



GAMIFICATION
for Intercultural Education

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GAMIFICATION FOR INTERCULTURAL EDUCATION

PART I



Erasmus+

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Chapter 1

Introduction

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1.1. Understanding culture and identity

What is culture?

Culture is an integral part of people's lives. It influences how we experience and understand the world, how we establish relationships, and how we interact with people. Culture determines what is "ours" and what is "foreign". It establishes the norms that function in a society. Learning about culture stimulates the mind, allows us to look at problems from a different perspective, enables successful interactions with representatives of other cultures, and helps to better appreciate diversity.

Barnett and Lee (2002) define culture as a property of a group. It is a shared collective meaning system through which the group's values, attitudes, beliefs, customs, and thoughts are understood. It is a determinant of how group members communicate. Culture can also be seen as a consensus about the meanings of symbols, verbal and non-verbal, held by members of a community.

Cronk (1999), in his work *"That Complex Whole: Culture and the evolution of human behaviour"* collected definitions of culture that can be found in anthropology textbooks. According to these definitions, culture is:

- The learned set of behaviours, beliefs, attitudes, values, or ideals characteristic of a particular society or population (Ember and Ember 1990).
- A set of rules or standards shared by members of a society that, when acted upon by the members, produce behaviour that falls within a range of variation the members consider proper and acceptable (Haviland 1996).
- Traditions and customs transmitted through learning that govern the beliefs and behaviour of the people exposed to them (Kottak 1994).
- The learned behaviours and symbols that allow people to live in groups, the primary means by which humans adapt to their environments. The way of life characteristic of a particular human society (Nanda and Warms 1998).

- The socially transmitted knowledge and behaviour shared by some group of people (Peoples and Bailey 1997).
- The system of meanings about the nature of experience shared by a people and passed on from one generation to another (Robbins 1997).
- Sets of learned behaviour and ideas that human beings acquire as members of society (Schultz and Lavenda 1995).

Now that we're aware of the existence of various definitions of culture, let's focus on what culture contains within itself. The list of cultural characteristics seems to be huge, almost unlimited. It would be impossible for a person to name every element of one's culture, but we can segregate these endless characteristics into 3 categories:

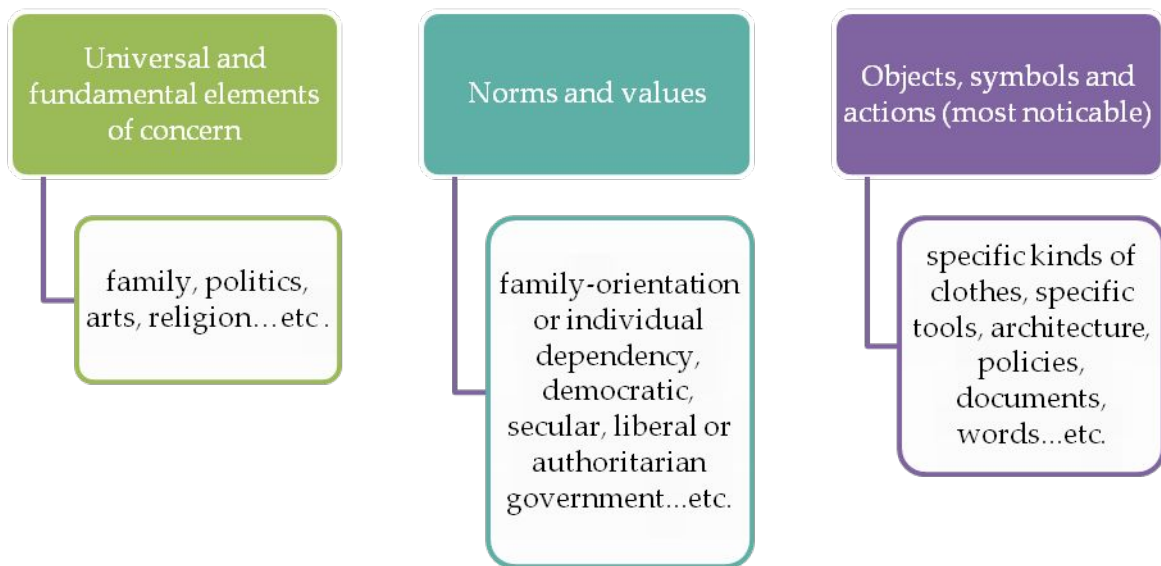


Figure 1: Graph based on the Tree model of Culture (Nguyen-Phuong-Mai, 2014)

In everyday life, we observe the most visible elements of culture: objects, symbols, and actions. Sometimes people assume that these elements are all there is to know about one's culture, but there is always a lot more to discover.

Understanding many perspectives, ways of functioning, perception, and thinking of other people creates tolerant attitudes and respect for otherness. Sometimes, when we are not aware of differences, it can lead to misunderstandings, we may interpret someone's behaviour incorrectly, or we may cause discomfort in our interlocutor. Therefore, it is important to make diversity visible.

One example of cultural differences is provided by Boucher and Carlson (1980). They show that cultures differ in terms of displaying emotions. In one culture, it may be less acceptable to display emotions in public, while in another culture it may be acceptable or even desirable to do so. In consequence, a person's behaviour can be seen as cold or too straightforward.

Knowing about cultural differences does not mean that we should behave differently towards people of different cultural backgrounds.

It should, on the other hand, give us perspective and understanding. As Robert Allen said:

“Cultural differences should not separate us from each other, but rather cultural diversity brings a strength that can benefit all of humanity”

Below, we present DuPraw's and Axner's fundamental patterns of cultural differences that describe the ways in which cultures tend to vary from one another.

| | |
|--------------------------------------|---|
| Different communication style | Verbal language - Across cultures, some words and phrases are used in different ways and have different meanings. Non-verbal language - Facial expressions and gestures; seating arrangements, personal distance. |
|--------------------------------------|---|

| | |
|--|--|
| <p>Different attitudes towards conflict</p> | <p>In some cultures, it is common to deal directly with conflicts that arise, for example in a face-to-face meeting. In contrast, in many cultures, open conflict is experienced as embarrassing or demeaning; as a rule, differences are best worked out quietly or using a mediator.</p> |
| <p>Different approaches to completing tasks</p> | <p>In some cultures, establishing relationships in collaboration comes first, and in others, they focus immediately on the task at hand.</p> |
| <p>Different attitudes toward disclosure</p> | <p>Speaking directly about emotions, about the reasons behind a conflict or a misunderstanding, or about personal information is appropriate in some cultures and inappropriate in other cultures.</p> |
| <p>Different approaches to knowing</p> | <p>How we acquire knowledge can vary depending on the culture.</p> |
| <p>Different decision-making styles</p> | <p>The roles individuals play in decision-making vary from culture to culture. In some, decisions are frequently delegated - an official assigns. In others, there is a strong value placed on holding decision-making responsibilities oneself.</p> |

Figure 2: Fundamental patterns of cultural differences (DuPraw, Axner, 2020)

Despite cultural differences, we can still communicate effectively. Different beliefs, habits, and behaviours do not have to be a barrier. Knowledge about them can lead us to a better understanding of ourselves and others.

Thanks to intercultural knowledge, we can see not only what separates us, but also what connects us. Comparison of cultures helps us to obtain information about the identities of others, and at the same time indicates the tools for understanding them. There is a diversity of cultures in the world. Understanding brings invaluable benefits and broadens the horizons. Effective knowledge of the main features of other cultures reduces unpleasant surprises (cultural shock), provides insight, and facilitates successful interaction (Pruskus, 2004, p. 24).

Information on other cultures can be found in a variety of sources: in books, articles, online, in tourist guides, etc. When starting to communicate with a stranger from another culture, it is important to share information, ask questions, and listen. This will not be enough to overcome obstacles to the communication process, but it will be a good start to establishing a relationship (Jančaiytė et al., 2009, as cited in, Braslauskas, 2020).

What is identity?

Identity is a vastly explored topic throughout the social sciences, such as psychology, sociology, and anthropology. Theories and research can be divided into those that focus on identity at the individual level, at a social level, as a process, or based on geographical location (Rosenwald, 2009).

As Côté (2006) has observed, the study of identity is quite fragmented. Each subfield has its own theoretical underpinnings and measurement instruments. Personal and cultural identities remain to be separate and require different approaches to be fully understood. At the most basic level, the word “identity” refers to how individuals perceive themselves. According to Hall (1991) identity is always a temporary and unstable effect of relations that define identities by marking differences. Thus, the emphasis while explaining this term should also portray the multiplicity of identities and differences rather than on a singular identity and on the connections or articulations between the fragments or differences.

In this chapter, we will focus on a specific type of identity called **“cultural” or “ethnic” identity**. It involves the identification and engagement of an individual with different cultural groups and refers to the ways in which individuals define themselves in relation to the groups to which they belong (e.g., family, religious community, nation) (Phinney et al. 2007).

Psychological studies typically approach cultural identity in terms of “the subjective orientation of an individual toward his or her ethnic origins” (Alba, 1990, p. 25).

From the perspective of the influential Social Identity Theory (Tajfel, 1974), cultural identity is seen as “that part of an individual’s self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1978, p. 63). Hecht, Warren, Jung, and Krieger (2005) conceptualised cultural identity as one of the four levels of “identity frames” identified as:

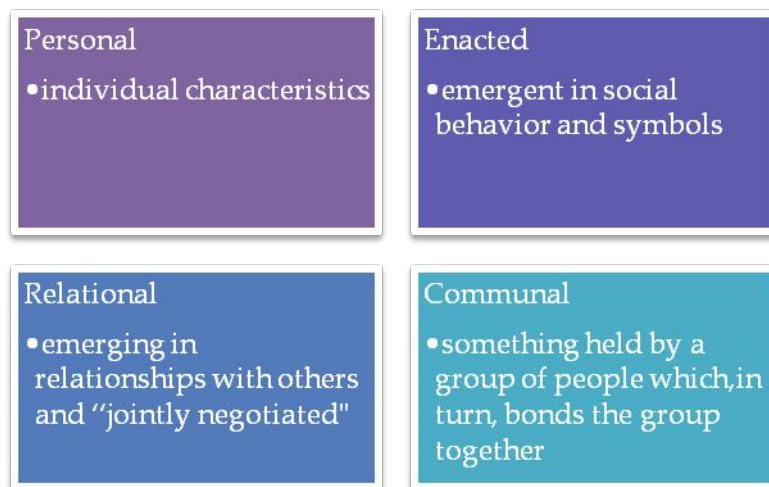


Figure 3: Components of cultural identity by Hecht, Warren, Jung, and Krieger (2005)

Representatives of each culture value other people through the prism of their own cultural behaviours, customs, principles, and traditions. If there is no readiness for self-understanding, a review of one’s points of view, thought patterns and ways of doing things, intercultural interaction is not possible either.

Intercultural learning teaches about different perspectives and leads to reflection and consideration of another point of view. Cultural barriers are possible to overcome by critical reflection of the individual and the development of the ability to communicate with foreigners (Brauslauskas, 2021).

Alexandrache (2019, p. 60) emphasises the value of national cultural studies in the development of intercultural competences. Students who are aware of their own cultural identity are better able to understand other cultures and know how to carry on an intercultural dialogue. The author states:

“The real intercultural dialogue is done by the conscious of ethnic identity that wants to express itself and to reflect it in the other culture.”

Exercises:

1. What are the most important things for foreigners to know about your culture so that they can understand you better?

2. What is typical about your culture that can be observed in other cultures as well?

3. What is unique about your culture?

4. Let's say a person from another cultural background wants to visit your country, and they don't know how people of your nationality communicate. What advice would you give them regarding both verbal and non-verbal communication?

5. Consider various aspects of your culture that should be considered relevant to living an everyday life. Give examples.

1.2. Understanding multiculturalism and intercultural competence

All cultures teach their members "preferred" ways of responding to the world, which are often described as "appropriate" and "correct" (Hinner, 2017). From childhood, we are taught by parents and teachers, how to display acceptable behaviour in our cultural circle, what values to hold. Multiculturalism offers a different perspective than recognising that there is only one truth in the world. It argues that social group differences are meaningful, motivating, and can be a source of strength instead of division (Plaut, 2010). It assumes that people who are members of different social groups often have different experiences and perspectives, and it is important to recognise, respect, and value these differences (Markus, 2008).

Intercultural competence embraces multiculturalism ideology by encompassing the attitudes of openness and willingness to engage with other cultures. Fantini (2009) proposed four components of intercultural competence:

- **Knowledge** of social groups and their products and practices.
- **Skill** to interpret a document or event from another culture, explain it, and relate it to documents or events from one's own experiences. Ability to acquire new knowledge of a culture and cultural practices and to operate knowledge, attitudes, and skills under the constraints of real-time communication and interaction.

- **Attitude** is characterised by curiosity and openness, as well as a willingness to suspend disbelief in other cultures while maintaining faith in one's own.
- **Awareness** is the ability to evaluate critically, on the basis of explicit criteria, perspectives, practices, and products in one's own and other cultures and countries.



According to Cucos (2000, as cited in Dănescu, 2015), intercultural competence has three dimensions:

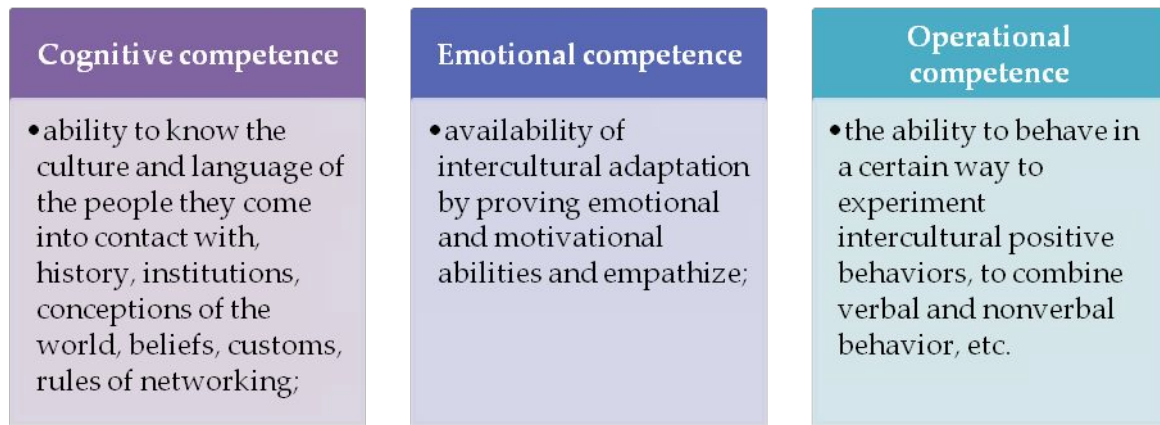


Figure 5: Intercultural competence dimensions (Cucos, 2000)

It is difficult to single out a common definition of intercultural competence. However, by summarising the models presented in the scientific literature, it is possible to agree with the statement of Norviliene (2014b, p. 42, as cited in Braslauskas, 2021) that the following levels are distinguished across the various models of intercultural competence:

| | |
|------------------|--|
| Cognition | Knowledge of cultural norms, beliefs, values, etc. |
| Emotion | Personal traits, attitudes, feelings, etc. |
| Behaviour | Application of knowledge, abilities, attitudes, and cultural experiences in intercultural interaction and cooperation. |

Why should we talk about intercultural competence? Culture impacts how people think, believe, and act. Learning about one's own culture and other cultures helps students to have a better awareness of their own values and identity. It strengthens not only their self-concept but also helps them to positively evaluate others and understand diverse points of view. Each culture has something valuable to share and teach. It contains truths that go beyond individual groups; students can observe not only what divides but also what connects, what's common and what's different, which fosters their ability of critical thinking.

In teaching about cultural differences, it is important to emphasise the intrinsic diversity and complexity of all cultural groups. Within the group, there are individuals with different opinions, behaviours, views, and values. One individual cannot speak for all. Every human being is unique. That's why students need to be educated on the dangers of stereotyping.

1.3. Stereotypes and prejudices about cultural groups

When we say that Canadians are polite or Italians are passionate, we use stereotype categories to simplify reality. Stereotypes define a biased and incorrect representation of the world by generalising and failing to take into account the variability of each individual. Simplifying and subjectivizing lead to distorted knowledge and perceptions about the world. Stereotypes are negatively conditioned and biased.

Among the main functions of stereotypes, we distinguish:

- adjusting (supplying the feeling of cognitive control in social situations),
- reducing fear (improving self-esteem, especially when a positive self-stereotype is confronted with a negative hetero-stereotype),
- serving as an indicative of distinctions between dominant and minority groups,
- strengthening in-group value against taking "foreign" values,
- channelling aggression and justifying attacks on others,
- assuring foreseeing human behaviour, communicative, manipulative, political, and propaganda (Agius, Ambrosewicz, 2003).

Prejudice is a term often associated with the term “stereotype”. It can be understood as a preconceived attitude one has toward a specific group based on beliefs about them (stereotypes) and affective reactions to the group. Eagly and Chaiken (1993) believe that stereotypes contain attributes that an individual assigns to a social group. Such attributes can easily be prompted by completing sentences similar to the ones shown below.

1. Poles are _____.
2. Americans are _____.

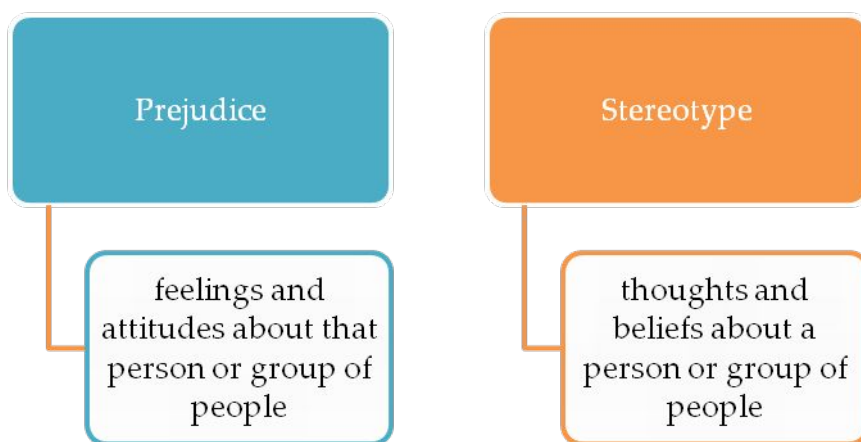


Figure 6: Difference between prejudice and stereotype.

Viewing others based on our limited understanding causes us to overlook important individual characteristics. Stereotypes often lead to misunderstandings and conflicts. They prevent us from truly seeing the other person and thus make it difficult for us to achieve true understanding of the person or group of people we communicate with.

But you may ask, what’s wrong with thinking that Canadians are polite? This is, after all, a “nice” stereotype. It turns out that favourable or mixed stereotypes of social groups are construed to contribute to the legitimacy of the existing social order in a manner that mimics the role of traditional prejudices.

A relationship between endorsement of positive stereotypes and prejudice has been found in both sexism and racism research (Lovitt, Ynez, 2020).

American sociologist Mary Jackman (1994) has suggested that the ways in which advantaged groups construe stereotypes of disadvantaged groups play a crucial role in the maintenance of the social order. Stereotypes don't need to be explicitly negative. On the contrary, they frequently include favourable components. Historical examples include widespread cultural assumptions that women are pretty and pure while also dependent and vulnerable (Glick & Fiske, 2001); and Jewish or Armenian genocide victims are talented, even if they may ultimately lack humanity (Glick, 2002). Therefore, any stereotypes should not be underestimated or encouraged to be relied on when we interact with representatives of a different culture. Going beyond patterns and common ways of thinking, it's best to view the individual as someone unique and not assume that we know more about him than what he has already shared with us.

In the educational package created for secondary schools, Agius and Ambrosiewicz (2003) give practical advice on how to reduce stereotypes. First, they stress the importance of realising that there are more differences within a group than between groups; therefore, each person should be treated as an individual with a unique set of characteristics, not like a typical member of the group. Everyone belongs to more than one group, and therefore, belonging to any group cannot fully encompass the individual's complexity. Stereotypes affect our ability to perceive and communicate with others. Much more valuable is the ability to refrain from judgement and let the individual give us the information we need.

To combat intolerance, a teacher needs to cultivate an understanding that there is more than one way of seeing the world, and the best way to learn it is to be attentive, empathetic, and listen to what other people have to say. At the same time, it should be kept in mind that one answer to everything doesn't exist. Each person must feel individually responsible for their beliefs and opinions, as well as their potential consequences.

1.4. Effects of discrimination on children

The negative impact of discrimination on young people has been largely documented. Direct as well as more subtle and institutionalised forms of discrimination (Howarth, Andreouli, 2014) can contribute to marginalisation (Crozier & Davies, 2008). It can damage a child's sense of self-worth and positive identity (Howarth 2002). In a meta-analysis conducted by Wang et al. (2018), it was found that racial/ethnic discrimination is linked to poorer adjustment in three domains:



Figure 7: Wang et al. (2018) A meta-analytic review of racial/ethnic discrimination and well-being during adolescence.

Discrimination is the behavioural representation of prejudice. It involves negative actions toward a marginalised group. Discrimination maintains dominating groups' favoured status and denies other groups equal treatment in any domain. Discrimination can be exemplified at both the institutional and individual level (Dovidio, Hewstone, Glick, & Esses, 2010). Societal barriers exist for those who are targeted by prejudiced attitudes and behaviours. Job candidates who identify as white, for example, get more call-backs for jobs than African American candidates with the same skills and credentials (Bertrand & Mullainathan, 2004).

