, and others.

The introduction of game elements aims to turn routine or complex tasks into more fun and motivating tasks, incentivizing users to achieve better results or interact more actively.

## A.2. Using gamification in the learning process

Gamification helps to acquire new knowledge and skills faster, making the learning process more dynamic, engaging and effective, and learning more fun, motivating and effective.

## A.2.1. Ways in which gamification can be applied:

#### Points and Rewards

Learners receive points or badges for completing tasks, solving quizzes, or participating in discussions. This motivates them to keep learning and improving their skills.

## Difficulty Levels

The learning process has different levels of difficulty, similar to video games. Learners start with easier tasks and gradually move on to more complex ones, which builds confidence and knowledge.

#### Charts

The introduction of leaderboards creates competition between learners, which motivates them to strive for better results.

## Challenges and missions

Introducing thematic challenges or missions related to the learning material, which makes learning interactive and stimulates critical thinking.



#### Achievement Awards

Providing virtual or real-world rewards for achieving certain goals or skills stimulates commitment and the desire to succeed.

## Scenarios and role-playing games

In simulations or role-playing games, learners apply their knowledge to realistic situations, making learning more practical and interactive.

#### Continuous feedback

Creating feedback through progress, assessment, or messaging that helps learners correct their mistakes and improve their scores.

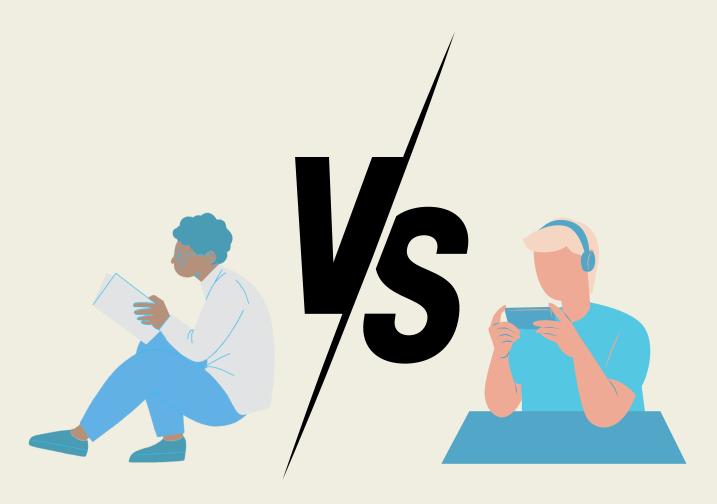
#### Team Activities

Group assignments and competitions encourage collaboration and communication between learners.



# A.2.2. Comparison of classical training with training based on gamification

Classical learning (more traditional and structured, with a strong emphasis on academic goals and systematic knowledge acquisition) and gamification-based learning (makes the learning process more interactive and fun by stimulating engagement through game elements) differ in several main characteristics related to the approach to motivation, Traning methods, student engagement and learning process goals:



#### **CLASSICAL TRAINING**

# LEARNING WITH GAMIFICATION

#### **Motivation**

It is usually based on intrinsic motivation (desire to acquire knowledge) or extrinsic motivation (grades, diplomas, recognition). Learners are stimulated through assessments, examinations and recognised qualifications.

It focuses on extrinsic motivation through game elements such as points, badges, levels, and rewards. It uses game methods to make the process more fun and engaging, engaging learners through competition, challenges, and rewards.

# **Training methods**

A traditional approach is applied, based on lectures, exercises, reading texts, discussions and exams. The structure is more rigorous and aimed at systematic assimilation of the material.

Stimulates active engagement through games and fun challenges. The inclusion of game elements motivates learners to participate more actively and to compete or collaborate with others.



# Student engagement

It varies depending on the teaching style and the interest of the learners in the material.

If the approach is more passive, they may lose interest and become less engaged.

Stimulates active engagement through games and fun challenges. The inclusion of game elements motivates learners to participate more actively and to compete or collaborate with others.

# **Learning objectives**

The main goal is the acquisition of knowledge and skills, with a focus on a deep understanding of topics and the development of analytical abilities. The assessment is usually based on theoretical and practical exams.

It aims to make the learning process more engaging and improve motivation. Knowledge and skills are also a goal, but the emphasis is often on short-term achievement, commitment, and fun.



#### **Feedback**

It usually comes in the form of grades, exams and comments from the trainer, and can be intermittent and delayed.

Frequent and instant through game mechanisms - collecting points, passing levels, ranking in lists. Learners can immediately see their progress and adjust their behavior.

# **Competition and cooperation**

It is usually implicit and manifests itself through the assessments and successes of individual learners. The collaboration is structured through group projects or class discussions.

It creates explicit competition through leaderboards and competitions, but also stimulates collaboration through team missions and challenges. The mechanisms encourage both individual and group activity.



#### **Awards and achievements**

Traditionally, they are associated with academic results - diplomas, certificates or recognition of excellence.

In-game rewards such as points, badges, virtual trophies, or additional in-game benefits are immediate and aimed at driving engagement.

# Approach to failure

It is often seen as a negative result that leads to lower grades or the need to retake an exam.

It is taken as part of the learning process, similar to games, where players can try to succeed repeatedly. This reduces the fear of making mistakes and encourages experimentation and repetition.





# **Emotional engagement**

It can trigger emotions such as stress or the pressure of exams, but also satisfaction with success. Emotional engagement is more related to the content of the learning material.

