flipbook

Mind the Game

The current flip book is part of the Erasmus small-scale partnerships in youth work: "Mind the Game or Game the Mind: Rethinking Gamification as an Educational Approach in Youth Work and Citizenship Education."

This project is being implemented in 2024 in Germany, Estonia and Poland.

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DISCLAIMER

DEAR READER OF THE MIND THE GAME FLIPBOOK,

We're excited to invite you on a journey of exploration into the world of game-based learning. We hope this Flipbook will offer an interactive experience aimed at immersing you in the dynamic realm of game-based learning. Within its pages, you'll find a mix of insights, reflections, stories, research, and practical guides, all carefully curated to shed light on the potential of game-based learning and the evidence of its efficacy. From the project's inception to the practical application of game design principles, each chapter presents a unique perspective of professionals from the educational field on how games can enhance education and youth work.

This small book can flip and vibe with you if you also take courage to apply game in education and learning. In other words it's an alive script of what was raised up as a result of reflection, mutual learning and stories of people journeying alongside us. Enjoy your reading or flipping, and feel invited to be a part of our community of practice inspired by game, play and innovative learning. Welcome to the Mind the Game Flipbook!

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UNVEILING MIND THE GAME: THE HEROES' JOURNEY

Nik Korba / Unsplash

In game development, storytelling is crucial. Therefore, we wanted to share the main milestones of the Mind the Game project as a story of heroes – the participants of the project – taking a journey, experiencing its twists and turns while learning, playing, and growing along the way.

REFLECT AND RETHINK

Our journey began with a group of passionate youth workers, educators and facilitators from Estonia, Germany, and Poland. They gathered in Tallinn for a reflective residency where they met with 15 fellow practitioners. During the residency, our heroes were particularly inspired by exploring educational games created by the Shokkin Group. These games tackled important topics like mental health, sustainability, and diversity, sparking their creativity and passion for innovative learning processes. This peer environment and partners' best practices set the tone for further deepening reflection and sense-making.

EXPLORE AND CO-CREATE

Throughout the project, our participants valued the inclusive and supportive environment fostered by their peers and the project team. They tackled educational challenges, nurtured their professional curiosity, and championed the transformative potential of game-based learning by gathering together in digital exchange spaces. Their collaborative efforts produced articles, methods, checklists, and other materials featured in this flipbook, podcasts, and a library of resources.

INSPIRE AND EXCHANGE

In the Beskid Niski mountains of Poland, our heroes engaged in 'Game Matters Training.' Here, they learned to craft engaging educational experiences using gamification techniques, working with various facilitation methods to explore the nature of learning design. They also played extensively to distill the essence and value of game-based learning. With insights from professionals across Estonia, Poland, and Germany, they developed pilot activities using the Mind the Game Canvas, a framework for designing game-based learning experiences.
This collaborative effort led to diverse implementations of game-based learning for various groups.

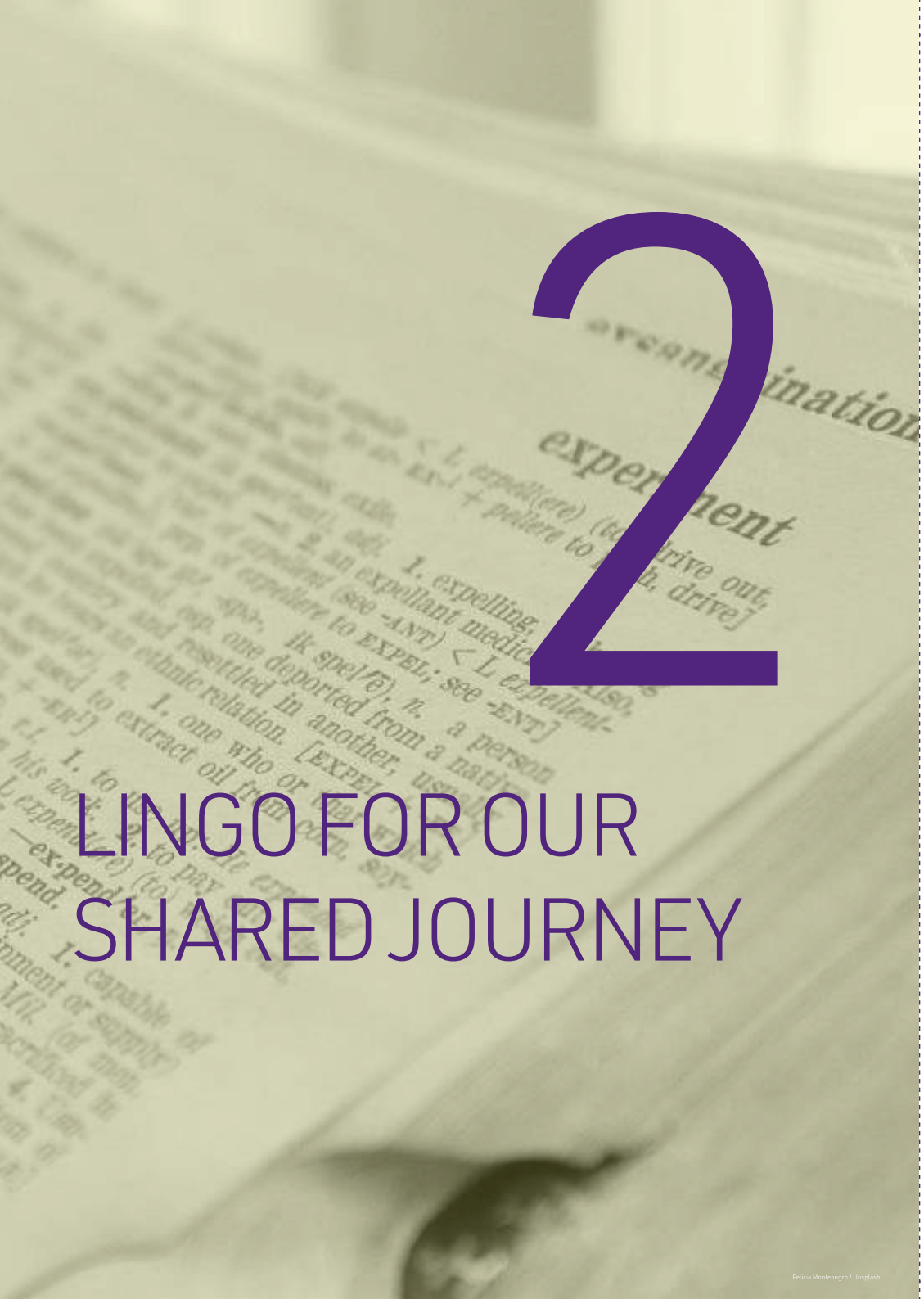
PILOTE AND TEST

Participants in the project implemented eight pilot initiatives on various topics for young people in their respective countries. These efforts directly reached 217 young people in Germany, Estonia, and Poland, showcasing effective methods for addressing cross-cutting issues and best practices for engagement and immersive learning experiences through games.