At the core of human prejudice is the objectification and dehumanisation of an individual. Research suggests that highly prejudiced individuals have authoritarian personality traits: they tend to over-generalize and think in bipolar terms, they are highly conventional, moralistic, and uncritical of higher authority. It is especially difficult to change their attitude, even if they receive new and contradictory information (Adorno, Frenkel-Brunswick, Levinson, & Sanford, 1950).

According to Brislin (1991), prejudices fulfil four functions.

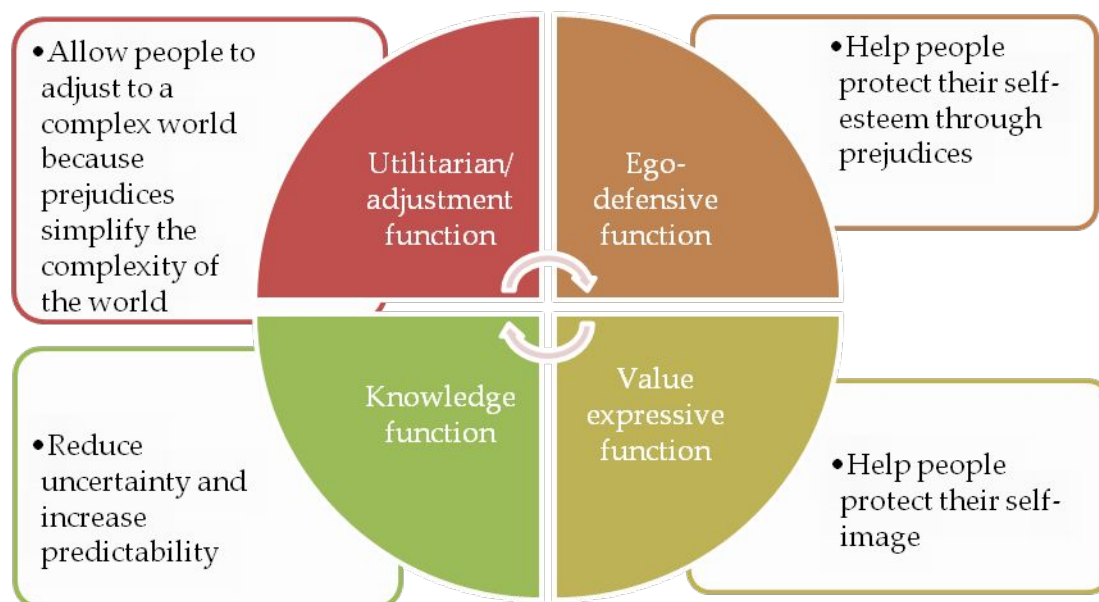


Figure 8: Four functions of prejudices according to Brislin (1991)

Why is prejudice so difficult to deal with?

- Human reasoning and problem-solving are argued to depend upon the same relational frames as the ones that seem to be involved in human prejudice.
- Prejudice may provide a mechanism by which people protect or bolster their self-esteem, but the link between self-image threats and the use of prejudice is weakened by providing people with the opportunity to self-affirm. That is, by providing them with information restoring their positive sense of self-integrity.

- The study found that receiving self-image-threatening information led participants to negatively evaluate an individual if she appeared to be a member of a stereotyped group, and these negative evaluations in turn were particularly effective in restoring participants' self-esteem. (Fein, Spencer, 1997).

How to reduce prejudice and discrimination?

- **Engage in open dialogue with your students.** Talk to them about mechanisms of prejudice in order to dispel and challenge stereotypes.
- **Tell stories about interracial interactions.** Books that portray interaction between children who are similar to the audience and children of different races or cultures have more impact on attitudinal changes than books that only portray people of other races and cultures (Paluck & Green, 2009).
- **Expose people to counter-stereotypic individuals** to help them build new associations (Kirwan, 2014).
- **Provide as much information about 'the other' groups as possible.** It can be done either through simple listing, role plays, movies, articles, or argumentation (Světlana, 2007).
- **Encourage intergroup contact.** Children from racially mixed schools are less likely to develop race-related favourable in-group biases and negative out-group biases (Rutland et al., 2005).
- **Dispute ethnocentrism.** Understanding that other people can have different and equally valid perspectives. For example, some kids like recess because they can run around, while others like recess because they can hang out and talk with friends.
 - **Make students aware of their own group identity** (Světlana, 2007).
 - **Stress the importance of national symbols (autostereotypes) for every nation, group, or subculture.** However, be careful that the representative features do not have to be genuine and the same for every single member (Světlana, 2007).

- **Foster empathy and perspective-taking.** Learning to perceive and share the emotions of another person by developing empathy (Pfeifer, Spears-Brown, Juvonen, 2007).
- **Encourage children to see beyond external differences.** Realising that although things may appear different, they are also similar. For example, understanding that a tall, thin glass of water could have the same amount of water as a short, wide glass.

1.5. What is an intercultural competence and why do teachers need it?

The less information we have about a person, the more likely we are to respond to him or her in terms of stereotypes. This is why fighting intolerance requires education. Intolerance is often rooted in ignorance and fear of the unknown, of *other* cultures, nations, and religions. It is also closely linked to an exaggerated sense of self-worth and pride.

These notions are taught and learned at an early age. Therefore, greater emphasis needs to be placed on education. Greater efforts need to be made to teach children about tolerance and human rights, about other ways of life. Children should be encouraged at home and in school to be open-minded and curious about others (Agius, Ambrosewicz, 2003).

Intercultural competence is operationalized according to a very wide array of terms; “cultural humility”, “cultural sensitivity”, and so on (Deardorff, 2016; Tabit et al., 2016, as cited in Wang et al., 2020). Several scholars have provided definitions of intercultural competence, most referring to the ability to understand, communicate, and interact with people across cultures.

Cultural competence encompasses:



Figure 9: Framework for School Age Care in Australia (p. 15).

According to Bennett (2009), intercultural learning is about “acquiring increased awareness of subjective cultural contexts (worldviews), including one’s own, and developing a greater ability to interact sensitively and competently across cultural contexts.” Byram (1997; Mauricienè, 2013; Virgailaitè-Mečkauskaitè, 2011) distinguishes five dimensions of intercultural competence when discussing intercultural competence. Some of the ones we list here:

1. ATTITUDES AND PERSONAL TRAITS

- Open and curious attitude to new knowledge,
- Ability to see things from different perspectives,
- Ability to manage emotions,
- Self-awareness,
- Ability to self-reflection,
- Sense of personal worth or value - self-esteem, positive “I” image,
- Ability to manage stress, anxiety, fear, and other negative emotions,
- Being sincere and friendly in dealing with representatives of other cultures,
- Ability to empathise with the situation of representatives of other countries,

- Having a sense of responsibility for one's own activities when working with representatives of other countries.

2. KNOWLEDGE

- About social groups of one's own and another culture,
- About the historical and present relationship between one's own and another culture,
- About emblems, rituals, customs,
- About taboo topics (things which are better not to discuss),
- About the etiquette,
- About the national interpretation of geographical space, etc.,
- About the principles of successful intercultural communication.

3. SKILLS OF INTERPRETING AND RELATING THE DIFFERENCES OF OTHER CULTURES

- Ability to analyse and adequately understand different cultural contexts and respond appropriately,
- Ability to interpret events and documents of another culture, to explain and relate them to events and documents of one's own culture,
- Ability to recognise manifestations of ethnocentrism and interpret their origins,
- Ability to recognize and explain sources of misunderstandings.

4. SKILLS OF DISCOVERY AND INTERACTION WITH PEOPLES OF OTHER CULTURES

- Understanding of non-verbal language;
- Ability to work effectively in a multicultural environment,

- Ability to resolve/avoid conflicts;
- Ability to build trust;
- Ability to communicate in situations dominated by different interaction styles, rules, rituals, symbols;
- Taking advantage of the diversity, i.e., when students from other countries share their knowledge and experience with each other.

5. CULTURAL AWARENESS

- Ability to observe, get to know, and understand oneself and the environment;
- Ability to analyse the meanings and validity of his beliefs, values, and behaviours;
- Knowledge of social values, norms, and systems;
- Knowledge of how values impact attitudes and interactions with individuals or groups;
- Ability to think critically, i.e. to distance oneself from the available knowledge and perception, to be able to distinguish facts and opinions, to analyse and interpret reality problems and ambiguities, to critically question the assumptions of social phenomena (Stancikas, 2015, p. 136).

There is a wide range of teaching methods available for intercultural learning, for example:

- discussions,
- case studies,
- films,
- videos,
- role play,
- literature,
- self-assessment,

- simulations,
- **games.**

Let's take literature, for example. Children become more sensitive towards issues of humanity through reading folktales, prose, poems, and drama. Children's literature can encourage young learners to consider themselves as cultural beings, going beyond the typical "Who am I?" activities. Learners may respond to these books by exploring their own cultural identities in different ways.

The expected outcomes of intercultural education encompass the knowledge, skills, and attitudes needed to be a more effective communicator in a new environment (Fowler & Blohm 2004). Cultural proficiency requires more than becoming culturally aware or practising tolerance. Rather, it is the ability to identify and challenge one's own cultural assumptions, values, and beliefs, and to make a commitment to communicating at the cultural interface.

School plays a crucial role in creating a climate in which every student feels respected and valued. Teachers are also an essential link in this task. If teachers are sensitised to acknowledge and accept other cultures with knowledge and respect for their own culture, then they can pass this knowledge on to their students and make every student feel respected and acknowledged.

According to Kuzmenko and Goncharenko (2007), an educator with intercultural competence is someone who can see and understand the relationships between cultures, understand and grasp the beliefs and behaviour of members of different cultures, as well as act in a constructive way in dealing with matters of social importance.

According to C. Bennett (1998, p.121), intercultural education is a teaching approach that is based on democratic values and beliefs. Intercultural education tries to promote cultural pluralism in the context of a diverse society and an interdependent world. It can lead to conflict resolution through the formation of behaviours such as:

- cooperation and the establishment of trust within a group,
- self- and other-respect,
- tolerance of different opinions,
- democratic decision-making,
- fostering problem-solving skills,
- mastery of primary emotions,
- ability to avoid physical violence.

1.6. What is intercultural communication and dialogue and why are they important in the classroom?

As human beings, we are in the constant process of communicating. Facial expressions, body posture, gestures, and even the way we dress are part of our interactions with the outside world. Moreover, communication is irreversible, meaning that it cannot be taken back. Because of this, we come to the conclusion that the ability to communicate is a vital skill for successful functioning in society.

While considering intercultural communication skills, we should be asking ourselves: *what can I do to better understand a person if we do not share a common cultural experience?* When we were discussing intercultural competence as a concept, we already spoke about this topic. One of the key ingredients of understanding another person is being open-minded and respectful. At the same time, the process in which human beings communicate is a complex and interesting topic worth more in-depth explanation.

According to Gudykunst (1983), strangers are people who are members of other groups. Strangers act in ways different from one's own culture. When encountering them, one can experience uncertainty and anxiety. Uncertainty means not knowing what the reactions of strangers will be and not knowing how to explain their reactions. This begs a question: how to alleviate this uncertainty.

The answer is: exposure. Exposure is stressed as an important factor in acquiring intercultural competence skills. Thanks to exposure, children have an opportunity to see members of another culture as individuals and friends, and they are less likely to use faulty stereotypes in order to understand another person. It is also not difficult to assume that stereotypes can affect the way different stages of social interaction unfold. Anxiety arises when a person is apprehensive about initial interactions. When anxiety is too high, we tend to avoid interactions, and when it is too low, we tend not to care what happens in the interaction. When teaching about intercultural communication, children need to be given enough knowledge to reduce their fear and uncertainty. At the same time, there's a need to prepare them to be open-minded and treat people with respect.

Bloemmaert (1991) supports the view that seeing the other interlocutor as a typical member of his culture means ignoring other influences upon communication behaviour, such as individual or social. He is going further by saying that intercultural communication is primarily interpersonal, and the only difference is that the interlocutors are culturally different. He also argues that the differences like various sets of values, intentions, conceptualizations, and categorizations, as well as their perception of communication behaviour are situation-dependent and can be assigned to the individual characteristics. However, it is also worth noting that each culture is different and similar to some degree. Awareness of cultural differences doesn't have to divide us from each other. The fear of not saying the "right thing" doesn't have to paralyse us. In fact, becoming more aware of our cultural differences as well as exploring our similarities can help us communicate with each other more effectively. Recognizing where cultural differences are at work is the first step toward understanding and respecting each other (DuPraw, Axner, 2020).

According to Grebliauskienė and Večkienė (2004, p. 34, as cited in Braslauskas, 2021), the development of communicative competence is characterised by continuous self-development. It is communicative competence that allows answering questions about the information that is to be given, assessing how important that information is to the recipient, and deciding on how to convey this information comprehensively.

Pruskus (2013, p. 86) names some of the following elements of communication competence:

1. ability to interpret the specific signals of the members of a particular culture by which they express a willingness to interact (or not to interact);
2. ability to sense how much time should be spent listening to the partner and to speaking, depending on the situation and interactional cultural norms;
3. ability to adequately express the interlocutor's thoughts;
4. ability to provide and interpret communication roles and interaction completion signals;
5. to preserve a pleasant communication distance that is acceptable in that culture;
6. ability to use verbal and non-verbal means of cultural acceptance;

Figure 10: LaRay M. Barna (1997) developed a list of six barriers to effective and appropriate intercultural communication:

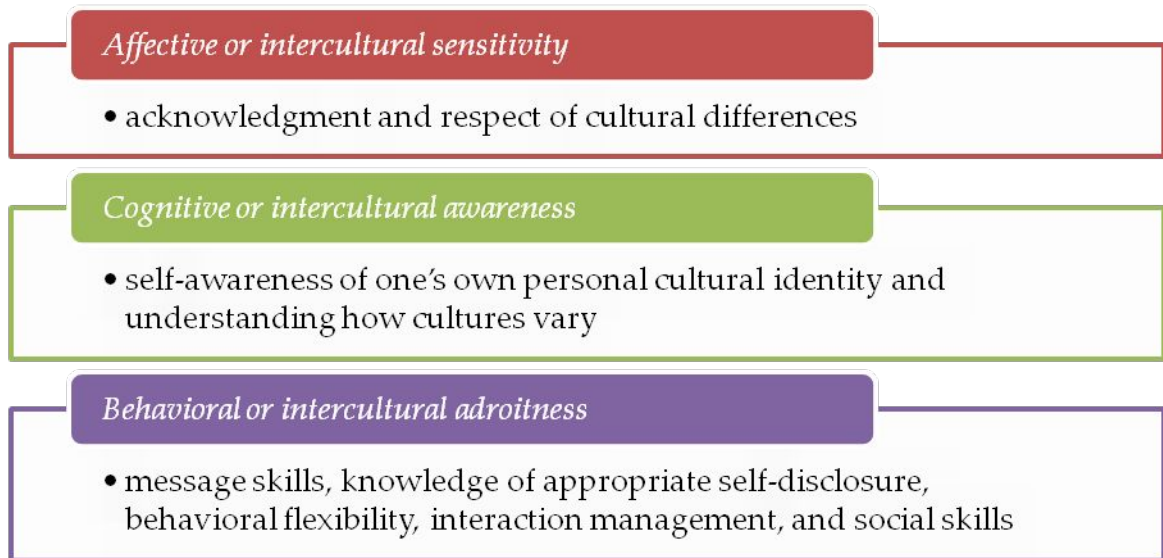


To overcome these barriers, it is good to consider what abilities and skills are needed in order to develop **intercultural communication competence** (Gudykunst 2004):

- motivation,
- attitude,
- emotions,
- knowledge,
- behaviour,

— skills.

The more specific list is being provided by Chen and Starosta's (1996). Their model of intercultural communication competence includes three perspectives:



Norvilienė (2014b, p. 42, as cited in Braslauskas, 2021) singles out the fifteen most common structural components necessary for people living in a multicultural society and seeking intercultural dialogue:

- respect for another culture;
- openness;
- tolerance for ambiguity;
- flexibility;
- empathy;
- curiosity;
- drive for knowledge;
- cultural knowledge;
- cultural understanding;
- ability to listen and hear the interlocutor's point of view;
- ability to monitor;

- ability to interpret and compare;
- ability to analyse and evaluate;
- ability to resolve/avoid conflicts;
- foreign language skills;
- understanding of non-verbal language.

Kale (1997) argues that peace is the fundamental human value. The use of peace applies not only to relationships among countries, but to “the right of all people to live at peace with themselves and their surroundings”. From this fundamental value, he developed four ethical principles to guide intercultural interactions:

| |
|--|
| Respect |
| Addressing people of other cultures with respect, without demeaning or belittling the cultural identity of others through verbal or non-verbal communication. |
| Many truths |
| Understanding that truth may vary from one culture to another; because it’s socially constructed. This principle means that ethical communicators do not deliberately mislead or deceive. |
| Value of uniqueness |
| Encouraging people of other cultures to express themselves in their uniqueness. In other words, it's respecting the right of expression, regardless of how popular or unpopular a person’s ideas may be. |
| Differences and Commonalities |
| Striving for identification with people of other cultures. Emphasizing the commonalities and differences. Celebrating both. |

Jason (2001), Cottrell (2017), Gormley, Jr. (2017), Rutherford (2018), the UNESCO Guidelines for Intercultural Education (2006, pp. 33-38) highlight its three main principles

Intercultural education emphasises respect for the cultural diversity of learners and must enable every learner to acquire cultural knowledge, as well as develop the appropriate attitudes and abilities that are necessary for the development of cultural knowledge, respectful attitudes and abilities that will allow students to communicate properly with representatives of different cultural, ethnic, social, and religious groups, and to feel respect and understanding for them. Moving from ignorance or passive tolerance to critical consciousness cannot be attained at once and is a process that is unique to each learner (Brno 2007, as cited in, Světlana, 2007). Nakonečný (1997, as cited in Světlana, 2007) indicates that there are certain interrelated stages that must be worked on:

Stages of intercultural education

1. Students need to imagine themselves from the outside perspective.
2. Students need to acquire a better understanding of the world they live in.
3. Students need to be made aware of different realities.
4. Students need to be taught to see differences positively.
5. Students need to be encouraged to display positive attitudes, values and, behaviours.

| Example of good practice: | |
|--|--|
| The Intercultural Communication Course was organised as a free-choice elective by Lapland University of Applied Studies in Finland. | |
| Objectives | Lesson topics |
| <ul style="list-style-type: none"> • To understand the meaning of cultural background in communication situations • To understand the characteristics of your own culture and those of the other students in the group • To understand the characteristics of your own culture and those of the other students in the group | <ul style="list-style-type: none"> • Theories of culture • Culture and communication • Verbal and non-verbal communication • Stereotyping • Culture shock • Study of the own culture |

Figure 11: Example found in Ala-Louko (2017) article.

1.7. Prevention and detection of racism, xenophobia and related intolerance at school

Xenophobia, racism, and anti-democratic ideologies continue to be a virulent problem and an ongoing challenge for European democracies. As the world moves closer to become a global village, more people from diverse cultures are coming into contact with one another. We face the challenge of communicating effectively with those who possess culturally based values that determine their communication preferences (Samovar & Porter, 1946).

Racism combines people's traits with features and views them negatively. It is rooted in prejudices, stereotypes, and hostile speculations about certain social groups. The individual, with his personal qualities, remains disregarded. Superstitions draw a dividing line that prevents a closer familiarisation with a particular culture (Braslauskas, 2021).

It is necessary to talk about these problems, recognise minorities, conduct an equal dialogue and advocate for their rights. Equivalence builds trust between members of the society (Paurienè, 2011, pp. 124–125). Xenophobia and racism are highly interrelated and mutually supporting forms of oppression. They are also distinct. Racism is typically associated with prejudices against individuals founded on a socially constructed notion of groups' differentiating visible phenotypic markers, such as skin colour (Castles & Miller, 1993; Helms & Talleyrand, 1997). In contrast, xenophobia targets specifically those individuals who are foreigners in a particular community, often regardless of their visible characteristics or visible differences with the native individuals (Boehnke, Hagan, & Hefler, 1998; Wimmer, 1997).

There are various ways in which children at school can display racist and xenophobic behaviours. Bullying related to a child's race or ethnicity is most commonly referred to as 'racist bullying'. This term refers to a range of hurtful behaviours, both physical and psychological, that makes a person feel unwelcome, marginalised, excluded, powerless or worthless because of their colour, ethnicity, culture, faith community, national origin or national status' (DCSF, 2007, p.33).

The term 'bullying' refers to a range of harmful behaviour, both physical and psychological.

- It is usually repetitive and persistent.
- It is intentionally harmful.
- It involves an imbalance of power, leaving someone feeling helpless to prevent it or put a stop to it.
- It causes feelings of distress, fear, loneliness, and lack of confidence in those who are at the receiving end.

Ethnic-cultural discrimination in schools is a phenomenon documented in different countries, and it threatens personal and social development ~~from~~ at early ages. Sometimes it even affects the health of students whose family origin or culture differs from the majority (Brüggemann and D'Arcy, 2017; Gkofa, 2017). Discrimination is very much related to loneliness and depression (Priest et al., 2014). It is known that high-school students who were the victims of bullying and high racial discrimination presented a higher probability of having suicidal thoughts (Garnett et al., 2014).

