NEW EDUCATIONAL METHODOLOGIES:

NON-FORMAL EDUCATION AND GAMIFICATION

Good practices in the field of youth

Erasmus+

Summary

This guide is the result of the collaboration between the organizations of the partner countries Spain, Poland, Italy and Turkey: Alianza Internacional para el Desarrollo de la Jóvenes (AIDEJOVEN), Polski Zwiazek Gluchych (PZG), Let's Keep Learning Association (LKL), ARCI Nuova Associazione Comitato Provinciale Chieti (ARCI) and Ankara Aile ve Sosyal Politikalar İl Müdürlüğü.

The objective is to understand the benefits of non-formal education, as well as gamification, serving as a guide for youth organizations, educational centers, local corporations and, in general, for youth workers to get started in the process of using these tools, the usual terms and how to implement them.

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NEW EDUCATIONAL METHODOLOGIES:
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Methodological Guide of "GAMIFICATION ICT to Play and Play to Learn"

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1. INTRODUCTION

This guide is the result of the collaboration between the organizations of the partner countries Spain, Poland, Italy and Turkey: AIDEJOVEN (International Alliance for Youth Development) Polski Zwiazek Gluchych (PZG), Let's Keep Learning Association (LKL), ARCI Nuova Associazione Comitato Provinciale Chieti (ARCI) and Ankara Aile ve Sosyal Politikalar İl Müdürlüğü.

The collaboration of all the partners has been fundamental for the preparation of the guide.

It has been made in English and it will be translated into Spanish, Italian, Polish and Turkish.

The objective is to understand the benefits of non-formal education, as well as gamification, serving as a guide for youth organizations, educational centers, local corporations and, in general, for youth workers who want to get started in the process of using these tools, the usual terms and how to implement them.

In this guide you can find resources, applications and benefits of non-formal education and specifically of gamification, addressed to youth organizations, educational centers, local corporations and, in general, youth workers.

It incorporates links to applications created by young people, as well as information on best practices developed by professionals and organizations.

Today's society is demanding new learning methodologies. Dopamine was discovered just half a century ago by Swedish chemists Arvid Carlsson and Nils-Åke Hillarp, and recent studies reveal that not only is responsible for the pleasurable sensations neurotransmitter, but also involved in coordinating muscle movements, decision-making and regulating learning and memory. In what concerns us, we can conclude that without this neurotransmitter not feel nor curiosity or motivation. It is proven that playing dopamine is produced, so suffice to use the mechanisms of the game for our youth to produce dopamine and get better attention, motivation and effort, ultimately higher learning.

The rapid growth of ICT in recent years in the general population and young people in particular. The latter are those best suited to the use of Internet and screens, and

an academic interest worldwide on the relationship between young people and new technologies are currently finds. In the case of adolescence it can be considered that the content of ICT becomes an element of interaction and socialization, especially with their peers, because they share hobbies for certain activities (music, fashion, cinema, sports among others). It also allows them to exchange information such as: Web pages of interest, tricks to pass stages in video games and so on.

It is clear that ICT has a role in our society. Education must adjust and to respond to the changing needs of society. Training in formal contexts cannot be separated from the use of ICT, which are becoming more affordable and easier for teens and worldwide use.

Also in the EU, more than six million young people leave school with a level corresponding to a maximum of the first cycle of secondary education. These young people are facing severe difficulties in finding work, and are more likely to be unemployed and dependent on social benefits.

Early school leaving hampers economic and social development and constitutes a serious obstacle to the objective of the European Union to achieve smart, sustainable and inclusive growth. The current EU average of early school leavers is 14.4%.

Gamification involves applying game techniques in environments that are not games. It is the use of dynamic and mechanical gaming environments and not playful in order to enhance motivation applications, concentration, effort, loyalty and other positive values common to all games.

Furthermore, the gamification is a powerful tool in non-formal education, related to young people and that can be applied in a large range of fields. The real objective of gamification is not only to get entertainment, but to educate into skills or knowledge and transversal competences through the use of ICT.

2. BASIC FUNDAMENTALS

2.1. NON FORMAL EDUCATION

2.1.1. Definition and types of education

The **Formal education** is the one which takes place within training and education institutions and that ends up with acquisition of a diploma or recognized qualification.

It corresponds to a systematic, organized education model, structured and administered according to a given set of laws and norms, responding to a rigid curriculum that define objectives, content and methodology. Compulsory schooling is part of that and it is taken so much for granted that we struggle to imagine a different organization of this environment.

In Europe, the protagonists of formal education are easily recognizable as they coincide with juridically in charge institutions for education and training. It necessarily involves the teacher, the students and the institution

With **Non-formal education** we refer to all those educational activities which are out of the main formal education system (workplace, organizations, civil society groups, associations, churches, etc.)

Their targets are easily identified with specific learning outcomes: job education and updates for instance; usually there is no acquisition of degrees or officially recognized qualifications, but only a certificate of attendance or validation of competences acquired.

Even though non-formal education systems are recognized by European Union, they do not have the same recognition as the formal education system.

Informal education is a process unbound from long and specific times, through which each person could acquire

attitudes, values, abilities and knowledge, even unconsciously, from experiences, influences and educational resources of his/her environment: family, friends, job, play, library, arts, media, hobbies and leisure activities.

It does not correspond to an organized and systematic view of education; informal education does not necessarily define the objectives and subjects. It is aimed at students as much as at the public at large and imposes no obligations whatever their nature.

Actors of this context belong to a variety of fields, really hard to define and identify; sometimes we have them in front of our eyes, but we are not able to see them from a knowledge/learning perspective.

We can imagine our world as populated of a variety of entities which deal with formal, non-formal and informal education, with which we come in contact daily.

Identification of these environments is more and more important in human beings' strategy of life as it allows (or it prevents) the access to information organization whence personal and collective biographies' success depends.

Creative know the ability to observe and reflect on issues, events and processes put in a different field of daily activities, is an incredible source of inspiration.

2.1.2. Benefits

European drives about education and training highlight the increasing role of lifelong learning.

It is highlighted that learning should involve formal, non-formal and informal education to promote those transversal competences as self-fulfillment, active citizenship, social inclusion and employability.

These are the main benefits of Formal Education:

- A calendar is defined and previously established.
- Themes are planned.
- Evaluations are scheduled.
- The outcomes learning are clearly defined.
- Recognition and accreditation at national and international level.

The competencies needed to allow people to become active and responsible citizens can be acquired through all the kinds of learning and education.

Especially youth people join a lot of activities which are out of the main formal education systems, e.g. youth workers, associations, sport, volunteering, civil society activities, international exchanges or mobility.

Some of the principal transversal competences that learners can acquire through non-formal education are:

- Intercultural skills and global awareness.
- Flexibility and adaptability.
- Strategical and innovative thinking.
- Organization and time management.
- Decision making.
- Teamwork.
- Empathy.
- Ability to build relationship.
- Problem solving.
- Health care and daily life skills.
- ICT competence: information and communication technology.
- Learning orientation.
- Negotiation skills.
- Use of non verbal education.
- Leadership.
- Learning to learn.
- Collecting and processing information

European Commission and Council of Europe set principles for non-formal and informal learning in youth sector:

- Voluntary and self-managed;
- Motivation of participants;
- Strict bound with youth aspiration and interests;
- Participative approach;
- Open structure;
- Transparency and flexibility of programmes;

- Evaluation of successes and defeats in a collective process;

- Right to be wrong;

- Preparation of activities with a professional attitude even though the activity is carried out by professionals or youth workers;

- Sharing results with the public and detailed follow-up.

2.1.3. EU policies

➢ Council of Europe encourages member states to promote equal opportunities through validation of training and competencies acquired by youngsters in non-formal contexts identifying ways to validate this kind of experiences.

➢ Everyone who acts in the elaboration process of policies linked to education should take in consideration that non-formal education is an essential part in the learning process that should be recognized.

➢ After a Recommendation about promotion and validation of non-formal learning/education, Member States are called up to work on development of standards for the validation of non-formal learning/education.

The White Book for Youth of European Commission highlights «youth associations, youth workers and local authorities in several countries are committed to in-depth work with youth. This work, inserted in the package of measures for lifelong learning, could take advantage from:

Higher clearness in concepts definition, competencies acquired and quality standards; Higher consideration for the people involved in these activities; Improved validation of this kind of activities; Improvement in complementarity with formal education.

2.2. GAMIFICATION

2.2.1. Definition

By "gamification", we are talking about applying game design elements to non-playful contexts. This means that conceptualizing a game is not gamification (but game

design itself). We can only speak about gamification when we are *outside* a game experience, but using game elements to enhance it.

This difference is a really important one, considering that we are talking about non-formal education, because games themselves have been historically used for learning. There are even best-selling titles, like Carmen Sandiego, that allowed players to learn while playing (Geography, in this case). The question here is: was Carmen Sandiego a project to encourage Geography studies? No, it was a videogame. So we could not say this was a gamification example, even though it can be really inspiring for a gamification project.

There are other examples where the barriers are even less clear. For example, if we use a flight simulator to teach people how to pilot a helicopter, is it gamification? Most experts have agreed that in this case, even though we have an immersive experience (which is one of the characteristics of a game), the aim of it is not fun (which is another characteristic of games – one of the most important, in fact). So, in this case we would be talking about *serious games*: those who are designed with an objective different from entertainment.

Serious games have also a huge potential helping youth workers. For instance, Innovations for Youth Capacity and Engagement (IYCE)[1]'s Facebook city building game "Our City"[2], for Jordan youth, seeks to engage and empower youth by understanding how they can participate in building a vibrant city. It combines city-building games mechanics with real-world experiences with local youth-focused NGOs, to develop a community-oriented perspective that young people can apply afterwards in their digital and real-world communities.

The biggest limitation of serious games is that they usually require an important investment in development and designing. Gamification is a much simpler and less expensive approach, as we use only certain elements and use them outside the game experience. We learn from game design, but we don't try to design a whole game.

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[1] Innovations for Youth Capacity and Engagement is an initiative project funded by the United States Agency for International Development (USAID) in partnership with NetHope and E-Line Media. IYCE meets young people where they are, capturing their interest with gaming and other new media that they consider relevant, interesting and "cool."

[2] Learn more: https://www.youtube.com/watch?v=nokqlgKkeMU

2.2.2. Benefits: what is it useful for? What are its benefits?

Playing is an essential part of human nature especially when it comes to socializing and learning, so we have probably done it before, unconsciously. When we invent a song so that we don't forget a lesson at school, or when we tell children they will have a reward if they are able to behave during the whole week, we are gamifying. When we play house or 'Doctor doctor' and we learn how to take care of our families, homes and health, we are using games to practice roles that might be useful for our lives in the future.

Games generate an immersive experience in which our attention is focused in what is happening inside the "magic circle" of the playful context, we create vivid emotions and memories around what we live while playing, and even make our prejudices stop so that we can try new ways of thinking or doing.

Therefore, games are very useful in learning contexts. In a world where our attention span has dramatically decreased due to information overload, learning something by a playlike experience makes participants more involved in the process. In formal education, where teachers report an increasing number of problems in the classroom associated with lack of motivation, this can revert the situation. But it is even more important in non-formal education contexts, as the individual responsibility of the learners is a key element for success. Gamification works with human essential motivation processes to set up gratifications that make us more likely to start, continue and finish our learning program. And it also guarantees, by including elements related to emotion, a better assimilation of the contents, as we remember better what we have experienced intensely.

2.2.3. Example

Aside of the elemental examples already mentioned, there have been very successful examples of gamification of education recently. Some of the better known involve learning languages. As there are plenty of different approaches, we believe the comparison between them can show the wide range of possibilities gamification has in learning contexts.

We can compare three popular initiatives for learning languages: **Duolingo**[3], **Busuu**[4] and **Babbel**[5]. They are all multilingual and focus in vocabulary practice. They use popular pastimes, such as word-search puzzles, but apart from that they use progress tracking, points systems, interaction with others, power-ups, rankings – and even "cheats" that you can obtain after a good performance.

One of Duolingo's competitive advantages (apart from being free) is that users contribute to translating popular media articles, such as in Buzzfeed. This gives them a sense of purpose, something we will talk about a little further.

Busuu first created a personalized virtual environment in which the progress of the user allowed them to decorate their own "language garden", buying objects for it with the berries earned with their achievements. This aesthetic decision was coldly received, as it was perceived as childish, but it's an interesting effort to differentiate themselves. We will talk about the importance of narrative and aesthetics afterwards. They now have transformed it into a much more typical reward system, including badges – one of the most used elements of gamification.

Babbel, on the other hand, has focused in the quality of the learning contents, more than trying to distinguish through gamified practices. Even though it uses some game design elements, their value proposition is the team of linguists behind the project. And this is important because sometimes, when we start adding fun we forget why we are doing so – and the quality of learning materials and teaching attention is as important as in a non-gamified context.

3. IMPLEMENTATION OF GAMIFICATION

- First step: setting goals

If we are emphasizing that the difference between gamification and game design has to do with the context, it's because in both serious games and gamified projects we always have some goals besides having fun. We don't mind adding fun to the process, but the importance of the project itself is a learning outcome (considering we

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[3]   Duolingo. Recuperado de https://www.duolingo.com/info
[4]   Busuu.com. Recuperado de http://www.busuu.com/es/about
[5]   Babbel. Recuperado de http://about.babbel.com/es/idea/

are speaking about gamification in non-formal and formal education). We expect the participants to improve their knowledge through the project.

But put like this, we are not talking about objectives, but about a wish. To make sure our project is solid, and make evaluation of the outcome possible, we work this wish through until it takes the form of a SMART goal.

Credit: Created by Waewkidja - Freepik.com

What do we exactly want our participants to learn? This is easier in formal education, as it's usually already specified at the syllabus, but that doesn't mean we can set specific goals in non-formal education. For instance, if we are working on teaching abilities for getting a job, we can set the ratio between interviews get and curricula sent.

This links directly to the second point: measuring results can only be done if the objectives are expressed in a quantitative way. This doesn't mean we can't measure more qualitative dimensions; for instance, if we want to know to which extent participating in the program has made our users feel more empowered in the job market, we can use a scale and ask them to fill a questionnaire before and after the project.

Stablishing this quantitative scale is very difficult for beginners, as we usually can't distinguish "how much progress" is adequate to expect. Related to this are the two

next points in SMART: the quantity must be attainable and realistic. Of course, we set goals to push us towards a result, but if this result is impossible to achieve, it will only lead to frustration, as we will see later when we talk about the flow experience.

A useful tip to set these goals for the first times is trying to find indicators we already can measure (for the current situation) and set a percent of improvement. If 15% of our students failed our subject last year, we can try to decrease this amount to a 10% this year after implementing a gamified experience in our classroom.

Last, but not least, goals must be time-bound. This is, again, easier in formal education contexts, when we will usually work with school years or terms for a time reference. In non-formal education, as even the participation is usually self-paced, we will probably work with longer periods of time before seeing results. Anyway, as evaluation is key to be sure our gamified design is working, is recommended to work with small pre-tests (with only some of the participants, and a short period of time) that will give us the first outcomes to correct any flaws that our project could have.

- <u>Second Step: getting to know our target users</u>

As said, gamification works with motivation, and any youth worker will probably know already that what motivates one person is completely different from another. Considering the main differences, and thinking from a game design point of view, several classifications of users have been theoretically stated.

Between all these systems, we have chosen for this project to work with Andrzej Marczeswki's Gamification User Types Hexad[6], as it is very useful for the next step: choosing the elements we will work with in our gamification design.

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6   Results of a validation study for this model can be found here: https://medium.com/gameful-design/the-gamification-user-types-hexad-scale-a6d8727d201e

Hexad User Types and Game Design Elements
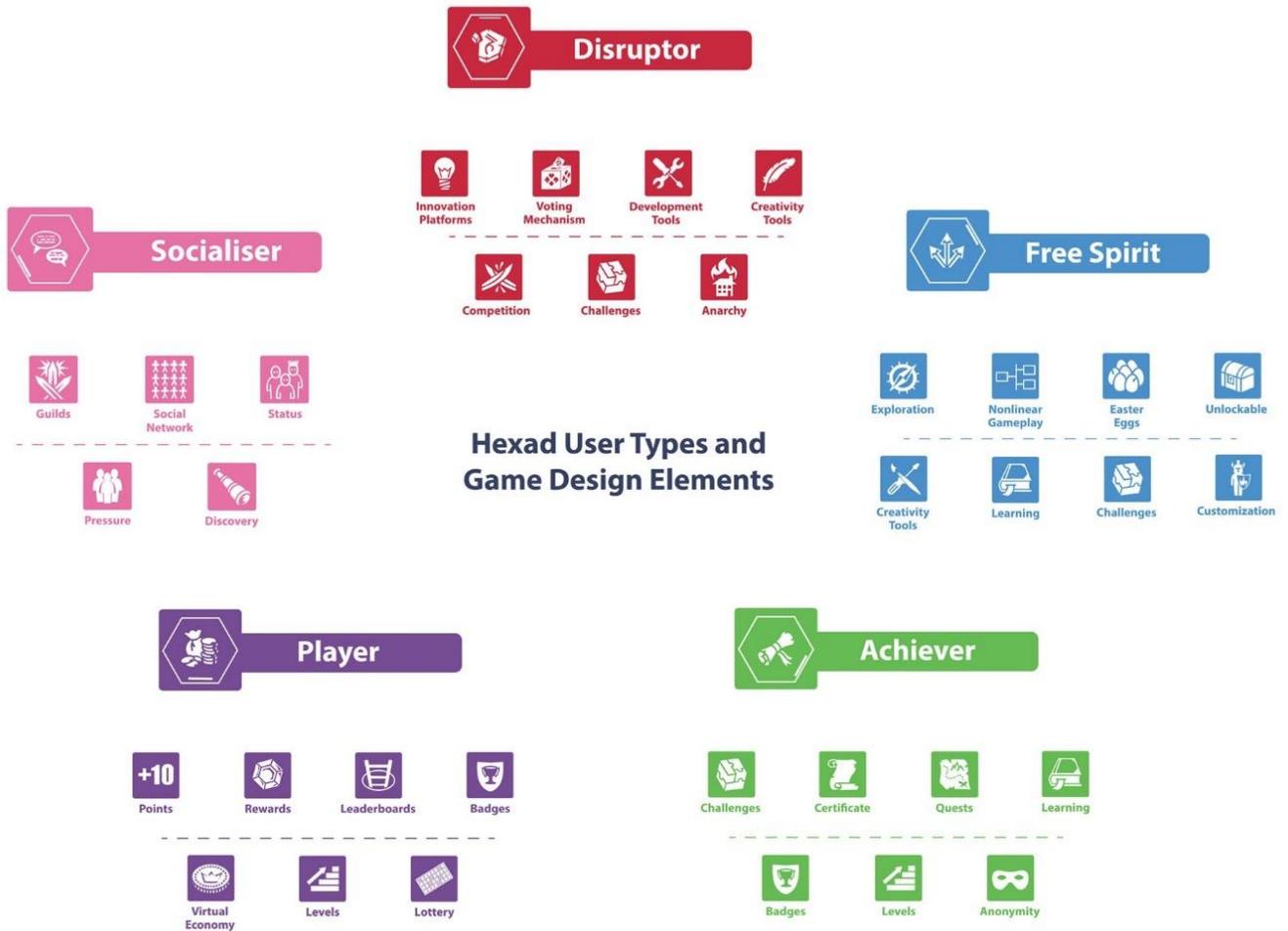
This model recognizes six basic kinds of players. Four of them were already stablished in the classic study about MUDs players "Hearts, clubs, diamonds, spades: players who suit MUDs", by Richard Bartle[7]. In this first approach, players were classified according to two dimensions: their interest in acting vs. interacting and their interest in other players vs. their interest in the virtual world they were playing at.