RECAP, CELEBRATE AND SCALE

As the project drew to a close, our heroes gathered in Berlin for a final reflective session. They celebrated their growth, shared insights, and planned future collaborations. Inspired by their experience, they returned to their work with renewed enthusiasm and fresh perspectives, continuing to advocate for game-based approaches in youth work. For our heroes, the 'Mind the Game or Game the Mind' project was not just a professional journey – it was a transformative experience. It fueled their passion for innovative education and empowered them to make a difference in the lives of young people.

As you explore this flipbook, you'll discover artifacts, stories, practical applications, and tools for designing engaging learning experiences. Enjoy your journey, and remember to mind the game–or better yet, game the mind.



Felicia Montenegro / Unsplash

2 LINGO FOR OUR SHARED JOURNEY

MIND THE GAME TERMINOLOGY

Pavel Vassiljev, Rodrigo Eyzaguirre

Gamified learning solutions, such as game-based learning, gamification, and educational play, have become increasingly popular in recent years. They have proven to increase learner engagement, motivation, and participation, making the learning process more enjoyable and effective. By incorporating game-like elements educators can create a safe and fun learning environment that encourages students to take an active role in learning. In this article, we will explore the definitions of these terms.

Defining terms can be a daunting task, especially when it comes to gamified learning solutions. With various sources providing their own nuances and peculiarities, it can be challenging to foster a common understanding of what we mean by gamified learning among practitioners.

Below you can find our attempt to come up with a logical frame of definitions including down-to-earth examples to help you better understand each concept.

ACTIVE LEARNING

A method of educating students that allows them to participate in class. It takes them beyond the role of passive listener and note taker, and allows the student to take some direction and initiative during the class.

Source: (Lorenzen, 2001)

Example: An educator creates a social studies curriculum where the learners take part in group work activities discovering the voting system; uses various discussion methods about advantages and disadvantages of different voting systems; invites learners to make presentations about election cases and give one another feedback.

GAMIFICATION

"The process of using game-like elements such as challenge, competition, and rewards to motivate and engage individuals in non-game contexts, such as the workplace or education."

Source: (Jane McGonigal, 2011)

Example: An educator creates a social studies curriculum where the learners see a progress bar in the classroom with the topics and dates of classes; gives out badges for taking an active part in a debate about advantages and disadvantages of different voting systems; invites learners to distribute points to each other during a presentation about election cases.

GAME-BASED LEARNING

Game based learning (GBL) is thus the act of appropriating games or game mechanics, recreating the scenario-based, problem-oriented learning processes found in games in order to fulfill specific learning purposes.

Source: (Poulsen, 2011).

Principles of Game-based Learning:

- Solving problems
- Action in context
- Receiving feedback
- Optimal challenge
- Safe zones

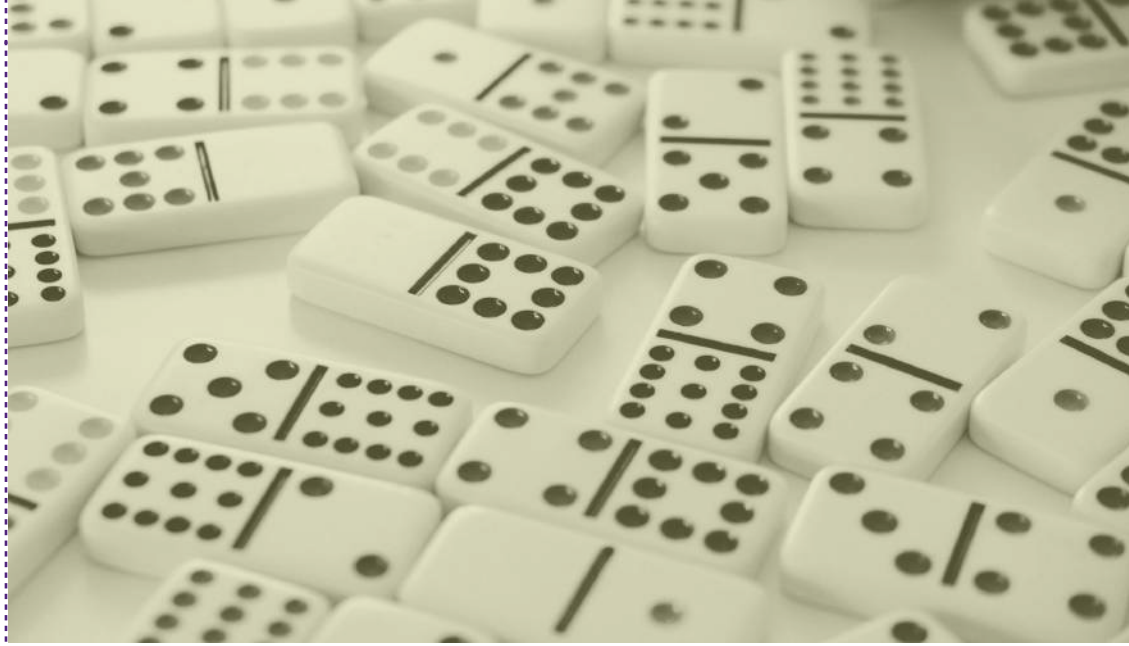
Example: An educator creates a social studies curriculum where the learners play a simulation game discovering the voting system of their country; uses a quest-like game about advantages and disadvantages of different voting systems; invites learners to play a board game with different election cases and evaluates students based on that.

GAMIFIED LEARNING

Gamified Learning can be loosely defined as the educational approach that uses games, game elements, gamification and an overall game design approach to increase engagement and competence development in a learning process.

Source: (Mind the Game Reflective Residency Practitioners, 2023)

Example: An educator creates a social studies curriculum that is themed as an election campaign and learners work in groups to gain votes based on how active they are in class; Organizes a roleplay game in the middle of the course to practically show an election campaign and vote counting; invites learners to simulate an election debate at the end of the course and invites students to vote for better prepared teams.



Ryan Quintal / Unsplash

EDUCATIONAL PLAY

A context for learning through which learners organise and make sense of their social worlds, as they engage actively with people, objects and representations

Source: The Early Years Learning Framework for Australia

Example: An educator brings a box of LEGO to the classroom and invites participants to create a representation of a successful election campaign that can take place in their town. After the representations are ready, learners share their ideas and inspiration with one another and the group. After the presentation there is a discussion led by the educator.

EDUCATIONAL GAME

Educational games are specifically designed to teach people about a certain subject, expand concepts, reinforce development, or assist them in drilling or learning a skill or seeking a change of attitude as they play

Source: (Dempsey et al., 1996).

Example: An educator sets up a simulated election office in the classroom, gives out role cards and personal missions to learners and invites them to play out their roles and try to achieve the mission by a certain amount of time. Once the time runs out the group checks who managed to fulfill their mission and a debriefing is facilitated about experiences.

> When applying gamified learning solutions it is absolutely okay to use above mentioned definitions loosely. Instead we invite you to experiment with various mixtures of play, gamification elements, overarching narratives, repurposed games and tailor-made educational games. Welcome to the world of gamified learning.