It stimulates positive emotions such as joy, fun and satisfaction from overcoming challenges. It often uses dynamics that make the process more fun and motivating.

# Flexibility and adaptability

Structured and often less flexible, with fixed goals and methods that are strictly followed. It is difficult to adapt to the individual needs and learning styles of each student.

It is usually more flexible and adaptable, allowing for personalized learning paths.

Game mechanics can be modified depending on the level of the learner and their preferences.



## A.2.3. Classic Learning vs. Gamification-Based Learning

The choice between classical learning and gamification-based learning depends on various factors: learning objectives, context, learning styles of learners, nature of the material.

#### When is **CLASSICAL TRAINING** preferable:

## • Seriousness of the topic

When training touches on critical areas, such as medicine, law, or safety, the classical approach can provide the necessary depth and seriousness.

## Deep knowledge acquisition

If the goal is to achieve an in-depth understanding of complex concepts and theories, classical learning offers a structured approach.

#### Standardized tests and assessment

In contexts where assessment and certification play an important role, classical training provides a formal framework.

#### A more structured environment

In situations where learners prefer clear instructions and methodology, the classical approach is preferable.

When is **LEARNING WITH GAMIFICATION** preferable:

#### Increase engagement

Gamification is especially useful when the goal is to increase learners' motivation and engagement, especially in less interactive or routine topics.

## Developing practical skills

In situations where learners need to apply their knowledge in practical situations, game scenarios make learning more realistic and applicable.

## Fostering collaboration

When it is important to encourage interaction between learners, gamification offers opportunities for teamwork and competition.

## Personalized learning

Gamification allows the learning process to be adapted depending on the individual needs and pace of learning of the learners.

## Interactivity and entertainment

When learning is perceived as monotonous or boring, game elements can bring freshness and new dynamics.

#### COMBINED APPROACH

In many cases, combining the two approaches can be effective. A typical example is a process where the basics of a topic are mastered through classical learning, after which gamification is used to apply this knowledge in practical scenarios.

# A.3. Effects and difficulties of using gamification in the learning process

#### A.3.1. Positive effects

#### Increased motivation

Gamification makes learning more fun and exciting, which incentivizes learners to participate more actively. Rewards, points, and achievements keep them interested and motivate them to keep moving forward.

## Engagement and attention

The game elements hold the attention of the learners and engage them in a deeper interaction with the material. They become more attentive and engaged in each task because they feel the immediate impact of their actions.

## Increased productivity

By setting clear goals and regular feedback, gamification helps learners focus on their progress and work more efficiently. Points and rewards encourage faster and better completion of tasks.

#### Satisfaction with achievements

Gamification creates a system of rewards and recognition for learners' achievements, which increases the sense of satisfaction and increases their self-esteem. This motivates them to achieve even higher goals.

#### Improving social skills

Many gamification models involve teamwork or competitions that encourage collaboration and communication between learners. This develops social skills such as teamwork, leadership, and conflict resolution.

## Personalized training

Gamification can be adapted to the needs of different learners, providing different levels of difficulty or challenges according to their abilities. This allows for an individualized approach to learning and reduces the risk of demotivation in stronger or weaker participants.

## Improving critical thinking and problem-solving

Game scenarios often include challenges and puzzles that require learners to think critically and come up with creative solutions. This helps develop their analytical skills.

#### Effective feedback

By using game mechanisms such as leaderboards and progress bars, learners receive quick feedback on their results. This keeps them informed of their progress and helps them correct their mistakes right away.

## Improved comprehensibility of complex concepts

Complex topics can be presented more easily and understandably through game scenarios or simulations. This makes learning more interactive and helps learners absorb the material more deeply and durably.

#### Promoting self-learning

Through gamification, learners become more self-reliant in the learning process, taking control of their progress and striving for improvement through their own efforts.

## Long-term motivation

Gamification elements, such as progression and rewards, create a sense of continued development and long-term goals. This encourages learners to stay motivated and interested in the long run.

## A.3.2. Negative effects

## Excessive dependence on external motivation

Learners may develop an addiction to rewards, points, or badges as the primary learning driver instead of focusing on their intrinsic motivation and genuine interest in the material. This can reduce their long-term desire for self-study.

### Rivalry and pressure

The implementation of leaderboards and competitive elements can create tension and stress among learners, especially if some feel "behind" than others. This can lead to frustration and even a loss of motivation.

## Ignoring slower participants

If gamification focuses too much on speed or efficiency, slower learners may feel left behind or marginalized, especially if they fail to keep up with the rhythm of the game.







# Reduced quality of training

In an attempt to "gamify" the content, educators may simplify the material or focus on entertainment instead of deep understanding. This can lead to superficial learning, without sufficient attention to the complexity of the topics.

## Loss of focus on learning goals

If game elements are too dominant, they can distract from the main learning objectives and steer learners towards achieving rewards rather than actually understanding the material.

## • Ignoring long-term results

Gamification often focuses on short-term achievements (such as earning points or badges), which can cause learners to overlook their long-term learning goals and focus only on immediate rewards.

## Negative impact on emotional health

The constant pressure to achieve higher results or compete with others can create an emotional strain for some learners, leading to anxiety, stress, or feelings of failure.

## Focus on quantity, not quality

Gamification can encourage the pursuit of completing as many tasks or activities as possible in order to collect points, which can lead to superficial learning and a lack of in-depth understanding of the learning material.