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[7]   http://mud.co.uk/richard/hcds.htm

PLAYER PERSONALITY TYPES IN VIRTUAL WORLDS

www.megamification.com   BASED ON RICHARD BARTLE'S WORK
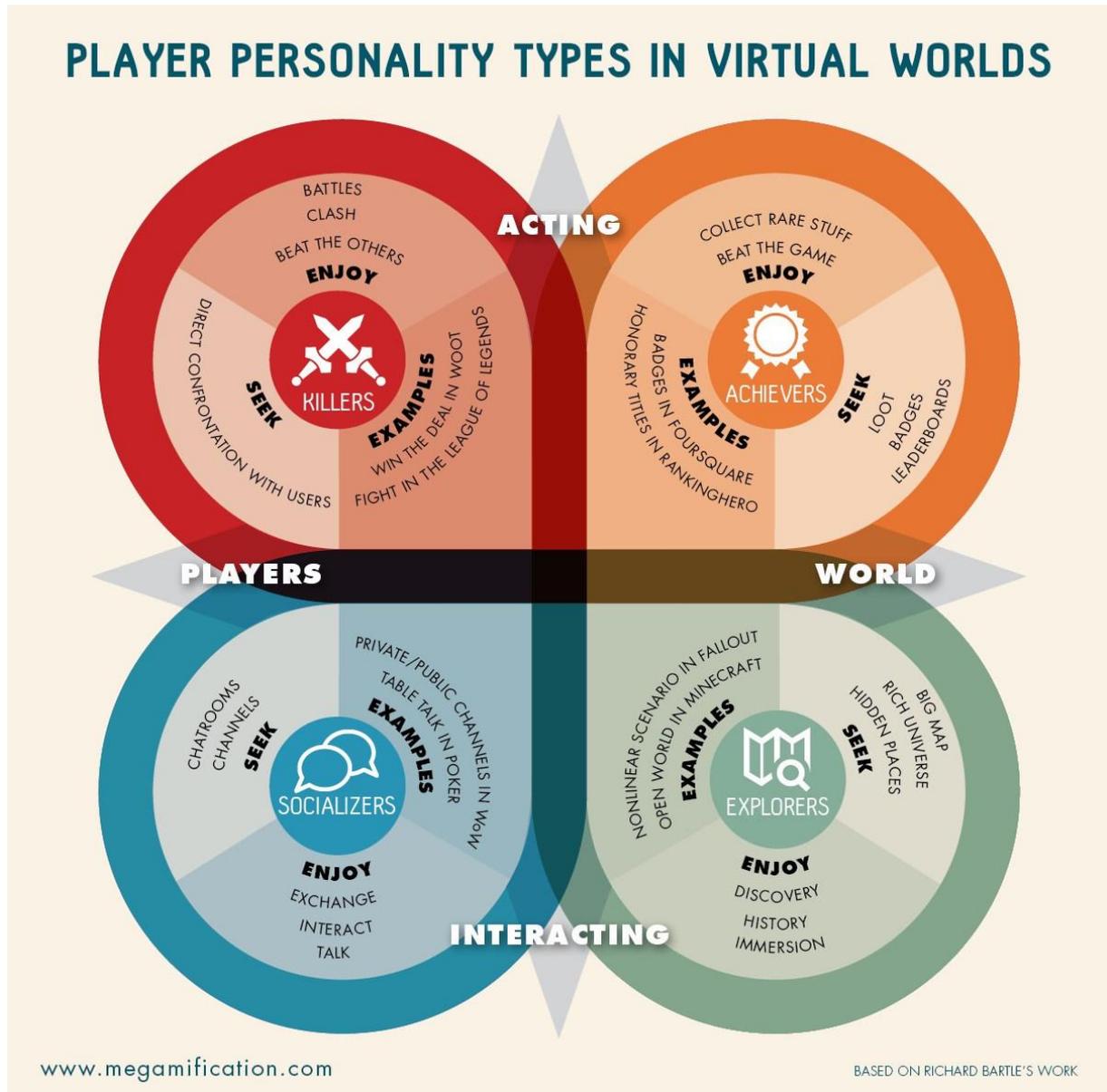
Marczeswki recognize these categories, with some differences, and adds two: the player, who is motivated by any reward, no matter the kind, and the disruptor, which is not at all motivated by the game. Those are very important to identify in any project: the first, because no matter which kind of design we have chosen, they will be willing to take part and can push the rest of the participants – the latter, because if we are not prepare for their cheats, complaints and even sabotage attempts, they can destroy the positive attitude of the rest of the group on their own.

How do we know which kind of players we will be addressing our design to? To be sure, we can use the test Marczeswki has in his web, and encourage our users to share their results with us[8].

But if they are not willing to do so, or if we can't contact them in advance, which is a common obstacle, we can do two things: first, work with stereotypes. For instance, in a program to teach self-regulation emotional abilities to problematic students, we will probably have an important number of disruptors. In a program which target is learning teamwork skills, we will probably have users that are more interest in their individual outcome (achievers and killers). In a regular environment, such as a formal education classroom, is safer to assume that the player kinds will be more or less balanced, and try to include mechanics that will suit all kind of players, even though this means a more complex design.

▪ Third Step: working with game-design elements

Game designers use a wide range of elements in their work. Professor Werbach, whose course on Gamification has been used as learning material through this project, classifies them in three categories: dynamics, mechanics and components[9]:

▪ **1. Dynamics**: the foundations of the gamified experience.

o Constraints: if you don't have rules, you can't have a game. Rules mean limitations: there are some things allowed, and some that aren't. Gamification is based on positive psychology, so penalizing behaviours it's not common. Instead, there are rewards for doing the right action, so penalization is simply putting the reward apart.

o Emotions: playing is never a rational experience. In fact, what makes games fun is usually the fact that we escape from our minds, from our realities. We can practice

8   https://gamified.uk/UserTypeTest2016/user-type-test.php#.Wd51RWh-qM8
9   Werbach, K. and Hunter, D. (2015): *The gamification toolkit: dynamics, mechanics and components for the win.* Philadelphia: Wharton Digital Press.

different roles, we can ignore physics if we want to. We must try to put emotion first as we design our project.

o   Narrative: a good game involves a story. Even puzzle games, which are casual and simple, are more engaging if they have an internal logic that puts them along a story – the success of Gardenscapes, a match-3 game for mobile devices, is a proof of this[10]. Match-3 or hidden objects games are all very similar – the difference in engagement from one title to another has a lot to do with narratives.

o   Progression: what keeps us playing a game after the first moments? The will of getting further. To make sure this feeling is evocated in your participants, any gamified system should have a progression. This means the difficulty of the tasks, or the effort taken to win a reward, grows **at the same pace** than the participant's skills. I remark the importance of balancing difficulty and mastery because this is the only way to guarantee the "flow state", which Csikszentmihaly defines as "the optimal experience" that one feels and that has a lot to do with attention and performance: we feel this one not only while playing, but also when facing an important challenge at work or school, when practicing a creative hobby…

In these situations, we feel challenged: we need to keep focused to do our best, but have the feeling that we will see results. If we don't feel challenged (with a very easy task associated with our job position, for instance), we will get bored. But if we are challenged beyond our skills, we will feel anxious and frustrated, because despite our efforts, we will not be able to perform as expected.

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[10]   See more: http://www.gamezebo.com/2009/10/23/behind-game-gardenscapes/
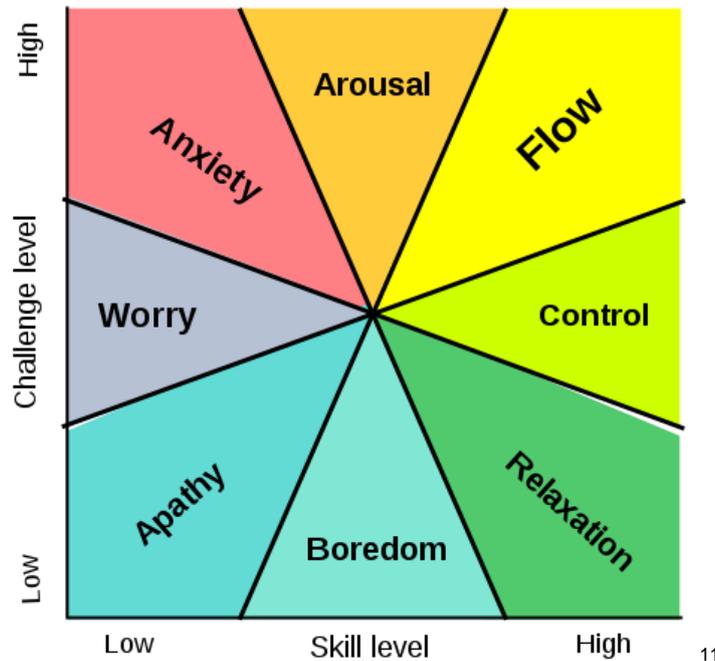
Any person designing gamified project must keep this flow channel in mind to balance challenges and skills if we want to generate an optimal experience.

o   Relationships: even if the gamified experience is focused only on individual skills, it's very useful to include some kind of interaction between the participants. Socializers will enjoy the relationship itself, killers can be motivated by a competitive relationship (such as a ranking), and in any case, bonding with other participants will help also with the emotional side of the project.

▪   **2. Mechanics**: Werbach compares this hierarchy to a linguistic one, in which dynamics will be the grammar (the invisible rules underlying the system) and mechanics will be the verbs. This means mechanics are the way we include actions in our system. He considers ten basic mechanics we can use, separately or combined:

o   Challenges: as we have exposed when talking about flow, they are the goal towards which the users will have to get by making an effort, so they have to be adapted to their skills: more basic at the beginning (which is called the **onboarding**

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11   Beatson, O. (2015). Csikszentmihalyi's flow model [SVG]. Wikipedia. Retrieved from https://en.wikipedia.org/wiki/Mihaly_Csikszentmihalyi

phase) and more difficult and intriguing once the users are committed to the system, so that the engagement remains.

o <u>Chance</u>: they can stimulate users' curiosity, but as we are trying to use gamification to encourage them to do certain actions, it is important to use chance as little as possible, linking rewards to their effort or progress. We can use chance, for instance, to choose which reward a user gets after earning it.

o <u>Competition</u>: is a sum-zero situation. We can work with this mechanic individually or in groups: for instance, if we are designing a gamified solution for the situation presented before, a teamwork course, a way to use the participants' killer-type ambition but conducing to <u>cooperation</u> (another mechanic that guarantees that players working together achieve a shared goal) will be competing in heterogeneous groups.

o <u>Feedback</u>: providing information as to how a user is doing. In learning environments, this is usually conducted through evaluation, but it might be important to include a separate feedback system if we are talking about non-formal education (when a lot of actions are not officially evaluated) or if we want to avoid demotivation from students that traditionally get lower marks (or, on the other side, of those who are so sure of their skills that don't think they need an "extra point").

o <u>Resource acquisition</u>: like, for instance, when we get different collectibles after each activity and try to complete a collection. This is one of the mechanics we can combine chance with: giving out a random collectible object is a nice reward and keeps users engaged until they complete the whole lot.

o <u>Rewards</u>: the benefits a user gets after completing an action, overcoming a challenge… It can be external (an extra point in their final grade) or internal (if we use points and use them to rank users).

o <u>Transactions</u> or trades between users. For instance, Busuu encourages users to share their berries with their friends. It can be a way of building relationships and generating cooperation mechanics.

o   <u>Turns</u> are alternated participations of each player. It can be very useful to encourage participation of those who are less willing to play.

o   <u>Win states</u>, or the objectives that make one of the users a winner. It is rare that we want only one user to win – again, gamification is built upon positive psychology, and tries to generate a sense of wellbeing that can be destructed by sum-zero dynamics. Anyway, it is very important that is linked to the main goals of the system, specially to avoid disruptors to cheat in order to get to the top.

▪   **3. Components:** once we are done with the verbs, it's time to get to the nouns (in Werbach's linguistic metaphor). Components are the basic elements we are combining and using to create dynamics and mechanics. They are sometimes even used on their own – leading to what has been called "the badgification of learning", for instance, and hardly criticized, or the PBL triad, the most common application of gamification, that is limited to including points, badges and leaderboards to a system which, apart from this, has not been analysed in gamification terms. We must be really careful to avoid this kind of oversimplification, because it usually has very limited results. That's why Werbach emphasizes that the correct implementation of gamification follows six steps: **D**efine objectives - **D**elineate target behaviours - **D**escribe players - **D**evise activity cycles – **D**on't' forget the FUN – And only after these first steps, **D**eploy the appropriate Mechanics and Components.

o   <u>Achievements</u>: when we define goals and target behaviours, we must think about how to motivate users to do them. One simple way is setting achievements they will unlock as they complete each key action.

o   <u>Avatars</u>: they are usually more interesting for children than adults, but letting users define their visual representation in the system can give us clues about their motivations. Do they depict themselves as warriors? We can expect them to be killers or achievers.

o   <u>Badges</u>: they visually represent the achievements a certain user has already completed. They can be seen as collectibles, also, as the motivation to complete a

collection can motivate a user to obtain a certain achievement that they found less interesting at first.

o   <u>Boss Fights</u>: they are really hard challenges. Usually represent the end of a level and the beginning of a higher level of exigence, and might require several intents to be obtained.

o   <u>Collections</u>: as we have been saying, they can be applied to virtual items, random rewards, badges…

o   <u>Combat</u>: a battle, usually between two players or teams, but can be also against a "virtual enemy" designed by the system; for instance, monsters that depict undesired attitudes like procrastination[12].

o   <u>Content Unlocking</u>: even though feedback is an important part of the process, and progression has to be felt by the users, keeping next levels or extra content locked until the users make certain action can be motivating, as it appeals directly to people's curiosity.

o   <u>Gifting</u>: a component that appeals mainly socializers, is a way of trading that doesn't have to be reciprocated.

o   <u>Leaderboards</u>: they represent visually and comparatively the progression of players. It can lead to undesired competitive attitudes, but is also a very motivational element.

o   <u>Levels</u>: directly related to progression, when we define different stages in the player's journey, it helps categorizing actions (from simpler to more difficult) and expectations about the higher level of challenges they will face.

o   <u>Points</u>: numerical representations of the progression, they are obtained through all actions. They have a key importance in balancing the system: knowing how many

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[12]   A gamified system that has worked very well this personification of undesired behaviours is Habitica. A listo f the bosses their users combat can be found here: http://habitica.wikia.com/wiki/Boss

points should a key action have associated is something we can probably only do with security once we have already tested our system.

o <u>Quests</u>: when we have a certain challenge, with its own objectives and rewards, we talk about quests. They are sort of mini-actions inside the global system. They allow us to test different narratives, for instance, to know better which kind of story, aesthetic, etc. are preferred by our users.

o <u>Social Graphs</u>: they are especially important for socializers, but they can also be used to encourage trading or alliances among participants. Leaderboards could be understood as a particular kind of social graph.

o <u>Teams</u>: the groups of users that work together for a common goal. It is highly recommended that we try to make heterogeneous groups to balance the system and make different kind of players motivate those who might be less appealed by a certain dynamic or mechanic. We can also rotate the participants in each team to test which of them work better, and to make the relationships more varied among the users.

o <u>Virtual Goods</u>: they are game assets, but they are perceived as valuable. In F2P games, for instance, they are a way to make players make a small purchase: a special item, a power up, can make them less reluctant to pay. In gamified systems, we can, for instance, make collectibles exchangeable for a real-world reward after completing a whole set.

▪ <u>Fourth Step: balancing the system</u>

When we first design a gamified project, is common that we work through intuition. As we test the system with real users we can find that their resistance to do the key actions we have defined as goals and achievements is higher than expected; or, on the other hand, that they are finding too easy to progress in the game, threatening the flow state. If this happens – and most certainly, it will-, is time for some adjustments.

Rewards must be balanced not only to the importance we give to a certain achievement, but also to what really motivates our users and to the reluctance they must overcome to act.

Maybe we think that debating the news is an interesting way of assimilating the contents of our learning program, but once we propose the activity, our class is not responding – then we can give a random reward for participants in the debate. Or maybe we expect participants in a voluntary course to be motivated to finish their projects, but we find that they are late submitting their assignments, or simply not willing to do so – then we can organize a competition between projects and assign a prize for the most voted one.

A gamified system must be a living one, as the participants will make it work differently from our original idea. What has worked well in a previous term can be a total failure with a different group of students with different motivations and profiles, thus forcing us to redesign our idea. This is totally normal and must not discourage us.

Which is really important is to be sure that we have the tools to evaluate the effectiveness of the program in an early state of the implementation – hence the need of having SMART goals we can periodically measure to find conclusions.

4. NON-FORMAL EDUCATION

4.1. NON-FORMAL EDUCATION TECHNIQUES

Here it is presented a list of non-formal education techniques to give an idea of how it works and its thousand sides. Please consider this list is non-exhaustive.

4.4.1. Trust games

Trust is the most important ingredient for a good team spirit. The dynamics of trust are very important to promote the cohesion and participation of all the members of the group. To begin using these dynamics it is almost essential that the members of the group know each other and there is a certain connection between them. We can use this type of dynamics both in educational contexts, as in business and all types of

groups. It is important that we adjust the activity to the level and the needs of the people who will participate. There for, you can intervent some exercises which will improve the trust feeling between participants.

4.4.2. Collage

Used in art therapy. The team has to make collage out of magazines and newspapers about some certain subject. The work style depends on the group. Some groups will have a discussion about the subject before they decided what the collage will illustrate. Some groups will start with looking for interesting images and then linking them together.

4.4.3. World map

The participants are asked to stand on the map in the place where they are coming from so the group get an idea about the distance between their environments. After they have shared their experience in their country, the participants are asked to travel to a country to they would like to visit. When the 'traveling' is done the group will share their motivation behind their land of choice.

4.4.4. Storytelling

The narration has an important value on human behavior; the narration sets in motion a research process that tends to the improvement of the narrated thing, defined deuteronomy-learning: learning to learn, the ability to insert one's initial context into other contexts that guide the choices, i.e. the creation of processes that create a way starting from other worlds. In other words, no one will ever tell the same story in the same way.

It must also be emphasized for the value of social exchange as the narrative has cognitive and emotional values.

The narration and the art of narrating it is not only a pleasant pastime, but it is one of the fundamental psychological mechanisms for the individual and for social and

cultural groups. The grammars of the narrative describe the structure of these texts that are characterized by a strong emotional impact and by the transmission of values and cultural ideals, especially through the traditional fairy tale.

Before going into the big issue of storytelling for children, it is useful and interesting to briefly dwell on the concept and meaning of storytelling itself.

The origins of the narration immediately lead us into the dimension of the oral story, in the stories rich in symbolic meanings that the "old sage" told the entire village to share ideas, thoughts, fears, hope. From this point of view we can consider the story as exchange, communication, catharsis, ritual, collective memory.

The narrative schemes are varied:

- the Monomyth or Journey of the Hero, centered on the figure of the hero who abandons his home to
- embark on a journey to unknown places;
- the Nested Loops, in which different narrative structures intersect;
- Sparklines, the discourse develops on two opposing levels that continually intertwine and represent the one "as things are" and the other "as things should be";
- the In Media Res, in which the narrative begins at the center of the action, to then explain the beginning of the story and prepare its conclusion;
- the Converging Ideas, a discursive structure in which different strands of thought converge to form a single idea;
- False Start, the narration begins with an apparently predictable plot that stops abruptly to give rise to a new beginning;
- the Petal Structure, a discursive scheme for organizing multiple stories that move around the same central concept

4.4.5. Digital storytelling

Digital storytelling enriches the stories with digital format and videos, which encourage inclusion through the story and the sharing of experiences and different backgrounds.