Beth Jnr / Unsplash

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MINING THE CONTEXT

BANI WORLD AND YOUNG PEOPLE: USING GAMES TO EMBRACE NEW REALITY

Maxim Smekhov

LET'S KICK OFF WITH A PERSONAL TALE

As I moved to Germany together with my wife and our 6-year-old son in 2019, I was really curious about the emerging changes in my life. I imagined myself as if I were in the Sims game, being able to play and establish my life the way I want here. I started to learn the rules, the rituals, and the relations of the 'game' that happened to me, called immigration. My immigration has had different stages, from the very optimistic euphoria about the beauty of the new place, to the entire confusion about my own identity, belonging, and new cultural code.

In the first months in Germany, I tried to convince myself (despite the inner turbulence) that everything going on around me was very romantic. I played this game with myself, tricking my overwhelmed mind, and tried to embrace all the challenges with wonder. Every day, I felt doubly uncertain about everything, but I noticed every detail and every artifact of this new existence, trying to gain something useful, see something beautiful, and learn from it. I marveled at seeing my name on the newly rented apartment, the beautiful trees lining the street, an elderly owner of a small art studio, and the neighbor's toddler enjoying his first ice cream.

As I tried to explore new experiences and connect with my surroundings, imagining it like playing in a calm and simple Minecraft world, my son strongly and aggressively rejected everything. For him all that was overwhelming, scary, and exhausting. Adapting to the new school system (his first experience) was truly problematic for him.

Every morning, he'd yell at us, blaming us for making him go to school and saying it was a dumb idea to move to this country. It took him three whole months to stop protesting by doing nothing, to stop staring blankly at the clock, and finally start talking to his classmates in the "Willkommen Klasse". During those months we tried conversations, we spoke to the school psychologist, but honestly, we were losing hope that things would ever get better.

But then, something unexpected happened: Pokémon cards. Yeah, you read it right. With no jokes, Pokémon cards finally became the primary and very powerful integration tool for my son. One day, everything began to change. He asked us to buy Pokémon cards, and we did.

Since then, he has begun collaborating, employing his 30 German words he learned to join "the gang", play, contribute, and express himself.

Thimo Pedersen / Unsplash

One evening that I'll never forget is when I realized my son, who firmly declared he'd never speak German, was passionately explaining the Pokémon game to me entirely in this new language. It was the only way to talk about all the things in the game, like a secret code he used to understand it. But more than just the language, what mattered most was how the game made him feel included in his school community, allowing him to immerse himself in the narrative, and create connections with peers. Unexpectedly, that was the moment he became local, a moment he became a Berliner.

Over the next year, we used to swing by a game shop where my son would spend his pocket money on buying new Pokémon cards. I was skeptical, questioning why I was paying a fortune for just pieces of paper and plastic. But then I realized I was investing in the sense of belonging.

Very soon, Berlin has become home for us, we all love the city. I still play that Sims game in my mind, doing morning jogging in the park, having small talks with my 88 year-old neighbor, and indulging in scoops of ice cream from the neighbor's small coffee shop. That all feels so real and unreal at the same time. Though my son has outgrown his Pokemon cards, the collection album still holds a place in his room, evoking memory pictures, how Pokemon served as an anxiety-escape-totem for us adults and a simple entry point for our son to joy, meaning and relationships.

BANI FRAMEWORK AND GAME-BASED LEARNING

My story is an honest, albeit somewhat idealistic, attempt to personalize the topics we aim to explore in this longrid. As a father and a facilitator, I witness the profound impact games can have on individuals, bridging experiences across the domain of gaming, virtuality, and reality. Whether through Pokémon cards, large-scale games, simulators, or video games, these interactive mediums present opportunities for connection, collaboration, and personal development.

As another example, I recall a story from a participant in the Mind the Game project, a student enrolled in a Master's course on game design in Estonia. She shared experiencing, for the first time during the pandemic's restrictions, a sense of closeness with her brother by engaging in video games. In the physical world, they struggled to find common topics of conversation, but within the virtual realm of video games, they felt like a unified team. Playing video games together became a daily ritual, enabling them to connect, check in, and partake in shared experiences. This practice helped them combat boredom, loneliness, and the pervasive sense of disconnection brought on by COVID-19.

In exploring the potential of games for education, in this longrid we would like to combine personal stories, theory and practice from the field to zoom in on diverse aspects of game and its impact. From fostering well-being and trauma rehabilitation to cultivating meta-skills and addressing issues of loneliness and intersectional identities crises, games offer a rich terrain for discovery. Developing the project Mind the Game, we stumbled upon the newly emerged concept of the **BANI world, as Jamais Cascio put it: 'brittle,' 'anxious,' 'nonlinear,' and 'incomprehensible'**. Through this lens, we aimed to take a broader look at the role of games and identified the question: **What essential qualities of the BANI world should young people adopt and incorporate into their lives, and how can games facilitate this integration?**

Before we delve into the qualities, let's take a look at a short gallery of different research already conducted on the power of games in educating youth and developing the skills and special mindset to address the challenges of the future.

GAME STUDIES: HOW PLAY CAN AID EDUCATION

Game studies is a relatively new field in science, but the intersection of research on games and education, including the works of James Paul Gee, Katie Salen Tekinbas, Seymour Papert, and Bernard De Koven, offers insights into how games can prepare young people to navigate the complexities of the modern world. Gee's emphasis on the cognitive benefits of games highlights how they cultivate problem-solving, critical thinking, and collaboration skills[1]. Salen Tekinbas[2] expands this perspective, advocating for game-based learning principles that enhance adaptability and resilience across educational contexts. Papert's[3] constructionist learning principles underscore the value of hands-on exploration and creativity facilitated through games, promoting adaptability in uncertain environments. De Koven's[4] focus on playfulness and social interaction highlights how games foster communication, empathy, and flexibility, crucial for navigating ambiguity and change. De Koven argues that when individuals approach games with a spirit of playfulness, curiosity, and creativity, they can cultivate a sense of wholeness and fulfillment, embracing life's challenges with greater ease and authenticity, ultimately leading to a more meaningful existence.

Sonja Livingstone in her research[5] highlights that young people, despite having many online friends, often disregard privacy and enjoy showcasing themselves. The study delves into teenagers' social media usage, revealing that younger ones focus on crafting intricate online personas, while older ones prioritize genuine friendships. This understanding is important in integrating social interaction and identity exploration into learning process, fostering self-development, socialization, and identity expression, where gamification can serve as an interactive supporting tool.

Jane McGoniga[6] emerges as a famous figure in the realm of alternate reality games with real-world benefits. She advocates for video games as tools for learning, healing, and improving attitudes in young people. Her research emphasizes the positive impacts of gaming on collaboration, skill development, and dispelling myths about violence. McGonigal promotes integrating game-like experiences into education and advocates for mindful gaming choices. In "Reality Is Broken," she showcases how games address issues like depression and poverty, offering insights into their influence across various sectors. Therefore, her research also provides evidence that games prepare young people to face the challenges of the modern world, characterized by the post-truth era and the constantly evolving "new normal".