According to the document from the National Association of School psychologists (2019), school-based approaches to reducing and preventing discrimination should include:

- crafting anti-discrimination and anti-harassment policies that protect a variety of sociodemographic groups;
- transforming social norms to express the value of a plurality of identities and modes of identity expression;

- promoting cooperative learning to foster intergroup contact;
- requiring staff to participate in cultural awareness or implicit bias training to better understand how to identify and overcome racial stereotypes;
- collecting and analysing school and disaggregated discipline data to act on any identified racial/ethnic and special education disparities while implementing school-wide positive behaviour supports (Horn & Romeo, 2010; Lhamon, 2016; Skiba, 2013).

1.8. Intercultural education in the light of international legal regulations

All EU member states are required to guarantee that their citizens are treated equally in education by making sure that direct or indirect discrimination is eliminated. The European Commission against Racism and Intolerance (ECRI) is the Council of Europe's monitoring body, specialised in combating racism, xenophobia, anti-Semitism, and intolerance. ECRI's action covers all the measures needed to combat violence, discrimination, and prejudice against persons or groups of persons on the grounds of race, colour, language, religion, nationality, or national or ethnic origin. ECRI was established by the first Summit of Heads of State and Government of the member States of the Council of Europe.

The principle of equal treatment and non-discrimination is included in all international Human Rights legislation.

“Education must be accessible to all in law and fact, without discrimination. The prohibition against discrimination is subject to neither progressive realisation nor the availability of resources.” General Comment 13 of the Committee on Economic, Social, and Cultural Rights.

When it comes to proposed anti-racist actions, discrimination in the Universal Declaration of Human Rights, this is expressed in the following way:

“Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance, and friendship among all nations, racial and religious groups, and shall further the activities of the United Nations for the maintenance of peace” (UN 1948, Art. 26).

The most central, legally binding EU instrument adopted in this spirit is the Council Directive of 29 June 2000, which stresses that:

“To ensure the development of democratic and tolerant societies which allow the participation of all persons irrespective of racial or ethnic origin, specific action in the field of discrimination based on racial or ethnic origin should go beyond access to employed and self-employed activities and cover areas such as education” (Council of the European Union 2000).

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Erasmus+

Chapter 2

Teaching games to face the challenges of contemporary intercultural education

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2.1. Modern approach to intercultural education

Intercultural education makes a central contribution to the education system through its demands on preparing people for a global society. It is based on the recognition of both differences and similarities between cultures and helps us enhance our ability to solve problems, our communication skills, our persuasive powers, and our writing skills.

Intercultural education allows the structuring of an open cultural identity, aiming at:

- guiding students to assimilate a culture from an anthropological perspective;
- understanding the point of view of another through relativistic positioning;
- legitimizing cultural identity, preventing sacralisation;
- ensuring respect for differences, but within systems of mutual attitudes.

The general objective of intercultural education is to facilitate the acquisition of these skills of coexistence in the plural society of today. More specifically, the objectives of intercultural education concern several axes, namely:

It is, first and foremost, about acquiring knowledge in the field of culture in general and one's own culture in particular, including its impact on the behaviour of individuals and groups. Reflection on one's own culture precedes reflection on one's culture of otherness.

This first goal facilitates the second, namely the awareness of the causes and roots of one's own cultural determinations, stereotypes, and prejudices, as well as their identification with others. With this awareness, the aim is to learn the ability to relativize perspectives and points of view as well as to develop communication skills with others.

The third objective is the formation of positive attitudes to be applied in a plural society: respect for diversity, for the identity of those perceived as different, and implicitly, the rejection of intolerant and discriminatory attitudes towards them.

The fourth goal of intercultural education is to encourage active participation in the application of pluralistic principles and to combat racism, xenophobia, and discrimination in all respects.

It can be seen from the objectives listed above that they are in increasing order of the complexity of the skills needed to perform them. Thus, in the early, stages it is generally about skills related to cognitive operations: reflection, identification of cultural aspects, and awareness of certain processes.

However, the last two objectives require the individual to take an active role: respect for diversity and rejection of discriminatory attitudes are on the axis of action, much more than on the axis of cognitive reflection of the first objectives.

And the last objective is, par excellence, one of concrete action, of active civic involvement in combating attitudes contrary to the principles of intercultural education.

This transition from passive to active takes place in parallel with the internalisation of the principles of intercultural education by the individual exposed to intervention in this field. Without internalising the values discovered in the first two objectives, the individual cannot move on to the concrete action that the last two objectives of intercultural education aim at, and this does not fully fulfil its proposed objectives. Therefore, the path must be complete, the progression must go to the end, and the intervention must reach the level of depth at which the values are internalised by the individual.

Education leaders in different countries take two different positions. According to skeptics, schools are in decline because our educational systems are no longer capable of preparing the world for tomorrow. From the position of optimistic specialists, the school has the necessary resources to build the future, but it needs to adapt its educational services to the demands of the contemporary world.

In the conditions of increasing contacts-and possible interactions, two main objectives of the intercultural school can be detected: preserving and defending the cultural diversity of the school population. The school, as a court of transmission of values, will focus on the plurality of cultures that the multicultural environment implies.

The primacy of one culture over another must be avoided. This objective presupposes two aspects: on the one hand, it aims at adapting the educated to their own environment, the region, the city, and their particular culture, with all its features; and on the other hand, this type of school aims to ensure the adaptation of the educated to the environment. As for the coexistence of several cultural groups, both family and environmental cultures are required to be targeted. Care must be taken that the school does not devalue one culture or another in the name of explicit relativism.

The specificity of the intercultural school, regarding the assimilationist or multiculturalist attitudes, consists in the fact that it refuses to be closed in false alternatives, promulgating the variant of conjugated culture, of cultural interaction.

As a tool for transmitting cultural heritage, this type of school aims to privilege all environmental cultures, to highlight them all in their specific differences, with their indispensable riches.

The civilization built by the school does not present itself as a fixed entity with a definitive structure. The culture present or transmitted by the school is required to be understood in a dynamic, unfinished perspective.

The modern approach to intercultural education has two central points:

- it sensitises the learner to respect, celebrate, and recognise the normality of diversity in all parts of human life. It involves becoming aware of the idea that people have naturally developed a range of different ways of life, customs, and world views, and that this breadth of human life enriches all of us;
- it promotes equality and human rights, challenges unfair discrimination and promotes the values upon which equality is built.

Some important characteristics of the modern approach to intercultural education are:

- student-centered;
- organised for the best results;
- multiple teaching strategies are used;
- repeated teaching, to ensure the enrichment of knowledge;

- work with flexible groups;
- differentiated teaching;
- active learning.

The forms of realisation of intercultural education are the same as those of any type of education: formal education, non-formal activities, and informal influences exerted outside the school perimeter.

The methodology of intercultural education is that of an active and participatory pedagogy that requires the interest and creativity of young people and allows them to express themselves, to communicate, and collaborate as well as possible. To these can be added other types of activities: projects, surveys through interviews, class diaries, role-playing games, stories, poetry recitations, case studies, debates on issues, critical and constructive reflection exercises, etc.

Within an intercultural curriculum, the activities could be carried out in the following variants:

- at the extracurricular level, intercultural education involves the organisation of activities involving the wider community, activities in which students and parents have the opportunity to get to know each other better, to cooperate, to live together in different events: intercultural celebrations, lectures with parents, hiking, excursions, meetings, celebrating children's birthdays, circles and seating in which the customs and traditions of different socio-cultural groups are brought to the attention of others. Extracurricular activities have the advantage of helping students to experience situations in the daily life of other cultures, to know customs and traditions different from their own, to cooperate in the reality of common activities, to understand that cultural diversity is a source and not a barrier, to be involved in activities of community interest, to know "heroes", personalities of the local community, to know the mechanisms of functioning of the community in which they live, and elements of the history of this community;
- intercultural education at the level of the curriculum at the decision of the school is materialised in the proposal of optional subjects that promote intercultural values: interdependence, tolerance, respect for self and others, empathy, cooperation, discovery, overcoming prejudices, non-violence, exchange, dignity, recognition

The curriculum, at the school's discretion, is the way in which intercultural education can be introduced into the school in the form of optional subjects or in the form of a series of projects to engage students in cooperative activities.

Intercultural education at the level of the core curriculum involves identifying the objectives and contents of the core curriculum programmes that can promote this education.

Cooperative learning correlates with teaching activities, the strategies used for the same purpose being: role-playing games, explanatory reading, correspondence, mentoring programmes, etc.

The media plays a special role in increasing sensitivity to otherness. Electronic media (especially television and the Internet) have several qualities, including ubiquity (presence everywhere) and immediacy (live presentation of facts).

The world is present here, the distant is close, I become an active participant in a show in which I am integrated as an actor. Cultures mix with each other, the transitions from one cultural space to another are made instantly, and the diffusion of cultural models is fully guaranteed. The stranger is no longer a stranger, the events that took place in vain mark him.

The media presents an organisation of the cultural capital of mankind in an osmotic, intercultural way. Media news comes with a huge intercultural potential. The specialised channels (in news, scientific documentaries) penetrate the consciences, realising a cognitive integration that, beyond the questionable, uniformizing functions, also have the advantage of creating the premises of an understanding in terms of the *savoir* to which each one refers.

Sport provides a favourable framework for achieving intercultural education. Sport is not only a physical practice, it is also a cultural one. Each sport allows several degrees of universality. Football in Europe or baseball in the USA also have intercultural functions in their subsidiaries. Sport conveys models, celebrities who surpass the limited space of a country.

The great athletes no longer have a single citizenship, they have become "world". Sport can unite, but also divide. It offers opportunities for knowledge and communication between people of different backgrounds, but it is also an opportunity to distance and highlight personal, community, and national pride.

If it is not properly signified, sport, its practitioners and admirers strengthen their affiliations, caste spirit, adversity, opacity towards "enemies", "foreigners", etc.

Man is a cultural being and, consequently, an educable one, permeable to contacts, dialogues, and cultural influences.

Objective categories can lead to the formation of attitudes, behaviours, and intercultural behaviours such as: openness to other cultures, the attitude to positively perceive what is not ours, the favourable attitude to explore different existential ways to open up to others, performance to conquer broader, more global identities such as European citizenship, citizenship of the world without giving up our own identities, the ability to recognize, to relativize our own ethno-socio-centrist landmarks without denying them but also without turn them into something absolute.

The curriculum as well as the curricula should be structured in such a way as to form in students a European and universal consciousness. From the primary classes, it is desirable to cultivate respect and solidarity with the culture of other people. For this, some key values must take place in school curricula and in the educational process: the aspiration for democracy, respect for human rights, respect for children's rights, social justice, ecological balance, tolerance and peace, cultural traditions, etc.

During all the activities undertaken, we must keep in mind that the changes that have taken place and that have upset this century have had various influences on young people. As a result, education is invited to promote and respect human rights, which go beyond ethnocentrism; if it can make the new generations recognize the essential role of interdependencies and interactions and actively learn a more constructive and dynamic way of intercultural human rights, it can be hoped that it will prepare these new generations to understand better the new stakes that are shaping for our societies and will ensure a development not only economic, but also social, cultural, solidarity, sustainable.

Encouraging an intercultural attitude opens the way to dialogue and communication between cultural groups, with beneficial consequences for understanding each other. By cultivating values such as respect for others, tolerance of diversity, and complementarity between values, the school is able to capitalise on the potential richness of multiculturalism without nullifying the identity of any culture.

The modern teaching/learning/assessment process focuses more on the individual student's needs rather than assuming all students are at the same level of understanding. During the whole teaching/learning/assessment process, teachers have to be aware that students develop at their own pace and work at their own speed in order to find the most appropriate strategies, methods, and activities to boost their development according to the proposed goals and interests of the students. Teachers can design their lessons in many ways so that the learning goals align with activities and assessments to encourage student motivation, performance, and persistence.

2.2. Teachers facing challenges of multicultural education

Challenges of multicultural education are one of the problems faced by teachers nowadays. Here we can have a look at some of them:

- racism/inequality;
- different epistemologies/ways of knowing;
- different learning styles;
- lack of time for planning;
- lot of paperwork;
- performance pressure from school managers;
- balancing diverse learning needs;
- handle too many 'masters' like school managers and parents;
- get burn out easily;
- lack of proper funding;
- limitations of standardised testing;
- lack of parental support;
- changing educational trends;
- limitations of disciplining students;
- lack of self-time;

- teachers working too many roles at the same time (e.g., teacher, social worker, counsellor, psychoeducator, etc.);
- applying a prescribed curriculum to all types of students;
- inspiring students to be more self-directed;
- differentiating and personalising teaching;
- getting students to do work outside of the class;
- lack of tech devices performance;
- motivating students;
- lack of teamwork;
- working towards long-term goals;
- arguments and student excuses.

Solving these problems can improve teacher retention rates, enhance success rates of students, and the quality of education.

2.3. Games as a form of intercultural interaction

Intercultural interaction can be defined as the behaviour (including, but not limited to, verbal and non-verbal communication) that happens when people of different cultures engage in a common activity.

A game is an activity that people join in for entertainment or fun, and it can also be used as an educational tool. It is a structured form of play based on goals, rules, challenges, and interaction.

Summing up the two definitions, we can say that games are a form of intercultural interaction.

During childhood, there is a dramatic development that includes biological, physiological, psychological, and social changes. At the age of about 12, children have already learned the main skills of life-walking, talking, taking care of themselves, and understanding the world around them. Research shows that family, school, colleagues, the media, and new technology are the main agents of socialisation and, at the same time, of learning, but all these agents depend on the child's level of development and his preferences.

Interaction plays a very important role in the social development of children. In the process of social development and especially through interaction, children discover their skills, learn to understand the motivations and consequences of their behaviour and come to understand human relationships in the social world. Key factors in social development include the ability to observe perspectives other than one's own, to make moral judgments, and to demonstrate basic social skills. Until the age of about 7, children's interactions with family, colleagues, school, small communities in their hometown, and the media play a significant role in the development of social and interpersonal skills.

The main forms of interaction that can positively support the harmonious and healthy development of children are games, complex school structures, home activities, social interactions, and new media products.

Despite the many advantages, very little attention is paid to the psychological and sociological values of the game. Research in the field of education, psychology, and anthropology suggests that play is a powerful mediator for lifelong learning.

Play is a difficult concept to define. People tend to define play as the opposite of work, but it is a misleading assumption. However, the opposite of work is free time, and sometimes work, through its potential, can be considered a game. Most of the time, the work is considered respectable, but the game is not. Another misconception is that the game would be easy. On the contrary, adults also engage in difficult and challenging activities such as sports, hobbies, and chess. Playing for children is also a deliberate activity that requires involvement, commitment, and effort. Another misconception is that play would be irrelevant and irrelevant to the learning process.

Most opportunities for social interaction occur during play, especially for young children. Play is practically mandatory for children who need to learn appropriate social skills. Play between children from different cultures, between the healthy and those with disabilities, should also be encouraged, as should the formation of friendships. These friendships will help the children form positive opinions and have a gentle attitude towards others while at the same time having the opportunity to learn age-appropriate social skills.

Although it is obvious at a tacit level, it becomes difficult to express what play means in concrete terms. In general, the game has four important features:

- He is usually a volunteer,
- It's motivating, enjoyable, and doesn't depend on external rewards,
- It involves a certain level of commitment, usually physical,
- It is different from other types of behaviour.

Current game theories are organised around four themes: play as progress, play as power, play as fantasy, and play itself.

- Playing in progress involves learning a useful thing and is a means by which psychological and social needs are improved. Almost always, this type of play has been described as an important mechanism by which a child becomes an adult, suggesting a clear distinction between adult play and children's play.

- The game as a power refers to competitions in which the winners and losers are declared. Unlike the game as progress, the game as a power is a form of play for adults.

- The game as a fantasy has the role of freeing the mind and engaging the child in creative thinking, to orient him towards imagination.

- The game itself involves getting optimal life experiences. The quality of the experience is appreciated and not other side results such as learning something new.

- Over time, the philosophy of play has changed. On the one hand, the game was thought to be a way for the child to become involved, solve problems, and consolidate his knowledge; on the other hand, it was thought to be a wasteful diversion from studies.

The most important thing is to get educational results through the game. The long-term benefits of the game include:

- Intellectual development,
- Social development,
- Improved performance and skills.

The game is also based on cognitive, social, and cultural functions, all of which are particularly important in the process of balance. The game is also considered a strategy of assimilation and imitation.

For example, when a child needs to understand why manners are important during a meal, he will imagine and imitate at the table playing with dolls and toys that mimic food. Such an imitation is the child's way of building the real world, and in time, he will assimilate new rules such as holding a toast on special occasions or offering things like salt or fork for salad.

Play and the process of imitation are natural strategies that children master best, and throughout life, these strategies will help to accommodate and assimilate. Adults tend to underestimate the complexity of children's games, but play requires extensive critical thinking and problem-solving skills.

2.4. Intercultural Education as a part of school curriculum

Just as there are several conceptualizations of intercultural education, there are several perceptions as to what constitutes intercultural curriculum transformation. Approaches for intercultural curriculum transformation range from slight curricular changes to a fully revised social awareness and action conceptualizations. James Banks (1993), Peggy McIntosh (2000), and others have formulated continuums for curricular reform that help move transformation efforts from the former toward the latter.

The following stages of curriculum transformation have been adapted from several existing models, including those by Banks (1993) and McIntosh (2000).

1. The Contributions Approach

This approach reflects the least amount of involvement in intercultural education approaches. This is incorporated by selecting books and activities that celebrate holidays, heroes, and special events from various cultures. In this approach, culturally diverse books and issues are not specified as part of the curriculum. Students' learning about "other cultures" focuses on costumes, foods, music, and other tangible cultural items.

2. The Additive Approach

In this approach, content, concepts, themes, and perspectives are added to the curriculum without changing its basic structure. This involves incorporating literature by and about people from diverse cultures into the mainstream curriculum without changing the curriculum.

3. The Transformation Approach

This approach actually changes the structure of the curriculum and encourages students to view concepts, issues, themes, and problems from several ethnic perspectives and points of view. For example, a unit about exploring cultural conflict. This type of instruction involves critical thinking and involves a consideration of diversity as a basic premise (Banks, 1999).

4. The Social Action Approach

This approach combines the transformation approach with activities to strive for social change. Students are not only instructed to understand and question social issues, but to also do something important about them. For example, after participating in a unit about recent immigrants to Romania, students may write letters to senators and newspaper editors to express their opinions about new policies. In addition to the changes made in the Structural Reform stage, important social issues, including racism, sexism, and economic injustice, are explicitly addressed as part of the curriculum. The voices, ideas, and perspectives of the students regarding these and all other topics are brought to the fore in the learning experience - the students themselves becoming yet another multicultural classroom resource. The textbook is viewed as a single perspective among many, and the relevance of its limitations, along with those of other educational media is explored and discussed.

Specific skills and examples of learning activities for intercultural education can be grouped as follows:

1. Critical reporting on facts, events, ideas, and processes in personal life as well as in various groups and communities, using specific social acquisitions

1.1. Correct use of terms specific to intercultural education with reference to facts/events/processes in contemporary society

1.2. Identify one's own landmarks of cultural identity by reference to various cultural reference systems

1.3. Examining situations in which people agree or disagree with the values and principles of intercultural society

2. Cooperation to carry out activities and to investigate issues specific to different groups and communities by assuming social and civic values and norms

2.1. Elaboration, in a team, of an intercultural project for solving some intercultural problems

2.2. Participating, through an intercultural project, in solving community problems and promoting intercultural dialogue

2.3. Solving in pairs/team work tasks related to life in an intercultural society

3. Responsible participation in decision-making requires a spirit of initiative and entrepreneurship, as well as active social, civic, and economic behavior

3.1. Manifestation of a positive attitude towards oneself and towards others, towards one's own cultural identity and towards the identity of those who belong to different cultures

3.2. Participate in solving community problems by using the capacity for cultural empathy in relationships with people from different cultures

Developing intercultural competence through education started with a proposal to develop a framework of competences for democracy, human rights and intercultural dialogue and through integrating strategic documents, actions of European bodies on the promotion of cultural diversity and intercultural orientation into the educational systems of the member countries.

Moreover, the European ministers of education of the forty-eight States Parties to the European Cultural Convention, meeting at the Standing Conference in Athens, in 2003, adopted the declaration of "Intercultural Education in the New European Context" to integrate of an appropriate intercultural dimension in educational policies, educational materials, curricula, and teacher training. (Council of Europe (2003), Declaration by the european ministers of education on intercultural education in the new European contex)

European countries increased their efforts to incorporate the intercultural dimension into various levels of the school curriculum. Thus, intercultural education is integrated into the hidden and formal curriculum of the school, as well as in school policies and practices and the teaching of curriculum content in different ways: whole school approach, cross-curricular, teaching controversial issues, integrated in subjects (e.g., Citizenship education, Language learning, Religion/Moral studies/Ethics, History, Philosophy, etc.), extracurricular activities outside school, cooperation between formal and non-formal education, pupil mobility programmes (e.g., long term/short term, individual/group, hosting/sending, virtual exchanges) and separate subject.

2.5. Intercultural education opportunities: planning the lesson content

Lesson planning is crucial to the process of teaching and learning. A lesson plan covers just one lesson and is the teacher's guide to what he is going to teach, how, and for what purpose.