## Artificial motivation

Rewards in gamification can create an artificial sense of success, with learners feeling satisfied with collecting points or achievements, even if they have not understood the material in depth.

#### Technical problems and inequality

If gamification requires the use of technology, it can create barriers for learners who do not have access to proper equipment or an internet connection. This can lead to inequalities in the learning process.

# A.3.3. Challenges and difficulties

#### Excessive focus on rewards

Learners can focus more on earning points, badges, or rewards than on the learning process itself. This can lead to reduced motivation to truly understand the material.

## Inappropriate application

If gamification elements are not aligned with learning goals or implemented without context, they may seem superficial or distracting and not support effective learning.

#### Uneven engagement

Different learners may react differently to gamification. Some may be highly motivated by the game elements, while others may not be as enthusiastic and even feel discouraged.

#### Loss of intrinsic motivation

Excessive use of external stimuli - rewards, points, can reduce the intrinsic motivation to learn, because the focus shifts from the pleasure of learning to receiving rewards.

## The level of complexity

If gamification is not well balanced, it can lead to frustration or loss of interest. Tasks that are too difficult can demotivate students, while tasks that are too easy can create a feeling of boredom.

## Technical challenges

Integrating gamification platforms may require technical resources that are not always available. The lack of proper equipment or software can make it difficult to implement these elements.

## Competition and stress

Constant competition through rankings or competitions can lead to stress or tension in some learners. They may feel overwhelmed or discouraged if they fail to achieve high results.

## Unfair distribution of opportunities

Some learners may have more experience with game mechanics and do better, while others may struggle to cope. This can lead to inequalities in the study group.

## Loss of control by teachers

With too much emphasis on gamification, trainers may lose control of the learning process and find it difficult to manage the content and objectives of the training.

## **Short-term impact**

Gamification-based motivation may be temporary. When elements are removed or reduced, learners' interest and motivation may also drop.





# 4.2. Ability to adapt to different characteristics - linguistic, cultural, etc. - and levels of students.

# **B.1.** Using gamification in adult learning (andragogy)

# B.1.1. Compatibility of gamification with andragogical principles

The andragogical principles are mainly oriented towards the specific needs of adult learners such as independence, practical application of knowledge and linking new information with previous experience. Combining andragogical principles with gamification is an environment for creating effective and engaging adult learning programs tailored to their needs and preferences and makes the adult learning process more engaging, motivational and effective:

# Self-directed learning

Adult learners often prefer to control their own learning. Gamification can provide platforms where students choose the pace and path of their learning. This can be done through levels, missions, achievements or branched scenarios that allow participants to make decisions, go through different challenges according to their own rhythm and interests.

#### Practical orientation of knowledge

Adult learners want to immediately see the benefit of what they have learned in their work or daily life. Gamification can include simulations, role-plays, or challenges that enable learners to apply what they have learned in real-life or near-reality situations. For example, management games and case studies can help solve specific business problems.



#### Motivation and internal remuneration

Gamification often includes points, badges, and leaderboards that create a competitive yet friendly spirit. This can motivate adult learners to participate more actively and deepen their engagement. It is important to combine these mechanisms with intrinsic motivation, such as providing meaningful goals and achievements that are associated with real benefits for learners.

## • Linking to previous experience

Adult learners often draw on their previous experiences. Gamification typically involves scenarios and tasks based on real-life professional or life situations that allow learners to integrate their knowledge and skills. For example, in a simulation game, participants can be assigned to solve problems that they have already encountered in the past, but with new knowledge.

## Problem-based learning

Gamification can use puzzles or problem cases that motivate learners to solve practical problems. They need to apply critical thinking, collaboration, and analytical skills, which is key for adult learners. This stimulates the deep absorption of matter.

#### Instant feedback

Adult learners value quick and specific feedback. Gamification can provide instant feedback through automated grading or reward systems, allowing learners to see how they are progressing and how they can improve their skills.

## Social Learning

Many gamification platforms include collaboration or competition between participants, which stimulates social learning. Adult learners can learn from each other through the exchange of experiences, joint problem solving or by discussing the results of tasks in group formats.

B.1.2. Areas and situations in which it is advisable to use gamification in the process of adult learning

Corporate training and professional development

## Learning new skills

Gamification can be used in onboarding or learning new professional skills by creating rewards for completing certain courses or tasks.

## Motivation for continuous learning

Adults often participate in trainings related to their professional development. Gamification can make learning more engaging through incentives such as points, certifications, or progressive competency levels.

Online Training and Courses

## Maintaining engagement

Online learning often requires self-discipline. Gamification elements such as leaderboards, points, or challenges can keep you motivated and encourage course completion.

## Create custom programs

Adults often have specific learning goals. Gamification can personalize the experience through customizable levels and missions tailored to personal interests or needs.

#### Health and safety training

#### Practical simulations

In industries where safety is critical, gamification can simulate real-world situations and allow learners to learn the right reactions in a risk-free environment. A typical example is emergency simulations, where each correct step brings points or other incentives.

## Prevention and training in health practices

Adults who participate in health and safety trainings can motivate themselves through playful approaches to memorize important procedures and protocols.

Languages and additional qualifications

## • Learning new languages

For adult language learners, gamification can help with a more fun and structured learning process through daily challenges, progress assessments, and achievement rewards.

## • Certification Programs

Gamification can encourage the acquisition of additional qualifications by offering points or certificates for successfully completed stages of training.