[1]Gee, J. P. (2013). The Anti-Education Era: Creating Smarter Students through Digital Learning
[2]Salen Tekinbas, K., & Steinkuehler, C. (2017). The Mangle of Play
[3]Papert, S. (2007). The Learning Power of LEGO
[4]De Koven, B. (2017). The Well-Played Game: A Playful Path to Wholeness
[5]Taking Risky Opportunities in Youthful Content Creation: Teenagers' Use of Social Networking Sites for Intimacy, Privacy and Self-Expression. New Media & Society, 10, 393-411, 2008
[6]Reality is Broken: Why Games Make Us Better and How They Can Change the World (Penguin Press, 2011) and SuperBetter: The Power of Living Gamefully (Penguin Press, 2016).

VOICES FROM PRACTICE

Grounding this topic into our practice in youth work, let's look at the example of one of the partners of Mind the Game project, Shokkin Group Estonia[7]. Their extensive experience in youth work, with game-based learning at its core, underscores the invaluable role games play in developing essential cognitive skills, adaptability, creativity, collaboration, and resilience needed to navigate in today's dynamic world. Operating from Estonia, Shokkin's team works within a highly diverse and complex social and historical landscape. For instance, while national-level governmental institutions struggle with integrating Russian-speaking and Estonian-speaking youth, Shokkin fosters safer spaces by bringing together youngsters from all backgrounds in neighborhoods through gaming initiatives offering to those speaking different languages a language of game.

Over the span of more than a decade, Shokkin has applied game-based learning to tackle a diverse range of relevant topics, such as mental health, mobbing, sustainability, climate change, civic engagement, etc. During our organization of a reflective residency at the youth center where Shokkin resides, we had the opportunity to immerse ourselves in the games they've been developing over the last years. Within our small group, we engaged in testing their innovative escape-box centered around mental health, delving into the narrative of a single teenager and various complexities a person of this age might be facing. This 25 minutes experience not only deepened our understanding of the topic but also revealed the contrast it presents to frontal learning. Shokkin's findings, as presented in their narratives, not only offer insights into gamification but also furnish us with evidence-based data indicating that game-based learning is an effective tool applicable in both formal and non-formal education. Ultimately, it equips young individuals with the skills needed to navigate complexity and chaos in their lives and the world.

7 https://et.shokkin.org/

GAMES AND THE BANI WORLD: ESSENTIAL SKILLS FOR YOUTH

Further we aim to delve deeper into the concept of the BANI world, offering an overview of its defining characteristics, dynamics and qualities. Our humble interpretation of the BANI concept should serve to spotlight the essential skills that young individuals will require today and in future. Additionally, we will draw examples from both the realm of video games, well-known educational, table, simulation games and games partners of the project have already tried out and integrated into their work.

BRITTLE

To understand this quality, we can think about building tower with blocks. You stack them up, making it seem really strong. But then, out of nowhere, it collapses. That's what happens with brittle things. They look tough, like rocks, but they break easily under pressure. It's like when your pretty new computer suddenly crashes without warning. Or Imagine delicate things, like a glass vase. They're fragile and break easily. But brittle things, they seem strong until they shatter unexpectedly. For young people, climate change is a big example of this brittleness in the world. They see how our systems can collapse, leading to disasters.

Practicing understanding of such systems, reflecting and raising self-awareness through games can help youth not just gain the skills to develop solutions, but also develop the special mindset to handle and adapt to the everlasting chaos. For example, during the training of Mind the Game project, educators made references to the "Pandemic" - is a cooperative board game where players work together as members of a disease control team to prevent global outbreaks of deadly diseases. Players must collaborate to strategize, allocate resources effectively, and contain the spread of infections while racing against the clock. The game emphasizes teamwork, communication, and adaptability as players face new outbreaks and unforeseen complications. By playing games like "Pandemic," participants can learn valuable lessons about resilience, collaboration, and the importance of proactive problem-solving in the face of crises.

Michał Parzuchowski / Unsplash

LIFE CAN BE LIKE A TOWER OF JENGA BLOCKS – LOOKS SOLID UNTIL IT ALL COMES CRASHING DOWN. BE READY FOR UNEXPECTED TWISTS, LIKE CLIMATE CHANGE MESSING WITH OUR SYSTEMS. STAY COOL, FIND SOLUTIONS, AND NAVIGATE THROUGH THE CHAOS.

ANXIOUS

The "A" in BANI stands for Anxious, meaning systems that make you feel worried, says Jamais Cascio. These are situations where you face tough problems without good solutions or have to make choices that you can't change. Anxious systems make it hard to trust because things you thought were true suddenly seem wrong, and decisions you thought were smart don't feel so sure anymore. In a world where things are always changing, one wrong move can lead to big problems. Jamais Cascio gives an example of an anxiety-causing system, it is misinformation, which can be political, economic, or personal. In the past few years, we've seen a lot of this. Misinformation often uses technology, but what's really important is how young people react to it.

With constant information overload, societal pressures, and uncertainty, it's vital for young people to develop coping mechanisms, emotional intelligence, and mindfulness practices to navigate anxiety and maintain mental well-being. Young people can face additional challenges when they're being raised by anxious or confused adults[8]. If the adults in their lives are struggling to cope with their own anxiety or uncertainties about the world, it can create a tense or unstable environment for young people. Games can contribute to helping young people cope with these feelings and emotions.

THE WORLD MAKES YOU FEEL SUPER STRESSED OR NERVOUS BECAUSE EVERYTHING IS ALWAYS CHANGING AND UNPREDICTABLE. BUT DON'T LET IT MESS WITH YOUR VIBE. LEARN TO CHILL, COPE WITH STRESS, AND KEEP YOUR MENTAL GAME STRONG BY TAKING DEEP BREATHS, TALKING TO SOMEONE YOU TRUST, OR FOCUSING ON THINGS YOU CAN CONTROL.

[8] Proven Strategies for Anxious Parents Who May Pass Their Anxiety on to Their Children