Therefore, the teacher has the possibility to integrate the learning objectives (what the students are supposed to learn), teaching/learning activities (the strategy, method, procedure) and assessment to check for student understanding (test, worksheet, homework. etc.).

Designing a lesson for effective classroom learning means performing the following operations:

1. General analysis of the lesson by consulting the syllabus, textbook, and other bibliographic sources (what will we teach?);
2. Framing the respective activity in the lesson system or the thematic plan (where are we?);
3. Defining the general objective and the operational objectives (what do we pursue in the respective activity?);
4. Identifying the necessary resources (what resources will be used in class to achieve the proposed ones?);
5. Identifying the teaching strategies appropriate to each established operational objective (how do we proceed to achieve what we set out to do?);
6. Selection, logical structuring, and essentialisation of content (what information do we refer to in teaching?);
7. Determining the forms of evaluation (how will we know if we have achieved what we set out to do?);
8. Establishing the application modalities (how will we make the transfer?).

To be effective, the lesson is not one in which everything goes exactly as planned, but one in which both students and teachers learn from each other, adapt to a certain context through experimentation, reflection, evaluation, and re-adaptation.

2.6. How can games help to create intercultural dialogue and foster understanding?

The game was considered by most specialists as a powerful mediator for lifelong learning, accompanying the entire human ontogenesis.

Games can easily support intercultural dialogue and foster understanding between people, groups and, communities.

Games, played physically or virtually, can form the backbone of a community, bringing people together, opening a respectful exchange or interaction between individuals, groups, and organisations with different cultural backgrounds or worldviews, promoting cultural diversity, protecting cultural identities at local, national, and international levels, and contributing to the edification of a culture of peace.

Games can be used in order to familiarise students with some concepts, consolidate the acquired knowledge, cultivate some qualities of thinking, and evaluate the acquired knowledge.

Most opportunities for social interaction occur during playing games, especially for young children. Playing games is practically mandatory for students who need to learn appropriate social skills. Playing games between different ethnic students should also be encouraged and the formation of friendships should be supported. These friends will help students form positive opinions and have a gentle attitude towards students from other ethnicities.

Games could be a very important tool in the adaptation of a person to reality.

2.6. Why should we use educational games for intercultural education? What are the barriers teachers need to overcome?

We should use educational games for intercultural education because they aim to:

- create motivating situations;
- cultivate creativity through boldness, cleverness, innovative spirit, flexibility of thinking;
- enhance the ability to solve problems;
- improve communication skills by stimulating dialogue and fostering understanding of each other;

- educate the volitional-positive features;
- stimulate weak or shy students;
- cultivate self-confidence as well as the spirit of responsibility, collaboration, and mutual help;
- make learning fun and interactive;
- create an addiction to learning;
- give learners the opportunity to see real-world applications;
- offers real-time feedback;
- enhance the learning experience.

The barriers teachers need to overcome were already listed when we presented the challenges of multicultural education faced by teachers nowadays (subchapter 2.2. Teachers facing challenges of multicultural education).

Some problems can be solved by gamifying or integrating games into our curriculum. For instance, by:

- designing a twister game and using its dynamics, we can both solve the problem of 'getting students out of the class' and 'inspire them to be more self-directed.'
- giving points for achieving lesson objectives. In this regard, for example, students need to be citing details from the text, as required, and -arguing their decision. A citing detail from the text without arguments = 1 point, a citing detail from the text with 1 argument = 2 points, a citing detail from the text + 2 arguments = 3 points.
- creating challenges during the lesson or as homework to encourage the students in improving their academic, behaviour, social, or creative skills.
- creating competition between the classmates.
- creating desirable rewards for students.

-using levels, checkpoints, badges, bonuses and other methods to motivate your students to progress in their learning process.

2.8. What teachers need to know about the outcomes of the game?

When playing games, students experience the diverse influence of games, including educational ones. There are a lot of positive results generated by the use of games in education, such as:

- improving cognitive abilities;
- improving creativity;
- development of logic;
- development of skills necessary for future work;
- development of thinking and memory.

When it comes to use a game in a lesson, first of all, a teacher should take into account:

1. if it is usable;
2. if it is engaging;
3. if the learning actually happens.

Usually, games require problem-solving strategies and planning. When a teacher chooses to use an educational game or adapt it to the lesson needs, he has to:

1. set up the problem;
2. set up criteria for solution;
3. come up with many options;
4. test it against criteria and students;
5. pick the best and develop it further.

2.9. How does pandemic affect intercultural education?

Unfortunately, COVID-19 has led to a rise in discrimination, inequality, and vulnerability, putting pressure on the capacities of societies for intercultural understanding at a time when solidarity and cooperation are needed more than ever. Exploring what happened, we can notice that the intercultural understanding during the pandemic was threatened – from the rise of xenophobia and ethnocultural racism to increases in gender-based violence.

The online platforms were used as a key means through which governments, practitioners, and communities have managed to create effective solutions through which to continue intercultural learning and exchange during the crisis.

Innovative artistic mediums to promote intercultural learning, and anti-racist activism through social media are the dynamic and creative good practices that have emerged through necessity during the crisis.

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Erasmus+

Chapter 3

Practical aspects of creating didactic games in intercultural education, features of good play for intercultural education

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Introduction

When we observe nature, we can see that the concept of play has a crucial place in both human and animal life and in the upbringing of future generations. The concept of play is older than the concept of culture (Huizinga, 1970). Even animals have been able to provide themselves and their children with the skills they need to survive, thanks to games, without the need for humans. When we look at today's education world, we can see that educational games or educational activities through games do not find enough space in school life. This is not due to a decrease in the educational effect of games on children. The aforementioned situation has not escaped the notice of modern education authorities, and in recent years, educational games or didactic games and gamification have begun to find more place in the education literature.

In the photo on the cover of this chapter, we see the dice, which is a common element of today's games, and the lamb's knucklebone, which is its version in the past. This photograph shows us how games have penetrated into everyday life since ancient times in human history.

In this chapter, we will focus on practical aspects of creating didactic games in intercultural education and the features of good play for intercultural education. Firstly, we will inform you about setting objective(s) and selecting the cultures or subgroups for using didactic games or creating your own game for teaching practise. After that, setting the topics and building the reality of the game topics are going to be mentioned. And then, we will provide you with some practical information about team building. After that we will have a small part about establishing the goals of the programme involved and how to determine the time frame and place of the game. Finally, we will talk about the selection of tools (techniques, exercises, and materials) for a didactic game.

3.1. Setting Objective(s), Selecting the Cultures or Subgroups

Goals are objectives that a person or a system desires to achieve (Oxford Dictionaries, 2014). In a game, a goal is what we strive for (e.g., goals can be to kill the dragon and rescue the princess).

Goals are fundamental to games; they determine what the player has to do to win the game, and give the player a sense of accomplishment and progression. Goals are what a player reaches for in the game and they are traditionally quantifiable, meaning that the goals are entities that can be measured, depending on which goals we use. By making measurable goals, it is possible to tell when the goals are reached. The player will typically know if she has reached the goal through feedback in the game. For example, this feedback can be communicated using trophies, badges, points, or unlocked new challenges and goals. (Weitze, 2014).

Weitze has summarised the entire function of the goal in the game in the paragraph above. According to Werbach & Hunter (2012), another leading scholars of the same field, goals should have some specific properties which could be listed as Specific, Measurable, Attainable, Realistic, Time bound (SMART) :

Specific (Definite, clear, open, and specific)

Measurable (Measurable and can be expressed in standard accepted units of measure)

Attainable (Visible and accessible)

Realistic (Realistic and resourceful)

Time bound (Lasting, starting and ending in a certain time interval) (Yılmaz, 2020).

Moreover, Schell (2008) has outlined the qualities that goals should have in the game to make them appropriate and well balanced. The four most important qualities for goals are as follows:

1. Goals should be specific enough so the player understands what the game's ultimate aim is. If there are a number of objectives, they should all be clear.
2. The goals should be tough yet attainable, allowing the player to believe that s/he can achieve them, and hence s/he does not give up.

3. The objective(s) should be constructed in such a way that the player both looks forwards to attaining the goal and enjoys having accomplished it. If you have set a goal for the proper challenge, the goal is worthwhile.

4. You must also balance the short-term and long-term goals of your game and allow them to be connected meaningfully.

Through intercultural education, it is aimed to create a space where children can come together, make contact, and interact with difference and otherness (“intercultural education,” n.d.). In basic, to create this space, the major tool will be “intercultural competence”. Berardo (2005) describes *intercultural competence* as “the ability to interact effectively and properly in a wide range of intercultural circumstances by using intercultural resources”. According to Byram (1997), intercultural competence consists of five dimensions, which are attitudes and personal traits; knowledge; skills of interpreting and relating to the differences of other cultures; skills of discovery and interaction with people of other cultures; and cultural awareness. Braslauskas (2021) also summarises specific intercultural competencies to be developed using Byram’s (1997) model of intercultural competence by classifying the various abilities, skills, and knowledge. It is indicated in 1.5. What is an intercultural competence and why do teachers need it? Since the didactic game we design will be aimed at intercultural education, considering the dimensions above, the learning objectives will be the skills and knowledge indicated at 1.5.

As for the game goals, we must pay attention to the setting of objective instructions indicated above and the intercultural competence dimensions. In this context, game goals need to be consistent with intercultural communication skills. Goals should not contain or imply any racist, xenophobic, or intolerant language. In the game, the enemy or the target should be free from prejudices and stereotypes against different cultures. Goals that stimulate respect for other cultures, empathy, cultural understanding, and tolerance should be established.

Moreover, we must decide which cultures and/or subgroups we will include in the game. Stephan W.G., Stephan C.W. (2003) explain selecting the cultures or subgroups as stage 1 in their stages in designing evidence-based intercultural education and training programmes: To create effective programmes, designers must understand the cultures and people involved, as well as the aspects of these cultures, their histories, and the history of relationships between these cultures. In other words, we should choose our targets based on subgroups or cultural elements, and we should be well-versed in cultures, subcultures, and their components. Also, specific goals are connected to learner motivation in a good way (Wilson et al. 2009).

Goals or objectives may also be used to sort games into different categories. This list of many types of game objectives in various kinds of games is intended for commercial games, although it may serve as inspiration for designing game goals for educational games.

- 1. Capture:** The objective of capture games is to destroy anything belonging to the opponent while avoiding being killed or captured. Chess is an example of this.
- 2. Chase:** In a chase game, the player's aim is to either evade or capture her opponent if she is being pursued.
- 3. Race:** A player's aim in a race game is to accomplish a goal before the other players, which might be either intellectual or physical in nature. Who wins the race will frequently be determined by a combination of strategy and luck.
- 4. Alignment:** The objective of an alignment game is to arrange the game's elements in a specific spatial arrangement or to generate mental alignment. Tic-tac-toe and Tetris are two examples.
- 5. Rescue or escape:** The aim of a rescue game is to bring a unit into the game safely. Mario Brothers is one example of this.
- 6. Forbidden act:** The objective of this type of game, such as Twister, is to breach the rules or make incorrect movements. These games aren't usually played on a computer.
- 7. Construction games:** The objective of the game is to construct, manage, and maintain things. SimCity or Minecraft are two examples of this.

8. Exploration games: The player's aim in exploration games is frequently to explore the game regions while also collecting prizes and solving riddles.

9. Solution: In these games, the aim is to solve problems faster or more correctly than your opponents.

10. Outwit: In outwit games, such as Trivial Pursuit, the aim is to utilise your knowledge to defeat your opponent.

Concluding what we say about the importance of setting goals and how goals should be, we offer a template that you can use to write your own goals. Using this template (University of California, 2016-2017), you can facilitate the process of setting goals for your didactic game and also consider intercultural education elements.

Template for writing a S.M.A.R.T. Goal

Crafting S.M.A.R.T. Goals are designed to help you identify if what you want to achieve is realistic and determine a deadline. When writing S.M.A.R.T. Goals use concise language, but include relevant information. These are designed to help you succeed, so be positive when answering the questions.

Initial Goal (Write the goal you have in mind):

1. Specific (What do you want to accomplish? Who needs to be included? When do you want to do this? Why is this a goal?)

2. Measurable (How can you measure progress and know if you've successfully met your goal?):

3.2. Setting the Topics, Building Reality

After the objectives and subgroups are determined, it will be time to prepare the reality design in which the player will take part and, to choose the topics that will serve this reality and intercultural education. The topics to be selected should be compatible with the elements of intercultural education, the universal common goals of intercultural education, and the demographic (age, gender, etc.) status of the players. The current tasks related to intercultural skills, attitude, and knowledge should be selected, like immigration, online hate speech for people from different cultures or minorities, conflict resolution, reconciliation, social justice, and intergroup peace, etc. can be selected. The quantity and qualification of intercultural skills and knowledge may vary according to country curriculums, but universal common intercultural skills and knowledge such as respect for another culture, openness, tolerance for another culture, empathy, cultural knowledge, and cultural understanding can be accepted as game themes.

The reality we perceive is simply an illusion, yet the only reality we will ever know is this illusion. When you build a game, you will create experiences that feel ~~as~~ real or more genuine, if you can understand and manage how that illusion is produced in the mind of your player (Schell, 2008). To keep a player within this illusion, in other words, the reality of the game, the player should be in *Flow*: The objective of a game is to provide an exciting experience that keeps the player focused for as long and as intensely as possible. If anything grabs his whole attention and imagination for a long time, he/she enters an exciting frame of mind. The rest of the world appears to be falling away and has no intrusive thoughts. He/she thinks about everything he/she does, and he/she loses all sense of time. This condition of continuous attention, delight and pleasure is called "flow," which psychologist Mihaly Csikszentmihalyi has studied in depth (Schell, 2008).

According to the Russian psychologist, Csikszentmihalyi, a person continues his/her life without losing his/her vital motivation. Unless there is an external intervention in his/her life, s/he keeps his/her life in the flow. If the conditions in these environments are balanced according to his/her abilities, s/he finds himself/herself in the flow and is motivated by the action itself, without realising how time passes. However, he or she may become bored or tense at work, school, in social situations, or in other environments where external pressures and rules are present.

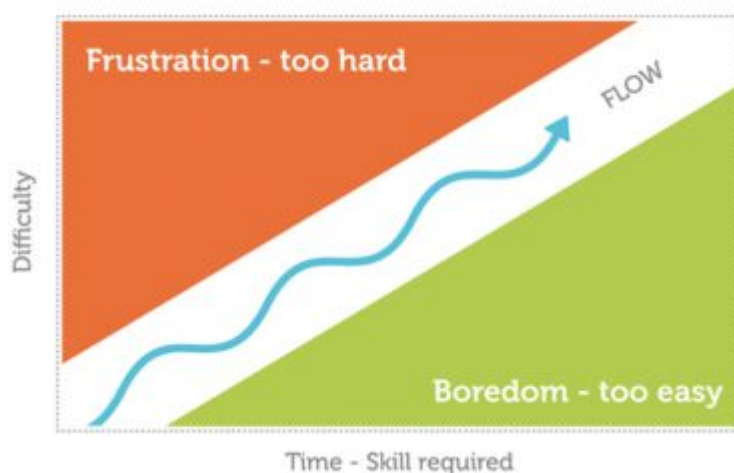


Figure 2. Flow Theory by Mihály Csikszentmihályi (“Flow Theory by Mihály Csikszentmihályi,” n.d.)

Figure three simply shows that if duties in a game are too difficult, people get frustrated or angry and may give up. On the other hand, if the duties are too easy, they get bored and may also give up what they do. As a result, these circumstances should be organised in such a way that tasks or duties should be easy at the beginning and get harder with progress so that flow goes on smoothly. In other words, keeping students or players in *flow* will help them build reality; however, if we consider designing a didactic game for intercultural education, there should be multicultural elements and no stereotypes or prejudice should be used or implied; thus, player/students will not feel as if they are in an unfamiliar place, which will help them feel more comfortable and increase their reality sense.

Moreover, the gamification toolkit dynamics (Werbach & Hunter, 2012) will help building reality; dynamics are design solutions that are independent from game rules. For example, game setting can be a place where the player is familiar with or belongs to his or her culture, so player/student internalises the game easily. Especially storytelling, one of the dynamics, will intensify the sense of reality. Stories that portray interaction between children who are similar to the audience and children of different races or cultures have more impact on attitudinal changes than stories that only portray people of other races and cultures (Paluck & Green, 2009). When you support this storytelling with events that will create emotional intensity (injustice, failure, battle between good and evil, etc.), players concentrate more easily on the game environment and feel the “reality” (Yılmaz, 2020). The type of player also influences their sense of reality and aids them in remaining in flow. While playing a game with a group, the player types should be convenient for team work so the game can turn into an amazing process for them.

Some of the main components required to produce an activity that puts a player in a state of *flow* are as follows (Yılmaz, 2020):

- **Clear goals:** The player understands what his goal is and what he needs to do to achieve it when the goals are clear. It helps to focus on the task.
- **Immediate feedback:** The player sees the result of her/his actions instantly; if s/he makes mistakes or is insufficient in the game, s/he improves his/her actions towards the goal. If s/he is successful in the game, the feedback serves as a reward for her/his actions.
- **Challenges matching skills:** As the player progresses and learns the game, he must go through a learning process that challenges him more and more. Missions that are well below and above the player's skill are equally frustrating to the player.
- **Deep concentrations:** The current task containing intercultural skills and knowledge promotes concentration.
- **A feeling of control:** The player should not lose the feeling of control during the game experience. Difficult-to-learn movements that are not necessary cause breaks in the player's experience.

- **The sense of time is altered:** The player forgets the flow of time and time seems to pass faster.

The activity is intrinsically rewarding: It is worth participating in the game even to experience the game experience. The game rewards you as you gain experience. The more intercultural elements are used in the game process from beginning to end, the more effective internal motivation will increase.

3.3. Team Building

While designing didactic games, we can design for individual players as well as for teams. By making use of the existing themes in gamification design, we can turn individual games into group games in the following stages. One of the most well-known of these themes is the Survivor theme. In the Survivor theme, the contestants are divided into two groups after the qualifying round; they participate individually. Groups compete as a team in areas called panoramas. In the next stage, the few people who are not eliminated from the teams compete individually again, and the winner of the game is determined.

At the end of the design process of the didactic game, there are some elements that we should pay attention to in the process of determining the teams we created while playing the game. First of all, our level of recognition of the group in which we will play the game has an important role in determining the path we will follow to form a team. If we do not know the group closely, we should use methods that employ the luck factor. The fact that a teacher randomly divides the group into two to play a game has negative effects on the motivation of the students towards the game. For this reason, it can be recommended to create groups with methods that provide the randomness function, such as raffle. You can use pen and paper for the drawing or online tools such as <https://www.random.org/> or <https://www.teamup.com/> prepared for this purpose. For intercultural education, it can still cause a problem; in the game process, it should be avoided composing homogeneous teams because team members acquire core skills, instincts, and knowledge related to intercultural competence while advancing to the goal in cooperation.

To create effective teams, designers must understand the cultures and people involved, as well as the aspects of these cultures and relationships between them. Furthermore, they should have comprehensive knowledge of intercultural competence; thus, the main factor in terms of intercultural education becomes team heterogeneity. They will develop understanding, empathy, and tolerance for others, and improve their non-verbal communication skills; their common language will be collaboration and joy. Teams should be heterogeneous in terms of gender, physical abilities, player types, and “cultures”. How you can determine the player type is explained in *Handbook Part II: Practical Advice for Game Design Process*.

The care we will show in the team building process will play an important role in helping the players fight to the end without getting bored.

3.4. Establishing the Goals of the Program Involved

Stephan W.G., Stephan C.W. (2003) explains how to *establish the goals of the programme* as stage 2 in their stages in designing evidence-based intercultural education and training programmes:

In the past, the goals of intercultural education and training programmes were sometimes stated vaguely, the idea being to improve intercultural relations or increase some combination of knowledge, understanding, and skills. These are fine ideas, but they are too broad to be workable goals. As a field, we are now in a better position to be specific about our goals. This point is exemplified by the types of programmes that are currently being developed. For example, programmes are now designed to promote co-existence, immigrant/resident relations, conflict resolution, reconciliation, social justice, and intergroup peace. Intercultural education and training programmes have also been developed that have even more narrowly defined goals, such as increasing empathy, reducing intergroup anxiety, reducing stereotypes and prejudice, and improving non-verbal communication skills. In general, the more specific the goals, the easier it is to design programmes that can actually achieve them.

Goals can be selected most profitably if a range of possible goals, from broad to narrow, has been considered.

As we mentioned above, Braslauskas (2021) also summarises specific intercultural competencies to be developed using Byram's (1997) model of intercultural competence by classifying the various abilities, skills, and knowledge. It is indicated in 1.5. What is an intercultural competence and why do teachers need it? These will be the basic goals of the programmes and also, it is needed to select more current and specific goals for an effective intercultural training program. Specific goals are connected to learner motivation in a good way (Wilson et al. 2009). The other dimensions of establishing the goals are technique and the aspects of the process -of implementing the learning goals into the game.

Setting the learning goals is a part of the entire design for learning, that is, how you plan to carry out the teaching and learning. Learning goals are a tool that can be used by the teacher and students to improve teaching and learning, and they should be clear, relevant, realistic, and meaningful. Clear learning goals will make it easier for the student to evaluate her own learning process and work. (Weitze, 2014)

When designing a didactic game, placing the learning objectives early in the process ensures that the game's instructional function is fulfilled. While implementing the learning goals into the game, the following should be taken into consideration (Hiim & Hippe, 1997 as cited by Weitze 2014).