# Motivation for learning through a competitive element

# Teamwork and competitions

Adults can participate in learning competitions where teams collect points for solving problems or completing tasks.

This can be applied to trainings for developing leadership skills, creative thinking or project management.

## • Stimulating competition

Gamification can create friendly competition, which is often a motivating factor for adults in a professional setting. This can be applied to sales, management, or marketing training.

Training in social and volunteer initiatives

## Social and cultural programs

In volunteer initiative or social work courses, gamification can maintain motivation and a sense of satisfaction through the introduction of missions, tasks, and community rewards for help and contribution.

## Group participation

In programs that aim at social impact or cultural learning, gamification can be applied to create teamwork and achieve common goals.

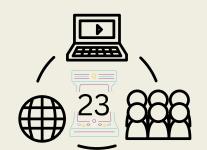
Habit Change Training

# Healthy habits and sports

Gamification can be used to promote healthy lifestyles by introducing physical activity challenges, diets, or improving mental health through rewards and incentives.

## Changing bad habits

Training programs for quitting bad habits such as smoking or reducing stress can benefit from gamified approaches.



#### Continuing education and postgraduate studies

#### Academic Programs

In postgraduate and graduate programs, gamification can help adults stay motivated through long and intense courses, through point systems, achievement awards, or group projects.

#### Research and tasks

Adults participating in research projects or trainings aimed at scientific activity can be motivated through game elements that encourage analytical thinking and collaboration.

# B.1.3. Areas and situations in which the use of gamification in adult learning should be avoided

In situations and contexts that require a more serious and concentrated approach, game elements can distract, reduce efficiency or create undesirable consequences:

Professional trainings in serious or critical industries

#### • Medicine & Health

When training doctors, nurses, or other healthcare professionals where accuracy and a thorough understanding of the material are critical, gamification can distract from the seriousness of the training. Mistakes resulting from misunderstanding can have serious consequences for human life.



#### Aviation

In the training of pilots or aeronautical engineers, where small mistakes can lead to catastrophic consequences, the use of game elements can be perceived as underestimating the seriousness of the tasks

#### Law

The training of lawyers or judges often requires an in-depth study of legal texts, which can be disrupted by excessive gamification. These professions require analytics and attention to detail, which can be negatively affected by game mechanisms.

Crisis Management or Safety Training

#### Crisis Response Training

In situations such as training to work in natural disasters, fire safety, or military drills, gamification can weaken the sense of urgency and seriousness of situations. This can lead to underestimation of risk and unpreparedness in a real situation.

## Work with security and cybersecurity

In the training of experts in the field of information security or personal data protection, too light-hearted treatment through gamification can lead to underestimation of dangers and threats.





#### Trainings related to ethics and morality

#### Ethical Training

In areas such as business ethics, corporate responsibility, or medical ethics, where deep moral and ethical issues are addressed, gamification can convey the wrong message. Discussing ethical dilemmas requires seriousness and critical thinking, which can be hampered by game elements.

Scientific and research areas

#### Basic Sciences

In training scientists and researchers, where analytical thinking, attention to detail, and working with complex data are required, gamification can create a false focus on "winning" or "succeeding" instead of deep understanding and critical analysis.

Corporate and leadership trainings

## Training of senior managers and leaders

Senior management in companies is often focused on strategies, making important decisions, and managing risks. Gamification can be perceived as inappropriate, especially if it distracts from key priorities or creates a frivolous attitude towards complex issues.

Trainings related to personal development and mental health

# Psychology and mental health

The training of psychologists, therapists and other professionals who work with vulnerable groups requires delicacy and an understanding of deep personal problems. Gamification can be inappropriate and detrimental to seriousness in evaluating and working on such topics.

#### Sensitive topics

## Social justice, equality or discrimination training

When discussing topics such as racism, gender discrimination, social inequality or humanitarian issues, gamification may seem superficial and do not reflect the depth of these issues. It is important that learners have space for serious discussion and reflection.

# B.2. Specifics of using gamification in the process of adult learning

# **B.2.1.** Taking into account linguistic specificities

In the process of gamification in adults, language problems can arise due to a variety of factors, such as level of language competence, use of specific jargon, cultural differences, and technological terminology:

If participants do not have a sufficient command of the language in which the platform or content is based, the following problems may arise:

## Difficulty understanding instructions

If gamified tasks or guidelines are written in a language that is difficult to understand, it can make it difficult to complete tasks.

#### Difficult communication

In group tasks or when interacting with other learners, misunderstandings may occur if language skills are not up to par.

#### Low confidence

Adult learners with limited language proficiency may feel uncomfortable and demotivated if they have difficulty understanding terminology or context.

Gamification may involve specific terminology or complex language that is not adapted to adult learners. This can lead to:

#### Use of technical jargon

If the platform uses complex or technical terminology that is not familiar to all learners, they may have difficulty understanding tasks and rules.

## Overly academic language

For adults with less academic background, complex and formal language can be a barrier to effective participation.

## Unfamiliar terms and metaphors

Often, gamified platforms use metaphors or game terms that are not part of adult learners' everyday language, which can confuse or make it difficult for them.

Adult learners often come from different cultural backgrounds, where terms, expressions, and ways of communicating can vary greatly. This leads to:

#### Different meanings of the same words

Certain words or phrases can have different meanings in different cultural contexts, which can lead to misunderstandings.