4 types of Digital Storytelling:

- Timeline: it is a form of narration of events, concerning a problem and/or a person, chronologically ordered and with a crescendo rhythm

- Storymapping: we use geographic maps or images to insert them in a series of links to web resources related to a specific issue in order to obtain a navigable route

- Transmedia storytelling: it is about creating a story organizing in an environment, images, videos, music, verses, related to a given event or theme or character, in order to obtain a multimedia story

- Video-visual storytelling: the story is created through the ability to manipulate video or images by inserting text, links, annotations, questions, pre-recorded voice, etc; the result is interactive videos that can contain multimedia elements within them.

There are various web tools suitable for digital storytelling, namely Appweb, Web Services or Browser Based

such as Xtimeline, Google Tourbuilder, JS StoryMap, Storify, Capzles, Thinglink, Pinterest, Meograph, Metta, ShortHand, Zentrick, Popcorn Maker, Storygami, etc.

4.4.6 Teatro do Oprimido

The social theater or theater of the oppressed in Brazilian Theater do Oprimido (TdO) is a theatrical method that includes different techniques created by the Brazilian director Augusto Boal united by the objective of offering tools for personal and social change for all those who do find in situations of oppression also by staging past experiences and sharing them with the group of actors who are sometimes the same spectators who become actors in order to give their inputs.

The aim of the contribution is to make the audience aware of the various forms of oppression and

marginalization, to invite critical thinking and dialogue by analyzing a problem without necessarily giving answers or actions but also to resolve individual conflicts and support change through the cathartic function of acting.

All the techniques of the TdO represent a form of popular education based on the community, which uses theater as a tool for social change at the individual, local and global levels. Techniques that are used in over 100 countries in various areas of social and political activism, conflict resolution, community building, therapy,

rehabilitation, awareness raising and even to create legislation. Designed for non-actors, it uses the universal language of theater as a means of investigating life in order to make people and communities identify their dreams and reinventing their future.

The TdO invites critical thinking and dialogue. It is about analyzing rather than giving answers, acting and interacting and not just talking. Boal developed specific theatrical techniques with the actors in ways that the spectators could spread the message of social criticism. Boal developed a variety of techniques, based on the interaction between "spectator" and actors.

According to Boal's intentions, theatrical techniques should be used to encourage people to active citizenship and to participate actively in political and social life. If it is true that social and political changes affect everyone's lives, including the weakest people, they also can make changes in all areas of society. In this sense the theater aims to represent the daily oppressions with the intent of finding strategies to face them and possibly transform them.

One of the reasons for the popularity of the TdO is the idea of activating the spectator (called precisely the spectator/actor), placing him at the center of the theatrical work, in order to include different representations of reality and explore possible transformations in a creative and socialized form.

4.2. COMPETENCES IN NON-FORMAL EDUCATION

4.2.1. Competence: skills, knowledge, attitudes and values

The simplest definition of the word competence describes it as *the ability to do something well*[13]. According to Council of Europe in Youth Work when talking about competences it refers to three linked issues: knowledge, skills as well as attitudes and values. Each of them can be achieved by individual in different way.

- Knowledge refers to the head, and basically is: knowing how to do the work. This is "cognitive" aspect of competence.

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[13] Cambridge Dictionary, https://dictionary.cambridge.org/dictionary/english/competence

- Skills are associated with hands, represent "practical" dimension of competence describe as ability to do the work.

- Attitudes and values are connected with heart. In order to do the work efficiently the individual needs to affirm certain attitudes and values.[14]

The European Commission recognise that there are eight "key competences":

1. Communicating in a mother tongue: ability to express and interpret concepts, thoughts, feelings, facts and opinions both orally and in writing.

Competence in a mother tongue requires a individual to have knowledge of vocabulary, functional grammar and the functions of language among other knowledge. Regarding skills, individuals should be able communicate both orally and in writing.. A positive attitude towards communication in the mother tongue involves a disposition to critical and constructive dialogue, an appreciation of aesthetic qualities and a willingness to strive for them, and an interest in interaction with others.

2. Communicating in a foreign language: as above, but includes mediation skills (i.e. summarising, paraphrasing, interpreting or translating) and intercultural understanding.
Competence in foreign languages requires knowledge of vocabulary and functional grammar and an awareness of the main types of verbal interaction, Knowledge of societal conventions.... Essential skills for communication in foreign languages consist of the ability to understand spoken messages, to initiate, sustain and conclude conversations. Individuals should also be able to use aids appropriately, and learn languages also informally as part of lifelong learning. A positive attitude involves the appreciation of cultural diversity, and an interest and curiosity in languages and intercultural communication.

3. Mathematical, scientific and technological competence: sound mastery of numeracy, an understanding of the natural world and an ability to apply knowledge

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[14] Youth work competence, https://www.coe.int/en/web/youth-portfolio/youth-work-competence

and technology to perceived human needs (such as medicine, transport or communication).

Necessary knowledge in mathematics includes knowledge of numbers, measures and structures. An individual should have the skills to apply basic mathematical principles and processes in everyday contexts at home and work. A positive attitude in mathematics is based on the respect of truth and willingness to look for reasons and to assess their validity

4. Digital competence: confident and critical usage of information and communications technology for work, leisure and communication.

Digital competence requires knowledge in computer applications such as word processing, spreadsheets, databases, information storage and management, and an understanding of the opportunities and potential risks of the Internet and communication via electronic media (email, network tools). Skills needed include the ability to search, collect and process information and use it in a critical and systematic way. It requires a critical and reflective attitude towards available information and a responsible use of the interactive media.

5. Learning to learn: ability to effectively manage one's own learning, either individually or in groups.

Learning to learn requires an individual to know and understand his/her preferred learning strategies, the strengths and weaknesses of his/ her skills and qualifications, and to be able to search for the education and training opportunities and guidance and/or support available. It requires basic skills such as literacy, numeracy and ICT skills that are necessary for further learning. Building on these skills, an individual should be able to access, gain, process and assimilate new knowledge and skills. A positive attitude includes the motivation and confidence to pursue and succeed at learning throughout one's life.

6. Social and civic competences: ability to participate effectively and constructively in one's social and working life and engage in active and democratic participation, especially in increasingly diverse societies.

It requires the knowledge to understand the codes of conduct and manners generally accepted in different societies and environments (e.g. at work). It is equally important

to be aware of basic concepts relating to individuals, groups, work organizations, etc. The core skills of this competence include the ability to communicate constructively in different environments, to show tolerance, express and understand different viewpoints, to negotiate with the ability to create confidence, and to feel empathy. The competence is based on an attitude of collaboration, assertiveness and integrity.

7. Sense of initiative and entrepreneurship: ability to turn ideas into action through creativity, innovation and risk taking as well as ability to plan and manage projects.

Necessary knowledge includes the ability to identify available opportunities for personal, professional and/or business activities. Skills relate to proactive project management (involving, for example the ability to plan, organise, manage, lead and delegate, analyse, communicate, debrief, evaluate and record), effective representation and negotiation, and the ability to work both as an individual and collaboratively in teams. The main attitudes needed are initiative, pro-activity, independence, innovation in personal and social life, as much as at work, motivation and determination.

8. Cultural awareness and expression: ability to appreciate the creative importance of ideas, experiences and emotions in a range of media such as music, literature and visual and performing arts.

It covers a basic knowledge of major cultural works, including popular contemporary culture. Skills relate to both appreciation and expression: the appreciation and enjoyment of works of art and performances as well as self-expression through a variety of media using one's innate capacities. Skills include also the ability to relate one's own creative and expressive points of view to the opinions of others and to identify and realise social and economic opportunities in cultural activity. A positive attitude also covers creativity, and the willingness to cultivate aesthetic capacity through artistic self-expression and participation in cultural life.

The key competences are all considered equally important, because each of them can contribute to a successful life in a modern society. Since many of the competences are essential to fulfill others, all of the competences overlap and interact. Competence in the fundamental basic skills of language, literacy, numeracy

and in information and communication technologies (ICT) is an essential foundation for learning, and learning to learn supports all learning activities.

4.2.2. Achieving competences: formal, non- formal, informal learning

The most recognisable adjective connected with the word "learning" seems to be "formal". Formal learning is linked to the obligatory education and since it is mandatory, it is a big part of every person life. In formal education the learning is structured, organised, planned, obligatory, validated by external bodies. Competences achieved during formal learning are recognised in formal document like diploma. Formal education is mostly focused on getting knowledge.

There are two more ways of learning: informal learning and non- formal learning. The simplest definition of informal learning is: everything that person absorbs from his/her background without knowing or controlling the learning process.

Non- formal learning as formal learning is planned and organised but those are the only similarities between them. Non- formal education involves mostly experience and active participation of learner in the process of learning. Apart from that non-formal education is: individualized, learner – centered, based on voluntary participation and on practice (learning by doing) , controlled and planned by learner and also, self – assessed and self-reflected by learner.

Each of the learning methods mentioned above formal, non- formal, informal allow the learner to get competences. But they are focused on different learning styles, tools and also require different level of involvement and motivation of the learner in designing own learning process.

4.2.3. Learning process

Learning process is connected with the tools and learning styles in order to get knowledge and experience needed to be better accommodated in society. There are different approaches when speaking about learning process. Most of them recognize types of learning by asking HOW DO I LEARN BEST? Edgar Dale created the cone of learning which shows the efficiency in different leaning methods:

Cone of Learning (Edgar Dale)

After 2 weeks we tend to remember...

Nature of Involvement

After 2 weeks we tend to remember...	Cone	Nature of Involvement	
10% of what we READ	READING	Verbal Receiving	PASSIVE
20% of what we HEAR	HEARING WORDS		
30% of what we SEE	LOOKING AT PICTURES		
50% of what we HEAR and SEE	WATCHING A MOVIE / LOOKING AT AN EXHIBIT / WATCHING A DEMONSTRATION / SEEING IT DONE ON LOCATION	Visual Receiving	
70% of what we SAY	PARTICIPATING IN A DISCUSSION / GIVING A TALK	Receiving / Participating	ACTIVE
90% of what we both SAY and DO	DOING A DRAMATIC PRESENTATION / SIMULATING THE REAL EXPERIENCE / DOING THE REAL THING	Doing	

Edgar Dale, *Audio-Visual Methods in Technology*, Holt, Rinehart and Winston.

When looking at the Cone of Learning the conclusion is very direct: own experience and actions, the core of non- formal education, are much more effective than passive receiving by hearing or reading used in formal education.

Another approach to learning process is to look at it from the perspective of learner involvement and his/ her influence on designing own learning. Formal education is institutional, organized and formalized with clear mechanism of validation and certification. The learner doesn't have too much choice what and how she/ he learns. Validation system is also based on external system. Someone else decides and checks what is learner progress on each learning stage.

Non- formal education is based on different values. The learner is in the center. He/ she is the protagonist of own learning and decides what skills, knowledge and competences wants to get as well as the way to achieve it. Non- formal learning requires responsibility. The learner must be aware of his/ her own learning expectations. This approach requires from the learner strong motivation and self-honesty. The learner takes responsibility of own learning process from setting up the goals, process of learning (choosing the tools and methods of learning), self-reflection on own learning and self- evaluation on own learning progress.

Now, after reading the paragraph above, non-formal education doesn't seem easy to crack. Assessing and reflecting on our own learning has been never taught. There are always people around to help or make decision for individual: ex. teachers, parents etc. But it's really worth to start doing it. Self- reflection is a key to know

yourself, to discover what you like, what you want , how you learn about the world, what is the best way to develop your skills, what are your expectations, how your comfort zone look like, what are your fears and what makes you happy. Self-reflection is also a tool helping to realize when you learn something, in other words, when you got the competences in something.

When asking: how do I know that I learnt something?

The answer is simple. It is the moment of finally knowing how to do something and understanding it better and feeling more secure about doing it, also understanding yourself better regarding why you act in a certain way as well as finding a role that suits you knowing what to learn next.

4.2.4. Validation and recognition in non- formal learning

The idea of learning is based on personal development nevertheless to prove of learning outcome is also important to show the evidence of our skills and competences to the others (ex. employer, enrolment to the club, school etc.).

There are few recognition documents of non- formal learning in youth field. As there is no external validation bodies to examine the learning progress of individual different than the learner himself/ herself.

The most recognizable and known document from the European Comision is called: Youthpass.

Youthpass is being used as recognition of skills and abilities in non-formal education learning process. It was introduced in 2007 and is much more than a certificate of participation. It describes the new skills and knowledge that a participant has gained in a Youth in Action/ Erasmus Plus project. The Youthpass is the strategy for recognizing and validating non-formal learning within Youth in Action/ Erasmus Plus projects. It supports the educational processes that take place in youth work activities and highlights the educational potential of such projects. It is a material outcome of learner process of reflecting on his/ her learning and writing it down. To make it more simple there are 8 main categories of competences in Youthpass which can be included in this certificate: communication in the mother tongue, communication in foreign languages, mathematical competence and basic competences in science and

technology, digital competence, learning to learn, social and civic competences, sense of initiative and entrepreneurship and cultural awareness and expression.[15]

Council of Europe created another document that is designed to help youth workers in recognition of their competences in the youth field called: Council of Europe Youth Work Portfolio.

By using this on-line tool youth workers and other professionals working in the youth field can reflect and analyse the level of their competences in the youth field as well as gather the evidence of their work and design action plan how to improve it. There are presented 8 main categories of competences: address the needs and aspirations of young people, provide learning opportunities for young people, Support and empower young people in making sense of the society they live in and in engaging with it, Support young people in actively and constructively addressing intercultural relations, Actively practise evaluation to improve the quality of the youth work conducted, Support collective learning in teams, Contribute to the development of their organization and to making policies/programmes work better for young people, Develop, conduct and evaluate projects.[16]

4.2.5. Examples of tools

➢ *Reflection on own learning*

Please, think for few minutes what is your preferable learning style, when do learn fast and with pleasure? By watching, listening, doing, observing, writing, drawing? Anything else?

➢ *Designing own learning process*

Imagine you plan the trip to the exotic island.

Close your eyes and think for 2 minutes about the island.

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[15] More information about Youthpass on www.youthpass.eu

[16] More information on: https://www.coe.int/en/web/youth-portfolio

Now try to answer the following questions (you can write it down):

• Why did you decide to take part in this trip?

• What are you planning to learn during your staying there?

• What exactly is this trip about? What are you going to do? What is your daily life going to be?

• How is the preparation going? Have you got all the information about the place you are going to? How do you feel about it? Are you worried? Excited? Satisfied?

• What do you expect to be the most difficult part of your journey?

Now, when we compare components of non-formal education with task above you will see that the exotic island matches it. And this is just designed own process of non- formal learning for the particular situation. Congratulations!

➢ *Daily self - reflection*

To start with self- reflection it's good to think the learning in the end of each day. It's simple and requires finishing only few sentences:

• Now I understand….

• I feel more confident about….

• The new question that appeared was…

• I need to research more about…[17]

4.3. EXAMPLES

4.3.1. Theatre of oppressed

The first step for the construction of the TF is the selection of the topic and the discussion of the same in the working group.

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[17] Those and more tools to be found in: "Unlocking Doors to Recognition. Handbook for setting up strategies for the better recognition of youth work and non-formal education in different contexts.", https://www.youthpass.eu/pl/publications/handbooks/

In informal/non formal training with youth groups problems easily arise in relation to individual behavior compared to a peer, family or institutional environment that they can be dealt with in the group or in the community with the Theatre of oppressed.

The argument must have the following characteristics:

- be clear to the group developing the drama.
- be part of the direct experience of one or more people in the group.
- have a clear link with the reference context and in which it will be represented.
- present problematic and potentially conflicting elements.

The method of the theatre of oppressed is based on flexibility and on the openness to the multiple solutions of a conflict situation, focusing more attention on relationships, in terms of actions/omissions and reactions rather than the outcome of the process. The educational content is strictly linked to the process and to personal activation rather than to content and outcome.

Youth workers that deal with the theatre of oppressed need to be trained with basic skills in development of the issues to be dealt with and in the formation of the group with which to carry out the exercise.

The games can combine different learning objectives in addition to the prevailing one. This initial training aims to acquire a significative level of cooperation and solidarity among the participants, verbal and nonverbal communication skills.

- **An example of warming exercise is the following**

"Yes, but"

Type of activity: Improvisation exercise

Learning objectives - skills / abilities: creativity development and improvisation skills; verbal and non-verbal communication.

Unwinding: an accusation of something else that must be justified and answered by starting with "yes, but

...". IT IS FORBIDDEN TO SAY NO. Improvisation exercise, creativity in looking for arguments to keep the character in front of the accusations of others.

- **Theatre of oppressed exercise**

Starting from a theme chosen on the basis of the context, which will be developed by the group, the work of reflection-action begins through the creation of living sculptures (image), of the most significant, visible moments, of a conflict.

We continue with the realization of the actual scenes. From still images, or slow motion, and mute you switch to a complete action with the addition of the verbal part. The scenes are repeated several times to change things that do not make them understandable or that do not clearly show the situation.

The situation of conflict must be very evident, with the protagonist put in question or in difficulty from the Antagonist and the other characters with clear roles of supporters; these can also represent intermediate positions with respect to the object of the conflict.

The work on the scene is then continued through the simulation of interventions by the public. When the scene is considered fairly consolidated, the conflict represented clear, with a clear explanation of the oppressed protagonist, you can proceed with the tests asking the other members of the group (also to the trainers) to intervene freely to propose solutions to the conflict.

Those who intervene can choose:

1. whether to replace a character from the scene or introduce a new character (such as a friend of the protagonist not foreseen by the initial scene)
2. in which moment of the scene to intervene, making it start from the chosen point or add one new situation at the scene, both in a previous and following time (for example: if the scene is plays at home, suggesting to represent a meeting in the office the next day).

4.3.2. Storytelling

- **Storytelling exercise**

Storytelling is an excellent technique to conquer audiences and deeply capture the attention. In an effective communication, this requires an excellent capacity for organizing thought and speech, modulating the accents and focusing on the objectives.

For this exercise of effective communication, let us use pen and paper and write down our story from the beginning to the end (be it fancy or a company case history). We re-read what we have written and we limit the boring, cumbersome or useless points in order to transmit the message we have set ourselves. We transform the necessary incisions into integral parts of the discourse and continue to reread and correct until the story is effective.

Through this first exercise we will become aware of the mental processes that we activate when organizing a speech. Repeating it over and over again, we will train our ability to produce a linear and focused discourse on the goal of communication.

4.3.3. Trust games

- **Binary trust game**

Players are placed in pairs: one player is the Investor, and the other is the Responder. The Investor chooses how much of her money to invest with the Responder. The investment amount is multiplied (i.e., the investment is successful), and the Responder chooses how much of this multiplied amount to return to the Investor.
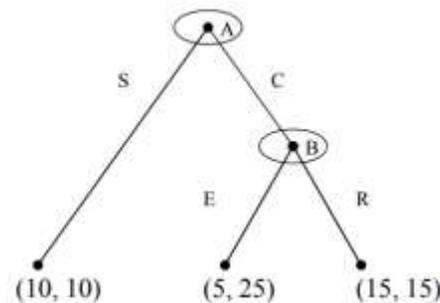
• Player A (Investor) can choose "S" in which both players receive $10, or he/she can choose "C" in which Player B (Responder) is given the opportunity to determine final payoffs.