1. Learning conditions: What past information may the learner be expected to possess, and what knowledge does she require in order to achieve the learning objectives and be a successful learner in the game?
2. Setting of the learning: While the game's setting is important, we must also consider the time constraints and other contextual factors in order to meet the curriculum's learning objectives.

- 1. Learning goals:** This section includes a list of the game's learning objectives, both short-term and long-term. Allowing students to choose their own learning goals, which are more meaningful to them, is a highly motivating factor. These objectives have traditionally been viewed as a contract between the student and the teacher, as they both strive to teach and learn.
- 2. Learning content:** This answers the question: What type of learning content should we use to help students achieve their learning objectives?
- 3. Learning process:** All of the learning activities that we design to help students achieve their learning goals complement the learning processes. These activities are influenced not only by the topic matter, but also by the pedagogical approaches and learning theories we intend to employ in the game.
- 4. Evaluation/assessment:** The point is that we also need to plan for evaluation and assessment to see if our learner has achieved the learning goal as well as the growth and mastery that we set out to achieve in the game.

These six focuses of attention are crucial to consider when designing a learning game, since they will aid in the learner's achievement of the learning goal.

While placing the learning objectives into the game, it is not of primary importance **to** how the student will gain this achievement in the game. First of all, it should be focused on what the target learning outcome is for the student. In other words, the "what" question should be asked before the "how" question. (Weitze, 2014).

In schools, through intercultural education, it is aimed to create a space where children can come together, make contact, and interact with difference and otherness ("intercultural education," n.d.). Didactic games are a form of intercultural interaction and will allow students to acquire these programme goals at a macro level in a more enjoyable and effective way. Students will gain strengths to live and learn together by understanding and respecting "the other".

3.5. Determining the Time Frame and Place

One of the basic dynamics to be determined while designing a didactic game or gamification process is "time". If we are designing a didactic game, we have an ultimate learning goal that we must reach first. Depending on whether the goal is long-term or short-term, the main element that determines the time limit for the learning goal is our curriculum plan. Let's focus here on what kind of time-setting strategy we should follow in didactic games while designing in order to give a more concrete and structured set of information about the time limit. Why should we determine a time limit in these designed games and how? What variables should we consider when determining this dynamic? Can a standard time limit be applied for the designed didactic game? Can we be flexible about the time limit according to group characteristics in designed games? These questions will shape our strategy basically.

The primary reason for imposing a time limit on learning is that we manage this process within the framework of a teaching plan created in a goal-operation-evaluation triangle. The realisation of the desired behaviours within the framework of the lesson plan necessitates a time limit depending on the nature of the goal. However, the time limitation creates a cognitive pressure on the learner. And it's not just about the amount of time they have to accomplish a task; it's the fact that they are timed. Sure, some people enjoy it! For some, competition is fascinating and an important element that increases motivation in learning. For others, even if they know the solution, they can completely shut down under the pressure of time, and when they do not know the solution, time can turn into an object of tension and fear for them that no longer precedes the task. (Olah, 2018).

Marczewski (2017) explains the effect of time on decision-making by examining 3 theories. The first one is Decision Field Theory, published by Jerome R. Busemeyer and James T. Townsend in 1993: According to the given amount of time, the impact of time pressure on decision-making can be significantly variable in terms of quality and quantity of outcome.

While option a is the most preferred option in a question with three options (a, b, c) in 2x unit time, when we halve the decision time, the most preferred option becomes c. Giving less time to generate ideas does not necessarily produce better ideas. But it certainly gives you the chance to generate more ideas, rather than better ideas, without any of your natural biases kicking in. This means that a long time should be given for ideas that are qualified and thought-out, including prior knowledge, and a short time should be given for practical and numerous ideas.

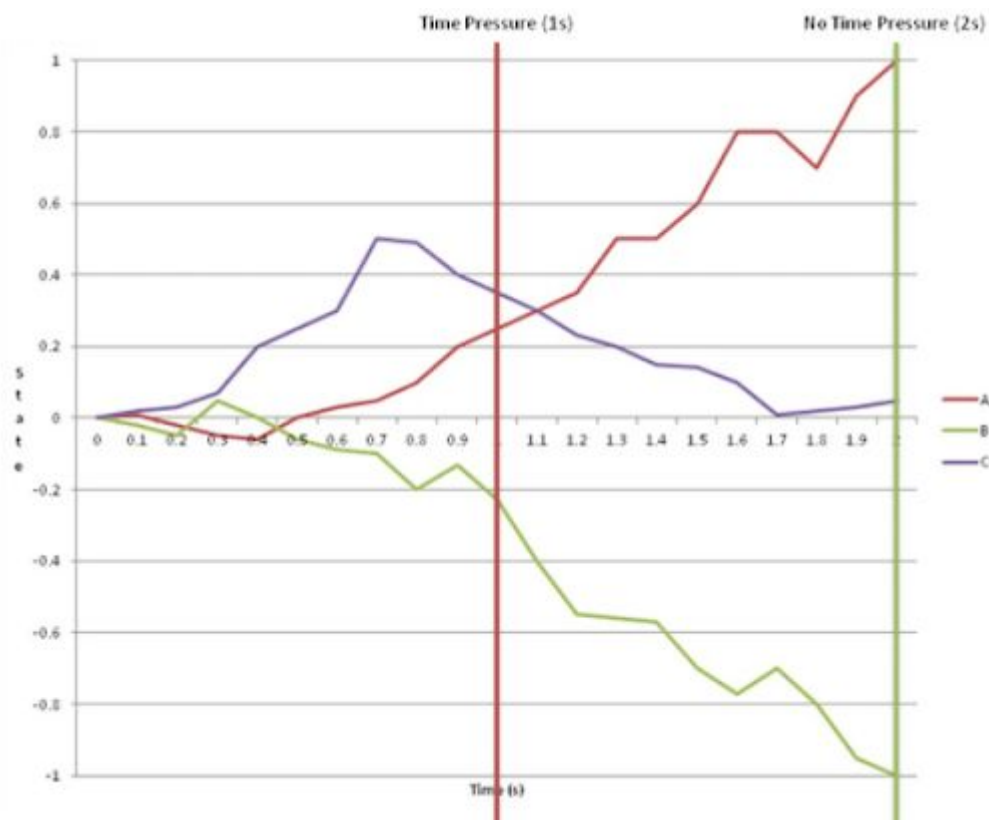


Figure 3. Decision Field Theory (Marczewski, 2017)

The second one is Temporal Construal Theory, published by Yaacov Trope and Nira Liberman in 1998. This theory suggests that people think about things differently depending on the psychological distance between them and the thing. This is physical distance, temporal (time), social, etc., it could be. The further away the experience is from the thing, the higher the level of configuration or perception. The closer the thing is to the experience, the lower the level of configuration and perception.

It's the difference between thinking WHY something should be done and thinking HOW it should be done.

The shorter the time allotted for idea creation, the less likely it is that qualified and superior ideas will emerge. It allows you to produce more ideas without any of your biases stepping in, rather than ideas that are qualified and superior. Allowing longer time for decisions leads to more thoughtful ideas and more creative decisions. But it can also lead people to reject good ideas based on personal bias or other external factors.

Time should be used to your advantage, according to the desired results. If it is desired to encourage a large number of good practical ideas, the time given is reduced. If it is desired to encourage creative and more abstract thoughts, they are given longer.

Ultimately, our primary priority will be to recognise the group and the dynamics within the group while determining the time frame and place of the didactic games we design. If our group consists of different cultural and social strata, it is an issue that needs to be addressed as we mentioned in Section 3.3, Team building. In this case, the strategy to be followed should be playtest-adjust-repeat. Eventually, the right timing and place design will emerge in the process.

While designing this didactic game or a gamification process, the following should be remembered (Olah, 2018):

- Under time pressure, learners may pay more attention or not. Can they learn under time pressure while performing tasks within the scope of the didactic game? If they can't learn, it may not be a good idea to add additional cognitive load and emotional pressure. If your answer is yes and it helps them make quick decisions in this process, it may be helpful to limit time. Be flexible about time restrictions according to your group dynamics, learning goal, and game objective.
- If you want to encourage students to make quicker decisions so that they are able to spend more time on any question or activity, allow them to use the remaining time from the quick decision in the previous question or activity for subsequent questions and activities.

- The time limit that punishes the learner can negatively affect the learner's experience. Therefore, if a quick decision is not more important than making the right decision in real life, it is more beneficial to use a time limit as an added advantage rather than a punitive method. Let's say choosing the correct answer is worth 100 points. The time limitation can serve as an additional bonus, each remaining second can be worth x points to add to the total. This strategy is just a recommendation.

While determining time and place, there are two elements we must also consider: age criteria and game variants (outdoor, digital, board). For the age criteria, we will use Jean Piaget's theory of cognitive development as a reference. Depending on his theory, he classifies cognitive development into 4 stages, but we focus on the last 2 stages: concrete operational stage (ages 7 to 11) and the formal operational stage (ages 12 and up). The major characteristics and developmental changes of this concrete operational stage are:

- During this stage, children begin to think logically about concrete events.
- They begin to understand the concept of conservation; that the amount of liquid in a short, wide cup is equal to that in a tall, skinny glass, for example.
- Their thinking becomes more logical and organized, but still very concrete.
- Children begin using inductive logic, or reasoning from specific information to a general principle

Major characteristics and developmental changes of the formal operational stage are:

- At this stage, the adolescent or young adult begins to think abstractly and reason about hypothetical problems.
- Abstract thoughts emerge.
- Teens begin to think more about moral, philosophical, ethical, social, and political issues that require theoretical and abstract reasoning.
- Begin to use deductive logic, or reasoning from a general principle to specific information (Cherry, K., 2020).

Since 7-11 age group learn and understand reality through their experience and concrete materials, there should be concrete rules about time limit. Considering their age, they are curious and impatient, so their major question will be “why” rather than how, their focus duration for an activity will be less than students who are at formal operational stage; 12 and over age group can learn and understand reality through abstract thinking so their focus duration for an activity will be more and it will increase with age. Eventually, we cannot draw accurate time limits, just depending on the age criteria. Defining time frame also can be affected by qualification of goal, place, number of participants, etc. On the other hand, age criteria affects the place of the game; it should be adjusted from more concrete to abstract with age. While designing the didactic game and gamification process, attention should be paid to the security measures in place, considering the age group.

The game variant (outdoor, board, or digital) affects the place and time frame of the educational game. In the respect of time, outdoor games take longer time than board and digital games considering that they include physical activities, effort; in board games, time limitation can be set more concretely considering mental and physical conditions of students; in digital game, students can not notice how the time passes, it is quite easy to go into flow, every duty or action should be bound to time limitation. In respect of place, security measures should be taken for the outdoor games considering their ages.

3.6. Selection of Tools (Techniques, Tactics, and Materials)

What is done when designing a didactic game is to design a journey for the player. In the first part of this chapter, we have given a wide range of things that we should pay attention to regarding the destination (goals) of the journey. In this section, we will take a look at the tools that the designer/teacher will need during the planning of the journey. In other words, while designing an educational game for intercultural education, what tools will the teacher use, what techniques will s/he needs, and what tactics and materials will be needed?

Werbach and Hunter (2012) have explained everything we will need while designing the game with the structure called *Gamification Tool Kit*. This tool kit is composed of three main groups of elements, which are shown in the figure below.

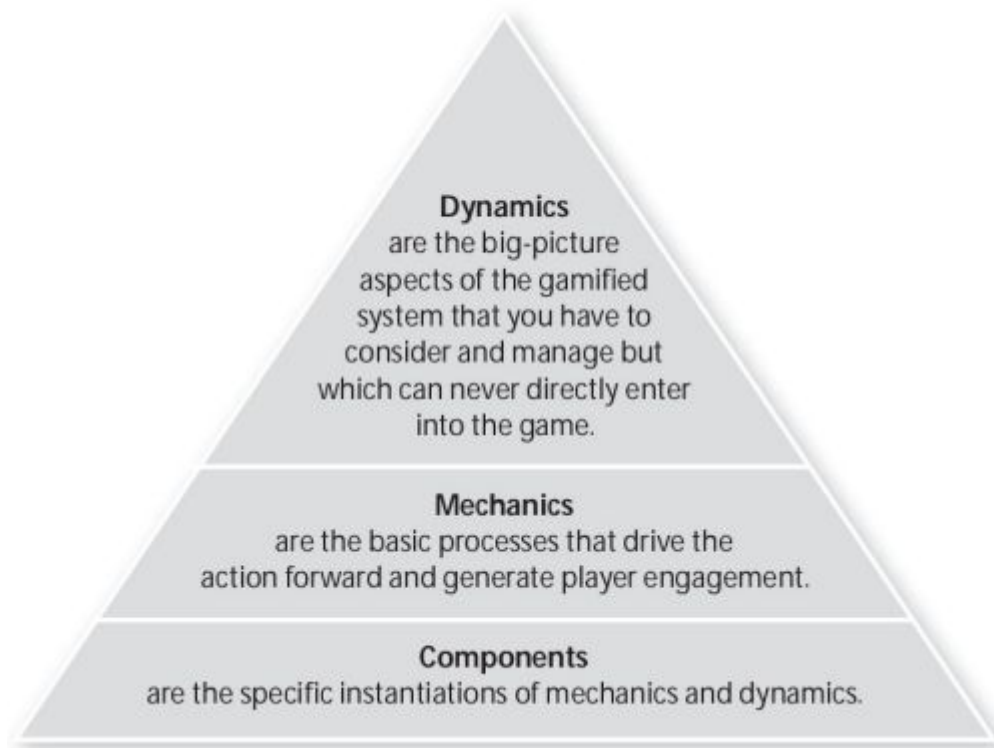


Figure 4. Game Element Hierarchy (Werbach & Hunter, 2012)

According to Werbach & Hunter (2012), the most important game dynamics are;

1. Constraints (Rules, limitations or borders of the game)
2. Emotions (Curiosity, frustration, enjoyment, and other emotions that the user has while playing the game)
3. Narrative (Storytelling)
4. Progression (The player's development throughout levels)
5. Relationships (Social interactions generating feelings of camaraderie)

Another element of the toolkit is Mechanics. The most important function of mechanics is engagement of the player. The examples of mechanics are listed below:

1. Challenges (Solving puzzles or tasks takes time and effort)

2. Chance (Randomness)
3. Competition (Winning or losing)
4. Cooperation (Working together for desired objective)
5. Feedback (Information about player's progress)
6. Resource Acquisition (Getting hold of usable and collectible things)
7. Rewards (Items given for achievement)
8. Transactions (Trading between players directly or indirectly)
9. Turns (Alternating participants take turns participating in the game)
10. Win States (Draw and loss statuses are connected to the goal that makes one player/group the winner)

The last element of the toolkit is Components. Components function as elements that interact directly with the player. The examples of components are listed below:

1. Achievements (Fulfilled objectives)
2. Avatars (A visual depiction of the character of a player)
3. Badges (Achievements are shown visually)
4. Boss Fights (Extreme challenges at the top of a level)
5. Collections (To collect sets of objects or badges)
6. Combat (A defined fight, typically short-lived)
7. Content Unlocking (Aspects are only available when players achieve their objectives.)
8. Gifting (Possibilities to share resources with others)
9. Leader boards (Visual representations of a player's development and accomplishments)
10. Levels (Steps in the player's evolution that are clearly defined)
11. Points (Numerical representation of a game development)
12. Quests (Challenges with objectives and rewards that are predefined)
13. Social Graphs (Social network representation of players in the game)
14. Teams (Defined groups of players working together for a common purpose)
15. Virtual Goods (Assets in games that have a monetary or perceived worth)

Werbach and Hunter (2012) have included many elements in ~~his~~ their gamification toolkit, but it is not necessary to include each of them in game design.

Whitton (2018) uses a framework including three aspects to categorise the scope and range of playful learning approaches. Tactics are the mechanics and attributes such as surprise, humour, chance, competition, storytelling, mystery, badges that engender game based learning; in other words, they are strategies, devices or characteristics that add playfulness into different contexts. For intercultural learning, it allows learning in the context. Badges can contain intercultural properties; jokes can be used by other cultures; competition will increase collaboration between students from different cultures, storytelling is based on intercultural competence, etc. It is also important to recognize within-group qualifications; many of these have intrinsic cultural or gender biases; the goal is to eliminate them.

Materials are the objects, artefacts, and technologies that are used in didactic games or gamification process. They can be flashcards, toys, simulations, puzzles, virtual environments, etc. Materials vary depending on game variant; considering intercultural education, there is no limitation for digital games. Digital game platforms like Minecraft, Roblox, Lego Worlds, Unturned, Trove enables you to create new worlds, virtual environments. Students can learn many intercultural skills and knowledge by experiencing it in the context. Board game materials, which are designed for intercultural education, should be convenient for fine motor skills, depending on age. Flash cards used in board games can also be designed for a particular purpose. In outdoor games, physical activities are more prominent. Therefore, attention should be paid to the use of materials that will not cause physical injury, as the materials will be associated with physical activities. Materials can be anything that will serve for intercultural education, but they must not contain cultural biases or taboos.

While Whitton (2018) describes aspects of playful learning; techniques, one of three aspects, are play-based pedagogies and learning approaches such as role play, making performances, problems, quests, and simulations; these techniques involve making-believe or empathising with another character; hence these techniques will enable students to build empathy and experience of being “other” through mistake-making. Using problems or quests, motivation for people to engage and stimulate curiosity and feelings of satisfaction can be created on completion.

To gain cultural knowledge; cultural understanding, respect for another culture; openness; tolerance for another culture, they will serve to compose a platform.

In conclusion, in this chapter we give brief information about the practical aspects of creating didactic games in intercultural education and the features of good play for intercultural education. For more details, you may check the resources used for the preparation of this chapter.

The game is not over, the game is forever!

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Erasmus+

Chapter 4

Adaptation of didactic games to different environments of use

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In this chapter we propose methods for adapting gaming features (didactical games) targeted for participants coming from different cultural backgrounds, hence for Intercultural education. Games could be any of the following types: Outdoor, Board, or Digital Games. Before proceeding to the methods, some useful information about Gamification, Adaptive learning, and Gamification is being presented.

Nowadays, thanks to technological development, learning environments are easily adaptable to learners' needs and become more enriched and interactive. Modern educators consider the development and use of games and game-like environments as a sine-qua-non skill in order to attract their students' attention and gain their commitment. Research in the field of game studies has adopted the concept of "gamification", which refers to the *"use of game elements and game design techniques in non-gaming environments"*. Gamification aims to motivate learners by incorporating various game elements into their learning environment. However, due to the *"one size fits all"* shortcomings of standard gamification concepts, gamification does not always achieve predictable results. It transcends the diversity of users' needs, abilities, and preferences. Therefore, researchers have begun to develop adaptive gamification frameworks to meet the needs of different types of users. The notion of the adaptive learning system entails the use of technologies in order to design and adapt to individual learners' learning achievements and personalise content based on their preferences (Böckle, Micheel, Bick, & Novak, 2018). According to the latest research in the gamification field, game elements should be tailored to learners (Halifax, Audrey, & Jean-Charles, 2019).

What is Gamification?

The commonest definition of the term «gamification» is *"the use of game elements and game design techniques in non-game contexts"* (Garland, 2015). In other words, Gamification is the process of applying game mechanics and dynamics to non-game environments in an attempt to promote desired attitudes and behaviours. Game mechanics are the elements that advance actions by means of points, bonuses, and levels (Proulx, Romero, & Arnab, 2016). Game dynamics are tools that serve to detect how to promote action, including achievements, competition, status, and altruism (Svitlana & Alina, 2018).

By recognising the elements and factors that make video games funny, dynamic, motivating, and effective, the gamification process includes the application of these characteristics to any kind of game intended to be used as a teaching material. Fundamentally, gamification intends to prolong the engagement of individuals and lure them to overcome the game levels through different award components, like identifications, positions on leaderboards, etc. This way, a feeling of triumph is due to happen, which will strengthen the commitment to the accomplishment of the goal of the game.

Gamification has become a major topic of research, debate, and application in the field of Education and in a variety of settings, such as Intercultural Education and self-development. The purpose of incorporating Gamification into education is to enhance an engaging and beneficial learning experience. The integration of game elements (e.g., levels, badges, contests, leaderboards, and points) in education plays a critical role in motivating learners towards achieving their educational objectives.

As stated in the Horizon Report published by The New Media Consortium (Johnson, Becker, Estrada, & Freeman, 2014), new digital strategies that reflect the methods of using software and technological devices to develop learning and instruction in and out of the classroom could be effective in the use of existing technologies in education. Although distance learning technologies, which are generally considered as out-of-class methods, provide flexibility and ease in participation to learning instruction activities when and where the students want to learn, the use of ineffective strategies fails to maintain student participation and loyalty in distance education (Sun & Rueda, 2012). On the other hand, the lack of face-to-face interaction that is available in conventional education leads to the failure to achieve student loyalty and engagement by reducing the opportunity for students to take advantage of interaction, involvement in collaborative activities, feedback, and social support facilities (Tuckman, 2007). Among new digital strategies, gamification is considered an important new way of ensuring student involvement and engagement (Johnson, Becker, Estrada & Freeman, 2014).