#### • Irrelevant or incomprehensible examples

If the platform uses culturally specific examples, they may not be understandable or applicable to learners from different cultures.



#### Language barriers in group tasks

In tasks that require collaboration between learners from different cultures, difficulties in understanding can arise due to language differences.

Gamified platforms often use technology terminology that may be unfamiliar to adult learners with lower technological literacy:

#### Unknown terms related to the interface

Expressions such as "update", "profile", "mission", "level" or "backup" can be difficult to understand if they are not part of the everyday language of learners.

## Terms related to gamification

Sometimes gamification platforms include specific terms, such as "XP" (experience points), "quest" (assignment), or "leaderboard" (leaderboard), which not all learners will understand right away.

If the platform or content is not localized for the specific linguistic and cultural context of the participants, comprehensibility issues may arise:

## Low-quality translated content

Automatic translations or poorly adapted texts can lead to confusion or errors in the interpretation of tasks and instructions.

## Use of inadequate cultural references

If gamification uses examples or references that are specific to one culture, they may prove incomprehensible to learners from another.

The language level should be tailored to the language abilities of the learners and not be too complex or too simple. Problems include:

#### Overly simplistic language

If the language is too simplistic, learners may perceive it as frivolous or inappropriate for their age and experience.

## • Overly complex language

If tasks or instructions use complex syntax or vocabulary, learners may have difficulty understanding and completing tasks.

Sometimes gamification tasks or challenges do not provide enough context or explanations, which can create language and cognitive problems:

#### Insufficiently clear instructions

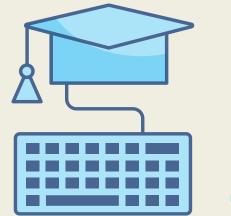
If the instructions are too short or vague, learners may have difficulty understanding what they need to do.

## Lack of examples

Adult learners often need specific examples to understand the new concepts or tasks they need to complete.

## **B.2.2.** Consideration of specificities related to cultural diversity

In the process of gamification in adults, various cultural problems may arise related to the perceptions, expectations and social attitudes of the participants:



#### Differences in cultural attitudes towards games

#### Prejudice to games

In some cultures, gaming can be seen as frivolous or inappropriate for adults. This can lead to resistance to gamification if people perceive it as incompatible with the professional or social environment.

#### Differences in attitude to time

In some cultures, time is perceived differently. For example, cultures with a stricter attitude towards time may see game elements as a waste of time, while other cultures would perceive this as an opportunity for socialization and creativity.

#### Cultural differences in motivation

#### Individualism vs. collectivism

In cultures oriented towards individual achievement (such as the American or Western European), people can be motivated by individual rewards and recognition. Conversely, in cultures with a collectivist orientation (such as Asian cultures), group rewards and overall success can be more motivating.

#### Adversarial vs. Collaboration

Some cultures are highly competition-oriented, while others prefer cooperative efforts. Gamification systems that emphasize competition can provoke negative reactions in cultures that value harmony and teamwork.



#### Language and symbolic barriers

#### Language difficulties

In cases where gamification elements contain text or instructions, language differences can make it difficult to understand and participate. This can lead to confusion or dissatisfaction among participants.

## • Differences in symbolism

Some visual elements or symbols can have different meanings in different cultures. For example, colours, gestures or icons that are used in games may be perceived differently, and some of them may even offend or embarrass certain cultural groups.

Perceptions of hierarchy and power

## Horizontal vs. Vertical Hierarchy

In cultures with a stricter hierarchical structure (e.g., many Asian and Latin American societies), it may be inappropriate or undesirable to create games that remove traditional norms of power and authority. In these cultures, there may be resistance to game elements that equalize the status of participants.

## Leadership involvement

Leaders or senior executives in organizations may feel uncomfortable participating in gamification if they feel that it damages their credibility or puts them on an equal footing with others.

m eee !!

Problems with engagement and perception of "fun"

#### Perception of entertainment

People from different cultures can have different understandings of what is fun and engaging.

Elements that may be fun and motivating for one group may seem boring or inappropriate for another.

#### Lack of commitment

If gamification mechanics do not align with cultural norms and expectations, learners may remain demotivated or not actively engage.

Differences in Reward Preferences

#### • Tangible vs. Intangible Prizes

Some cultures may value more material incentives (such as money or rewards), while others may prefer intangible ones (such as public recognition or praise).

#### Fairness and distribution of awards

The perception of fairness in the distribution of awards can vary greatly. In some cultures, it will be important that awards reflect individual efforts, while in others, it will be important for everyone to receive equal recognition.

Technological literacy and access

#### Technological barriers

In less technologically advanced societies or environments, there may be problems with access to the technology needed to participate in gamification systems, or lack of the necessary skills to use it.

#### Resistance to digitalisation

Some adults may be resistant to the use of technology and digital tools, especially if it is not widely accepted in their cultural environment.