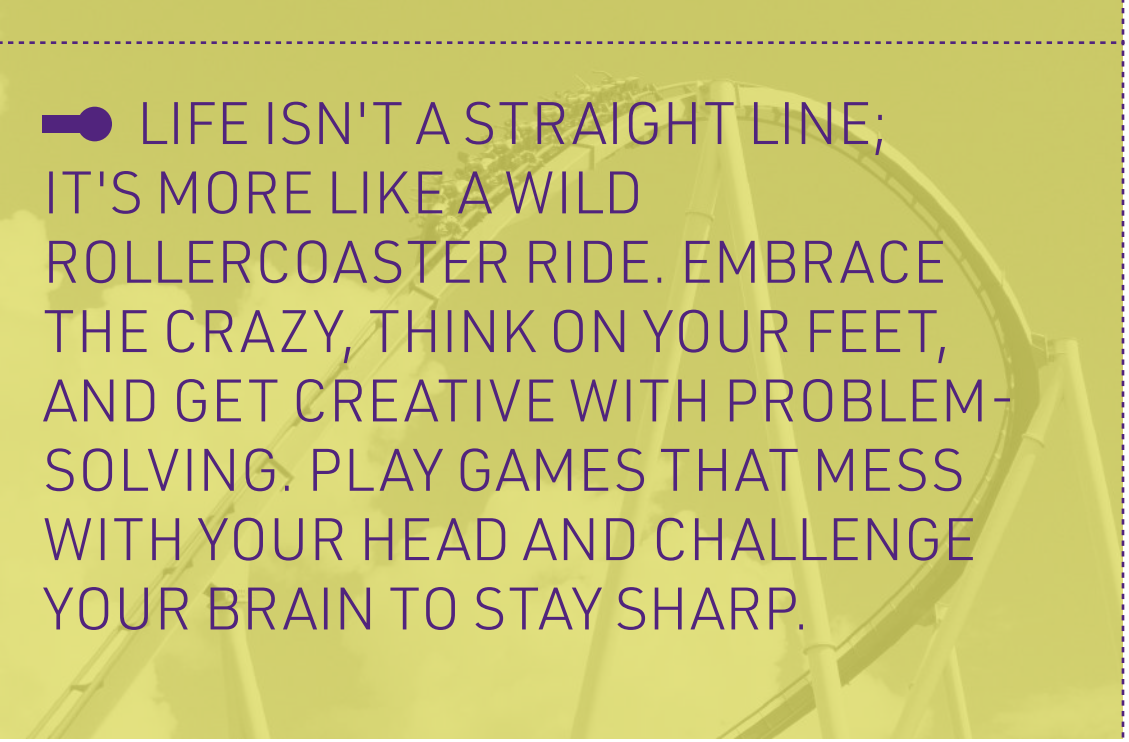
According to the latest UNICEF report[9], in 2019, over 14 million young people in Europe experienced mental health challenges. COVID-19 worsened this situation, causing a doubling of anxiety and depression symptoms in many countries. UNICEF reports that suicide is the second leading cause of death among European youth. Shockingly, almost half of EU youth (49%) lack access to mental health care, compared to 23% of adults. This means that 49% of young people aren't getting the support they need.

HERE'S SOME EXAMPLES FROM OUR PRACTICE, WHICH POPPED UP DURING PRACTITIONERS' REFLECTIONS IN THE FRAME OF MIND THE GAME :

Interactive simulations provide a safer space for players to confront anxiety-inducing scenarios.	**Games simulate** public speaking, social interactions, and academic challenges, helping players in desensitizing to stressors.	Mechanics like **emotion cards and role-playing** enhance communication and empathy.
Platforms like **Minecraft** foster teamwork and community building.	**Games with social features** create safe spaces and promote positive norms against harassment.	**CBT games** integrate cognitive-behavioral therapy principles to challenge negative thoughts.
"Think-Feel-Do" helps reframe perceptions and build flexible thinking skills.	Another example is **"SPARX"**, a game that teaches coping strategies for depression and anxiety through fantasy quests.	**Mindfulness and relaxation games** offer interactive exercises to manage anxiety effectively.
"Breath of Light" guides players through breathing exercises, while "Color Zen" promotes relaxation through puzzles.	Games like **"Life is Strange"** tackle themes of mental health and personal growth, offering players insights into their own experiences. Similarly, "Celeste" explores anxiety and self-discovery through challenging platforming gameplay.	**Narrative-driven experiences** immerse players in stories of resilience.

While addressing mental health issues requires systemic solutions, normalizing these conversations in education and increasing their visibility is a concrete goal we should all work toward. Game-based learning can help destigmatize this topic and empower educators to navigate it with confidence.

[9] The Mental Health Burden Affecting Europe's Children



LIFE ISN'T A STRAIGHT LINE; IT'S MORE LIKE A WILD ROLLERCOASTER RIDE. EMBRACE THE CRAZY, THINK ON YOUR FEET, AND GET CREATIVE WITH PROBLEM-SOLVING. PLAY GAMES THAT MESS WITH YOUR HEAD AND CHALLENGE YOUR BRAIN TO STAY SHARP.

NON-LINEAR

Understanding that cause-and-effect relationships are not always straightforward in a non-linear world is key. Young people should embrace complexity and develop critical thinking skills to navigate ambiguity, make informed decisions, and anticipate unintended consequences. Alongside critical thinking, it's also important to foster creativity, encourage authenticity, cultivate a digital mindset, and promote embracing awkwardness, courage, and raw I-am-ness, which all in result will contribute to developing innovative solutions to deal with non-linear issues.

Games simulate complex systems, letting players explore the relationships of different elements of the system in a safe way. This helps young people understand how things interact in different systems and what are the dynamics and impact of these interactions. By playing games that require strategy and problem-solving, they learn to analyze situations from different angles and predict consequences. Trying various tactics in games fosters creativity and comfort with uncertainty. For instance, Shokkin offers escape games on different topics. Supported by Erasmus, the project Critical Escape created COMMUNICATION BREAKDOWN. This game plunges players into a future where disconnected communication causes societal collapse. It challenges them to think critically, solve problems creatively, and innovate. Players must unravel the reasons behind societal collapse, analyze information, and find connections. They're pushed to think outside the box to succeed, whether it's decoding messages or improvising solutions.

INCOMPREHENSIBLE

Imagine a world where things seem to be constantly changing, where traditional systems and ways of thinking no longer apply. It's like trying to navigate through a maze without a map – everything feels ridiculous, senseless, and even unthinkable. In such world, relying on intuition becomes paramount, tapping into our brain's ability to see hidden connections or sense when something isn't quite right, even in seemingly normal situations. Jamais Cascio, refers to this as a "gut feeling"[10], our brains excel at recognizing patterns, with our subconscious drawing conclusions from evidence we may not consciously perceive. The remarkable thing about intuition is that it's uniquely human, a product of millions of years of biological evolution.

Games often require players to think strategically, fostering the development of intuition by encouraging them to anticipate outcomes and make decisions based on gut feelings. Exposing young people to a variety of games, including social deduction games, board games, video games, and puzzles, can help them develop different facets of intuition, such as pattern recognition and decision-making skills. Educators can prompt students to reflect on their gaming experiences, encouraging them to identify moments when they relied on intuition and analyze the outcomes of their decisions. For example Rory's Story Cubes is a storytelling game where players roll dice with different images and use them to create stories. Players must rely on intuition and creativity to connect the images and weave them into cohesive narratives. Portal 2 is a puzzle-platform game that challenges players to navigate through complex environments using portals. Solving puzzles requires intuition, spatial reasoning, and the ability to think outside the box.

During the training session "Games matter" in the frame of the Mind The Game" project, we experienced a creatively gamified practice of night walking, where participants were encouraged to connect with their other senses in the darkness of the forest. This involved implementing various exercises that focused inwardly, in contrast to our daily outward existence. Such practices are being applied by partners of the project Galicyjska Fundacja Rozwój i Edukacja in their work with children and young people, highlighting the value of nature and our interconnectedness with the environment. Additionally, these practices positively contribute to the development of skills beyond rational thinking and perception, fostering a heightened sense of intuition, or "gut feeling", among participants.