Although gamification is initially perceived as a strategy of raising interest in education rather than the efficiency and effectiveness of instruction (Reigeluth, 1999), it could contribute extensively to the effectiveness of instruction since it has the potential to have a direct impact on the “individual performance of the learner” which is the most important factor in distance learning methods. This is because it is intuitively regarded as an interesting and effective strategy to motivate students in education and instruction (Lee & Hammer, 2011).

Adaptive Learning

In recent years, increased awareness of the feasible benefits of an adaptive learning environment has been witnessed. The term «adaptive learning» demonstrates a set of techniques directed at providing learners a personalised and unique experience with the intent of accentuating their performance. The core principle that Adaptive learning depends on is that each and every learner comes from a different background, has a distinct learning style, and has diverse educational needs. Consequently, adaptive learning systems may well be adjusted to the learning environment according to individual learners' characteristics and personal needs (Hammad, Hariadi, Hery Purnomo, & Jabari, 2018). A learning environment is adaptive given that it can screen the user's activities, interpret activities based on domain-specific models, and infer learner requirements and preferences from the interpreted activities, appropriately representing needs and preferences in relevant models. Ultimately, the activities could be based on the available knowledge concerning their users and the subject matter at hand to vigorously simplify the learning process (Madani, Bengourram, Erritali, & Hssina, 2017). Adaptation in learning has been ranked into several categories, including adaptive interaction, adaptive course delivery, content discovery and assembly, and adaptive synergy support. Adaptive interaction means modifications that arise at the system interface. It aims to enable user interaction with the system without altering the learning content itself. The term "adaptive course delivery" focuses on any adaptations aimed at designing a course or a series of courses suitable for individual learners.

Content discovery and assembly is the actualization of adaptive techniques in the discovery and assembly of learning content from possible dispersed sources or repositories. Lastly, adaptive collaboration support intends to implement adaptive support in the learning processes, which includes communication among various individuals, collaboration to fulfil common goals, or communication for social intercourse purposes (Hammad, Hariadi, Hery Purnomo, & Jabari, 2018).

Adaptive Gamification

Adaptive gamification aims to enhance standard gamification approaches with user-targeted mechanisms designed to accommodate numerous characteristics of users and contexts. Specialists affirmed that gamified applications should be custom fitted from an exceptionally customised and versatile viewpoint. Researchers have started to explore ways of creating adaptive gamified conditions to maintain individuals' motivation to a feasible extent (Hammad, Hariadi, Hery Purnomo, & Jabari, 2018).

Gamification mechanisms have the general merit of stimulating behavioural changes in a lightweight manner, that is by involving people in game-like scenarios where a certain task accomplishment is rewarded with a virtual or physical prize (Herv R., Ruiz-Carrasco D., Mond T., 2017). Gamification is highly effective when personalization and adaptivity are included. Adaptive (or tailored) gamification (Ana C.,Klock T., 2020), rather than motivating users with solely external rewards, is designed to make the experience engaging for the specific user by also taking into account and adapting to individual traits according to necessary trade-offs. Nevertheless, adaptation within a single gamification campaign might not be enough. People may still be uninterested regarding the activity promoted, or they might even be more useful for the community if they were actively engaged (also) in another initiative.

To summarize, in this chapter we attempt an approach to methods applied to incorporate games adaptation into different learning environments, such as outdoor, board, and digital games. In our case, the end-users are participants coming from different cultural environments, so our field of interest is Intercultural Education.

4.1. Outdoor Games

Gamification principles are quite difficult to be applied in outdoor games because there is no automated mechanism to send feedback in order to achieve the adaptability, but it is a widespread game category as far as intercultural education is concerned. We should bear in mind that learners might not be competent users of a certain language or new technology, so this might cause a denial to participate in formal or even informal teaching procedures.

Taking this into account, we propose the *BrainHex model* as the best option for the adaptation in outdoor gamification learning. BrainHex is a player satisfaction model used to discover the efficiency of gaming characteristics for the player typology factors. It measures the preference for a feature by means of a weighted amount of personality traits. Players' classifications determine the divergence of players' expectations and behaviours. Learners have varied emotional reactions to game mechanics. Consequently, player typologies can be used as grounds for adaptation.

BrainHex player typology comprises seven player types, including :

1. the seeker,
2. the survivor,
3. the daredevil,
4. the mastermind,
5. the conqueror,
6. the socializer and
7. the achiever



The seeker revels in discovery and exploration, the survivor relishes escaping and feeling fear, the daredevil fancies playing on the edge and taking risks, the mastermind loves solving puzzles and devising, the conqueror takes pleasure in defeating difficult opponents, the socializer is fond of interacting with other players, and, finally, the achiever is always eager to complete tasks.

This typology provides a variety of benefits; it counts a wide scope of game mechanics and is not fixed to a context as Bartle's taxonomy (Wikipedia, 2021), which is specific to role-playing games. It illustrates player types as an intrinsic set of values, showing their interest in each form of game mechanics. Additionally, BrainHex is the only typology that is connected with a simple questionnaire used to determine different users' player types. BrainHex has been proposed by Richard Bartle (Wikipedia).

Another BrainHex version has been proposed by (Lavoué, Monerrat, Desmarais, & George, 2018). This model is based on a linear model among player types. The model has the objective of adapting game features automatically in the learning environment based on the BrainHex model that identifies the learner player types.

4.2. Board Games

Gamification using Board Games is being considered an innovative approach to Intercultural Education. Players coming from different cultural environments and having different experiences on a significant number of issues feel a special self-confidence when they participate in a learning procedure because they really have fun enjoying the lesson and get motivated to overcome any difficulty. As this group of learners is characterised as heterogeneous, adaptivity is perhaps the only solution for gamification applications. Thus, (Jianu & Vasilateanu, 2017) proposed a gamified adaptive learning system called the *Question scaling, reusing and scoring system* which is mostly used for board games adaptation.

The main purpose of this system was to arrange for a speedy, engaging, and effective learning experience for each learner. As a result, the system exhibits a number of features, such as a well-defined user profile, a friendly interface, comprehensive content, mobile compatibility, graded-difficulty questions, as well as question-reuse and gaming elements.

The system provides adaptability through question scaling and reuse. Question scaling means the ability to use the same question again but with several difficulties formed depending on the situation and the current learner.

Question-reuse means that the system replies to a learner after giving a false or correct answer; the same question is given, however, with other choices of solutions.

Gamification is implemented through a scoring system, which means that the user is able to collect experience points and reach new levels according to the total number of points gathered. Furthermore, the learner obtains ranks based on his points, completed lessons, and knowledge levels.

Some activities are blocked for more motivating gameplay until the user has reached a certain level of knowledge for the previous lessons.

The system is constructed to provide an easy path for each user to reach the highest levels of knowledge. Scaling offers prompt feedback and engagement via gaming elements. Learners may confront mistakes and try to improve their competence or certain skills by following each training session.

Nevertheless, some weaknesses of the proposed system should be considered in the future. For instance, introducing the content of lessons and the questions is a challenge and ideally lessons have to be divided. Moreover, each question must be implemented using a pool of options. This can require a more significant amount of time to form the options. On the contrary, choices can be reused for several questions.

In addition to this, the system interface should present some important information for the learner in order to evaluate his status, such as the result of an answer, progress bars, or the state of the question the learner is currently answering (i.e., a new question or reapplied).

Case Studies

1. Diversity Space Meeting



This brand-new game fostering diversity and inclusion invites a multicultural team to experience a space journey towards each other in order to learn more about each other's cultural background as well as individuality.

The **online version** can be played with up to 45 players from all over the world or from the same team or class. Since it is a diversity and inclusion game, the only condition that this game requires is that it be played by as culturally diverse a team as possible (not for monocultural groups). This is for Primary and Secondary pupils.

2. Culture Shock



A simulator of intercultural business negotiations that allows players to experience the way one feels when they start communicating with foreigners without knowing their culture and understanding their mentality.

The Culture Shock role play is good to:

- show participants their strengths and weaknesses in terms of cross-cultural skills
- experience the realistic consequences of low cultural intelligence
- prove that one has no chance to ignore cross-cultural science
- train cross-cultural sensitivity

How it is played?

You divide a group into representatives of two cultures – the Alpha culture and the Beta culture. You have them read the rules of their culture and the scenario of the negotiation. Next, you arrange them in smaller groups of negotiators and invite the Alpha and Beta delegations from the cultures to start their meetings. Even more important than the play is the debrief that follows. You have them discuss their impressions and feelings during the game, the way they noticed cultural differences and their actions and decisions.

3. Saying NO Across Cultures

Just Don't Say NO is a part of the Saying NO Across Cultures activity being, an exerciser for intercultural communication style adaptability. It was created as a sequel of the Saying NO Across Cultures Game, a teamwork within the Gamification for Intercultural Training Workshop in Leuven, Belgium (2019). Communication styles differ across cultures. The same idea can be conveyed and perceived in different ways. Knowing how to encode and decode a message based on understanding your foreign partner's mentality is the key to successful international cooperation. Refusal is one of the most sensitive communication units.



The **Just Don't Say NO** game illustrates how dramatically different are the ways people say NO in different cultures, and teaches a whole range of means of expressing refusals and disagreements allowing participants to choose the most adequate style of communication for various contexts in different parts of the world.

Just Don't Say NO game trains the ability to:

understand and accept refusal encoded differently across cultures

choose the most adequate communication strategy for different cultures when they need to deny, refuse or disagree

maintain and enhance mutual understanding and atmosphere in relations with partners from different business-cultures.

4. Cross-Cultural Poker Face

It is a communication exerciser for a variety of listening styles. If there are different communication styles in different cultures, then obviously there are different listening styles and reaction manners. In a number of cultures, it is not only the meaning of utterances that matter, but also non-verbal information and context may prevail. The role play teaches to read and distinguish different types of non-verbal reaction to one's speaking.



Cross-Cultural Poker Face trains the ability to:

- consciously observe and correctly interpret your foreign counterpart's non-verbal signals in response to what you tell them
- notice non-verbal feedback from an international audience while presenting
- manage the communication, avoiding misunderstanding

How it is played

The simple Cross-Cultural Poker Face role play is played in pairs, and is represented by a pair of cards describing what the players should do and say.

4.3. Digital Games

A digital game could be considered as an e-learning material that is accessible via a mobile device or a personal computer. For digital games adaptation lots of frameworks or models have been proposed but the most prominent is the Framework for Adaptive Gamification Applications proposed by (Böckle, Micheel, Bick, & Novak, 2018). This specific framework informs about the systematic development of adaptive gamification applications. It was designed on the basis of the current corpus of gamification literature. Specifically, it is centered on a stream of research regarding adaptive gamification and guiding the design of an efficient adaptive gamification solution. This framework is illustrated in Figure 1. It is composed of various elements and sub-elements. The adaptivity element involves a set of sub-elements. The changing of the state attempts to change the end-users attitude so as to align with the advantages of using the system. Support of learning provides adaptive solutions to assist the end-users' in their learning pathway. Intensifying user participation in information systems is the focus of supporting the participation component. The creation of a meaningful connection between the goals of the end-users and non-game context is managed by creating meaning between the End-User and the Activity element. The second component involves the adaptivity Criteria.

It lists criteria that form the basis of existing adaptive gamification approaches such as player types, usage data, user data, context, level of knowledge, defined goals by the end-user and reputation. The third component of the proposed design framework is adaptive game mechanics & dynamics. It introduces the adaptive gamification elements found in the gamification literature. Lastly, the adaptive intervention element is targeted toward the gamification elements that supply the results of the adaptation process in the form of an intervention in the front-end layer.

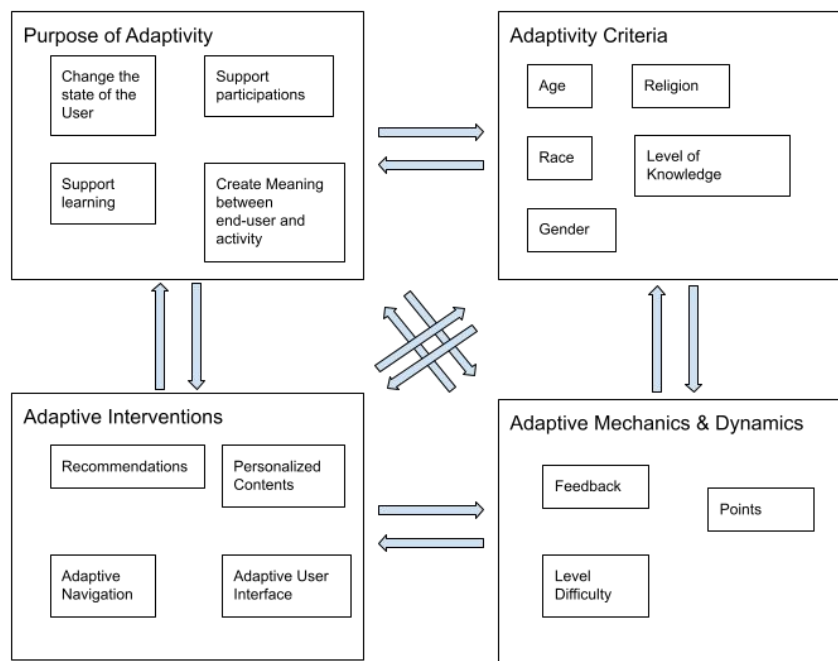


Figure 1 Adaptive framework for Digital Games

Case studies

Goalbook



It is a website that supports teachers and administrators with a collection of teaching strategies and learning goals that can be adapted for kids with various learning needs. It's made up of two parts, the Toolkit and the Plan

Age: 6+

Online

Articulation Station



Articulation Station provides kids with the opportunity to record and listen to their own voices as they pronounce the letters and words in conjunction with a narrator who speaks them. As a result, students can gain self-awareness and identify their own pronunciation strengths and weaknesses

Age: 6+

Online, Desktop

Minecraft Edu



The original Minecraft is itself a fantastic tool for collaborative, student-directed work, but for teachers keen on measuring out doses of the game while tying activities to specific content, MinecraftEdu is a good fit.

Age: 6+

Online, Desktop

Ten Marks



Overall, teachers will love the flexibility TenMarks provides, both for them as well as their students. The track system allows for differentiation as students work at their own pace, and the videos are especially helpful for those working independently.

Age: 8+

Online, desktop

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GAMIFICATION
for Intercultural Education

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GAMIFICATION FOR INTERCULTURAL EDUCATION

PART II



Erasmus+

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Chapter I

Introduction

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Chances and challenges of using educational games as a teaching tool

In most European countries, schools are facing increasing numbers of students from diverse migrant backgrounds (OECD, 2014). The use of educational games is found to be an effective tool to reinforce teaching. First and foremost, it is important to note that games can be used to learn tolerance, to acquire knowledge about different cultures and customs, and to develop communication skills as well as sensitivity and openness to others. While there are benefits that come with using educational games, there are also challenges that teachers and people might face. Some are related to game design, others to game implementation in the classroom setting. We will discuss them in the points below.

Why use games to teach?

Children want to play, and usually it's what they do after school, after finishing their homework and other responsibilities. But what if playing was happening during the lesson? When learning & fun are combined, the best outcome is possible to achieve. If children enjoy school and learning, as a result, they become more invested and motivated to work. When children learn through games, it is not perceived as learning, because they experience it differently than while using traditional learning techniques.

Educational games benefits:

- Using games can show the students that learning can be **engaging, interesting,** and **rewarding.**
- Games can help us achieve a greater level of **concentration** in students.
- By playing games, individuals are challenged to explore their knowledge of the given in a highly **motivated** manner to satisfy their curiosity and reach an outcome.
- Games can not only improve students' knowledge about certain study topics. They can also improve **social skills;** build positive **self-esteem, leadership** skills, etc.
- Games foster a sense of individual accountability in situations where the outcome for the individual player affects the entire team.

What are the challenges of game-based learning?

Necessary materials might be out of reach for a teacher due to a lack of funds.

Solution: Utilizing easy-to-use and inexpensive devices, which most teachers and even students hold, is the answer to the hurdle called "lack of equipment". There are also sites with free educational games and publicly available educational materials.

Providing students with instructions and game play alone can be too time-consuming for traditional lessons.

Solution: Find a game that doesn't require a long instruction time or find a game that can be used multiple times. In the latter example, the time-consuming aspect is happening only at the beginning stage, and once students know the rules, they can spend the rest of the year continually playing the game.

If student abilities differ, the game may not provide a sufficient challenge, while others may find it difficult to follow. No effort results in boredom, and too much effort can result in students giving up or experiencing anger and frustration.

Solution: Students may start a game at a different level of difficulty depending on their skill level, or students may be matched with players who possess similar capabilities and skills. Both of these solutions can be used in order to maintain the level of motivation and involvement in the game.

Too little space in the classroom.

Solution: There are several options for this. First, if possible, teachers can arrange other classrooms more suitable for game playing or engage in outdoor learning. If changing the location is not an option, it might be possible to re-adjust the game to a different environment or adjust the classroom for playing. It may be necessary to move chairs and desks before the lesson.

How to balance fun and learning while designing the educational game?

According to Thomas Malone, who studied intrinsic motivation as an area of research, fun in educational video games is influenced by three factors (Malone, 1981).

FANTASY

- Make sure practised skills are integrated with the fantasy scenario

- The elements of fantasy should interact with the challenge by providing meaning to the gameplay and setting short-term, achievable goals.

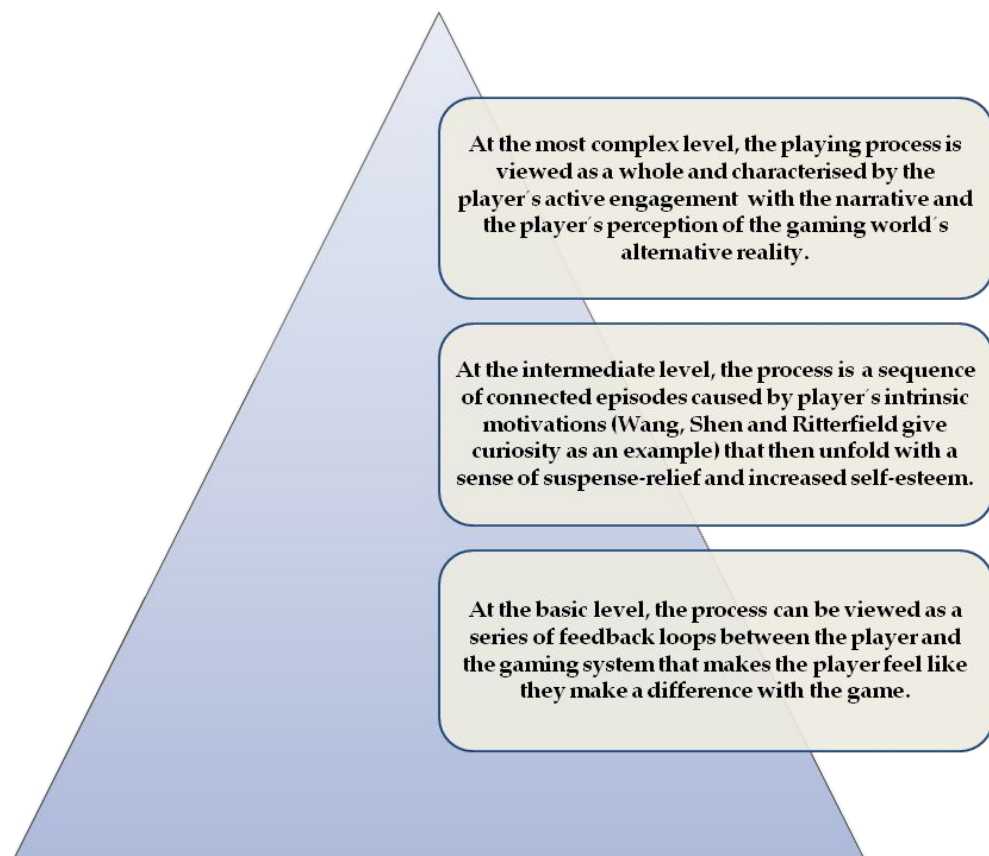
CHALLENGE

- Encourage students to set personally meaningful goals.
- Make sure students are uncertain about the outcome of the challenge.
- Make sure the game has different difficulty levels.

CURIOSITY

- Make sure to set the level of difficulty to an optimal level.
- Use new objects, shapes, colors, sounds, tastes, etc. to decorate and reinforce the fantasy framework to reward and better represent the concepts.
- Challenge the student's existing knowledge by making it seem like it's incomplete, and providing avenues to fill those gaps or resolve contradictions.

To better understand game enjoyment, Klimmt (2003) has suggested a model derived from Oerter's play theory (1999). He felt that gameplay enjoyment could be determined by three different levels.



How to ensure learning takes place?

- Adjust or modify the game plan to ensure it fits the material you want students to master.
- Games are all about interactions with objects, environments, and avatars. Make sure these interactions align with learning objectives without distracting learners from the concept at hand.

What to pay attention to when using educational games in building and developing intercultural competence?

Intercultural competences are considered key competences of the 21st century "and have therefore become an important element of education policy. As Humphrey says, reading books about other cultures, listening to lectures, and using other theoretical tools are not enough to deal with the topic. We may be aware of a culture on a cognitive and intellectual level, but yet know little about how representatives of a given culture function and perceive the world. There is no substitute for interaction and authentic immersion in a certain social structure at the level of empirical experience (Humphrey, 2007) .