## **B.2.3.** Addressing linguistic and cultural diversity

Addressing language and cultural issues in the adult gamification process requires a careful, adaptive, and culturally sensitive approach. The most commonly used approaches to dealing with these problems are:

- Language adaptation and cultural sensitivity
- Providing explanations of terminology
- Providing clear and detailed instructions
- Understanding the Cultural Context
- Adapting game elements according to cultural differences
- Reducing Cultural Prejudice Against Games
- Using different motivational approaches
- Involving learners in the gamification process
- Highlighting the professional contribution of gamification
- Technology support and training

#### Feedback and adjustments

# B.3. Taking into account the individual and characteristic features of individuals in the process of gamification in adults

Taking into account the individual and characteristics of individuals in the adult gamification process is crucial to ensure engaging, motivating and effective learning. Adult learners have different learning needs, experiences, motivations and preferences, which necessitates approaches that take these differences into account. This can be achieved by:

<u>Personalization of the training process</u> personalization of the content and the path of training is one of the most effective ways to take into account individual characteristics:

#### Customizable platforms

The use of technologies that automatically adapt to the needs of participants allows learning according to individual skills and progress.

#### Individual profiles

Creating profiles for each participant that reflect their preferences, learning style, competency level, and goals helps to personalize the learning experience.

#### Personal goals and achievements

Providing the opportunity to set personalized goals that correspond to the professional and personal needs of the participants.







<u>Variety in the types of tasks and activities</u> - adult learners have different preferences for learning styles - some prefer practical activities, others - analytical tasks, others - the visual presentation of information.

#### Combining different types of tasks

Incorporating a combination of case studies, simulations, quizzes, role-plays, and visual tasks to cover different learning styles.

#### • Practice-oriented tasks

For participants who learn best by doing, activities related to solving real problems or simulating work situations should be included.

#### Interactive elements

Adding interactive activities, such as open-ended questions or game elements (such as missions and challenges), allows learners to actively interact with the content.

<u>Flexibility in the pace and time of learning</u> - adults often have different commitments and time constraints that impose flexibility in the learning process:

#### • Self-management of time

Gamification platforms should allow participants to progress at their own pace without imposing fixed deadlines for everyone.

#### Microlending modules

Microlearning units (short learning modules) allow learners to learn at small intervals of time when it is convenient for them.



#### Asynchronous Learning

Participants should have access to the content and assignments at all times so that they can study it at a time convenient for them.

<u>Personalized rewards and incentives</u> - different learners are motivated by different incentives, so gamification should offer variety in rewards:

#### Individual achievements

Rewards such as badges, certificates, and points can motivate those who value personal success and recognition.

#### Team Awards

The inclusion of tasks that require collaboration and provide team rewards will motivate participants who prefer group work and social interaction.

#### Opportunity to choose prizes

The platform can give a choice of different types of awards, thus meeting individual preferences for recognition and motivation.

<u>Differentiated feedback</u> – feedback is especially important for adult learners, as it helps them understand their progress and correct their behaviour. To be effective:

#### Personalized feedback

Instead of automatic messages, feedback should be provided tailored to the individual needs and achievements of each participant.

#### Frequency and timeliness

Regular and timely feedback that allows participants to correct their mistakes and adapt to new requirements.

#### · Coaching and mentoring

Include a mentoring support opportunity where learners receive additional guidance and advice from experienced colleagues or tutors.

<u>Consideration of different motivational factors</u> - adult learners are often motivated by various factors such as career development, personal satisfaction, social recognition or desire for improvement.

#### Connecting content to real life

Gamification tasks should have a direct connection to the real life and professional needs of the participants, which will increase their motivation.

#### Providing opportunities for personal development

Tasks that encourage creativity, critical thinking, and skill development can be especially motivating for adult learners.

#### Clear outline of benefits

Participants should understand the specific benefits of the tasks they perform, both for their personal development and for their career growth.

<u>Support for different levels of technological competence</u> - adult learners have different levels of skills when using technology. To ensure accessibility for all:







#### Intuitive platform design

Gamification platforms should be easy to use and provide clear guidance for navigating and completing tasks.

### Technical Support

Providing access to help and guides for those who have difficulties with technology.

#### Training on using the platform

Ability to provide short training courses on using the platform for people with less technological experience.

<u>Taking into account cultural and social differences</u> - adult learners can come from different cultural backgrounds, which requires adapting the content to avoid cultural misunderstandings:

#### Content localization

Adapting examples, scenarios and tasks so that they reflect the cultural and social context of the participants.

#### • Inclusivity in gamification

Create tasks that take into account differences in social, cultural and personal attitudes, and promote respect for diversity.

### Group tasks with multicultural teams

Fostering cooperation between people from different cultures, which develops cultural awareness and skills to work in an international context.



# 4.3. Taking into account certain issues - linguistic, cultural, etc

# Examples and solutions when using gamification in adult learning

Problems in gamification in adults can be triggered by various factors such as inadequate translation, cultural differences in the meaning of words or phrases, as well as the complexity of the language used. Here are some case studies where language and cultural differences have led to setbacks or challenges in the gamification process:

#### **EXAMPLE**

#### **DECISION**

### Translation and localization of game elements

In an international company that uses a gamification system to train staff in different countries, the automatic translation of game interfaces led to confusion. In the Chinese translation, some of the words were not correctly translated, which led to a misunderstanding of the instructions. For example, terms such as "leaderboard" and "badges" were mistranslated, and users did not understand their meaning in the context of the

game.

Hiring professional translators and localizers to take care of culturally appropriate translation and adaptation of terminology.

#### **EXAMPLE**

#### **DECISION**

# Cultural differences in the meaning of words and symbols

A gamification platform designed to motivate employees in several countries used color codes for different levels of achievement. In Western countries, the color red meant a warning or a low level of achievement, while in China, the color red was associated with good luck and success. This led to confusion among Chinese consumers, who thought they had done a good job, even though in the system red meant "failure".