SOMETIMES YOU GOTTA TRUST YOUR INSTINCTS, EVEN WHEN THINGS DON'T MAKE SENSE. LISTEN TO THAT INNER VOICE AND SPOT THE PATTERNS. REFLECT ON YOUR GAMING MOMENTS AND LEARN TO TRUST YOUR GAMER INSTINCTS IN REAL LIFE

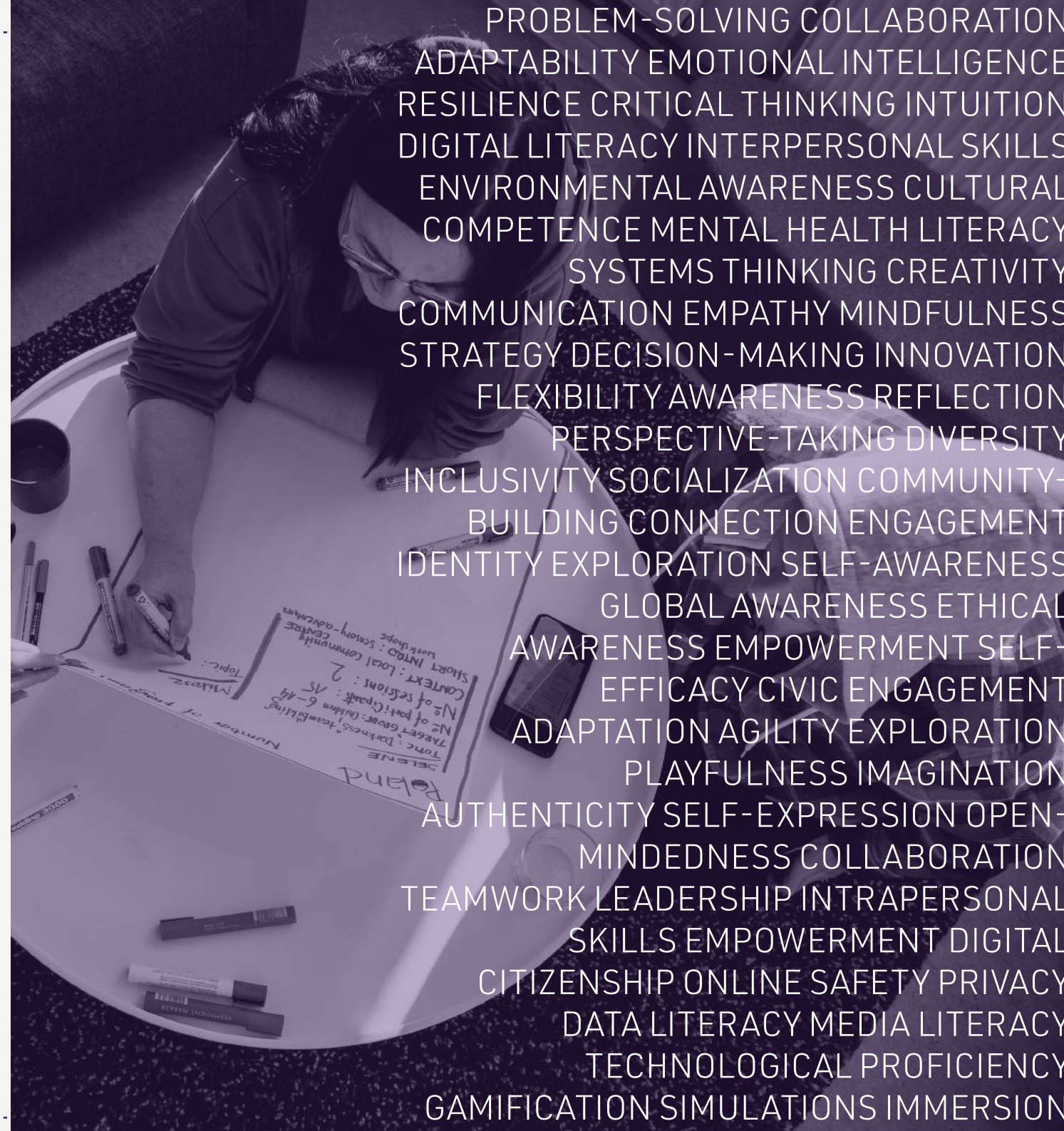
[10] Jamais Cascio - Human Responses to a BANI World

WE JUST SPICE UP CONVERSATION

In conclusion, it's worth mentioning that the BANI world concept provided us with a framework to synchronize game-based learning outcomes with vital future skills and competencies for youth. However, we acknowledge the uncertainties and incompleteness in our approach, but we just wanted to experimentally expose the realm of possibilities facilitated by game-based learning. Regard this text as one more piece for stimulating discussions within the practitioner community.

Returning to the initial question posed in this longread: What essential qualities of the BANI world should young people adopt and integrate into their lives, and how can games facilitate this integration? We looked at practical examples and evidence-based research data on the potential of play and the impactful features of games. Our exploration implies that educators can apply game-based learning for fostering resilience, adaptability, and critical and system thinking in young learners. Examples from the Mind the Game project illustrate and prove the efficiency of practical applications of game-based learning in addressing complex educational and youth work challenges. Considering this, games, with their capacity to simulate diverse scenarios and promote collaboration, communication skills, self-awareness, mindfulness, and intuition, offer a dynamic approach to engaging learners and preparing them for the uncertain future of the BANI world.

While writing the longread, we came up with the possibility that while we examine games from various perspectives, young people may already possess all the necessary tools for navigating the present and future world. If games promote a sense of completeness, fulfillment, authenticity, and satisfaction, empowering individuals to tackle life's challenges with increased resilience and sincerity, thereby paving the path for a more purposeful existence, perhaps it's time for us educators not only to 'Mind the Game' but to truly honor it.



THE POWER OF GAME: IS IT WORTH IT?

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Edited by: Maksim Smekhov

INTRO

As a child, we would sit down with a set of watercolors, dipping our brushes freely into vibrant palettes, creating a vivid canvas where the colors merged and danced. It was a world of imagination and experimentation, where we unknowingly delved into the fundamentals of color theory. That innate act of artistic exploration, where each brushstroke ignited a new hue, was like an unstructured journey of learning. It's intriguing to consider how this innate childhood behavior aligns with what we now conceptualize as Game-Based-Learning (further GBL). GBL represents a dynamic approach that challenges the conventions of traditional pedagogical methods of lectures, textbooks, and passive learning by using games as learning tools. Just as we instinctively blended colors to create our art, GBL harnesses the natural drive for exploration and engagement to make learning an exciting journey of discovery.

In this article we will touch both terms **Serious Games** and **Game Based Learning**. The concept of serious games appeared earlier than game-based learning. Serious games, as a concept, emerged in the 1970s with the work of Clark C. Abt, who introduced the term in his 1970 book "Serious Games." This book explored the potential of games beyond mere entertainment, suggesting their use for educational, training, or informational purposes. On the other hand, game-based learning gained prominence in the late 20th and early 21st centuries with the rise of digital technology and the increasing recognition of the potential of video games in education. While serious games were initially more focused on specific training or simulation purposes, game-based learning expanded the concept to include the integration of existing commercial or recreational games into educational settings, building upon the foundations laid by serious games to incorporate a broader range of gaming.