• If given the opportunity, Player B can then choose "E" in which Player A receives $5 and Player B receives $25, or he can choose "R" in which both players receive $15.

• Player A's decision is often viewed as her level of trust, and Player B's decision as his level of trustworthiness.

- **"The Guide/Guardian"**

Objectives: The main objetive is the integration of all participants in a group and the creation of a positive enviroment. The group has to learn that they can trust in their peers.

Material: It can be done inside or outside. We need bandages or masks to cover the eyes and other kind of material to bring back suchpieces of paper that prove that the goal or place was reached. There can be other material such as tables that can obstaculise some parts of the path.

Procedure: In a group, we have to separate the members in pairs establising who is "The Guide" and the "The blind". Then, we cover the eyes of "the blind" and the other has to take a place without saying anything: they can shake hands or the "guide" just can put a hand on the "blind's" shoulder, as you wish, so just pressing the arm. It is preferably outside the classroom to her or to the address, you can ask them to bring something to check that they came to the place, for example, a piece of paper or a material from a lounge area. It can last as long as the teacher wants or until you reach a certain place where you can ask that the guide is now the blind.

The guide must not take off the bandage until he comes back with the material or paper, or until he reaches his seat, the guide must try to be quiet and prevent his blind from falling in any moment

Evaluation: Comments in the group of sensations, incidents, if the objective was achieved, how they would feel when they are blind and what to do if they encounter one.

4.3.4. Group dynamics for working conflict

- **Approaching postures**

Objective: To develop flexibility on the criteria, learning to approach positions.

Time: Between 30 and 45 minutes.

Resources: A classroom and two cardboards.

Procedure: On a class wall, you write on a paper the word "YES" with big letters and on the wall in front of it, you write the word "NO" in the same way.

The group stands in the middle of the class and you tell them a phrase, for example "If I take a pencil case from a classmate without permission it is normal that he/she gets upset?", or "If a classmate makes fun of me I feel bad"… look for phrases that reflect a recent conflict lived in the classroom.

If you agree with the phrase you move toward the wall "YES" if you disagree you move to the wall "NO". Nobody can stay in the middle, even though they don't completely agree or disagree with the phrase, everybody has to choose.

Ask the members of each group about the reasons for their election. You have to do it without debating and listening carefully the arguments of everyone. List them on the blackboard. Ask the members of the group "NO" to step forward toward the middle of the class for each reason they agree with the other group. Continue in the same way with the members of the group "YES". Each group try to show the other, new reasons and each time a member is convinced, they step forward toward the middle. The dynamic is over when there are no more reasons.

Evaluation: You can assess as evaluation criteria aspects such as: grade of flexibility of students, capacity of dialogue and listening, conciliation of positions, etc.

- **Building a common framework**

Objective: Overcome the own point of view and learn to build a common base with other people.

Time: From 20 to 30 minutes.

Resources: Classroom with chairs and blackboard.

Procedure: Divide the group into two subgroups "A" and "B", placed one in front of the other. The subject to be negotiated could be varied, for example an afterschool activity in a weekend outing. When conflict appears, one of the parties affected can require the intervention of a mediator (it is recommended that the mediator students work in couples). If the other party accepts, you call a meeting where each of them give their point of view about the problem. Mediators try not to look for a guilty

person, neither they try to solve the problem, they intend to approach positions of the parties in order to reach an agreement or a satisfactory solution for both of them. If finally, the conflict gets solved favorably, the parties can sign a written agreement or do it verbally.

You write both proposals on the blackboard and ask each group to indicate what each activity offers, with questions like: What is the propose for you to go to…?; What do you get doing this activity?; What do we get if we accept your proposal?

You list and summarize each answer obtained and based on the conclusion you make this question again, "Why it is important for you this aspect?", so you accomplish both groups to agree on a common base, they will easily come to the conclusion that what both wants is to have fun; then they have to determine how.

It is important to differentiate between a common frame and an agreement; for the first one is necessary to reach the second one, demonstrating to the parties that they have an important base in common, which calm them down and generate a favorable atmosphere to negotiate.

It is a useful dynamic to address disagreements as base of conflicts, the way to overcome them and the advantages of approaching attitudes and consensus with the others.

Evaluation: It can be useful as evaluation criteria, the capacity of the students to obtain a consensus, the grade of listening, the attitude to get a common frame, etc.

4.3.4. Group dynamics for working interculturality

- **More equal than different**

Goal: Analyze how stereotypes or prejudice may change our way to understand and interact with things and people.

Time: Between 40 and 55 minutes.

Resources: Roll of paper, scissors, cardboard and glue.

Procedure: You provide cardboards and paper to every group. They draw on the paper a silhouette of a team member and on this drawing they have to open windows. Below each window, placed in different body parts, like the heart, the brain, the eyes, etc., they will write feelings and attitudes that they would have if they immigrate to other country. For example, in the heart window, when open it you may find the word "hope".

Share the reasons that they would have to immigrate and the consequences of immigration.

Examples of questions that you can make are: What would you take with you if you were to emigrate? What are the causes of immigration? What happens to you when you are starting over in another country? How would you feel? What would you miss?

- **Do we see or look at the images?**

Goal: It is an activity that attempts to make us more aware and sensitive when we are making value judgments about differences. It favors to get closer in opinions about multiculturalism.

Time: Between 40 and 50 minutes.

Resources: You need as many pictures as participants. You will have pictures with full images and pictures that only show a section of it.

Procedure: You divide the activity in three parts.

- Part 1: You give each participant an uncomplete picture and you will put it face down on the table, so they can't see the image. When everybody has a picture, turn it up and ask them to write a caption in the bottom of the picture. Then each participant shows the picture and read the caption of it. We attach an example of a "complete" and "uncomplete" picture.
- Part 2: After sharing the captions of "uncomplete" images, we repeat the procedure with the "complete" images. Make sure you give each participant the corresponding "complete" picture to the "uncomplete" one, given before. They should write a comment about the perception they have about the "complete picture".

- Part 3: The teacher encourage dialogue through questions which will guide them to reflect:

  o What did you feel when you saw the "uncomplete" picture included in the "complete" picture?

  o Do we use this vision of the reality? Do we see it uncomplete?

  o Have you felt the same emotional impact observing the uncomplete picture than observing the complete one?

  o Recognizing the existence of other perspectives and interpretations; how can we advance in the mutual knowledge to achieve equality?

5. GOOD PRACTICES: YOUTH WORKERS PROJECTS

5.1. Youth workers' projects from Spain

5.1.1.

Project title

PROGRAMMING OUR GAMES

Members

Celia Ruíz Flores

Bernat Llopis Carrasco

María Doloras Iborra Sales

Summary

This gamification project consists of a system that increases the motivation of girls and boys to learn, while acquiring increasing levels of programming, through technological challenges consisting in programming their own games. We have improved, adapted and expanded a system of challenges and levels initially developed by Coderdojo, an international organization with more than 1000 programming clubs around the world. It is being applied since October 2017 with the girls, boys and young people - whom we call "ninjas" - who participate in the CoderDojo Valencia Programming Club.

How?

1. Designing a **training itinerary:**"*Ninja Tour*".

2. Expanding **challenges** with more technologies and levels.

3. Designing an **original rewards system**: a collection of cards.

4. Designing a **template to evaluate the challenges achieved** by the children.

5. Each week the cards are given to the ninjas who have achieved different challenges in a simple public ceremony.

Dates of implementation

October 2017 - May 2018

Graphic material

5.1.2.

Project title

MATHEMATICS SPACE

Members

Rafael Oliver

Summary

Along the years I observe that young people are not motivated to study math. They think that maths is difficult and boring, so I decided to do something to change that thought, and I found gamification.

In this game pupils have to learn math in order to advance in the game.

Every diary exercise gives them points and "weapons" to afford the exams that will be the big enemy.

If they beat the enemies, they achieve the objectives and obtain good results.

My main goal is to improve the results in an academic course and to motivate my pupils to study and make homework. The main objetive is increasing the motivation of the students towards Mathematics.

**Dates of implementation**

October 2017 - May 2018

Website

https://sites.google.com/view/rafamatematicas314/inicio

Graphic material

PIEZA DEFECTUOSA	SABOTAJE	MALAS CRÍTICAS
Se rompe un motor	Os rompen un escudo	Un cliente da una mala crítica de vuestro trabajo
Teneis que pagar 2 monedas para arreglarlo	Teneis que pagar 2 monedas para arreglarlo	Cada miembro de la tripulación pierde 0'5 XP

BUENAS CRÍTICAS	EJERCICIO SORPRESA	EJERCICIO SORPRESA
Un cliente da una buena crítica de vuestro trabajo	Aquel que resuelva de forma correcta el siguiente ejercicio propuesto, obtiene 0'1 puntos en el examen	Aquel que resuelva de forma correcta el siguiente ejercicio propuesto, obtiene 0'5 XP
Cada miembro de la tripulación gana 0'5 XP		

5.1.3.

Project title

ESCAPE ROOM

Members

Gladys García Fernández

Guadalupe Esther Rodríguez Pérez

Sonia Espiñeira Caderno

Summary

Escape Room based on the discovery of cooperative techniques in the classroom. It includes mysteries, challenges and missions prepare to be solved using cooperative

techniques. These missions have to be done by the students in order to be able to win a lock combination that opens a box where they will find The Force.

Main Objectives:

- To discover cooperative techniques in the classroom in order to use them regularly.
- To develop cooperative techniques in small groups.
- To initiate working routines that can be used in other areas.

Dates of implementation

April 2018

Graphic material

	Compulsory challenge	Cooperative technique	Optional challenge	Cooperative technique
Romm 1	Find answers to a test about Star Wars **Badge** *Insignia of the Unit*	Rotating Paper	Recapitulate everything learned about Star Wars **Badge** *Fire Bird of the Alliance*	Scrabble
Room 2	Research about Star Wars **Badge** *Imperial Emblem*	Information search	Resolution of various puzzles about the saga. **Badge** *Fire Bird of the Alliance*	Couples of detectives
Room 3	Solve problems **Badge** *Galactic Medallion*	Couples of detectives	Mind map about the Force **Badge** *Fire Bird of the Alliance*	Mind map through 4 people groups

5.2. Youth workers' projects from Italy

5.2.1.

Project title

LEARN LANGUAGES WITH ICT

Members

Dimitra Gurduiala

Lara Pachioli

Vladic Ciccotosto

Summary

"Play to learn Languages" is a project to learn languages through ICT courses.

Games and logic software are a good way to learn foreign languages. Using computer due to use a universal code, usually combining with a predefined language that you have to use and that you could learn. This course does not want to teach the use of the computer, although it is part of the course, but the basic knowledge of the most common language in ICT: English. This "need" about understanding "how" use the ICT in your hand could be an opportunity to learn English with more motivation.

This project consists in facilitating students' courses with a website or an App for mobile that uses the typical gamification elements to improve English language knowledge.

Main goals:

- To improve general students motivation;
- To increase a solid base in English Language with playing logic games and programming base software;
- To increase school performance in English

Erasmus+

Graphic material

WHY?

Cause the needs about understanding "how" use the ICT in your hand could be an opportunity to learn English with more motivation.
More and more countries are adopting this methods for education, and results are really satisfying.
Languages, even the ancient ones, nowadays are one of the most requested for all kinds of jobs and in general are the best skills for life.

What is ICT

ICT (Information and Communication Technologies) Technologies for integrated telecommunication systems (wired and wireless communication lines), computers, audio-video technologies and related software that allow users to create, store, and exchange information. Significant economic incentives favor this process of integration by promoting the growth of active companies in the industry.
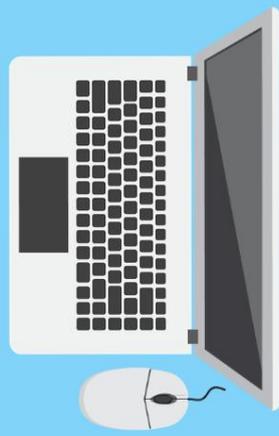
SMART

Specific   Measurable   Attainable   Relevant   Time Based

Define objectives:

The objectives of our project are really smart: improving languages skills, valuated by CEFR levels during and at the end of the course.

Define target:

The target group are students or adults interested in languages skills and competences. We'll think about two groups:

1- Students of local High Schools;
2- Adults +30, employed or unemployed that are improving theirs languages and communication skills.

Project title

FIRST AID ONLINE COURSE

Members

Alice Del Casale

Alessia Buttiglieri

Rebecca Acconcia

Summary

We decided to implement this project because we think that first AID procedures are important but not well- known by students and young people.

Main goals:

- To guarantee the knowledge of basic first AID procedures which are really important to solve dangerous everyday situations;
- To make the topic of first AID easier for young learners with videos and game elements;
- To increase the interest of young people and students in volunteering work.

We're going to achieve these purposes through an online network which is both a game and a course and will last maximum 3 months. It will be divided into levels and each one of them will correspond to potentially dangerous situations with increasing difficulty. The learners will be taught the procedures thanks to a series of videos, with a storyline and a main character, a young boy. The knowledge will be then tested with a quiz and the results will give a certain numbers of points to be included in a leaderboard. The leaderboard will include all the participants of the course.

Graphic material
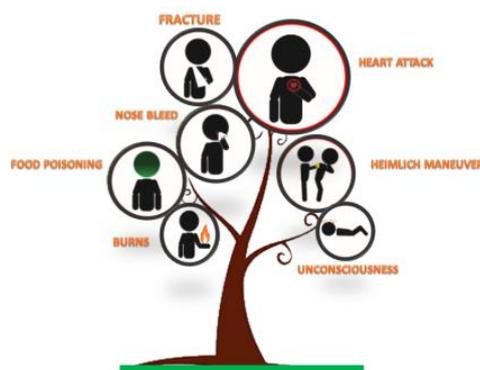
Project title

SPORTS AND PHYSICS. THAT'S THE GAME!

Members

Sara Gallo

Chiara Lauditi

Federica D´Andreamatteo

Fabiola Rossi

Summary

The idea aims to improve scientific competencies of scientific high school students' through the Physical Education and the sports interest of the youngsters.

We think that students should be tempted to study scientific subjects from school, a way to learn quickly is to study enjoying themselves.
We're attending a scientific high school and the most hated subject is physics while the most recreational is Physical education.
The solution could be to make the students interested in physics throw the union between physics hours with Physical education hours.

In fact, in every sport we play we can include physics.

Our project is simple and intuitive. We could develop an app on every sports category in order to teach physics (but also math and other school subjects') through sports passion.

Every simulation of sport situation could be a game, where to make points you have to use the correct formula. Every formula for every physics exercise that we could arrange. Every formula for every level of the game and every level for every results and "score".

Main goals:

- To improve scientific competencies of scientific high school students' through the Physical Education and the sports interest of the youngsters;
- To make the students interested in physics;

Graphic material
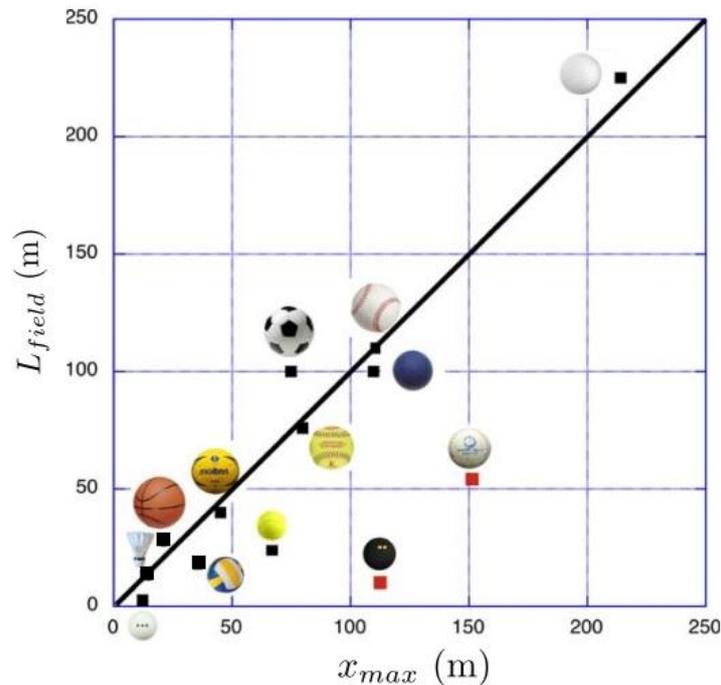
5.2.4.

Project title

DANTE FOR RIGHT GRAMMAR

Members

Matteo Brunetti

Marco Di Virgilio

Diana Karmanschi

Summary

We decided to implement this project because we think that Gamification and Not Formal Education methods are the best solutions for Italian grammar teachers who are involved in the "battle" against the banal grammar mistakes in Italian.

Main goals:

- To improve the knowledge of Italian language
- To reduce the common Italian grammar mistakes'

Our idea is to develop an online game or an App for mobile where Dante could be the best friend of an Italian boy/girl that, in daily situation, makes Italian grammar mistakes. This Game/App will be divided into levels and each one of them will correspond to the most common situation in which people makes Italian grammar mistakes. The Not Formal Education method will be useful to create a sort of quiz for the students that have to help the main character to correct his/her mistake and make Dante happy to spend his time with his friend.

Graphic material
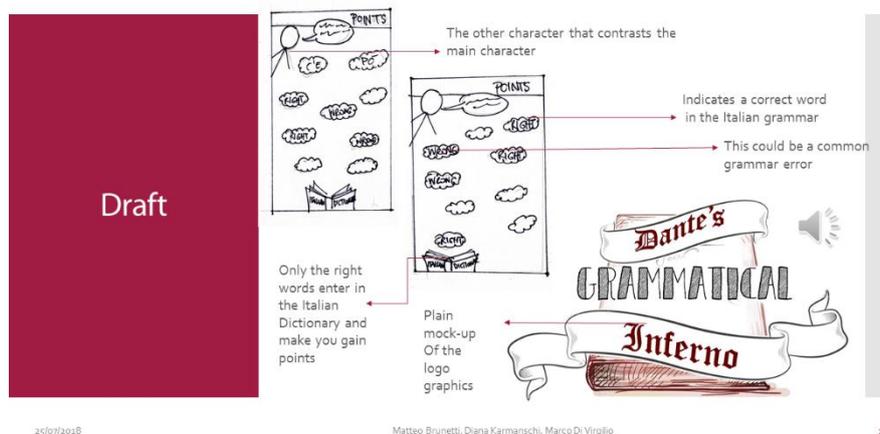
5.3. Youth workers' projects from Turkey

5.3.1.

Project title

JIGSAW READING

Members

Emre Mutluoğlu

Gülsüm Ege

Summary

Reading habit also continues to function as a multi-faceted contribution to individual's mental and social development in the process of rapid social change. However, it has not been seen in recent years that children watching television and using computers are influencing their reading habits.

Some researchers show that students prefer to play on computers and watch television in their leisure time to reading books. There is an inverse proportion apparent between the time spent using computers and watching television and the time spent on reading.

We will study with students at secondary school group into 4 different bands based on their graders as 5th graders, 6th graders, 7th graders and 8th graders. The purpose of the project is to popularize reading among young people. We aim to give them interesting experiences while they are reading and, as a result, to get into the habit of reading e-books to students via the game.

We designed a game with different levels for it. They will be able to choose one of history, science and literature in the game and read about it. We will make the mascot that we created, and the level will be determined according to the age of the student, the content of the e-book, and the total number of pages. We hope that children will be happy to spend time reading.