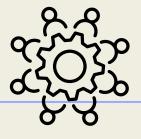
Adaptation of colours and symbols according to the cultural contexts of different countries to avoid misunderstanding and confusion.



# Language complexity in the interface

In a gamification program for training adult employees in a corporate environment, the language used was too complex and technical, making it difficult to understand the instructions. For example, the use of slang terms and technical expressions in game instructions has made some tasks incomprehensible to people who are not used to digital jargon.

Use of clear, understandable and simple language, adapted to the level of understanding of the target audience. Conducting tests with the target group to check the comprehensibility of the instructions.



### Language barriers in multilingual environments

In a gamification project for training employees in an international company with offices in different countries, the interface of the system was only in English.

Many of the employees, especially in countries where English is not widely spoken, could not understand the tasks and goals of the game well. This

led to a low level of participation

and demotivation among these

groups.

Offering an interface in several languages, depending on the location of users. It is also important to use translators with cultural competence to ensure accurate translation of terms and instructions.

# **Problems with the ambiguity of terms**

In a gamification system that aims to stimulate learning through competitive games, the use of the term "quest" (mission) led to confusion among participants. In different cultures, "quest" can have different connotations - in some countries it is associated with religious or historical plots, which has caused negative reactions among some groups of participants.

Review and adaptation of the terms used, taking into account cultural differences and possible interpretations. Substitution of terms that may have undesirable connotations in different cultures.

# Game mechanics related to cultural differences in language

In a gamification system for teaching foreign languages, the use of words and phrases with double meanings in one language has led to confusion for people who do not have a good command of that language. For example, the English term "beat" can mean both "to win" and "rhythm". In the learning context, this caused confusion when used in a game task.

Avoiding words with double meanings or providing additional explanations and context for such terms on the gamification platform.



### Differences in attitudes towards competitive elements

At an international corporation that uses gamification to increase employee efficiency, racing mechanics such as leaderboards and individual rewards have been well received in Western offices, where competitiveness is highly valued. However, in East Asian branches, where collectivism and teamwork are more valued, elements caused stress and dissatisfaction among employees.

Incorporating more cooperative elements and group rewards into collectivism-oriented cultures, and adapting game mechanics to encourage collaboration rather than competition

They preferred cooperation to competition and considered racing mechanics inappropriate.

# Different perceptions of hierarchy and power

A European company implemented a gamification training system, where all employees, regardless of their position, had to participate equally in gaming activities. In many Asian offices, however, this caused inconvenience, since in cultures with a strong hierarchy, it is unusual for managers to compete directly with their subordinates. Lower-level employees were worried about outperforming their managers in the rankings, as this would be perceived as disrespectful.

Ability to adapt gamification mechanics according to the hierarchy in different cultures, offering games and tasks suitable for different levels of power and role in the organization.



## Inappropriate rewards and incentives

In a global program for employee motivation through gamification,

Adaptation of the reward system according to cultural preferences.

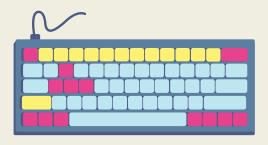
the rewards were the same for all countries - material bonuses and personal rewards such as coupons or vouchers. In cultures such as Japan or South Korea, where group recognition and collective achievement are more important, material rewards are less valuable. This led to lower motivation and less participation in the program.

In collectivism-oriented cultures, offer group rewards, recognition to the team, or opportunities for team bonuses instead of individual material rewards.

# Not perceiving game elements in a professional context

An international financial company has implemented a gamification system to stimulate productivity and learning. In some countries, such as Germany and Japan, employees did not perceive gaming elements well, as they felt that games were not suitable for a serious professional environment. They believed that games undermine the seriousness of work and blur the line between the professional and the personal.

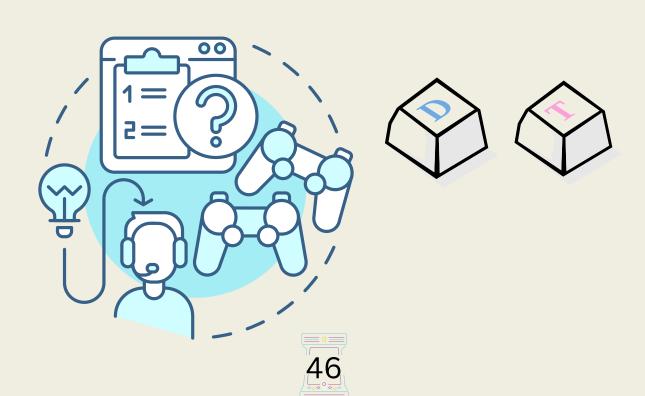
In such cultures, gamification should be presented not as a "game", but as a tool to increase efficiency and professional skills. It is important to use game elements that highlight professional contribution, such as learning platforms with clear goals and outcomes.