Serious games and game-based learning have emerged as novel approaches that challenge traditional education paradigms. This marked a significant shift from traditional educational methods, offering immersive and interactive experiences to engage learners. In parallel, game-based learning leveraged the inherent engagement and motivation of commercial games to enhance learning outcomes. These approaches challenged the notion that education must occur in a classical classroom setting, instead embracing the potential of digital technology and gaming culture to transform learning experiences. By integrating games into educational contexts, serious games and game-based learning have opened new avenues for creativity, engagement, and effective learning, challenging traditional notions of how knowledge is acquired and applied.

In this article, we'll explore the multifaceted world of Game-Based Learning (GBL), diving into the mechanics of Serious Games, the psychology of learning through play, and real-world applications that showcase their effectiveness. Our goal is to examine the experiences, knowledge retention, and cognitive development facilitated by games as learning tools. Our diverse group of practitioners aims to analyze this approach through both research-based examples and various application fields, embracing the wide array of outcomes that Game-Based Learning can bring to the educational process.

SERIOUS GAMES: A DIFFERENT APPROACH TO EDUCATION

The field of Serious Games emerged as a natural progression of the broader digital game industry. While games had been used for educational purposes for decades, the formal conceptualization of Serious Games gained prominence in the early 21st century. The historical roots of Serious Games can be traced back to the use of simulation and game-like training tools in the military and aviation industries. Early simulators were developed to train pilots and soldiers, and these can be seen as precursors to contemporary Serious Games. The formal conceptualization of Serious Games gained prominence in the early 2000s, ushering in a new era where games were purposefully harnessed for education, training, and informative purposes. The distinction between games for entertainment and non-entertainment became a major driving force behind the "serious games movement." Games for purposes such as military training and health education and therapy began to gain credibility as they demonstrated their capacity to be "taken seriously."

This movement drew significant contributions from game studies, deepening our understanding of how games affect the learning behaviors of individuals and groups within game environments. It shed light on the mechanisms of competition as a design component, the delicate balance between fun and instructional design, and the importance of integrating teams of developers, writers, and instructional designers. In recent years, the term "Game Science" has begun to replace "Serious Games," reflecting a growing recognition of the science behind the effectiveness of games as educational tools.

IMPACT OF GAMES ON EDUCATION

In the educational sector, computer-based educational games began to gain traction in the 1980s. Games like "The Oregon Trail" and "Number Munchers" were used in schools to teach students history and math. These early educational games laid the foundation for the idea that learning could be engaging and interactive. Numerous Serious Games have made a profound impact on learning outcomes. Take, for example, "Zoombinis," a game that introduces logical reasoning and mathematical concepts to children while embarking on a whimsical journey. Or "Eco", which allows students to explore the complex dynamics of ecological systems, making learning environmental science an engaging endeavor. Furthermore, "Minecraft: Education Edition" provides students with a virtual sandbox for creativity and problem-solving. In the process of constructing virtual worlds, learners hone their spatial reasoning, collaboration, and critical thinking skills. Serious Games are carefully crafted to immerse learners in decision-making scenarios, problem-solving challenges, and real-time feedback. These elements come together to provide a holistic learning experience. Yet, Serious Games offers more than just education. They are intentionally designed to be immersive, captivating, and motivating, leveraging our intrinsic desire for accomplishment and progress, turning the act of learning into an enjoyable adventure rather than a mere task.

GAME-BASED LEARNING: HARNESSING ENGAGEMENT FOR EDUCATION

The game consists of several basic elements: specific rules, goals to achieve in an artificial context and fun. Through rules, we control the way the goal is achieved. Even if a game is made only for entertainment, we can learn something from it. Game-Based Learning however is an educational approach where learning tasks are achieved through giving adequate learning opportunities by playing in games. The point is that, while moving towards the goal, players acquire the knowledge and skills that they want to convey by using this game. In some cases, Game-Based Learning shows better learning outcomes, and in others, the effects are similar to the traditional methods.

Let's imagine such a scene: tired children, bent over books with clearly bored faces, yawning furtively, rocking on chairs and looking forward to the time when they can play again. Is it possible to call them engaged in the learning process? How much will they remember from the material they read and the lectures they heard? What would happen if they started to play?

Games mobilize action and help to direct large amounts of energy towards achieving the intended goal. Such a lesson motivates students to concentrate and gives them gratification. Having fun during the lesson can be a learning experience, and this learning not only does not lose its effectiveness but also gains it, simultaneously while reducing stress levels. What's more, it puts them in an artificial situation in which they have the opportunity to use knowledge in practice which favors cognitive processes.

Modern children grow up in a world full of entertainment, with plenty of games played just for rest. Maybe they even learn something from that but it is hard to say what skills they would achieve and if it could be useful for them. We don't have control over it. Game-based learning is something exactly the opposite. With games used or even created especially for GBL, educators control the process by carefully selecting games for specific educational purposes and redesigning learning tasks into games which will really engage students, making the process more interesting and easier to remember.

Many educational institutions associate students with boredom and stress. Also, the practice of cramming for a test only to immediately forget the acquired knowledge is still common. However, educational games are no longer a rare, exotic addition to lessons. Especially in science, GBL seems to support higher learning outcomes compared to conventional media. The number of games, mini-games and playful activities in textbooks, notebooks and auxiliary materials for learning has increased significantly. It is added not only for variety but also because its positive outcomes on the learning process have been confirmed, especially when it comes to the motivational and cognitive aspects. Let's have a look at some of such outcomes on the next page.

GROUP DYNAMICS

- Group integration
- Improvement of communication skills in group
- Better relationships in the group

META-SKILLS DEVELOPMENT

- Problem-solving practice
- Better retention of information
- Creativity development
- Concentration increment
- Reduction of stress
- Less fear of making mistakes

LEARNING PROCESS AND ATMOSPHERE

- Increase of motivation
- Improvement of the atmosphere
- Learning satisfaction
- Positive attitude to the classes
- Fun

One may have doubts about whether it is really worth spending time and energy to find or even create games for the core curriculum. Can students really learn something by playing games? Is GBL really an effective learning method? Since interest in this topic has been going on for about 50 years, there is quite a lot of **scientific research** on the topic. Let's take a look at some examples:

2007

A study involving 121 7th semester students in a math lecture on structural concrete at Master's level compared the online game "Internal Force Master" to traditional teaching methods. While the game fostered motivation and enjoyment, there was no significant difference in learning outcomes between groups.

2011

A meta-analysis of 65 studies found a positive effect of simulation games on self-efficacy and various types of knowledge among adult workforce trainees compared to non-game instruction media (Schrader, C.).

2016

Another meta-analysis of 69 studies highlighted that the learning effect of digital games can vary based on specific design features, affecting motivation, affect, and learning outcomes.

In a study involving 440 undergraduate students in English and science courses, the use of games led to increased motivation, enjoyment, and learning improvement.

2020

Studies on Game-Based Learning (GBL) according to cognitive load theory suggest that while it can enhance learner motivation, excessive distracting features may impede meaningful learning by overloading cognitive capacity.