Time is changing and children's needs are changing. For this reason it is necessary to make it fun to read.

Dates of implementation

January 2018 - April 2018

5.3.2.

Project title

AVATAR´S INSIDE OUR EMOTIONS

Members

Elmas Gülcan atalar

Seda Gür

Summary

In the present study, it is aimed to support the social development in children under protection and in institutional care. Social skills are very complex in terms of a large number of components. In the present study, it is aimed to develop the skill of recognizing feelings, which is a prerequisite skill in acquiring social skills.

We studied with children who have been under protection by the government under the child protection law number 5395. Our target group was consisted of 20 children which have problems in social relationships with negative early life experiences due to negative family circumstances. Ages of the children ranged between 7 and 12 years old.

Within the scope of the project, it is aimed to design a computer game based on the Theory of Mind Tests. There are three phases for identifying emotion in accordance to the relevant literature: 1) Emotion recognition from the real-face-photo 2) Recognizing emotions depending on the situation and Recognizing emotions depending on belief. Each phase contains prerequisite skills of the next step. Therefore, it is not possible to become skillful at the next stage without achieving that level of skill. In this context, it is planned to follow these three phases in the present study. The game to be formed in this way is ordered according to the degree of difficulty.

The related game used by children under protection for one time. The game has been applied to each participant for once. The participants also asked to answer «System Usability Test» for testing the usability issues of the game.

Dates of implementation

January - April 2018

Website

https://scratch.mit.edu/projects/213157124/

Graphic material
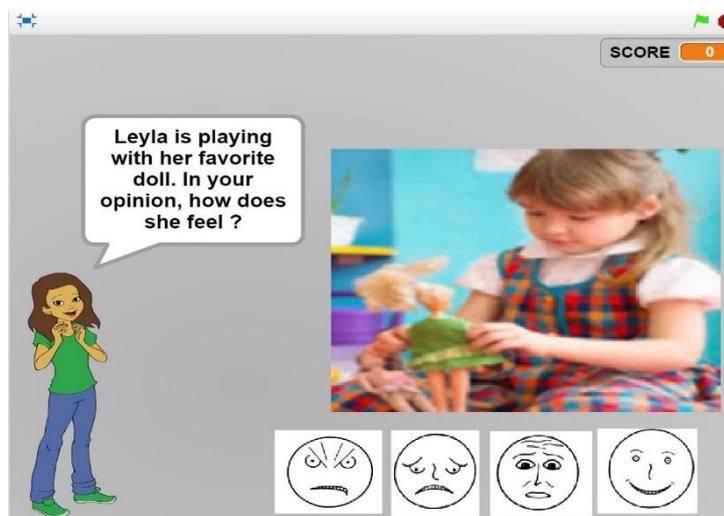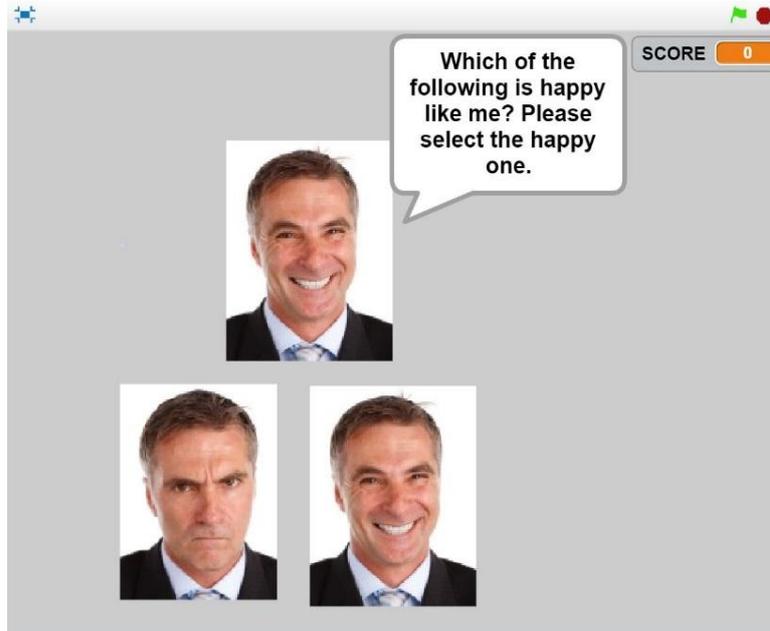
5.3.3.

Project title

REGULAR LIFE

Members

Görkem Açikel

Sinem Metin

Summary

Target group: A total of 20 children (10 girls, 10 boys) between 6-11 years of age, under protection and care in Ankara Children's Houses

The goal of the project is teaching children in the target group through the following self-care skills through play techniques.

Social Environment; each section is a golden key that opens the door/chapter

The child completing the previous task wins a golden key for the next task.

For example; the child who wakes up in the morning and goes to the bathroom will be able to see the buttons in the bathroom such as washing the face, flushing the siphon, eating food, running the washing machine and earn a gold key when he presses two correct buttons.

With this key, the house that is supposed to enter will find the other part and open the door of the rate and gain a new key by doing other self-care and daily life skills as well.

Dates of implementation

January 2018 - April 2018

Graphic material

5.3.4.

Project title

YOUNG VOLUNTARY INSPECTORS

Members

Duygu Ata

Eda Zeytinoglu Sen

Hakki Simsek

Summary

We chose this topic because there is low level of abiding the traffic rules despite the strict law enforcement in Turkey.

The main goals were to make a culture of traffic rules for children to improve attention level of children and to teach traffic rules to "future drivers".

In this sense, we created a two part game which consisted of an animation video on traffic rules (the 1st part) and questions on traffic signs (the 2nd part). The participant who watched the video earns points and allowed to pass the second part. In the second part participant who answered the questions correctly earns points and wins an "ID card of Traffic Inspector".

Graphic material
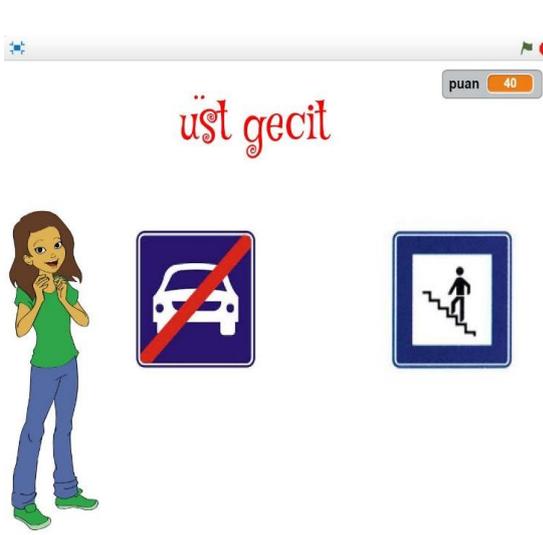
5.3.5.

Project title

WE ARE RECYCLING

Members

Nesrin Çetin

Summary

As a result of the rapid population growth, progress in industrial and technological developments, the effects of people on the natural environment have increased and the rapid depletion of natural resources has led to the intensification of protection and recycling of the environment.

This project aims to teach the methods to direct out-of-use recyclable waste materials back into the manufacturing process as raw materials.

Target group is the girls and boys between the ages of 7 to 12 years with normal development who are provided with services by the institutions under Ankara Provincial Directorate of Family and Social Policies.

Dates of implementation

January - April 2018

Website

https://scratch.mit.edu/projects/213150336/

Graphic material

5.4. Youth workers' projects from Poland

5.4.1.

Project title

I´M OK

Members

Anna Nowak

Summary

"I'm OK" is designed for deaf children from primary school – 8 years old. The gamification was implemented in a group of 6 children: 3 boys and 3 girls. All the pupils are in the same class, they know each other since nursery school. The main problem in this class is aggression, unhealthy competition, desire of domination in the class, no respect for authorities e.g. teachers.

The main aim of "I'm OK" was reduction of negative habits and reinforcement of positive behavior in a group of pupils attending the same class by using gamification methods during one month.

How to play:

Each player gets the pawn. On the wall hangs the board of gamification. It is rounded. Each player puts the pawn outside the circle in equal distance from the pawns of other players.

Each day every player gets a secret friend to take care of.

To get the point and move forward on the playing board the player needs to behave in a certain way – positive way (the list of positive behaviors will hang next to the playing board) to his/ her secret friend. Examples of positive behavior: helping hand, smile, good word, nice drawings for a person. Each day one player can get one point.

The aim of the game is to get the center of the circle on the playing board.

During the game there are many challenges and surprises waiting for the players.

The leader checked the impact of gamification by observation of pupils during the gamification, comments of teachers, and opinions from pupils before and after the gamification. The feedback from all the groups was very positive. The leader plans to continue the gamification in the future.

Dates of implementation

November - December 2017

Graphic material
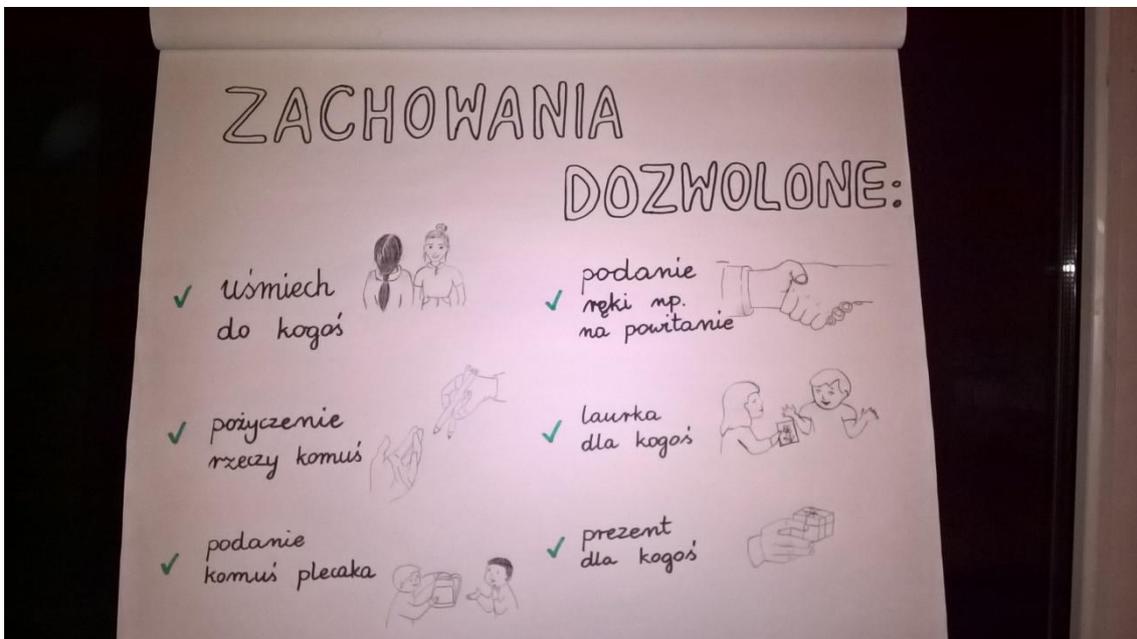
5.4.2.

Project title

REAL BEAUTY IS INNER BEAUTY

Members

Katarzyna Jozefowicz

Summary

The gamification called "The real beauty is inner beauty" was designed to help deaf students change the way they act and also to promote tolerance, kindness and empathy. Physical abuse like gossiping, slandering, backbiting, humiliation had been the problem the school for deaf was facing with no results. This problem mostly concerned the girls.

The gamification lasted for one month, five days a week. Before introducing the rules of the gamification the leader organized workshop about aggression.

How to play:

The player chooses her/ his favorite celebrity (ex. actress, hero, sportsmen etc.) The leader of gamification prints the photos in A4 size. The photo is covered with small papers. It refers to the fields on the game board. Every day each player can get points awarded by other players depending on his/her behavior. Players will have their own personalized boxes painted in different colors to collect points from other players. They reflect different emotions: +positive, - negative. The points are granted anonymously. The player whose photo is first uncovered wins. The game will have 4 stages. Every stage gives the players fresh start to win the surprise of the week.

To verify and evaluate the gamification impact on the group during and after the activities the leader used following tools: interviews with each student/ player, emotion box – to check the general mood in the class, "hot chairs" – individual interviews of the leader and player in the end of each stage of gamification according to the catalogue of questions ex. how do you feel in the class? Is there anyone you don't get along with? Do you have friends in the class?

Dates of implementation

November - December 2017

Graphic material
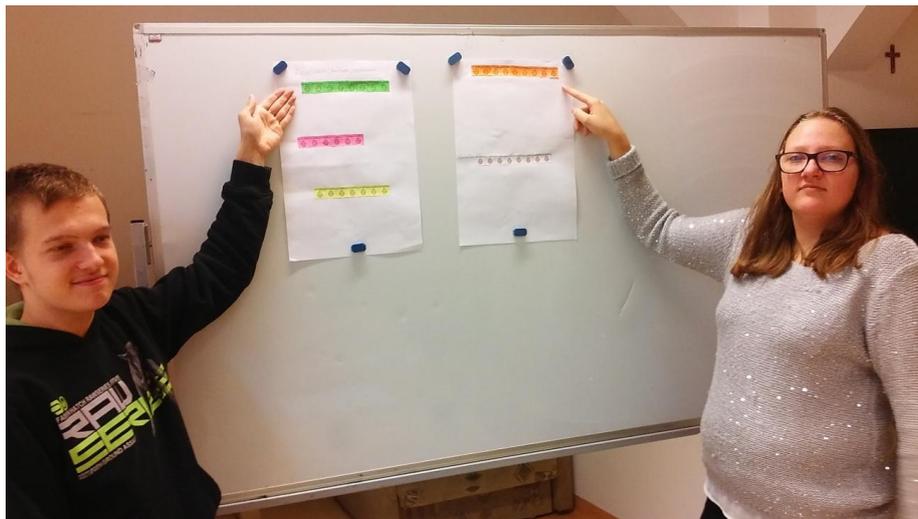
5.4.3.

Project title

STAY ON THE TOP!

Members

Patryk Dąbrowski

Magdalena Włodarz

Paulina Romanowska

Natalia Pietrzak

Summary

Project "Stay on the top!" is addressed to a group of young people from high school. In the group is about 20 people. All students go to three different high school classes. They know each other for at least a year (some of them much longer). The aim of the project is to increase ambition and raise self-confidence. We think everyone can improve their learning outcomes if they want. We live in a time where technology dominates.

The lifestyle is been changing, it's aiming for a quick goal with as little effort as possible, just to pass the test and move on. This problem is quite common. In the consequence people have lower motivation or lack of involvement (ex. being late) to various activities, and in the future even problems at work. Therefore, we want to encourage students to increase their ambition and motivation. The aim of the project is also to improve the habits to avoid bad consequences now or in the near future. During the game there will be bonuses and surprises to encourage and engage the participants into the activity. All information will be sent via messenger to a group on Facebook.

 In this connection, we want to carry out the following experiment:

1. Choice of three classes aged 16 to 20 years

2. Introduction of game rules (activity table, bonuses, work control, awards)

3. Determining the course of the game (meetings, dates, places)

4. Observation of the game, checking, or modifying the game

5. Game summary, rewards

6. Evaluation of the project (based on observations, surveys and interviews)

Dates of implementation

November 2017 - December 2017

Graphic material
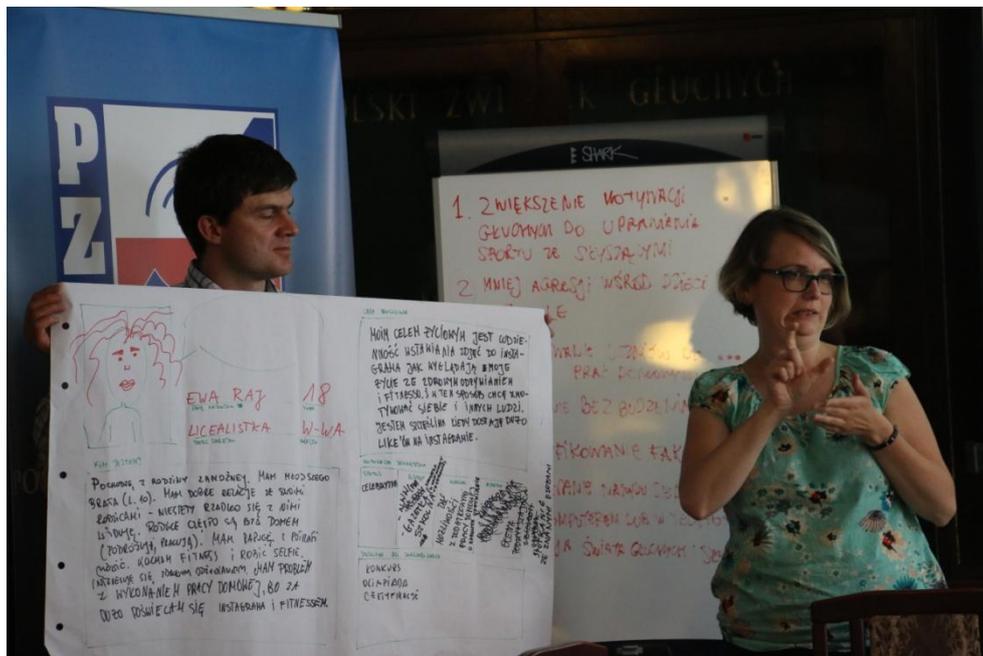
6. YOUNG PEOPLE APPLICATIONS

6.1. Youngsters' projects from Spain

6.1.1.

Project title

NOCRIDA

Members

Alejandro Wang

Alfredo Kopf

Iker Ispierto

Cristopher Miron

Nerea Peinado

Alexandra Prunescu

Summary

Our project consists in the creation of an application which contains levels in which you have to have a series of knowledge and answer the questions and in this way consolidate in a more optimal way the acquired knowledge.

We are heading towards 3 concrete groups, murderers, achievers and socializers.

We will introduce a forum and in this way we will attract these types of players. The main goal is to attract socializers so in this way that they can socialize with other users of the forum. Another goal is to attract murderers to establish ranks within the forum, while for the achievers we will add a series of achievements.

Our application concentrates on just one subject, specifically history and it will be divided into several sections, each part is going to have summaries on the subject that is trying each section, after reading the information there are questions on the text to see if the player understood what was read, only going to be able to pass to the next level if you have correctly answered the previous level and the sections will be blocked to be able to unblock them they will have to pass the previous level.

Graphic material
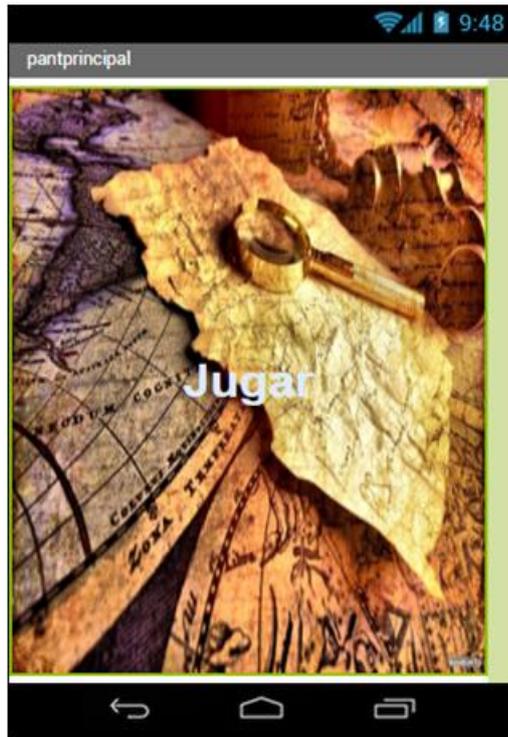
6.1.2.

