

**PLAY IS OUR BRAIN'S
FAVORITE WAY OF LEARNING!**
/ DIANE ACKERMAN

WHAT ELEMENTS SHOULD BE CONSIDERED WHEN CREATING A GAMIFICATION ALGORITHM?

During Erasmus+: Youth in Action Training for youth workers "Gamification as a Tool for Learning Engagement" participants discussed and analyzed different criteria and came up with following elements:





PURPOSE (AIM)

- × What do we want to achieve with activity/ why do we do it?



RESULTS

- × What would be "ideal" result?
- × How will understand if/ when result are achieved (indicators, criteria)?
- × Why result is important and to whom (youngsters, youth workers, organisation, society)?



TARGET GROUP

- × Age
- × Background
- × Experience
- × Language
- × Special needs (physical/ mental abilities)
- × Personality
- × Expectations
- × Needs
- × Motivation



WHAT RESOURCES NEEDED/ AVAILABLE?

- × Environment
- × Space
- × Materials
- × Technical
- × Games
- × Financial
- × Human
- × Time to work with project



DURATION

- × Long term (more than month)
- × Short term (till 1 month)
- × Frequency
- × Repeatability



WINNING CONDITIONS

- × Rewards system
- × Prizes



MANAGEMENT - WHAT ARE THE ROLES, TASKS AND RESPONSIBILITIES?

- × Who generally is responsible for activity
- × Who will develop/ run activities
- × Who will pass info to involved people
- × Who will monitor process?
- × Who will keep main communication?



PROCESS/ MECHANISM

- × Competitive or cooperative
- × Point system
- × Time investment
- × Reflection achieved
- × Resources
- × Summary of results
- × Evaluation
- × Awards / Prize Fund
- × Possibility to repeat
- × Flow & Fiction
- × Scoring system
- × Leadership / Involvement
- × Number of people
- × Role of facilitator
- × Dynamic (Introduction/ Closure)
- × Assessment
- × Adaptability
- × Infinite or finite



CONTENT

- × Story
- × Design
- × Materials



CULTURE

- × Country
- × Individuals



OTHER TIPS

- × Step by step
- × Space for creativity
- × Involve participants in creation process



GAMIFICATION FOR LEARNING ENGAGEMENT

Gamification and game-based methods are powerful tools to be used in the learning process to motivate learners and help them to engage in the process and achieve learning goals. Both are widely used in different spheres, including business, different services and less in education. The non-formal education and youth work being a potential space for learning of young people and specialists working with young people is a great platform and opportunity to improve youth work results and diversify the process. Game based learning environment helps young people in the non-formal education to acquire new competences and improve already existing one. It brings an element of fun, engagement and definitely learning outcomes.



GAMIFICATION VS. GAME BASED LEARNING

Gamification - is adding game elements to a nongame situation. Business reward programs are a good example. Users, workers, clients are rewarded for certain behaviours. In the youth work, gamification is often integrated in an authentic manner. Young people develop a character, play as part of a team, and earn experience points, badges and rewards based on the related behaviour. Young people are rewarded for accomplishing tasks, working together, volunteering, support provided for others, project implementation and taking specific roles etc.

Game-based learning is a type of game play with defined learning outcomes (Shaffer, Halverson, Squire, & Gee, 2005). The design process of games for learning involves balancing the need to cover the subject matter with the desire to prioritize game play (Plass, Perlin, & Nordlinger, 2010). Play has been an important and critical element if human development.



THE ROLE OF PLAYING AND FUN IN GAME-BASED LEARNING

Playing and fun has an important role in development of child. Both increase motivation. Joy is the essence of the game. Joy and humour stimulate creativity as brain get from cognitive and rules-based state to fluid and relaxed, when all body engages in problem solving (Fromberg, 1992; Smilansky & Shefatya, 1990; Vygotsky; 1976). Thus, the learning process becomes attractive, easy and engaging.



THE RESEARCH SHOWS THAT GAMES:

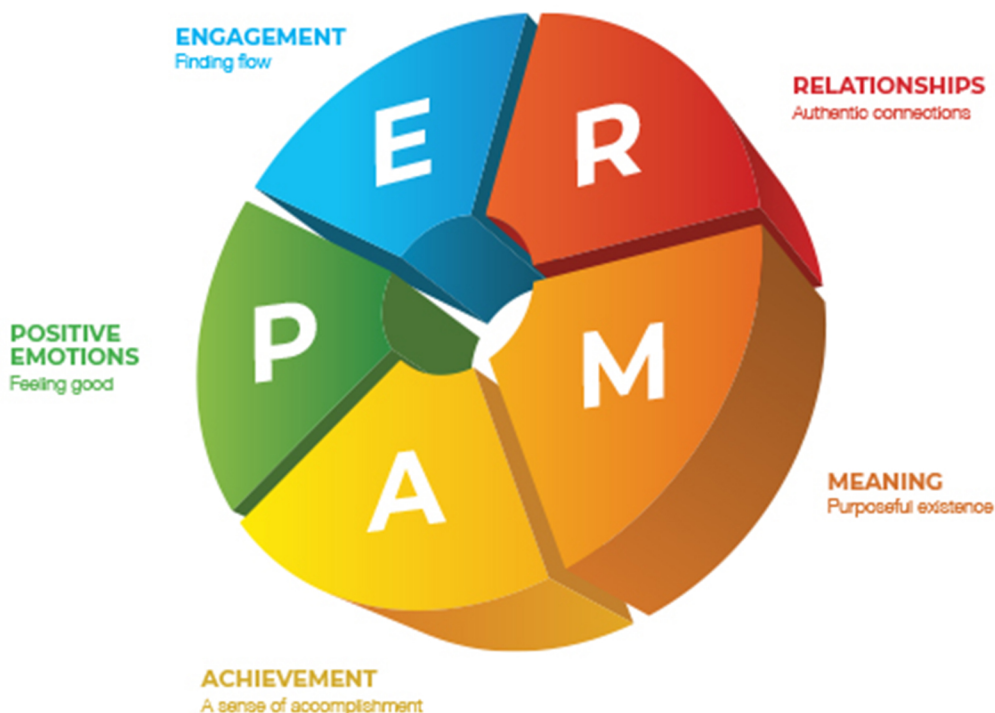
- Increase motivation of involved people
 - Boost interest about the processes where there was lack of interest or a low level of interest
 - get over 'engagement gap' what is important in communication
 - Can develop new patterns/habits
 - Can change people behaviour
 - Can provoke new collective initiatives
 - Can increase productivity and efficacy
 - promote exchange of information, knowledge and experience.
- Cooperative learning and group work is related to:
- lower risk for bullying;
 - better skills to see the question from different perspectives
 - better conflict resolution skills.