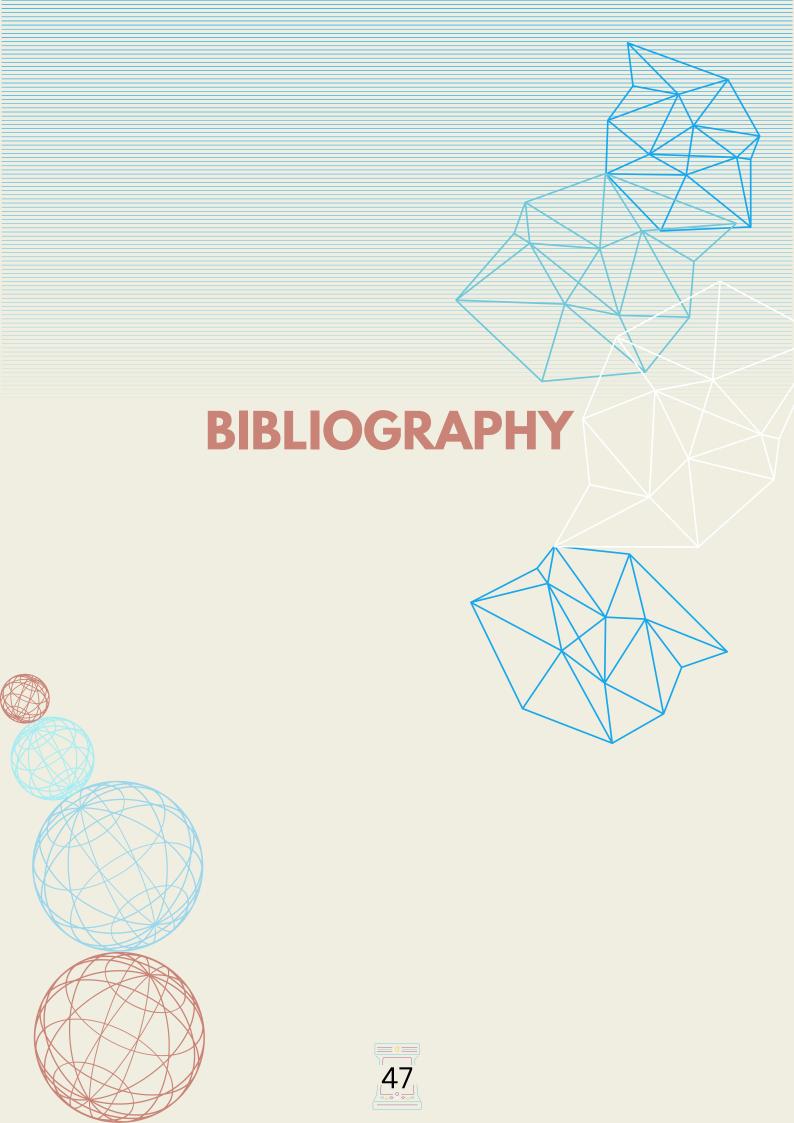


### Different approaches to time and workload

In a gamification training system at an international corporation in which employees had to complete game tasks with tight deadlines, European and American participants fared better, while Japanese and South Korean employees struggled. The reason was the different attitude towards working hours in Japan and South Korea, employees tend to spend more time at work and perceive additional game tasks as burdensome and outside the usual work schedule.

Adaptation of gamification systems to local work practices and cultural understandings of the balance between working hours and additional activities. For some cultures, it is important that play tasks are seamlessly integrated into the existing work rhythm.







- "From game design elements to gamefulness: Defining "gamification". MindTrek - Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). The Basic Concepts of Gamification and How They Can Be Applied in Different Contexts
- "The Gamification of Learning and Instruction" Karl Kapp (2012).
   Provides an in-depth understanding of how gamification can be integrated into education and corporate training
- "Game-Based Learning: What Managers, Scientists, and Practitioners Need to Know" - David Williamson Shaffer (2006).
   The benefits of using game elements in different types of training are considered
- "Does Gamification Work?" Hamari, J., Koivisto, J., & Sarsa, H. (2014). A Literature Review of Empirical Studies on Gamification. Proceedings of the 47th Hawaii International Conference on System Sciences. Summary of numerous empirical studies on the effect of gamification on learning
- "Gamification in education: Where are we in 2015?" Dichev, C.,
   & Dicheva, D. (2017). International Journal of Educational Technology in Higher Education, 14(1). Description of the successes and difficulties in implementing gamification in education

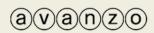
- "A RECIPE for Meaningful Gamification" Nicholson, S. (2015). In Gamification in Education and Business. Springer. Issues in implementing gamification, including the need for personal relevance and sustainable solutions, are addressed
- "Pros and Cons of Gamification and Gaming in Classroom" -Furdu, I., Tomozei, C., & Köse, U. (2017) BRAIN. Broad Research in Artificial Intelligence and Neuroscience. Research on the benefits and challenges of using gamification in the learning process, including specific examples of its application
- "The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development" - Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2015). A reputable publication that presents the basics of andragogy and the peculiarities of adult learning
- "Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps" - Zichermann, G., & Cunningham, C. (2011), O'Reilly Media.Practical examples of using gamification techniques that can also be adapted for learning purposes













#### **Free Licence**

The product developed here as part of the Erasmus+ project "Game-based digital learning. Playing to teach ERASMUS+2023-ES02-KA210-ADU-000174J66" was developed with the support of the European Commission and reflects exclusively the opinion of the author. The European Commission is not responsible for the content of the documents

The publication obtains the Creative Commons Licence CC BY- NC SA.



This license allows you to distribute, remix, improve and build on the work, but only non-commercially. When using the work as well as extracts from this must

- 1. Be mentioned the source and a link to the license must be given and possible changes have to be mentioned. The copyrights remain with the authors of the documents.
- 2. The work may not be used for commercial purposes.
- 3. If you recompose, convert or build upon the work, your contributions must be published under the same license as the original.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.