Project title

LAND OF MATHS

Members

Nossaiba Saber Boudchar

Raúl López del Valle

Laura Sanz Suárez

Álvaro Garcia Muñoz

Stephy Guacoyante

Summary

Our application consists of learning mathematics through the game. The main objective is to increase the motivation towards mathematics, of students in the fourth year of ESO, in order to find mathematics a more attractive subject.

The reward system will be used to ensure continuity of participation in the game. Accordingly, the participant will receive 10 points for each correct answer. The participant will also earn a badge for each completed level.

Graphic material
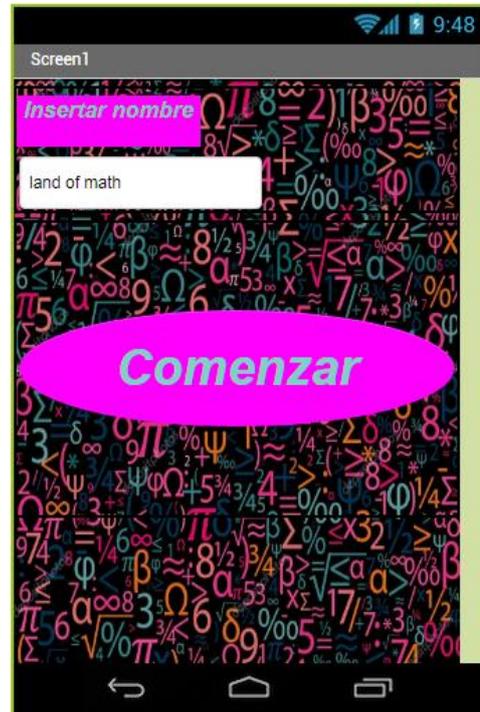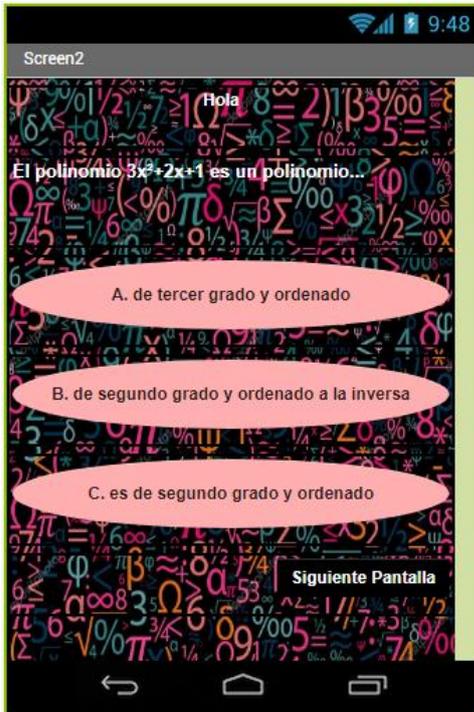
6.2. Youngsters' projects from Italy

6.2.1.

Project title

CITIZEN OF THE WORLD

Members

Dimitra Gurduiala

Lara Pachioli

Vladic Ciccotosto

Fiorenzo Tittaferrante

Valerio Desiati

Summary

This project consists in an App for mobile that uses the typical gamification elements for facilitating students' course and for motivating youngsters to learn languages and cultures to be citizens in a multicultural World.

In this idea, students are going to start their courses for learning languages, including the ancient ones, as Latin and Greek, that are important in nowadays European cultures: it could be a promotion of the European Citizenship.

Main Objectives:

- to improve youngsters' possibility to live abroad and travel more easily

- to improve mental elasticity

- to motivate youngsters to knowing various cultures

- to motivate youngsters in active citizenship

- to promote European Citizenship

Graphic material
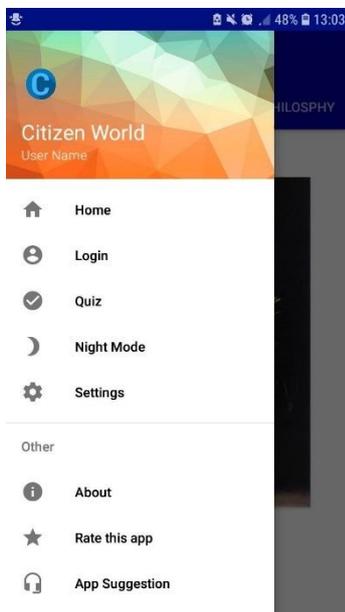
6.2.2.

Project title

EMERGENCY ROOM - FIRST AID ONLINE COURSE

Members

Alice Del Casale

Alessia Buttiglieri

Rebecca Acconcia

Mihai Eusobiu Trifan

Vlad Constantin Mihal

Summary

We decided to implement this project because we think that first AID procedures are important but not well- known by students and young people.

So, we develop EMERGENCY ROOM. A smartphone application with a course that teaches the main procedures of first aid, in increasingly difficult situations, using game elements and gamification.

Main goals:

- To guarantee the knowledge of basic first AID procedures which are important to solve dangerous everyday situations;
- To make the topic of first AID easier for young learners with videos and game elements;
- To raise awareness of this topic that young people usually ignore;
- To increase the interest of young people and students in volunteering work.

We're going to achieve these purposes through an online network which is both a game and a course and will last maximum 3 months. It will be divided into levels and each one of them will correspond to potentially dangerous situations with increasing difficulty. The learners will be taught the procedures thanks to a series of videos, with a storyline and a main character, a young boy. The knowledge will be then tested with a quiz and the results will give a certain number of points to be included in a leaderboard. The leaderboard will include all the participants of the course.

Graphic material
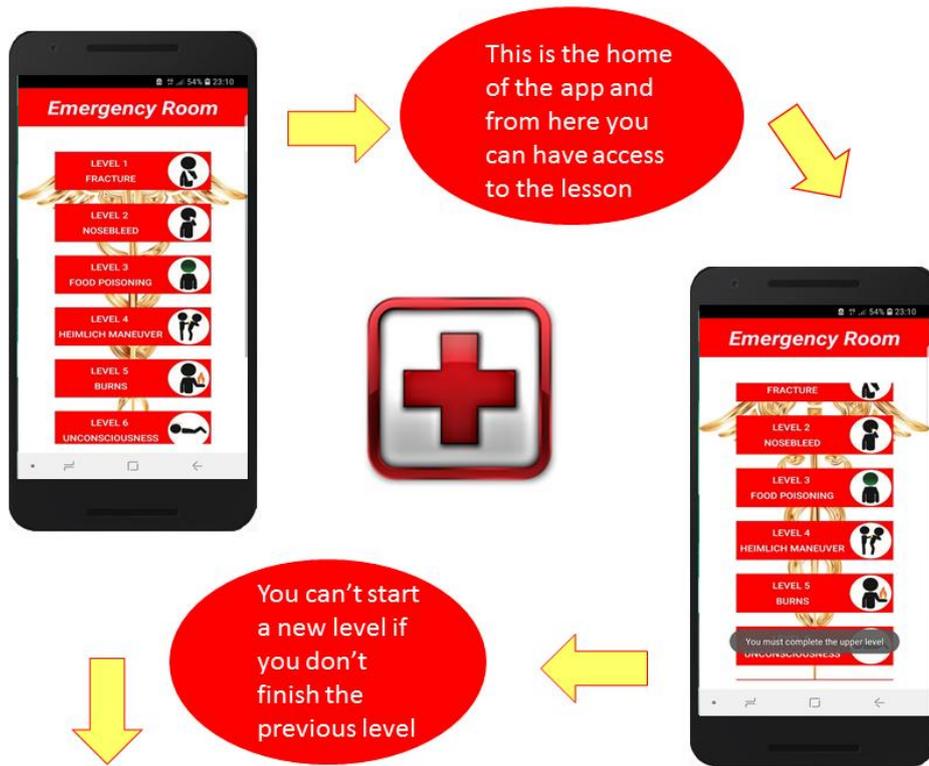
6.2.3.

Project title

SPORTS AND PHYSICS. THAT'S THE GAME!

Members

Sara Gallo

Chiara Lauditi

Federica D´Andreamatteo

Fabiola Rossi

Vladut Bobeica

Erika Gualteri

Nicolò Maccione

Summary

Recent international studies on education highlight serious shortcomings of students in technological, scientific skills and basic concepts of science, technology, engineering and mathematics. But the globalized labor market requires these types of skills.

STEM Education is an educational program based on the concept of teaching these disciplines with an interdisciplinary approach and according to the tenets of learning by doing and cooperative learning and teaching.

We think that the guys should be tempted to study scientific subjects from school, a way to learn quickly is to study enjoying themselves. We're attending a scientific high school and the most hated subject is physics while the most recreational is Physical education.

The solution could be to make the students interested in physics throw the union between physics hours with Physical education hours.
Our project consists in an App Game for mobile with different levels, in which there are problems regarding several physics topics applied on the typical situation from several sport. Could be an example a calculation of a power and angulation needs a football player in the Final Penalty of the Mundial 2018 to make goal and win the World Cup.
So, as a normal videogame there are several levels that you have to exceed: solving some problems, you earn coins and points that give you the chance to continue the game and wins your tournament.

Main goals:

- To improve youngsters' skills in basic concepts of science, technology, engineering and mathematics;
- To improve youngsters' physic skills and competencies;
- To increase the interest of young people and students in scientific studies.

Graphic material

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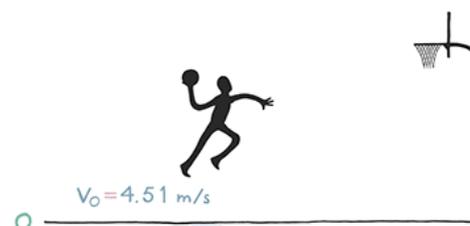
6.2.4.

Project title

DANTE FOR GRAMMAR

Members

Matteo Brunetti

Marco Di Virgilio

Diana Karmanschi

Gaetano Lella

Jacopo Decoroso Boschetti

Francesco Tartaglia

Marco Boschetti

Summary

We have decided to implement this project to defeat the ignorance that is growing more and more among youngsters.

The aim of the game is to break down the common mistakes in Italian language through game levels that will become more difficult, there is Dante Alighieri who takes on the role of protagonist in the game, that came from past to help the people go back on the right grammatical track.

Main goals:

- To improve the knowledge of Italian language
- To reduce the common Italian grammar mistakes'

We're going to achieve these purposes through a game based on the Gamification and Not Formal Education methods. It will be divided into levels and each one of them will correspond to the most common situation in which people makes Italian grammar mistakes. The learners will be increase its knowledge in Italian language thanks to a series of videos, with a storyline and two mains characters: a young boy called Mario and Dante. The knowledge will be then tested with a quiz and the results will give a certain number of points to be included in a leaderboard. The leaderboard will include all the participants of the course.

Graphic material
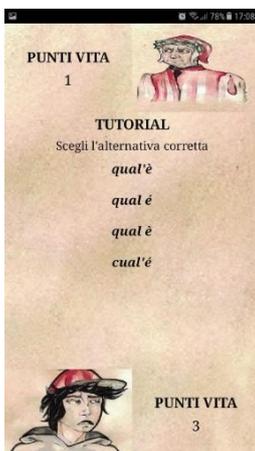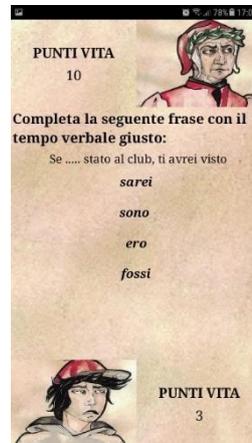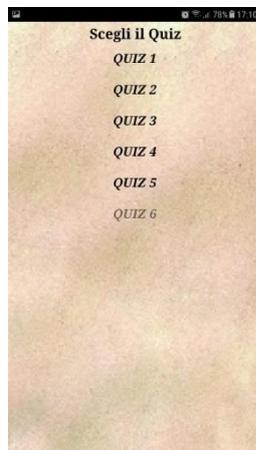
6.3. Youngsters' project from Poland

Project title

World of silence - education

Members

Emilia Brzeska

Przemysław Mąkosa

Joanna Suchecka

Zuzanna Szeliga

Adrian Wiśnios

Summary

We, as a polish group have decided to take part in this project with a view to current, yet invisible problem such as lack of motivation to learn polish language by deaf people. Additionally, we want to extend our knowledge about programming and improve our communication skills. Our main aim, though, is to influence people around us and create tools which might be useful for them in the future.

An app on which we have been working on will be connected with the website where especially chosen references are publicized by Polish Association of the Deaf. We aim to simplify the access to this website and enable its users to be up to date with the newest sources. To achieve this, we want to devise the system of reminders and gamification methods which will be designed to keep participants eager to learn and give them sense of purpose. Our target group is peers and people below age 21. That is why we want to implement many visual details and elements.

Since we deal with people with disability, we also would like to get to know their community and behavior to choose the right way to modify our app. To recognise it, we have prepared specific questions which may help us to adapt the app to their expectation.

Graphic material
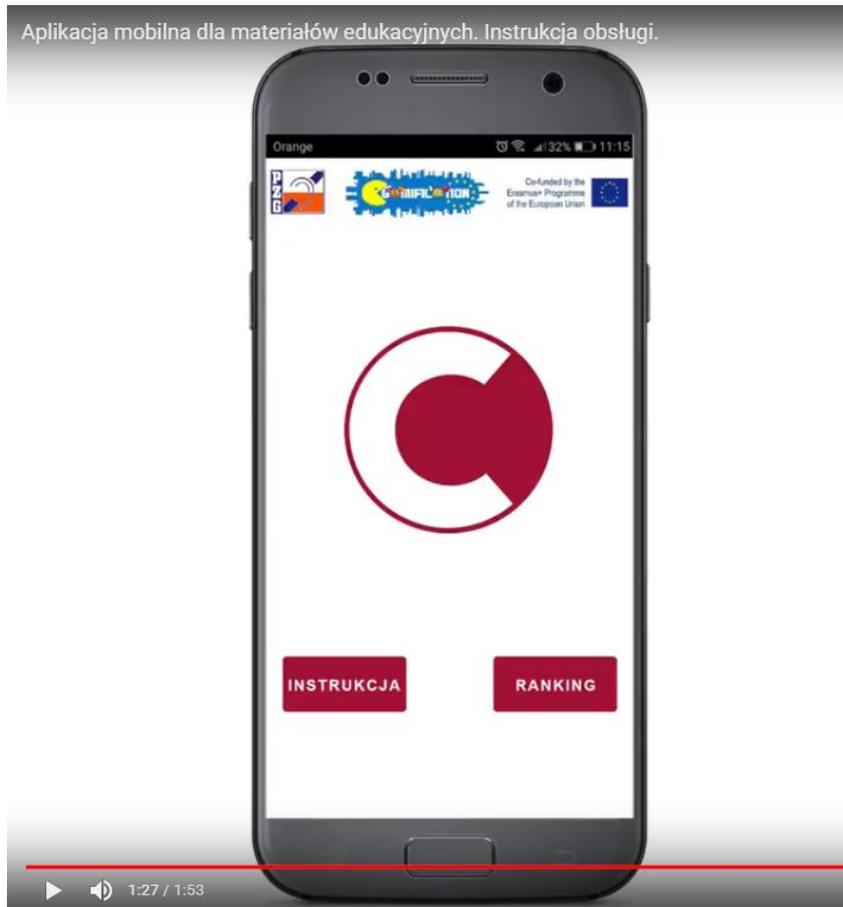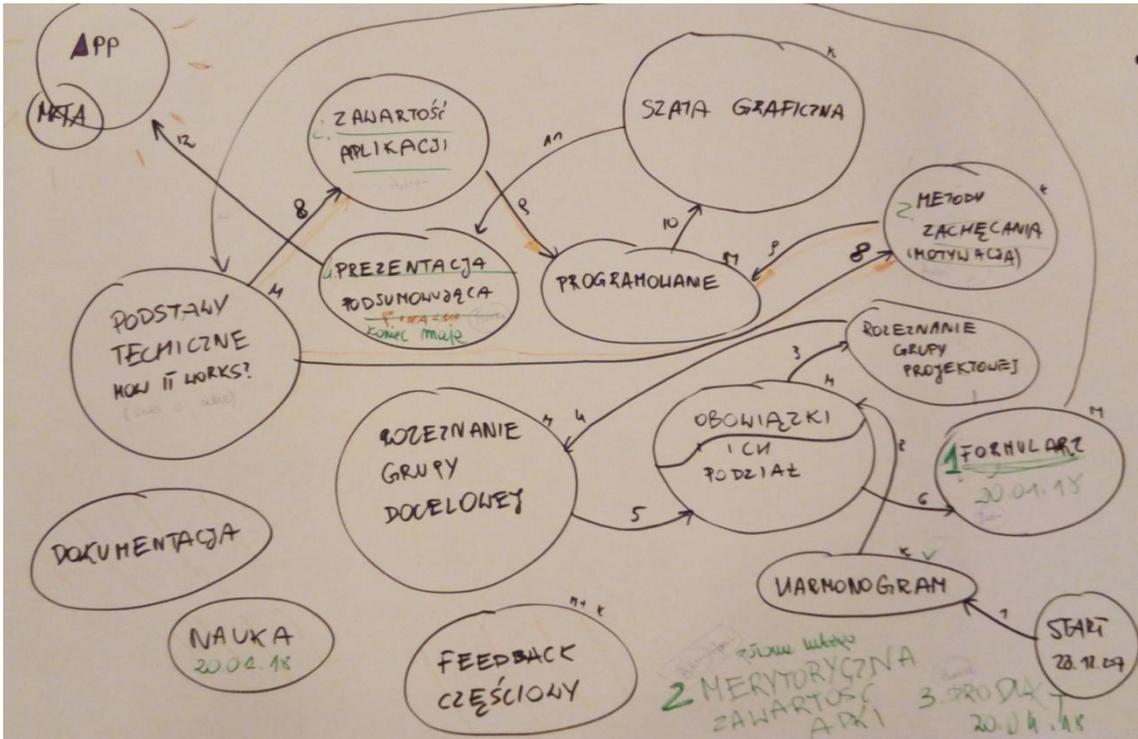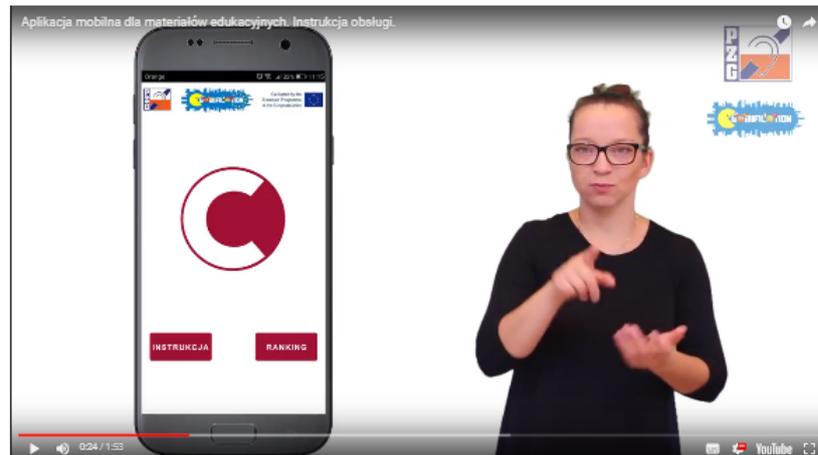
Przedstawiamy Wam aplikację mobilną, kompatybilną z materiałami edukacyjnymi do języka polskiego na naszej stronie.