THE ROLE OF POSITIVE EMOTIONS IN LEARNING

Positive emotions play a positive and important role in developing people's capacity to learn. They provoke and enhance optimistic thinking, which leads to more creative problem-solving capacities. (Fredrickson and Joiner, 2002). Having fun together is a bonding experience and increases the sense of belonging to the group (Ayers et al., 2005). The psychological safety of all is an important element in having fun.

PERMA PRINCIPLES BY M. SELINGMAN

PERMA model which is a theoretical model of happiness developed by Martin Seligman can become your friend in making the learning process with games meaningful. The model offers 5 elements – different combinations of cognitive and emotional tools. (Seligman, M. E.P., 2002).





In the project "Gamification as a Tool for Learning Engagement" we looked at games and how gaming approach can be integrated into youth work as an innovative and interesting way to better involve and educate young people, especially young people with fewer opportunities and hard-to-reach groups. Develop the skills of youth workers to develop gaming algorithms, incl. using existing youth center games and educational projects.



PROJECT GOALS:



- ▶ To promote youth workers' understanding of the games as a innovative non-formal education tool and to discuss about gamification approach in a youth work;
- ▶ To enable project participants to acquire knowledge and to gain skills to develop gamification algorithms what can be included in a youth work and educational activities;
- ▶ To encourage participants to share their personal experiences of working with young people, especially about games in a learning process, main benefits, challenges;
- ▶ To develop personal and professional competencies of the participants for the future work with young people and to discover new ways how they can use games as a non-formal tool;
- ▶ To contribute to improve quality in a youth work and to develop cooperation among project



TRAINING COURSE LEARNING JOURNEY WAS FOCUSED ON SEVERAL IMPORTANT ASPECTS:

- ▶ GAMES & GAMIFICATION - What is it? / Why are games and playing games useful for young people? / How is gaming related to learning? / What are the stages of games?
 - ▶ LEARNING - What is Learning? / How do people learn? / How do games help people learn? / What can I learn using games? / What impact does such learning have on participants? / What skills does it develop, how are they useful and how can they be applied in real life? / Experiential learning.
 - ▶ Engagement (ENGAGEMENT) - Engaging Emotions in the Learning Process / Motivation and Different Types of Motivation / How motivation affects the gaming process? / Interest in involvement / Types of players / Group dynamics in gaming processes, or how games affect group dynamics.
 - ▶ Algorithm (ALGORYTM) - What elements should be considered when creating a gamification algorithm? / How to promote results in the short and long term? / How to create a gaming system in youth centers from existing games? / Criteria and recommendations for the algorithm exhibition.
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29 participants



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SOME RESOURCES FOR INSPIRATION TO GAMIFY LEARNING PROCESSES METHODS & GAMES

An interactive competence game which would promote and develop 8 lifelong learning key competences "8KEYCOM": www.8competencesgame.com

Educational card games to develop personal and professional competences and to get inspiration "TELL YOUR STORY": www.tellyourstorycards.com

A simple and highly engaging team communication and problem-solving task "WORKSTATIONS" shop.rsvpdesign.co.uk / webpage - rsvpdesign.co.uk

A card game for gamification design: www.gamificationnation.com

The game design methodology: educationaltoolsportal.eu/en/tools

Games "Play Inclusive": www.playinclusive.com

Game "Zoom in, Zoom out": odnchicago.org/wp-content/uploads


**ACTIVE LINKS
(CLICK)**

GAMIFICATION EXAMPLES

Classcraft: www.classcraft.com

Scouts: www.skaut.cz/english/about-us

Find the future: xhibitions.nypl.org/100/digital_fun/play_the_game

Find the Future at NYPL: The Game www.youtube.com/watch?v=NTAIBv-oVYk

Serious European games with Open Badges: www.slideshare.net/badge-craft/league-of-youth-work-agents

Duolingo www.duolingo.com

Goosechase www.goosechase.com

Khan Academy www.khanacademy.org/welcome

Super Better www.superbetter.com

Class Dojo www.classdojo.com

Fitocracy www.fitocracy.com

Actionbound www.actionbound.de

OTHER RESOURCES

Ted talk by Jane McConighal "Gaming can make a better World"
www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world

McGonigal, J. 2011. Reality is Broken: Why Games make Us Better and how they can Change the World. Penguin Pr.

Pyramid of game elements and 6 steps to gamification - Hunter, D., Werbach, K. 2012. For the win. Wharton Digital Press Philadelphia. - Wharton School, University of Pennsylvania