That is why we support activities, interactions, and effective communication by introducing games to develop intercultural competence. It is possible through:

- Directly introducing different cultures into the structure of the game. Real or fictional cultures can be used, but they should always be well integrated with other aspects of the game element. They should determine the rules of the game and the actions of the players. Example: Modis, Tardos, Interact (Fleschsig, 2007; Bolten, 2002).
- Indirectly, we can introduce the cultural aspect to the game by involving representatives of various cultural backgrounds in it. Example: Atlanticon (Stummff et al. 2003).

- You can design a game where disagreements do not arise directly from cultural or ethnic differences. A game in which disagreements result from conflicting interests and an unequal distribution of power and resources that are predetermined by the game (Strohschneider 2010: 250).

Case studies: stories of successful game implementation

| | |
|----------------------------------|---|
| <p>Gaming through Government</p> | <p>One of the 4th grade teachers in The Arts Based School in the USA used the gaming unit called: <u>Gaming through Government</u>.</p> <p>Before the game, students were presented with the introduction:</p> <p>“Your mission is to climb the ranks of a political career. Your ultimate goal is to become President of the United States. In order to be successful in a career in politics, you must be knowledgeable about the government, rights and responsibilities of citizens.”</p> <p>Throughout the Gaming though Government, students earned points by playing digital games and answering questions. Students earned points based on their scores in digital games and from written reflections that related the digital gaming experience to social studies content.</p> <p>Most importantly, students found the learning experience to be memorable. On an end of year perception survey, a student remarked that Gaming through Government was their favourite social studies concept of the entire school year (Schaaf, 2017).</p> |
| <p><u>Slither.io</u></p> | <p>One of the 5th grade teachers from Hawaii said, “I teach in a public K-12 school at Kau High School and Pahala Elementary. We recently played the online game <u>Slither.io</u>.</p> <p>This multiplayer game allowed players to build a snake. The goal was for the group to build a larger snake than the competing team. The teacher felt that this game would be a great way to build teamwork, ingenuity, and communication skills in his students.</p> |

| | |
|--------------------------------|--|
| <u>Slither.io</u> | By leveraging this technological platform, Charlie's students were able to problem-solve through team play (Schaaf, 2017). |
| <i>Race to the White House</i> | <p>In a recent study, Johnson worked with students in her English Methods class to design, build, and test a board game called <i>Race to the White House</i>.</p> <p>The students took the game to a local high school and played the game in a group of 4-5 ninth graders. After playing, they collected data in the form of written reflections from the teachers, as well as audio recordings and transcripts of the group experience.</p> <p>They learned that his exercise allowed students to produce arguments and critique the argumentation work of others in a playful context, rather than through intimidating discussions disconnected from real-world situations.</p> <p>"All the ninth-grade students were highly engaged, and the teacher particularly pointed out one student who would typically sleep through class, but who was really excited about the game. It was very rewarding for the students to see that level of excitement and motivation." (Tucker, 2021)</p> |

Resources

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Chapter II

Practical Advice for Game Design Process

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Why Teacher Needs to Clarify the Game's Goals and Expected Results and How to Do This?

Gamification or educational games are not only playing games during the lessons in order to make students have fun. It is the process of reaching educational goals by implementing game elements such as competition, collaboration, strategy, levels, story, etc. to lessons. In this process, the first step is to clarify the goals for the lesson.

“Whether planning for one classroom or many, curriculum developers must have a clear idea of what they expect students to learn. Establishing goals is an important and necessary step because there are many desirable things students could learn more than schools have time to teach them so schools should spend valuable instructional time only on high-priority learnings” (Brandt & Tyler, 1983).

As it could be inferred from the statement, clarifying the learning goals and expected results enables teachers to save time and to reach desired learning outcomes. In the same framework, it can be said that it is valid for defining a gamification or educational game goal.

Locke, et al. (1981) defines goal as the “object or aim of an action”. Goal setting is the process of establishing specific and effective targets for task performance (Moeller, et al., 2012). Therefore, the point is relation between target and performance. Latham and Locke (2007) clarified that “a specific high goal leads to even higher performance than urging people to do their best”. In other words, students’ commitment to the game increases and they show more willingness to complete the task when they have clear and specific goals because while this enables students to focus more, it also eliminates other possibilities for the purpose and relieves them of a burden.

In a game, what we strive for is the *goal*. They determine what the player must do to win the game and give the player a sense of achievement. They should be specific, measurable, attainable, realistic, and time-bound. The player takes feedback through trophies, badges, points, etc., and hence it shows whether the player reaches the goal or not (Weitze, 2012).

In the context of intercultural education, in order to concretize the set of data above, an educational game goal can be given:

Case Study- There is an 8th grade classroom which consists of students from different cultures. The teacher wants them to develop knowledge about where ~~the~~ others live and how a culture affects the architecture and structure of a house. Then students from different cultures make a presentation about the houses where they live and the general qualifications in their own countries. The teacher clarifies the goal and each student begins the game. The winner or winners get a badge showing that s/he has completed the duty successfully.

Game goal: to be able to build a comfortable house with 3 three rooms for a friend from another country/culture in the classroom in *Minecraft* within 30 minutes.

In the literature of gamification theory, there are some main theories, including defining goals as a gamification design step, and setting goals has an important role in these theories:



Figure 1. Werbach & Hunter 's Six Steps to Gamification Model (Tılıç, 2020)

According to Werbach & Hunter (2012), the first thing to do is to define goals. In order for an educational game or gamification to achieve its purpose, it is very important that it always has a goal that it is created to achieve and that these goals are well understood by students.

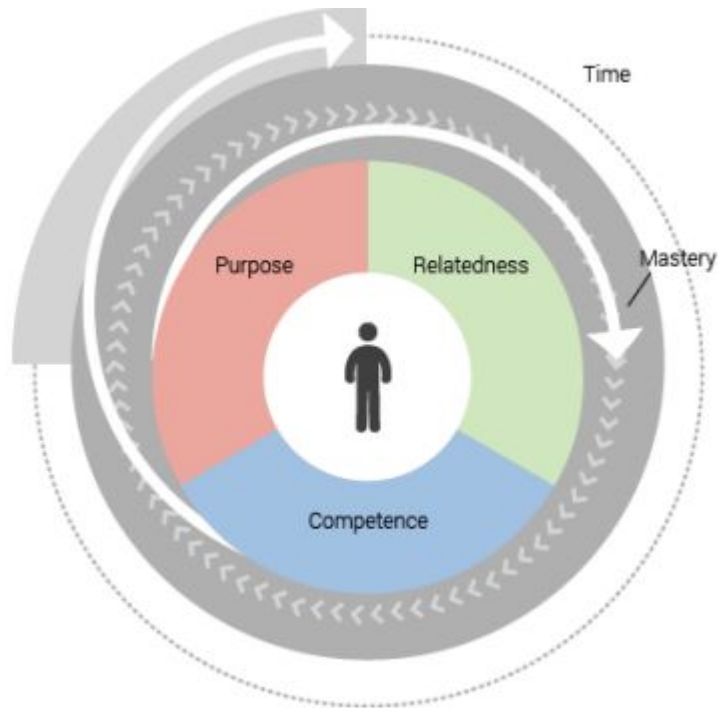


Figure 2. The Framework for Sustainable Gamification Impact (SGI) (Al Marshedi, Wanick Vieira & Ranchhod, 2015)

Sustainable Gamification Impact Framework” (Al Marshedi, Wanick Vieira, & Ranchhod, 2015) revealed that in order to create an effective and sustainable impact in gamification, first of all, player/user goals, competencies, and relationship needs should be defined. It has been stated that as players/users reach their goals over time and develop expertise in line with these goals, the interest in gamification applications will gain continuity, so that users who progress in line with meaningful goals can continue to develop within the system and eventually become experts. (Senocak & Bozkurt, 2020)

The importance of clear goals in Csikszentmihalyi’s flow theory is also emphasized. According to the theory, the player knows his/her goals and quickly understands what s/he needs to do to reach them. If s/he takes longer to understand them, anxiety arises and the transition to the “flow state” becomes difficult (Yılmaz, 2020).

What target group characteristics teachers should take into account when designing the game and why?

It is very important to determine player characteristics in gamification. Creating the game we designed with the selection of mechanics and dynamics suitable for the player characters in our target audience increases the number of players who will stay in the flow and prevents disconnections from the game.



Figure 4. Marczewski's User Type Hexad(Marczewski, 2015).

You cannot predict the player types of the students exactly from the first day. Some of them can take different roles in different games or on different days. However, it can be useful to know the types of players, especially in team gamifications, in order to predict the motivation of those who are out of the flow and add a new fiction special to them. In general, this is very important in terms of the relevance of your plot to the players in your target audience. (Yılmaz, 2020).

Enhanced tests are available to identify player types. You can access a test that you can use as an example by clicking the link below. (Language options are available in the links):

- <https://gamified.uk/UserTypeTest2016/user-type-test.php#.YR4rt44zblU>

- <https://www.16personalities.com/free-personality-test>

| User Types | | |
|---|---|---|
| Intrinsic: Motivated by "Self" | Player Motivated by "Rewards" | Disruptor Motivated by "Change" |
| <p>Philanthropist Motivated by Purpose. This group are altruistic, wanting to give back to other people and enrich the lives of others in some way.</p> <p>Achiever Motivated by Mastery. They are looking to learn new things and improve themselves. They want challenges to overcome.</p> <p>Free Spirit Motivated by Autonomy. Some are looking to be creators, others explorers. Try to cater for both if you can. All like to be free!</p> <p>Socialiser Motivated by Relatedness. They want to interact with others and create social connections.</p> | <p>Self-Seeker Will act in a similar way to Philanthropists, but only for reward or recognition. Value quantity over quality, unless quality earns rewards!</p> <p>Consumer Will do what is needed to get rewards. If that requires them to learn new skills or take on challenges, like an Achiever, then they will do it.</p> <p>Exploiter Like Free Spirits, these people are looking for the boundaries of the system, where they can go and what they can do. However, for them, it is a way to find new ways to rewards.</p> <p>Networker Where a Socialiser connects to others because they are looking for relatedness, Networkers are looking for useful contacts from whom to gain something.</p> | <p>Griever They want to affect other users negatively, just because they can. It may be to prove a point about not liking the system; it may just be for fun.</p> <p>Destroyer This type of user wants to break the system directly. This may be by hacking or by finding loopholes in the rules that allow them to ruin the experience for others.</p> <p>Influencer These users will try to change the way a system works by exerting influence over other users. This is not to say they are a negative type, far from it.</p> <p>Improver Improvers will interact with the system with the best intentions in mind. They may hack it or find loopholes, but their aim is to change the system for the better.</p> |

The user types in this table were created by Marczewski (2015)

How to determine what type of game will be the best to pass on the knowledge about the chosen topic?

When we want to evaluate the options we come across, we first need to consider their advantages and disadvantages. Like everything in life, game types have advantages and disadvantages, as well. They can vary depending on the circumstances and situations. What is an advantage for one person may be a disadvantage for another. The important thing is to weigh the pros and cons by taking into account resources, time frame, environment, characteristics of the target group, etc.

For example, choosing board games when working with small age groups can create security problems. Students may not be able to control the checkers, losing them during the game because their fine motor skills are not sufficiently developed. The readiness of our students should be taken into account in the selection of the game type.

Let's take the number of players as a variable. If the number of players is not high and collecting them in a physical environment does not require the use of extra resources, we can choose an outdoor or board game. However, if the number of players is high, turning to digital games enables us to use resources more efficiently.

Hybrid solutions offer a nice middle ground, where players can experience face-to-face gamification whilst potentially retaining all the benefits and scalability of digital gamification. In-room events can continue to have an impact after they have finished with a good digital, online campaign reinforcing everything that was achieved in the main event. (Marczewski, 2020)

The best game type option does not remain the same in all cases. While making decisions, the most appropriate choice can be made by considering many variables.

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FIGURES

Al Marshedi, A., Wanick Vieira, V., & Ranchhod, A. (2015). SGI: a framework for increasing the sustainability of gamification impact. *International Journal for Infonomics*, 8(1/2), 1044-1052

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Chapter III

Practical tools for game design

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How to find free resources for the field of interest to develop the game? (Resources for outdoor, board and digital games)




On the web, there are many useful portals where somebody can find resources on how to create and use didactic games. No matter the type of game (outdoor, board or digital), the game design principles based on the gamification theory remains the same. In general, when a teacher or student is looking for resources on how he/she is going to design a game, it is a good practise to visit portals that provide the theoretical game design background, the game design principles, and then the tools that can be used in order to implement the design and develop the idea.


Case Studies

One of the most well-known portals is <http://gamedesigntools.blogspot.com/>. Visitors can find plenty of useful information and tips about tools, techniques, and methods in game design. Another portal is <https://www.artstation.com/>. Visitors can find ready-to-use games, learning material, blogs, books, podcasts, and guides. Also, visitors can find really important resources at <http://igda.org>. The International Game Developers Association (IGDA) is the world's largest non-profit membership organisation serving all individuals who create games. They advance the careers and enhance the lives of game developers by connecting members with their peers, promoting professional development, and advocating for the interests of game developers worldwide.

| OUTDOOR | Lawn Twister |
|---|--|
|  A photograph of a woman with long brown hair, wearing a light pink long-sleeved shirt, blue denim shorts, and white sneakers. She is sitting on a lawn with colorful circular markers (red, yellow, green, blue) around her. She is leaning back on her hands, with one leg raised and bent, mimicking the Twister game. Her right arm is extended upwards. | <p>Take the game of Twister outside. Just spray paint some Twister dots on your lawn or use sidewalk chalk if you're playing on a patio. Then bring out the spinner from your indoor Twister game.</p> |

| | |
|---|--|
| <p>OUTDOOR</p> | <p>Lawn Bowling</p> |
|  | <p>Here's a fun outdoor game: Just fill 10 empty plastic soda or water bottles with water and set them up like you would bowling pins. Use a soccer ball or volleyball to try to knock them over. If you want to play this at night, just add some glow sticks to the water bottles.</p> |
| <p>OUTDOOR</p> | <p>Outdoor Scrabble</p> |
|  | <p>Scrabble is another amazing outdoor game. Grab some boxes and cut out 100 squares, all the same size. Use a Sharpie to make the letters and leave two squares blank. Then enjoy a game of Scrabble in the sunshine!</p> |
| <p>OUTDOOR, INDOOR</p> | <p>Ring Toss Game</p> |
|  | <p>You can make your own ring toss game for fun with adults and kids. Grab some wood trays and decorative bottles to make this fun game at home. This one can be played indoors or out, so be sure to make your own today as those dreary days of winter are ahead.</p> |

| | |
|---|---|
| <p>INDOOR,BOARD</p> | <p>Convert a Dry Erase Board Into a Scrabble Board</p> |
|  | <p>Life-sized board games are more fun when playing with a large group. When you're thinking of making your own board game, consider making it larger to make it more memorable. This version of Scrabble uses a large dry-erase board as its base and magnetic squares as the letters.</p> |
| <p>OUTDOOR,BOARD</p> | <p>Use a Mat for Classic Games on the Beach</p> |
|  | <p>If you want to partake in some board games at the beach, chances are a typical board game will get too sandy and pieces will get lost. Paint a roll-out mat instead and collect seashells for game pieces. That way, if one gets lost, no worries. You can go out and replace it with another.</p> |
| <p>BOARD</p> | <p>Repurpose Printables Into a Memory Game</p> |
|  | <p>These printable donuts are incredibly versatile. Not only can they be used to fashion a garland, but they also double as an inexpensive and fun memory game. To make this memory game officially a board game, fashion a board to place the donut pieces on.</p> |

| | |
|---|--|
| BOARD | Monopoly |
|  | <p>Players take the role of landowners, attempting to buy and then develop their land. Income is gained by other players visiting their properties, and money is spent when they visit properties belonging to other players. When times get tough, players may have to mortgage their properties to raise cash for fines, taxes, and other misfortunes.</p> |
| BOARD,DIGITAL | Sudoku |
|  | <p>Sudoku is one of the most popular puzzle games of all time. The goal of Sudoku is to fill a 9×9 grid with numbers so that each row, column, and 3×3 section contains all of the digits between 1 and 9. As a logic puzzle, Sudoku is also an excellent brain game. If you play Sudoku daily, you will soon start to see improvements in your concentration and overall brain power.</p> |
| DIGITAL | Mahjong Solitaire (Mahjong King) |
|  | <p>Mahjong Solitaire (Mahjong King) is a free mahjong game based on a classic Chinese game. The goal of Mahjong Solitaire (Mahjong Titan) is to clear the board by removing all the matching identical pairs from the layout. A valid pair consists of two tiles which are both free and identical or of the same type.</p> |

What free online tools teachers can use to design a game?

What are game design tools? Game design tools help teachers solve design problems without having to build playable experiences in order to test out any ideas. After an extensive search on the web, we realised that there are plenty of free game development tools that give a strong boost to teachers or students to create innovative and attractive didactic games. These tools are for game designers looking to streamline their game design process. However, like any tool, a certain amount of practice is required before experiencing the expected benefits.

No matter if a teacher is planning to design an outdoor, a board or a digital game, the design tools are basically the same. Of course, there are some specific tools dedicated for to specific purposes (i.e., software development for digital tools), but in the below section we will focus on the majority of their common.

The Game design process consists of three (3) steps:

1. Documenting the idea
2. Prototyping the idea
3. Specifying player metrics

We are going to specify specific design tools that fit into each of the three below steps. Categorized the main tasks that a design game procedure is composed of, a game designer (for example a teacher) should deal with the below list of design tools categories:

1. Project Management & Collaboration

This category includes tools for team members' collaboration. This is useful, especially in cases where more than one teacher is planning a common game. This tool manages the game resources, task management, and design progress.

Trello: Team management and project planning

Google Hangout: To discuss designs with a distributed team

IceScrum: Free and open-source agile development tool for teams

Target Process: Web-based Scrum/Kanban tool, free for up to 5 users

Evernote: is great to easily write your game idea, code idea .. everything!

Pointing Poker: A free tool for agile team development

2. Diagram/Graph drawing

These tools can be used by teachers in order to depict the game idea into a more understandable form.

Lucidchart: Online programme to draw graphs (technology trees or dialogues)

yEd Graph Editor: A free cross-platform graph editor

Dia: A free program to easily draw graphs (technology trees or dialogues)

FreeMind: Free Mind Mapping Software

3. Script Writing

Fountain: Fountain allows you to write screenplays in any text editor on any device.

Because it's just text, it's portable and future-proof.

Telby: A free, multiplatform, feature-rich screenwriting programme

4. Narration design

Audacity: Free Audio Editing & Recording Software

5. Image Editing

The below tools are very useful for all different environment games design. The teachers should use any of them in order to create the printings (if it is going for a board or even outdoor game) or the graphics if it is going for digital games.

GIMP: A free alternative to photoshop, with plenty of features!

Inkscape: To draw mock-ups of UI's in real-time using Google Hangout

Paint.Net: Intended as a free replacement to the basic Paint program in Windows

XnView: A free programme batch process images for file conversion

Krita: A free painting programme

The main goals of these tools are to support thinking, support ambiguous and evolving ideas, support unresolved conflicts and issues, and to support an anarchic process.

But beyond these specific topic tools, there are some all-in-one game design tools. A very good and easy to use is the free online CREY tool. Any inexperienced user (as any teachers could be) can sign up and use the platform to design a game either from scratch or using a specific template.

For digital game design and development, we filtered the most famous and well-known tools. Below is the list:

1. **Game Maker: Studio**
2. **GameSalad**
3. **Stencyl**
4. **Construct 2**
5. **Unity.**

Challenges and limitation of using tools in the process of creating educational games (Divided on outdoor, board and digital games)

Challenges

A good didactic game, no matter if it is outdoor, board or digital, necessarily must be underlined by an attractive and well-defined concept in order to retain learners' attention.

Some of the challenges a didactic game faces are seen below:

- Learning experience is obtained with entertainment and learning during the game.
- A well-designed gamification strategy will make participants more active. Since gamification provides scores, trainers can always observe a trainee's progress and vice versa.
- Better learning environment. The learning experience is personalized; learners can progress at their own pace in a safe environment.

- Gamification is much more than just superficial benefits given by points, discreet, level of reputation, as it can catalyse behaviour change, especially if combined with the scientific principles of cyclical learning and ensuring conservation.
- Gamification is flexible as, by using it, most learning needs can be met, including product sales, customer support, soft skills, awareness-raising, etc., resulting in a performance gain for organisations.

Limitations

There are also some limitations of using gamification in a wrong way that must be considered.

1. By making play mandatory, gamification might create rule-based experiences that feel just like school.
2. Effort, not dominance, should be rewarded, and students should learn to see failure as an opportunity, rather than being unmotivated or frightened.
3. Activities need to be designed so that students can repeat them in case of an unsuccessful attempt.
4. Feedback can be used as a correction of students' actions and should be a stimulus to their further activities. Also, the trainers should balance metrics with real engagement.
5. The design of the challenges and the definition of the content should be carefully considered to be as neutral as possible, while not looking trivial and boring.