Aby pobrać i zainstalować aplikację:
1. W ustawieniach telefonu wyszukujemy opcję "Prywatność i bezpieczeństwo".
2. Wyszukujemy opcję "Nieznane źródła" (Zezwalaj na instalowanie aplikacji spoza oficjalnych źródeł) - zaznaczamy.
3. Pobieramy pakiet instalacyjny.
4. Przechodzimy procedurę zgodnie z poleceniami w telefonie.

Aplikacja powstała dzięki partnerstwu przy projekcie Gamification ITC to Play and Play to learn.
W projekcie uczestniczyły organizacje z: Hiszpanii, Włoch, Turcji i Polski.
Celem projektu było zainspirowanie osób pracujących z dziećmi i młodzieżą oraz młodzieży do stosowania metod gamifikacji w edukacji oraz w życiu codziennym.
Chcieliśmy pokazać, że nowe technologie ułatwiają, czynią bardziej atrakcyjnym i skutecznym proces uczenia się w każdym wieku.
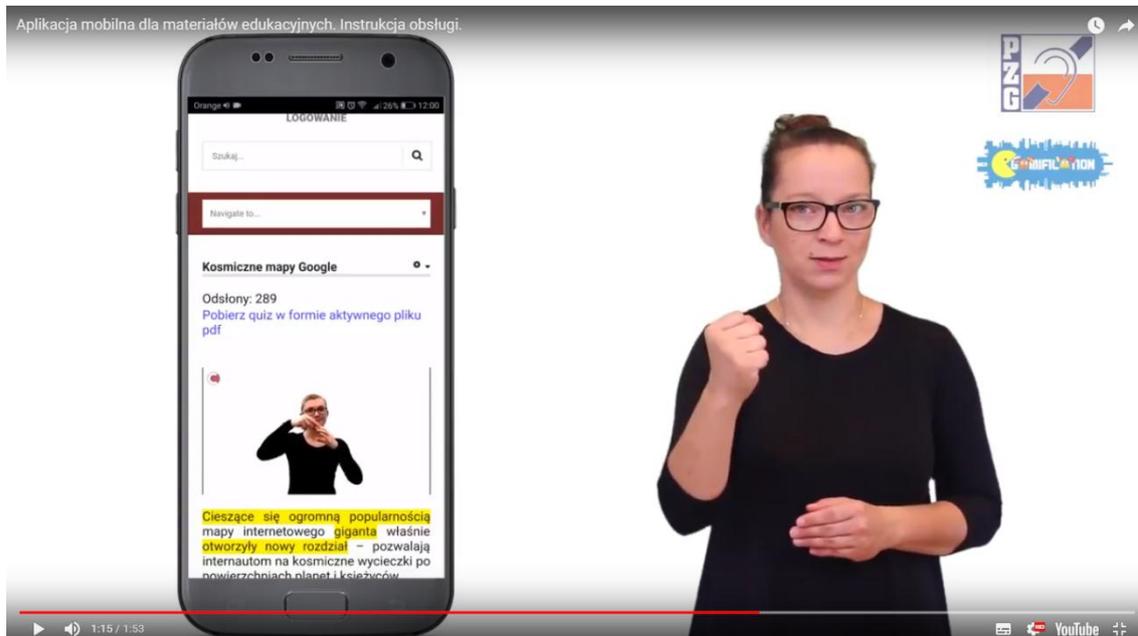
6.4. Youngsters' project from Turkey

Within the scope of the project, 17 children with a basic level of knowledge about English and MS Office program among the 13-18 age group of children in our children's homes were given coding training through Scratch Program.

As a result of the training, pre-test / post-test research design was used to measure the effectiveness of training and self-evaluations of children's coding skills. Results indicate that almost all of the participants positively effected from the training.

The participants were all females and the average age of the group was measured as m=15.65 (age range = 13-19). Children's educational levels ranged between 6th and 12th grade.

Regarding the level of coding knowledge, 2 of the participants had a basic level of coding knowledge within the Informatics course at the school. 15 children did not receive any coding training before the current training.

Results indicate that almost all of the participants responded positively to the relevant items after the training, while responding negatively to the test items to use the coding language in question before the training. In the test, the skill level in Scratch is examined in two parts: Test items that measure basic knowledge and test items that measure advanced knowledge. In the post-test condition, respondents were positively responded to by nearly all participants (82% -84%). Other items measuring advanced scratch knowledge were positively answered by more than half (64% - 70%) of the participants. Advanced skills are the skills that can be gained depending on the language and the practice of doing so. In this context, the participant is provided with simple exercise assignments to improve application skills as well as material containing theoretical information.

The youngsters still going on their codding training in practical approach and yet, they need to do more exercises create their games.

The youngsters who participated the training are listed below:

- Hatice Hazal Karabüber
- Rojin Doğan
- Meryem Kenger
- Fatmanur Günay
- Fatma Akbıyık
- Melise Erol
- Buse Tokay
- Gamze Yücekaya
- Gamze Turhan
- Cemrenur Aysegul Uysal
- Nazlı Kocak
- Berivan Erdenci
- Pelin Güler

- Ozlem Demir
- Meryem Kaya
- Lale Beren Saıkaya
- Gonca Yaren Sarıkaya

7. EU ACTIONS CONCERNING YOUTH AND EDUCATION

7.1. ERASMUS+

7.1.1. What is Erasmus+?

Erasmus+ is the EU's programme to support education, training, youth and sport in Europe. Its budget of €14.7 billion will provide opportunities for over 4 million Europeans to study, train, gain experience, and volunteer abroad.

Set to last until 2020, Erasmus+ doesn't just have opportunities for students. Merging seven prior programmes, it has opportunities for a wide variety of individuals and organizations.

Individuals: Erasmus+ has opportunities for people of all ages, helping them develop and share knowledge and experience at institutions and organizations in different countries.

7.1.2. Aims

The aim of Erasmus+ is to contribute to the Europe 2020 strategy for growth, jobs, social equity and inclusion, as well as the aims of ET2020, the EU's strategic framework for education and training.

Erasmus+ also aims to promote the sustainable development of its partners in the field of higher education, and contribute to achieving the objectives of the EU Youth Strategy.

Specific issues tackled by the programme include:

- Reducing unemployment, especially among young people.
- Promoting adult learning, especially for new skills and skills required by the labour market.
- Encouraging young people to take part in European democracy.
- Supporting innovation, cooperation and reform.
- Reducing early school leaving.
- Promoting cooperation and mobility with the EU's partner countries.

7.1.3. Opportunities for Individuals

For nearly 30 years, the EU has funded the Erasmus programme, which has enabled over three million European students to spend part of their studies at another higher education institution or with an organization in Europe.

Erasmus+ brings such opportunities to all - students, staff, trainees, teachers, volunteers and more. It's not just about Europe or Europeans either - with Erasmus+, people from all over the world can access opportunities.

Opportunities for:

Students: Studying abroad is a central part of Erasmus+ and has been shown to have a positive effect on later job prospects. It is also a chance to improve language skills, gain self-confidence and independence and immerse yourself in a new culture.

Staff (training): With Erasmus+, training opportunities are available to staff working in education, both in teaching and non-teaching capacities. Training periods abroad can consist of job shadowing, observation periods or specific training courses abroad.

Young people: Erasmus+ is open to all young people, not just those currently enrolled in education or training. With Erasmus+, you can volunteer across Europe and beyond or participate in a youth exchange abroad.

Staff (teaching): With Erasmus+, opportunities are available to spend time teaching at an education institution abroad. These opportunities are available to both staff working in the education sector and to individuals working outside the sector invited to share their knowledge and experience.

Trainees: Erasmus+ helps you gain valuable experience in the workplace by supporting traineeships abroad. Erasmus+ support for traineeships is available for higher education students and recent graduates, as well as vocational education and training students, apprentices and recent graduates.

Youth workers: Erasmus+ supports the professional development of youth workers through training or networking periods abroad. Periods abroad can consist of training courses, study visits, job shadowing or observation periods at relevant organizations and more.

7.1.4. Opportunities for organizations

Organizations wanting to participate in Erasmus+ may engage in a number of development and networking activities, including strategic improvement of the professional skills of their staff, organizational capacity building, and creating transnational cooperative partnerships with organizations from other countries in order to produce innovative outputs or exchange best practices.

In addition, organizations facilitate the learning mobility opportunities for students, education staff, trainees, apprentices, volunteers, youth workers and young people.

The benefits for involved organizations include an increased capacity to operate at an international level, improved management methods, access to more funding opportunities and projects, increased ability to prepare, manage, and follow-up projects, as well as a more attractive portfolio of opportunities for learners and staff at participating organizations.

7.1.5. KEY ACTIONS

> **Key Action 1: Learning mobility of individuals:**

Key Action 1 aims to encourage the mobility of students, staff, volunteers, youth workers, and young people. Organizations can arrange to send or receive students and staff to or from participating countries, as well as organize teaching, training, learning and volunteering activities.

> **Key Action 2: Innovation and good practices:**

Key Action 2 is designed to develop the education, training, and youth sectors through five main activities:

Strategic partnerships to support innovation in the sector as well as joint initiatives to promote cooperation, peer-learning, and the sharing of experience.

Knowledge Alliances to foster innovation in and through higher education together with businesses, and beyond, contributing to new approaches to teaching and learning, entrepreneurship in education, and the modernization of higher education systems in Europe.

Sector Skills Alliances to tackle skills gap and ensure a better alignment of vocational education and training with labour market needs. There are opportunities to modernize VET, exchange knowledge and best practices, encourage working abroad, and increase the recognition of qualifications.

Capacity-building projects in the field of higher education to support the modernization, accessibility, and internationalization of higher education in Partner Countries.

Capacity-building projects in the field of youth to support the development of youth work, non-formal learning, and volunteer work, as well as promote non-formal learning opportunities with Partner Countries

> ➤ **Key Action 3: Support for policy reform**

Key Action 3 aims to increase the participation of young people in democratic life, especially in discussions with policy makers, as well as developing knowledge in the fields of education, training, and youth.

> ➤ **Jean Monnet**

Opportunities for teaching, research, and policy debate on the EU and its policies

> ➤ **Sport**

Designed to develop and implement joint activities to promote sport and physical activity, identify and implement innovative activities in the field of sport, and manage not-for-profit events to increase participation in sport.

7.1.6. Outcomes

The outcomes of Erasmus+ are available in reports and compendia of statistics, as well as through the Erasmus+ Projects Platform, which includes most of the initiatives funded by the programme, as well as a selection of good practices and success stories.

7.1.7. Statistics

Statistics on Erasmus+ are available from the statistics page.

Information on progress towards the ET2020 benchmarks is available from the Education and Training Monitor.

Progress towards the ET2020 benchmarks can also be seen through a series of interactive maps.

Similarly, information about the situation of young people in Europe can be found in the Youth Monitor.

7.1.8. Reports

The Erasmus+ Programme is the subject of a mid-term review, set to be completed in 2017, and an impact study, set to be published following the completion of the programme in 2020.

Following the completion of the Erasmus programme, an impact study highlighting the outcomes of the programme was published in 2014.

7.1.9. Who can take part?

Erasmus+ is open to many individuals and organisations, although eligibility varies from one action to another and from one country to another.

Individuals can take part in many of the opportunities funded by Erasmus+, although most will have to do so through an organisation taking part in the programme. The eligibility of individuals and organisations depends on the country in which they are based.

Eligible countries are divided into two groups, Programme countries and Partners countries. Although programme countries are eligible for all actions of Erasmus+, Partner countries can only take part in some, and are subject to specific conditions.

More information on eligibility is available on the pages for specific opportunities (both for individuals and organisations), as well as the Programme Guide.

7.1.9. How is it managed?

The Erasmus+ programme is managed by the European Commission (the EU's executive body), the Education, Audiovisual, and Culture Executive Agency (EACEA), a series of National Agencies in Programme countries, and a series of National Offices in some Partner countries.

The European Commission:

The European Commission handles the overall management of the programme, including:

• Managing the budget

- Setting the priorities

- Identifying the programme's targets and criteria

- Monitoring and guiding the implementation

- Follow-up and evaluation of the programme

The Education, Audiovisual, and Culture Executive Agency (EACEA) of the European Commission is in charge of managing the "centralised" elements of the programme, including:

- Promoting the programme and opportunities

- Launching calls for proposals

- Reviewing grant requests

- Contracting and monitoring projects

- Communicating on results

The EACEA and Commission also carry out studies and research, as well as managing and financing the other bodies and networks supported by Erasmus+.

Detailed information on the management of Erasmus+ is available in the Annual Work Programmes published by the European Commission.

The National Agencies:

In the EU countries, the Commission entrusts much of the management of Erasmus+ to National Agencies. Outside the EU, and specifically in the field of higher education, this role is filled by the National Erasmus+ Offices.

The Commission provides funding to the National Agencies, who use these funds to manage the programme's "decentralised" activities. This allows the Agencies to adapt the programme to suit their national education, training, and youth systems.

The National Agencies are responsible for:

- Providing information on the programme

- Reviewing applications submitted in their country

- Monitoring and evaluating the implementation of the programme in their country

- Supporting people and organisations taking part in Erasmus+

- Promoting the programme and its activities at a local and national level

These Agencies also support beneficiaries of the programme from the application stage to the end of a project. They also work with beneficiaries and other organisations to support EU policy in areas supported by the programme.

National Erasmus+ Offices: Outside the EU, in the partner countries participating in Erasmus+ in the area of higher education, much of the work of the National Agencies is carried out by National Erasmus+Offices. These offices are the focal point for anyone intending to take part in Erasmus+, and are responsible for:

- Providing information on the programme and who can take part

- Advising and assisting potential applicants

- Monitoring Erasmus+ projects

- Supporting policy dialogue, studies, and events

- Maintaining contacts with experts and local authorities

- Monitoring policy developments

Other bodies:

There are various other organisations that also support the programme, including:

• Eurydice Network – provides information on national education policies and systems.

• eTwinning – an collaborative online platform for school staff that also provides tools, support, and services.

• EPALE – The Electronic Platform for Adult Learning in Europe is a community for staff and professionals involved in the sector.

• Network of Higher Education Reform Experts – supporting policy development and dialogue, communicating on Erasmus+ projects, and providing training and counselling in partner countries.

• Euroguidance – a network of national resource and information centres for practitioners and policymakers active in education and employment.

• National Academic Recognition Information Centres (NARIC) –providing information on the recognition of diplomas and periods of study abroad, as well as advice on studying abroad.

• National Teams of ECVET Experts – promoting the adoption, application, and use of the European Credit System for Vocational Education and Training.

• SALTO-Youth Resource Centres – providing youth work, training and networking resources and activities, supporting Erasmus+ projects, and hosting an Erasmus+ partner-finding tool.

• Eurodesk network – offering information services to young people on education, training, and youth opportunities.

• Youth Wiki – provides information on national structures, policies and actions supporting young people.

7.1.10. Key figures

Overall mobility opportunities: More than 4 million people

Higher Education : Around 2 million students

Vocational Education and Training students: Around 650,000 students

Staff mobility : Around 800,000 lecturers, teachers, trainers, Education staff and Youth workers

Volunteer and Youth exchange schemes: More than 500,000 young people

Master's degree loan guarantee scheme: Around 200,000 students

Joint Master Degrees: More than 25,000 students

Strategic Partnerships: Around 25,000 linking together

125,000 schools, vocational Education and Training institutions, higher and adult Education institutions, Youth organisations and enterprises

Knowledge Alliances: More than 150 set up by 1500 higher Education institutions and enterprises

Sector Skills Alliances: More than 150 set up by 2000 vocational Education and Training providers and enterprises

7.2. EUROPASS

7.2.1. What is Europass?

Europass is a new initiative which aims to help people make their skills and qualifications clearly and easily understood in Europe, thus facilitating the mobility of both learners and workers. The Europass documents have been designed in such a way as to help people chronicle their skills and competences in a coherent manner, whether they are planning to enroll in an education or training programme, looking for a job, or getting experience abroad.

Europass consists of a portfolio of five documents as follows:

Two documents which individuals can complete independently:

* **Europass Curriculum Vitae (CV)**

* **Europass Language Passport**

Three documents which are completed by the competent organisation on behalf of the individual:

* **Europass Mobility**

* **Europass Certificate Supplement**

* **Europass Diploma Supplement**

7.2.2. What is Europass For

Europass will be used by people who wish to communicate their qualifications and competences in an effective way. People will be able to use Europass when they are seeking jobs and when they wish to enter education and training programmes.

Europass will be especially helpful when people move between countries to learn or work because:

Europass will make it easier for employers to understand the qualifications and competences of job-seekers from other EU Member States

Europass will help education, training and guidance practitioners to advise people about the most suitable learning paths and opportunities

7.2.3. Benefits

Europass has a number of benefits associated with it, the principal ones being:

It will help citizens to convey their qualifications and competences in an effective way

It provides a comprehensive tool for users based on an accessible electronic format

It enables people with diverse backgrounds and experiences to gain access to opportunities for learning and employment throughout Europe, particularly by helping people to move between countries or across employment sectors

It will promote strong links between education and training, business and industry, ensuring the continuing relevance and adequate appreciation of competences and qualifications

Europass is an open system that supports European policy developments related to the transparency of competences and qualifications.

7.2.4. Europass documents

Are used by many people as a tool to promote themselves and to describe their academic, training and professional accomplishments when applying for a job, further study etc. As many different CV formats are available and used by people in various countries, the Europass CV has been developed so that there is a standard CV

format people can use to detail their qualifications and skills in a straightforward and understandable manner. The Europass CV can be completed in 26 different languages and other Europass documents can be attached to it.

The Europass CV can be completed in 26 different languages and other Europass documents can be attached to it.

7.3. ECVET

7.3.1. What is ECVET?

The European Credit System for Vocational Education and Training, often referred to as ECVET, is a technical framework for the transfer, recognition and (where appropriate) accumulation of individuals' learning outcomes with a view to achieving a qualification. Guided by a European-level Recommendation, ECVET relies on the description of qualifications in units of learning outcomes, on transfer, recognition and accumulation processes and on a series of complementary documents such as a Memorandum of Understanding and Learning Agreement.

ECVET is intended to facilitate the recognition of learning outcomes in accordance with national legislation, in the framework of mobility, for the purpose of achieving a qualification.

ECVET aims to support the mobility of European citizens, facilitating lifelong learning - achieved in formal, non-formal and informal settings - and providing greater transparency in relation to individual learning experiences, making it more attractive to move between different countries and different learning environments.

At a systems level, ECVET aims towards greater compatibility between the different vocational education and training (VET) systems in place across Europe, and their qualifications.

From a geographical mobility perspective, ECVET aims at facilitating the validation, recognition and accumulation of knowledge and skills acquired during a stay in another country, with a view to ensuring that such achievements can contribute to the achievement of vocational qualifications.

7.3.2. Why Use ECVET?

ECVET brings a range of benefits to all those involved in geographical mobility and lifelong learning.

Benefits of ECVET for Geographical Mobility

While mobility in vocational education and training (VET) is already happening, the EU's political ambition is to significantly increase the number and duration of exchanges. Developing and enhancing geographical mo-bility implies putting in place a range of support mechanisms and activities for learners including, for example, language learning, financial support. The visibility and recognition of learning achieved abroad is equally crucial for enhancing VET mobility.

ECVET was designed as one of a series of European instruments (others include Europass and the European Qualifications Framework) each targeting improvement in learning recognition and transparency.

ECVET provides a framework for the assessment, validation and recognition of learning outcomes, alongside a series of common tools and instruments able to support quality in mobility.

ECVET promotes the integration of mobility into existing learning pathways.

ECVET supports the valorisation of key competences (such as foreign language skills or intercultural competence) alongside those that are more technically - or vocationally - oriented.

ECVET contributes to the development of a common language for use by different VET stakeholders and promotes mutual trust within the wider VET community.

Benefits of ECVET for Lifelong Learning

In the context of economic restructuring, where certain sectors are declining whilst others have difficulties in recruiting adequately qualified staff, there is a need for a flexible workforce. Individuals are ex-pected to have both the aptitude as well as the opportunity to enable continued learning and the development of new knowledge, skills and competence. Lifelong learning and the recognition of leanring and skills aims at facilitating the transition between different jobs, com-panies or sectors, as

well as the transition from unemployment or inactivity into employment. It is seen as a means of improving the match between labour market demand and supply and for supporting social inclusion.

ECVET is a tool that can assist lifelong learning by improving the transfer, recognition and accumulation of that which has been learned in the past, irrespective of the learning environment. It can facilitate the development of individualised and flexible lifelong learning paths enabling individual learners to gain knowledge, skills and competence, and ultimately a qualification.

ECVET supports a range of learners and learning scenarios including:

Learners wishing to upgrade or extend their qualifications through part-time study.

Learners wishing to study for additional qualifications that complement or build on those already held.

Learners seeking qualifications for career progression.

Learners returning to education or training.

7.3.3. How does ECVET work?

ECVET relies on a series of common goals, principles and technical components that centre on the recognition of learning outcomes and achievements for European citizens undertaking vocational education and training, irrespective of the learning context, location or delivery method.

ECVET works hand in hand with the European Qualifications Framework (EQF) to provide greater transparency in European qualifications, promoting the mobility of workers and learners, and facilitating lifelong learning.

ECVET brings together a wide range of actors, at local, national and European levels, with a view to encouraging its wider implementation and use, particularly in learning mobility.

7.3.4. ECVET History and Timeline

References to a credit transfer system for VET can be traced back to the Copenhagen Declaration, of 2002, where the recognition of competences and qualifications was confirmed, by the Directors General for Vocational Training (DGVT) and the European Commission, as a priority for VET.

In the years that followed, subsequent communiqués (Maastricht 2004, Helsinki 2006, Bordeaux 2008) confirmed a continuing commitment to a credit transfer system for VET. At the same time, a range of national and European-level testing and consultation activities were launched, involving a number of sectors and institutions, with a view to building a convincing ECVET proposal that could be presented for approval by the governing authorities. Centralised project funding was also made available by the European Commission, in 2008, to support the development of ECVET partnerships and to encourage the testing and experimentation of ECVET, with a particular focus on mobility in VET. As a result, 11 pilot projects were funded.

On 18 June 2009, a Recommendation of the European Parliament and of the Council on the establishment of a European Credit Systems for Vocational Education and Training (ECVET) confirmed common ECVET principles, provided detailed technical specifications for ECVET and recommended wider ECVET promotion and implementation by all Member States.

Since then, the focus has been on progressive implementation, with Member States encouraged to create conditions that will allow ECVET to be employed for all learners in VET. In 2010, the European Commission supported a second round of ECVET testing and experimentation activity, resulting in the funding of a further 8 pilot projects, this time with a focus on national implementation. Additionally, ECVET was confirmed as a priority within the Lifelong Learning Programme (2007-2013) and, more recently, within the Erasmus+ programme (2014-2020).

In 2011, a group of 14 national agencies responsible for overseeing implementation of the Lifelong Learning Programme (now Erasmus+) came together, under the leadership of the German national agency (NA BIBB), to support geographical mobility practitioners working with ECVET: this network of national agencies, known

as NetECVET, was responsible for the production of the current ECVET Mobility Toolkit.

In 2014, the Report on Evaluation of the Implementation of ECVET confirmed strengths and successes - such as mainstreaming of the learning outcomes approach - whilst providing recommendations for future development - such as the need to underline the benefits of ECVET for all parties and the need to better align ECVET with other recognition and transparency tools.

These recommendations were made concrete in the Riga Conclusions (June 2015) with direct reference to EU-level support for the continuing development of ECVET and with a particular focus on achieving greater coherence between ECVET and other recognition and transparency tools. Only a few months later, the Draft Joint Report of the Council and the Commission on the Implementation of ET2020 (August 2015) highlighted the need for simplification and rationalisation and confirmed the transparency and recognition of skills and qualifications to facilitate learning and labour mobility as one of six new priority areas for European cooperation in education and training.

More recently, the European Commission's New Skills Agenda for Europe, confirmed ten actions to help equip people in Europe with better skills, among which ambitions for "Making VET a First Choice" also talk of the possible future revision of ECVET.

7.3.5. ECVET Principles and Technical Components

European Credit system for Vocational Education and Training (ECVET) is a technical framework for the transfer, recognition and, where appropriate, accumulation of learning outcomes, with a view to achieving a qualification.

ECVET is a decentralised mechanism that relies on the voluntary participation of Member States, and wider VET stakeholders, and relies on mutual trust being established among all those involved.

ECVET centres on a series of Technical Components that, together, facilitate the process of learning recognition, irrespective of the country or education system in which the learning took place.

Successful ECVET implementation requires that qualifications be described in terms of learning outcomes, with learning outcomes brought together in units, and units often accumulated to form the basis of qualifications or awards. Assessment, validation and recognition processes must also be agreed, among all those participating, and should respect existing national, regional, sectoral or institutional practice.

In cases where credit is able to be awarded, a points system might also be considered with points directly attributed to ECVET units and qualifications.

ECVET practitioners are able to benefit from the use of common European documents, or templates, that promote quality in learning mobility, namely:

➢ **Memorandum of Understanding (MoU):** a voluntary agreement, between competent institutions, which sets out the framework for credit transfer and accumulation; the MoU formalises the ECVET relationship through confirming mutual acceptance of the status of, and the procedures put in place by, competent institutions.

➢ **Learning Agreement (LA):** a contract signed by all mobility parties, including the learner, in which the learning duration and expected learning outcomes are confirmed alongside mechanisms for assessment, validation and recognition.

7.3.6. ECVET and Learning Outcomes

What are Learning Outcomes?

Learning outcomes are defined in the Recommendation of the European Parliament and of the Council on the establishment of the EQF, and in a similar ECVET Recommendation, as "statements of what a learner knows, understands and is able to do on comple-tion of a learning process, and which are defined in terms of knowledge, skills and competence". Learning outcomes are usually developed as a part of the process of designing and building qualifications, and can be achieved, by individual learners, through various different learning pathways, modes of delivery and learning contexts (formal, non-formal and informal).

How are Learning Outcomes Described?

Whilst the European definition of learning outcomes uses the terms knowledge, skills and competence, as a common denominator, learning outcomes are often described using terminology or descriptors already in place across different European countries, regions and sectors. Once developed, learning outcomes are usually grouped together to form units, according to one or more common criteria (for example, linguistic, occupational or technical nature; complementary competences; level of learning). Units are then brought together to form whole qualifications. Decisions on the grouping of learning outcomes remain with the competent institutions in each country.

How are Learning Outcomes used for ECVET and Geographical Mobility?

In terms of geographical mobility, ECVET targets the improved recognition of learning outcomes, enabling individuals to fully integrate mobil-ity-related achievements into new or existing learning pathways, recognising and making visible that which they have learned abroad. Successful implementation of ECVET requires that qualifications be described using learning outcomes, with many of the technical components of ECVET underpinned by their use:

➢ in some European countries, the achievement of learning outcomes results in credit being awarded, following a process of validation, with such credit often contributing to the achievement of a qualification or award.

➢ in other countries, where unit-based qualifications are not in use, or where qualifications systems do not allow for credit accumulation or transfer, learning outcomes can be developed specifically for mobility purposes, with activities recognised as a part of the curriculum, yet with achievements often viewed as extra-credit.

In all cases learning outcomes should be agreed in advance, and communicated to all parties, with direct reference made in the learning agreement.

Additional information on the use of learning outcomes for ECVET and geographical mobility can be found in the ECVET Toolkit.

7.3.7. The EQF, ECVET and other European Instruments

The European Qualifications Framework (EQF) is one of a series of instruments developed to support European cooperation in education and training (other instruments include EQAVET, ECTS, NARIC and Europass)

Developed and tested over many years, the EQF was officially launched in April 2008 following a Recommendation of the European Parliament and of the Council.

Acting as a translation device for existing national qualifications, the EQF aims at promoting the mobility of workers and learners, facilitating lifelong learning and qualifications recognition and increasing understanding, and comparison, of the qualifications levels in different European countries through linking national qualifications systems to a common European reference framework.

The EQF encompasses all levels and all types of learning and centres on eight reference levels, known as EQF levels, that describe what a learner knows, understands and is able to do (learning outcomes descriptors). The EQF does not describe specific qualifications, however, relying instead on the levelling of qualifications and awards against existing National Qualifications Systems and Frameworks (NQFs).

The referencing of different national qualifications systems and frameworks to the EQF is ongoing, with some countries having completed this activity and other countries continuing to work on development and referencing actions. Where referencing has been completed, results have been uploaded to the EQF Portal (a part of the European Commission's Ploteus platform) to allow the comparison of different NQFs, to the EQF, and to each other.

The EQF shares common transparency goals with ECVET, with each of these instruments making use of learning outcomes (see section on Learning Outcomes). In ECVET, learning outcomes are used as a basis for credit transfer and accumulation. ECVET does not, however, provide a template or taxonomy for the development of learning outcomes, relying instead on models already in use at national, re-gional or systems level (for example, as a part of existing NQFs).

What is essential for ECVET is ensuring that learning outcomes are clearly identified and described to enable the mutual understanding of qualifications and judgments on:

➢ whether the qualifications covered in the framework of a partnership for geographical mobility lead to the same or similar occupation.

➢ whether learning outcomes, as described in one setting or context, are compara-ble with those able to be achieved in another setting or context.

With a view to promoting synergy between these two important instruments, many European countries have designated the same body or organisation to act as a national contact point for EQF and ECVET.

7.3.8. Key ECVET Actors

At European level, activity is led by the European Commission and its Directorate-General for Employment, Social Affairs and Inclusion, albeit with a requirement for regular reporting to the Directors General for Vocational Training (ACVT-DGVT), an informal body that brings together Ministers responsible for education, training and employment, from EU and accession countries, alongside a small number of wider VET stakeholders such as Cedefop and social partner representatives.

In addition to stimulating ECVET implementation and motivating the various national and European actors, the European Commission provides regular input to a number of different committees and advisory groups, with a view to ensuring coherence among the various European instruments developed to support European cooperation in education and training.

A number of additional European level actors also exist, however.

Currently, *ICF Consulting Services* is contracted as ECVET Secretariat working under contract to the European Commission. As well as maintaining the current *ECVET Mobility Toolkit*, the ECVET Secretariat is also responsible for the hosting of ECVET-related meetings, workshops and events, at European level, and for supporting the ECVET Community of Practice. The ECVET Community of Practice was launched in 2013 with a view to building partnerships and sharing

knowledge among those bodies, organisations and institutions involved in the governance, testing and implementation of ECVET. Register here to become a member of the Community of Practice and to hear more about future events and activities.

In line with the ECVET recommendation, an ECVET Users' Group was set-up to govern the quality and overall coherence of ECVET coordination, cooperation and implementation. Chaired by the European Commission, the *ECVET Users' Group* is formed by representatives of national Ministries with responsibility for VET, alongside wider VET stakeholders involved in one or more aspects of ECVET implementation - for example, social partners, employer associations, and national agencies working to implement the Erasmus+ Programme. Cedefop and the European Training Foundation (ETF) also provide specific expertise and input to the *ECVET Users' Group*.

As a part of their remit for management and implementation of the decentralised actions of the Erasmus+ Programme, some Erasmus+ National Agencies work together on areas of common interest, targeting improvements in policy and service delivery and the identification of good or interesting practice. An example of this, in the past, was *Thematic Networking*, an initiative which targeted the identification and exploitation of good practices emanating from European-funded development programmes - an example of *Thematic Networking* is NetECVET (2010-2013) which brought together 14 National Agencies in order to support geographical mobility practitioners working with ECVET. NetECVET was also responsible for initial development of the current ECVET Mobility Toolkit.

In the last decade or so, numerous ECVET-related projects have been funded either within the sectoral funding programmes for education and training (for example the Lifelong Learning and Erasmus+ Programmes) or in response to dedicated Calls for Proposals at European level, from which a vast array of tools and materials have been developed, and continue to exist; examples of these ECVET Projects are referenced in the current ECVET Toolkit.

Beyond European level activity, and governance, ECVET implementation at national level can (and does) involve a number of additional actors, including:

➢ **Erasmus+ National Agencies:** contracted by the national authorities in each country (national authorities are usually nominated departments within the Ministry of Education, Training or Labour), *Erasmus+ National Agencies* are responsible for the management and implementation of decentralised funding actions within the Erasmus+ programme - the European funding programme for education training, youth and sport; *Erasmus+ National Agencies* actively promote the use of common European tools and instruments for transparency and recognition (for example, ECVET, EQF, Europass) and are also responsible, in many countries, for managing National Teams of ECVET Experts in which selected experts work together to promote ECVET, encouraging its wider take-up and use;

➢ **ECVET National Coordination Points:** national coordination points - also referred to as ECVET national contact points or NCPs - exist in many European countries and provide expertise to qualifications providers and awarding bodies (helping them to better understand how ECVET can work with existing vocational qualifications, or in the design of new awards) and to mobility practitioners and individual learners (advising on possibilities for the recognition and validation of learning outcomes, particularly those achieved through geographical mobility);

➢ **Competent Institutions:** national ministries, sectoral bodies, chambers of commerce, regional education or employment administrations, qualifications awarding bodies, training providers and companies are just some of the bodies and institutions that are referred to, in ECVET circles, as *Competent Institutions*; such institutions differ from country to country but generally comprise those organisations responsible for the design and award of qualifications, the allocation of credit and credit points to qualifications (and units) and the assessment, validation and recognition of learning outcomes, with practices usually governed according to national policies and regulations;

➢ **Social Partners:** in many European countries, social partners play an important role in the design and development of new qualifications and awards, and in establishing standards and assessment criteria; social partners continue to promote the take-up of common European tools and instruments, such as ECVET and the EQF, and have been involved in their testing and promotion since the very beginning;

➢ **Mobility Practitioners:** mobility practitioners exist in all European countries and are responsible for organising short and long-duration mobility and for sending and hosting learners; in addition to education and training providers in the public and

private sectors, mobility practitioners can comprise employers, sectoral bodies and specialist mobility agencies, among others; mobility practitioners have played, and continue to play, an important role in the development, testing and implementation of ECVET and its technical components

7.4. EQAVET

7.4.1. What is EQAVET

European Quality Assurance in Vocational Education and Training (EQAVET) is a community of practice that promotes European collaboration in developing and improving quality assurance in VET.

The EQAVET Work Programme 2016-2017 has been devised on the basis of its members' experiences of developing their national approaches to the implementation of the Recommendation on the establishment of the European Quality Assurance Reference Framework (EQAVET Recommendation). It also builds on the experience of implementing the EQAVET Work Programme 2013-2015 and EQAVET Work Programme 2010-2012.

The Work Programme proposes the range and type of activities which are necessary to ensure that the EQAVET Recommendation is implemented in a way which embeds a culture of quality assurance throughout the EU. Embedding a culture of quality assurance for VET among all relevant stakeholders within and across Member States requires a bottom-up approach for the development and ownership of quality processes in VET systems.

Building on this principle, the activities of the Work Programme involve key players in the Member States as well as the European Commission, Social Partners and EU relevant stakeholders (in particular EU VET providers associations). The activities proposed are characterised by their flexibility and responsiveness to the emerging policy needs, which will ensure their relevance and usefulness.

Encouraging, stimulating and supporting the national implementation processes should be the focal-point within the work of the network in 2013-2015 with two distinguishable levels of action:

1. Supporting implementation at national level

2. Strengthening synergies and European cooperation

Network Members: The European Quality Assurance in Vocational Education and Training Network comprises representatives of the European Union Member States, Candidate Countries and European Economic Area countries, Social Partners, scientific advisers and the European Commission. The work of the Network is supported by the Secretariat and collaborating experts.

➤ Member States: Member States' representatives are appointed by relevant ministry/ministries responsible for quality assurance, certification and qualifications in vocational education and training.

➤ National Reference Points: National Reference Points bring together existing relevant bodies and involve social partners and all stakeholders concerned at national and regional levels in order to ensure the follow-up of initiatives.

➤ Social Partners: Social Partners are full members of the Network reflecting the role of the world of employment and the labour market in shaping the content of high quality VET.

➤ European Commission: The European Commission chairs the Network and works in partnership with the Member States and the Social Partners in order to ensure the effective implementation of the Reference Framework

➤ Scientific advisers: ETF and Cedefop support EQAVET and the European Commission in their work to the generation of an added value knowledge on issues concerning VET, contributing in the formulation of relevant, up-to-date and informed policy initiatives.

7.5. EHEA AND BOLOGNA PROCESS

The European Higher Education Area (EHEA) is the result of the political will of 48 countries which, step by step during the last eighteen years, built an area using common tools. These 48 countries implement reforms on higher education on the

basis of common key values – such as freedom of expression, autonomy for institutions, independent students unions, academic freedom, free movement of students and staff. Through this process, countries, institutions and stakeholders of the European area continuously adapt their higher education systems making them more compatible and strengthening their quality assurance mechanisms. For all these countries, the main goal is to increase staff and students' mobility and to facilitate employability.

This official website of EHEA provides both general information on this process and detailed information for experts.

8. LINKS

http://ec.europa.eu/programmes/erasmus-plus/about_en

http://www.europass.ie/europass/what.html

http://www.ecvet-toolkit.eu/introduction/what-ecvet

https://www.eqavet.eu/

http://www.ehea.info/

https://europass.cedefop.europa.eu/documents/curriculum-vitae/examples

9. REFERENCES

Pathaways towards validation and recognition of education, training & learning in the youth field: working paper *European Commission, General Direction "Culture and Education". Youth, Civil Society, Cpommunication. Council of Europe, General Directorate "Education, Culture and Sport". Strasbourg and Bruxelles, 2004*

Recommendation on the promotion and recognition of non-formal education/learning of young people *Rec(2003)8 adopted by Council of European Union 30° April 2003*

Study on the links between formal and non-formal education, Manuela du Bois- Reymond *(Ed.) Council of Europe. General directorate "Education, Culture and Heritage, Youth and Sport" Council of Europe. 2003*

Curriculum and Quality Group (CQDG) [EN] : *experts committee in the framework of Partnership Agreement between European Commission and Council of Europe about training for youth workers at a european level. DJ/EUCO(2001)9 the group was made of youth researchers, academics, youth workers and representatives of the Council of Europe, European Commission, Youth Forum and National Agencies.*

European Portfolio for youth leaders and youth workers (2006) - *initiative of the Council of Europe and European Youth Forum. It offers a tool to youth workers, volunteers, and professionals to evaluate and describe competencies regarding european quality standards.*

"Recognising Learning in Youth Exchanges. A Hands-On Toolkit" by Léargas, Irish National Agency

"Youthpass Unfolded. Practical tips and hands-on methods for making the most of the Youthpass process."
https://www.youthpass.eu/pl/publications/handbooks/

"T-Kit 10: Educational Evaluation in Youth Work" by Council of Europe
https://pjp-eu.coe.int/en/web/youth-partnership/t-kit-10-educational-evaluation-in-youth-work