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Chapter IV

Implementation

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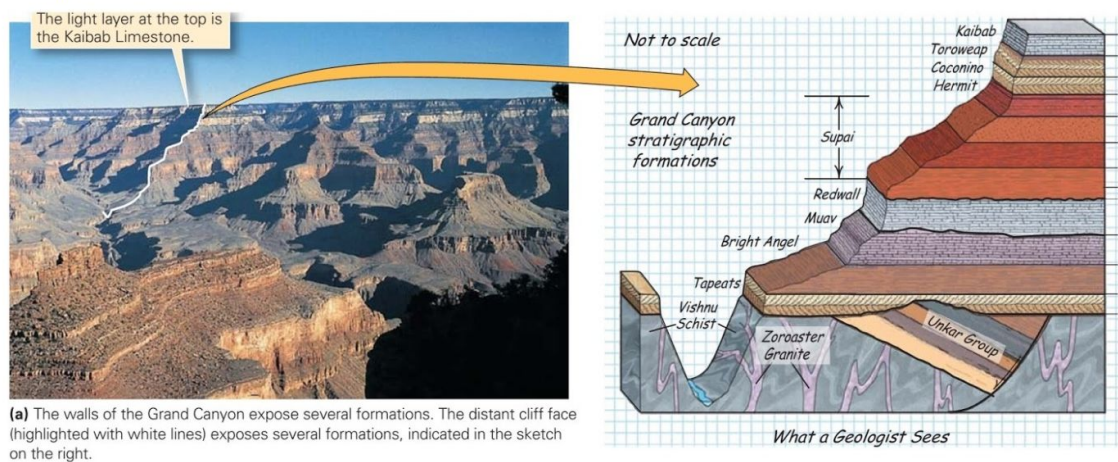
Practical tips on including the game in a teacher's lesson plan.

Using gamification creates a learning environment for the students and attracts them to enhance their interest in the topic to a deeper level. Game playing can have an extremely valuable role in teaching and learning in the classroom, as long as the game design and inclusion in the lesson is crafted with deliberate thought, versus playing a game as a reward for good student behaviour (Lafond, 2019).

We dissociate some tips for including the game in the teacher's lesson.

1. The first one is to **understand objectives** – The teacher should have a clear understanding of creating a lesson plan. He/She writes down the aims, goals, and learning outcomes from the lesson, as well as using gamified strategies to engage students in the learning process. Every student must know what they are learning and why they are learning it. All objectives should be prepared by the teacher. It is perfect to plan when the teacher knows the capacity of their students and can achieve realistic goals and objectives.
2. **Include Technology in Your Lesson** - Nowadays, technology allows for easy access to information whenever and wherever you want it, which makes having high-tech tools in the classroom essential. For example, computers save time when it comes to organising and planning lessons, as well as the efficiency of some planning apps and websites, such as "Common Curriculum, Planboard, Standards Planner, PlanbookEdu". Teachers' focus will only be on the productivity of the objectives and innovations.

3. **Visual aids** are important, such as illustrations, to make it clear to the student what the teacher is talking about. For example, when the teacher talks to some geographical peak or point, they can use online tools to make it zoom and rotate the map easily, or they can make it into a big picture and thus create more understanding, engagement, and interest for students than using non-technical geographic maps. This is not limited only to geography; it can be in other subjects such as sport, biology (which describes the skeleton), history, culture, and so on.



3. **Online software applications.** New software applications give teachers the opportunity to include their students in gamification, such as Minecraft, DIY Games, Classroom Jeopardy, or using Kahoot. That can help computational thinking, while games like Gone Home use storytelling to enhance critical thinking. Teachers can use online games for any purpose they need. For example, with Kahoot, they can create a quiz where the teacher shares the link with the participants, who can join the game with names or it can be in a group, so every correct answer will get a point, and at the end, the winner will be chosen automatically. This type of software application attracts and engages students to play the game more. Students would come back to class and tell me they played the game again to see if they could do better. I had never had that experience before, and I wanted to have it all the time. (Farber, 2019)

How to prepare the students for the educational game? Purpose of rules of conduct

For the preparation of the students, first teachers must be trained and know how to apply the games successfully to them and not to leave a gap or a space for students to make even a small mistake when implementing games, because one gap during the activity can lead students to lose attention and have a negative effect on the activity.

Start the activity with an interesting fact; show the big picture that relates to the lesson topic; ask questions to get students thinking about the topic while also testing their knowledge; pique their interest and active participation in the activity; tell a story to demonstrate the importance of the topic.

Players are attracted to those games while no one else “forces” them or encourages them to play. One explanation is that playing games is intrinsically satisfying, as players can experience a sense of enjoyment and fun (Malone & Lepper, 1987)

Motivating students intrinsically and extrinsically to come to class prepared starts with the curiosity of gamified activities in the classroom. Intrinsically, motivation begins with the individual, who increases their interest in engaging in gamified activities. In this case, it is easier for teachers to prepare students for the activity because they are readily ready to start with the activity.

Extrinsically, motivation is created by the teacher and the good climate created in the classroom, so both have an impact on motivating students. In this case, it can be a bit difficult for the teachers to raise motivation because the students are not ready for the activity. Teachers should start by designing the game; to ensure that the level of difficulty of the game is neither too easy nor too difficult, otherwise both may affect the player’s motivation.

Use Prompts/Reflections to ask students to define new terms, share their experience, what they understood, the level of difficulty, complexity of the game, and confidentiality.

How to make sure every student is engaged and feels included in the game play?

During the gameplay teacher must control if all the students are engaged physically in the activity and ask them if they need any help, or suggest to them what they could do better in the activity, so as to control psychically. Debriefing questionnaire should be prepared to get feedback from the students, thus by collecting data teachers can improve the activity for better engagement and inclusion of the students.

According to the research conducted by Ryan, Rigby, and Przyblski, they found that gaming fulfils three basic needs in those who play:

1. The need for autonomy. People have the need to be in control, to make choices, and to practise self-sufficiency.
2. The need for competency. People desire to know that the choices they make are valid and allow them to overcome challenges placed in their paths.
3. The need for relationships. Playing with others, whether on a team or in competition, increases communication skills and promotes collaboration.

Rewards – reward the student by giving gratitude, donating a famous book, or making a special pen for the best student. Rewarding creates value for the students and motivates them to continue with their success. Develop rewards for the students; those will increase curiosity and competition into the classroom, so everyone will try to be the best and fully engaged in the activity. Rewarding students can include giving them a title such as excellence award, superstar of the class, ambassador of the class, and so on.

Make Your Lessons Interactive by giving space to every student to share their opinion without prejudging if their answer is correct or incorrect. The important thing is to engage them in the activity. By giving space to them to be more interactive, engagement automatically increases for the activity.

Body language can be used for focus and feedback reflection for the students. If the teacher explains without using body language, including hands, gestures, eye contact, fingers, and so on, the pupils will not show some curiosity to be engaged in the game play.

Don't Repeat Classroom Material, mentioning that many times the same thing can be boring for the students. They feel that they already know this part and don't show any interest in engaging in the activity.

Possible obstacles in the implementation process and how to prevent them

If you know your students or audience, if you know your students and yourself, you need not fear the results (Sun Tzu). Knowing your students helps you decide what information to include when implementing activities. If you think they will understand the objectives of the activity, some information should be avoided in order students not to create a dilemma or noise in the classroom.

Creating classroom rules that all students would agree with the overall benefits of the classmates, such as learning, even though someone wants to distract the activity, the teacher or classmates can give a punishment to the noisy student, by singing in front of the class, solving hard mathematical problems that will take time to do ~~in~~ on the whiteboard, cleaning, and so on.

Combining game design with learning objectives can present obstacles while games and objectives don't match each other. Not all games match the learning objectives. For some objectives, it is necessary to create a specific game, which can be costly to develop. Anyway, some games can be adopted or can be used as different tools to meet the learning objectives.

Not all classes have good discipline or are interested in gamification, so not interested students could tease others and could stop them from the activity, so the way to prevent them can be a bit difficult. Before implementing the activities, it is wise to have private talk (which can be good advice rather than advising in front of all pupils, which can offend them in front of their friends or classmates) with undisciplined pupils, who otherwise will face disciplinary actions for those who will prevent the activities from happening or inform their parents that misbehaviours won't be tolerated.

Not all children possess computer skills when the game is played, some are reluctant to participate in online gamification, or maybe the game configuration doesn't match computer performance. In some cases, using a projector to overcome obstacles is an option planned for possible technical obstacles. Before implementing any online apps or games, teachers should be prepared for the obstacles that might occur, such as the link, WI-FI, the projector, or some apps that work only on Android smartphones, while others may be difficult or have another version. All these obstacles should be planned before implementing the activity avoid potential obstacles.

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Erasmus+

Chapter V

Evaluation

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Types of assessment in education

Measuring student learning can be done through both **formative and summative assessments**.

Formative assessment is performed *during* the learning process.

Summative assessment is performed only at the *end* of the course or unit.

It is part of the training process, which is undertaken by teachers in order to improve the student's understanding and competences by changing teaching and learning methods. Formative assessment seeks to provide direct and detailed feedback to both teachers and students in terms of student performance and learning. It is an ongoing process that respects the needs and progress of students in the learning process.

Summative assessment **refers** to an assessment which focuses on the outcome. It is a part of the classification process that is given periodically to the participants, usually at the end of the course, term, or unit. The aim is to check the students' knowledge, namely to what extent they have learned the material. Summative assessment tries to evaluate the effectiveness of the course or program, to check the learning progress, etc. The scores, grades, or percentages obtained act as an indicator that shows the quality of the curriculum and form the basis for ranking in schools.

The differences between formative and summative assessment are clear:

| Formative assessment | Summative evaluation |
|--|--|
| refers to a variety of assessment procedures that provide the information needed to adjust teaching during the learning process. | is defined as a standard for assessing student learning. |
| takes place continuously, either monthly or quarterly. | takes place only at specific intervals, which are usually at the end of the course. |

| | |
|--------------------------------------|--|
| is made to enhance student learning. | is made to assess the student's performance. |
|--------------------------------------|--|

The goal of assessment is to evaluate the progress achieved towards a learning goal. This can be monitored in a variety of ways by both the teacher and the student (Kurt, 2020).

Evaluation for effective learning

Evaluation should gauge students' progress and determine the effectiveness of the teaching methods. The feedback the teachers receive should serve as a roadmap to review the progress and make the necessary improvements/modifications in the learning process.

Evaluation is necessary to assess if a lesson based on using games is a good substitute for a traditional lesson. The method of data collection can vary depending on the purpose and nature of the lesson in question.

A part of the evaluation effort is teachers making and keeping notes/results to later analyse and compare them, ~~conclude~~ draw conclusions and make decisions about their approach in the near future. All this collected data will provide teachers with the necessary information to adapt their lessons, fixing up trouble spots step by step and building an appropriate environment for the acquisition of new knowledge.

There are many ways in which evaluation can be approached; some of them are:

- **In-Lesson Reports:** a teacher can prepare a set of indicators to correctly assess a student's performance in order to monitor students' progress.
- **Self-Reports:** teachers can create Google Forms spreadsheets for every student and ask them about their feelings, attitudes, beliefs, and so on.

Evaluation is especially needed when we're trying new teaching methods in our classroom. When introducing elements of gamification or trying out game-based learning, we must determine the quality of our teaching efforts and the quality of the materials themselves, including games or exercises that were used during the lessons.

In addition to checking whether our students are satisfied with the way the lesson was conducted, whether we are satisfied with the results achieved by the students and the amount of knowledge/skill mastery acquired by them, if we are using an educational game that was created by us, we should especially focus on evaluating it as a separate learning material.

According to Oguz Ak, game quality can be assessed by three independent factors: enjoyment (fun), usability, and learning.

Enjoyment – game is interesting, attractive, and understandable for students. The students want to play it again in the future. It has been a fun experience for them. Enjoyment is an important factor for the educational games because it stimulates the motivation and curiosity of a student. It helps them to stay focused on the subject.

Usability - game can be used for different purposes in the same classroom without turning into a boring, demotivating task for the students.

Learning - according to Freitas and Oliver (2006), a game should consider the age and level of learners, as well as specific components of how they learn, including their backgrounds, styles, and preferences. With that being said, a game that is well-adjusted well-suited to students should help them acquire a significant amount of new knowledge.

Qualitative and quantitative methods

To evaluate students' enjoyment, learning, and game usability, we can use qualitative or quantitative methods. Qualitative tools consist of qualitative data, and they're collected through observation, interviews, focus groups, and case studies and as well as from written documents. Analysis of qualitative data includes examining, comparing and contrasting, and interpreting patterns.

Qualitative data can be observed and recorded. It involves information that cannot be counted, measured, or easily expressed using numbers, so it is non-numerical in nature. Collecting and working with this kind of data can be time-consuming, because it requires reflection on the part of the analysis.

Below, we will show several examples of ~~gathering~~ ~~how to gather~~ qualitative assessment data:

- Class Observation – register the reaction of your pupils to the game, describe ~~the~~ class climate, assess the understanding of the topic. Observe how the students interact with each other, ~~who's if someone's~~ not participating or not being heard. Keep the notes from your observations and analyse them.
- Storytelling - Begin a story and ask the students to fill in the blanks with their opinion about the game, or ~~an~~ assessment of what they have learned. They can do it on paper, so you can analyse their answers later.
- Interviews - Have students interview~~ing~~ each other about gathered knowledge and record what they say.
- Debate - Conduct a debate, asking students questions to stimulate discussion and ~~an~~ exchange of opinions. ~~Individually or as a group~~, ask the students to explain, as a group, what they know about the subject or list ~~, individually or as a group~~.
- Discussion - address misconceptions or positive/negative emotions/behaviours the student is displaying. Write down what needs to be improved. Listen to what the students are telling you. Ask ~~the~~ students to tell ~~you~~ what they liked/disliked about the lesson.

Quantitative tools provide information that can be counted. They enable us to find ~~the~~ answers to quantifiable questions such as “How many?”, “What were the outcomes?”, and “How much did it cost?”.

Quantitative assessment can be done quicker than qualitative assessment. Today, we have an array of online tools that allow us to create free surveys and quizzes. Those tools provide the user with automatic results and often provide analysis of the responses.

Below, we will show several examples of ~~gathering~~ ~~how to gather~~ quantitative assessment data:

- Quiz: Create a quiz to check students' knowledge. ~~A~~ quiz can be done before and after the lesson. ~~This~~ can be helpful to assess if there's an increase ~~of in~~ students'

- Survey: learn about students' opinions about your game or a lesson.

How to create an effective survey?

Survey research can be defined as "*the collection of information from a sample of individuals through their responses to questions*" (Check & Schutt, 2012, p. 160). It is a quantitative method that poses a set of predetermined questions to an entire group, or sample, of individuals. It is an especially useful approach when a researcher aims to describe or explain features of a large group, and it's used in social sciences to obtain information that will help to understand the needs of your students. This method may also be used as a way of quickly gaining some general details about one's interests, satisfaction, etc. to help prepare for a more focused, in-depth study of the teaching method.

McCombes (2021) suggests several steps in order to conduct an effective survey:

- Specify the objective of the survey.
- Determine who will participate in the survey.
- Decide what type of survey is going to be conducted (mail, online, or in-person).
- Identify what ~~do~~ you want to learn from your respondents.
- Adjust the number of questions to the **amount number** of people it's possible to involve in the survey research in order to get **a** statistically significant result.
- Keep questions clear. Avoid questions that are likely to confuse respondents, such as those that use double negatives, use culturally specific terms, or pose more than one question in the form of a single question.
- Distribute the survey.
- Analyse the responses.
- Write up the results.
- A questionnaire is a research tool used to conduct surveys. It allows a researcher to ask the **same** set of questions to the targeted group of individuals.

Case study

- **This dissertation was** written by Raed S. Alsawaier (2018) and published under the title:

“The effect of gamification on students’ engagement and motivation in three WSU courses” used survey research to measure the motivation and engagement of the students who participated in the college courses where the gamification method was used as a teaching tool.

~~44 students and 3 professors were involved in the research for the course of six months (two semesters).~~ For a total of six months (two semesters), 44 students and three professors were involved in the research.

The students were asked to rate the degree to which different gamified activities had engaged and motivated them. The survey had a Likert scale items with a 5-point measurement. The answers ranged from “strongly agree”, “agree”, “neutral” to “disagree”, and “strongly disagree”. The survey results allowed the researchers to conclude that gamification had a motivating and engaging effect on the students, and the methods that were used to conduct the research allowed us to draw the conclusions about good practises of in survey research design:

- The survey should be conducted anonymously: the identity of the subjects needs to be protected by using pseudonyms, and the data collected needs to be used for research purposes only and was not shared with anyone.
- Participation should be voluntary. The participants should be asked to sign a consent form and/or be notified that their participation is voluntary.
- Participants should be allowed to decline to answer the question.
- Researchers should check with a sample group whether the survey’s questions are easy to comprehend and relevant. If possible, ask the sample group of participants to fill in the questionnaire to determine which questions should be eliminated or modified.

Selection of tools for evaluation and knowledge-checks

Free online tools for evaluation (in alphabetic order):

1. Edpuzzle is a free assessment-centered tool that allows teachers and students to create interactive online videos by embedding either open-ended or multiple-choice questions.
2. Edulastic is an educational assessment platform trusted by teachers, school leaders, and education coaches across all 50 states. The easy-to-use platform provides educators **with** a time-saving and customizable solution for assigning digital quizzes, tests, assessments, or worksheets to students.
3. Explain Everything is a presentation and whiteboard app available on the web as well as **for** Android, iOS/iPadOS, and Chrome. To start, tap on New Project and choose a blank project screen, select a starter template (including those for learning), or import media (e.g. an image, presentation, or PDF).
4. Flipgrid is a website and app that allows teachers to facilitate video discussions. Students are organised into groups and then given access to discussion topics.
5. Gimkit is a **free online** quiz learning game for students and teachers, created and maintained by students. After signing up, you begin by creating "kits" (live learning games) to create quizzes. Create from scratch, import an existing quiz from Quizlet or a CSV file, or copy quizzes from the Gimkit gallery to modify for your use.
6. Google Classroom Question Tool. As a Classroom teacher, you can post short-answer or multiple-choice questions. After you post a question, you can track the number of students who responded. You can also **draft-draught** questions to post later and post a question to individual students.
7. Go Formative is a web-based tool that allows teachers to create digital formative assessments, tasks, or assignments that are easily accessible from any electronic device:laptop, tablet, or smartphone.
8. Google Forms is free online software that allows you to create surveys, quizzes. It's part of Google's web-based apps suite, including Google Docs, Google Sheets, Google Slides, and more.
9. InsertLearning saves teachers and students time while keeping students engaged. Teachers can insert questions, discussions, and insights directly into any website. When students go to that website, they can respond to those questions and discussions, see that insight, and take their own notes.

12. Mentimeter enables you to: engage with students using live polls, word clouds, quizzes, multiple-choice questions and more; track learning and understanding by asking questions and downloading results; communicate and interact with your students.
13. Mote lets you easily add voice comments and audio content to shared documents, assignments, emails, and forms. Mote is integrated into Google Docs, Slides, Sheets, Forms, Classroom, and Gmail for easy recording and playback.
14. Nearpod helps educators make any lesson interactive, whether in the classroom or virtual. The concept is simple. A teacher can create interactive presentations that can contain Quizzes, Polls, Videos, Collaborative Boards, and more.
15. Padlet is a digital tool that can help teachers and students in class and beyond by offering a single place for a notice board. That's it at its most basic. This digital notice board is able to feature images, links, videos, and documents, all collated on a "wall" that can be made public or private.
16. Parlay is a comprehensive discussion platform that allows students to interact with each other and with their teacher, both virtually and in person. To begin, teachers select a RoundTable topic from the Parlay Universe to assign to students.
17. Pear Deck is an interactive presentation tool used to actively engage students in individual and social learning. Teachers create presentations using their Google Drive account.
18. Plickers is an audience response system that allows an instructor to use their mobile device to scan a classroom to read students' paper-based voting cards.
19. Poll Everywhere is an online service that allows teachers to ask their students a question. The students answer the question using their mobile phones, Twitter, or web browsers. Both the question and the students' responses are displayed live in Keynote, PowerPoint, and/or on the web.
20. Quizizz is a gamified student engagement platform that offers multiple features to make a classroom fun, interactive, and engaging. As a teacher, you can conduct formative assessments, assign homework, and have other interactions with your students (for all grades) in a captivating way.

21. Quizlet is a free website providing learning tools for students, including flashcards, study, and game modes. You start by creating your own study sets with terms and definitions. You can copy and paste from another source, or use Quizlet's built-in auto-define feature to speed up the ~~creating~~ creation process.

22. Quizalize is a classroom quiz-game website similar to Kahoot!, Quizlet, and Quizizz. Create quizzes with multiple-or two-choice question sets or single-word responses presented as word scrambles. Students then access the quiz from the web using a class code and see the full quiz on their screen.

23. Seesaw is a simple way for teachers and students to record and share what's happening in the classroom. Seesaw gives students a place to document their learning, be creative, and learn how to use technology. Each student gets their own journal and will add things to it, like photos, videos, drawings, or notes.

24. Socrative is a cloud-based student response system developed in 2010 by Boston-based graduate school students. It allows teachers to create simple quizzes that students can take quickly on laptops – or, more often, via classroom tablet computers or their own smartphones.

25. Spiral.ac is a suite of collaborative learning apps designed for classroom use. Each app emulates a specific classroom activity.

(Bell, K. (2021), 27 Formative Assessment Tools for Your Classroom,

<https://shakeuplearning.com/blog/20-formative-assessment-tools-for-your-classroom/>)

Other practical solutions to check students' knowledge were already listed when we presented 25 ways to assess the students' pre-existing knowledge and skills.

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