Overall, game-based learning doesn't always result in better learning outcomes compared to traditional methods, but it usually matches them. Most often, it leads to positive results like increased motivation, lower stress levels, and higher student satisfaction. To succeed with game-based learning, it's important to choose the right games that fit the learning goals and to get feedback from students.

For practitioners who would like to apply game based learning, we prepared some useful questions, which can help you to kick off the design of gamified activities:

- WHY DO I WANT TO USE A GAME?
- WHAT GOALS DO I WANT TO ACHIEVE WITH THE GROUP?
- DOES THE GAME SUIT THE AGE OF STUDENTS?
- WHAT CAN MAKE THIS GAME INTRESTING FOR THEM?
- WHAT ARE THE RULES OF THE GAME?
  ARE THEY UNDERSTANDABLE AND UNAMBIGUOUS?
- WHAT DIFFICULTIES STUDENTS MAY ENCOUNTER?
- WHAT MATERIALS, TOOLS AND PROPS SHALL I PREPARE?
- HOW LONG WILL IT TAKE? DO I HAVE ANY TIME LIMIT?

THE PSYCHOLOGY OF LEARNING THROUGH GAMES

The integration of games into education extends beyond mere entertainment; it delves into the intricate workings of the human mind. Understanding the psychology of learning through games provides valuable insights into why this approach can be exceptionally effective. Below we analyze 3 aspects: **motivation, emotions, retention**.

MOTIVATION is a key component of effective learning, and games excel in harnessing and sustaining this motivation. Immediate feedback, rewards, and a sense of achievement within the gaming environment contribute to heightened intrinsic motivation (Deci & Ryan, 1985). Deci and Ryan's Self-Determination Theory postulates that individuals are most motivated when they experience autonomy, competence, and relatedness. Games inherently provide a structured environment that fulfills these psychological needs, creating a powerful motivational framework for learning (Deci, Vallerand, Pelletier, & Ryan, 1991). Also in educational games, the immediate feedback provided after completing a task or solving a problem serves as a motivational driver. This timely reinforcement not only validates the learner's efforts but also guides them toward improvement (Malone, 1981).

Games have a unique capacity to evoke a wide range of EMOTIONS, creating a memorable and immersive learning experience. The Emotional Design framework proposed by Norman (2004) suggests that emotional engagement enhances cognitive processes and, consequently, learning outcomes. When learners are emotionally invested in the content, information becomes more salient and is retained more effectively.

Consider a scenario in a history-based game where a player makes decisions affecting the outcome of historical events. The emotional engagement elicited by the consequences of those decisions makes the historical context more memorable and fosters a deeper understanding of cause and effect.

Games, by their very nature, require active participation and decision-making. This active engagement taps into cognitive processes that contribute to enhanced MEMORY AND RETENTION (Clark, Tanner-Smith, & Killingsworth, 2016). Cognitive load theory, as proposed by Sweller (1988), emphasizes the importance of managing the mental effort required for learning. Games, with their interactive and immersive nature, inherently optimize cognitive load by presenting information in a manner that aligns with the learner's pace and capacity. For instance, the use of gamified scenarios in medical education has been shown to improve diagnostic accuracy and decision-making skills by engaging learners in realistic patient cases (Akl et al., 2013).

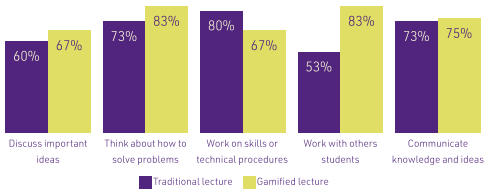
The psychology of learning through games involves a careful interplay of motivation, emotions, and cognitive engagement. As educators and designers continue to explore the potential of games in education, understanding these psychological factors will undoubtedly contribute to the development of more effective and engaging learning experiences.

CASE STUDIES

The true measure of the effectiveness of any educational methodology lies in its real-world applications and impact. As discussed in the podcast created by this project (see the QR code of the podcast at the end of this flip-book), we delve into evidence of the effectiveness of games as learning tools through a series of compelling case studies and real-life testimonies from people in the field. These stories reach diverse sectors and illustrate real-world success, demonstrating the transformative potential of game-based learning. Below, we offer you a variety of evidence-based cases confirming the efficiency of game-based learning:

CASE 1: GAMIFICATION IN EDUCATIONAL PLANNING

Researchers from Queens University, the University of Waterloo in Ontario, and the Rochester Institute of Technology in New York conducted a study in 2020 to examine how gamification affects planning students' perceptions of learning, engagement, and teamwork. Two distinct teaching pedagogies were used in two lectures of an undergraduate planning course (one game-based, one traditional lecture-style). Semi Structured interviews and an online questionnaire were used to collect feedback. Findings indicate that students preferred and participated more in the game-based lecture. Studies suggest that gamification is especially appropriate for educational planning.



CASE 2: BOARD GAMES

In order to see if using a game as a review tool was better than a conventional lecture-style review session, S. Hoyt (2008) from Central Washington University had one class use Knighthood: A Quest to review the content for the King Arthur unit in preparation for their unit exam. This game was chosen because it was made specially to assess students' knowledge of the subject matter in an easy-to-understand question-and-answer format, in preparation for the exam. As a way to review the material for the exam, Knighthood: A Quest was randomly assigned to one class. The experimental group consisted of the class that was assigned to play the game. The control group was the other class, which was given the standard lecture review in its place.

Table 1 reports the grade breakdown of both the experimental and control groups by percentage. The experimental group was found to have a better passing percentage of 91%, as compared to the control group's 79%, a difference of 12%. Additionally, more students in the experimental group, 37%, received a grade of A, whereas the control group only had 29% of students earning the same grade.

Test Results – Table 1

Grades	Experimental Group (Percentage of Students)	Control Group (Percentage of Students)
A	37	29
B	28	25
C	22	25
D	4	0
F	9	21

The most dramatic results of the study are the increased performance of students in the experimental group in the A and F categories. It appears that the use of an educational game was effective in this context in assisting more students in passing the class and more students attaining the highest grade possible.

CASE 3: E-LEARNING

The blog on axonpark.com by N. Verma (2023) emphasizes how gamification can change education by carefully incorporating game elements into academic endeavors to improve motivation, engagement, and learning outcomes. The ensuing case studies offer specific instances of how gamification enhances student motivation, engagement, and performance:

- 365 students from the School of Electrical and Computer Engineering participated in a study that investigated how to use the gamified web application "Horses for Courses". When compared to traditional lecture-based education, the challenge-based gamification produced an astounding 89.45% improvement in student performance, with an overall performance increase of 34.75%.
- Compared to non-gamified methods, gamification in training increased motivation by 44%. People who did not receive gamified training reported being unmotivated (28%), boring (49%), and unproductive (12%). However, 83% of respondents said they felt motivated after gamification elements were added.
- A gamified review of fundamental obstetric and gynecology topics was completed by medical students, and they reported a 95% engagement rate. It is clear that gamification has potential in medical education because most people (74%) thought the gamified activity was superior to traditional lectures.
- According to a study with 260 management students, gamification increased students' comprehension of the subject matter by 75.5%. Furthermore, gamification was desired by 89% of students in other subjects indicating that students have positive preferences for this method of instruction.

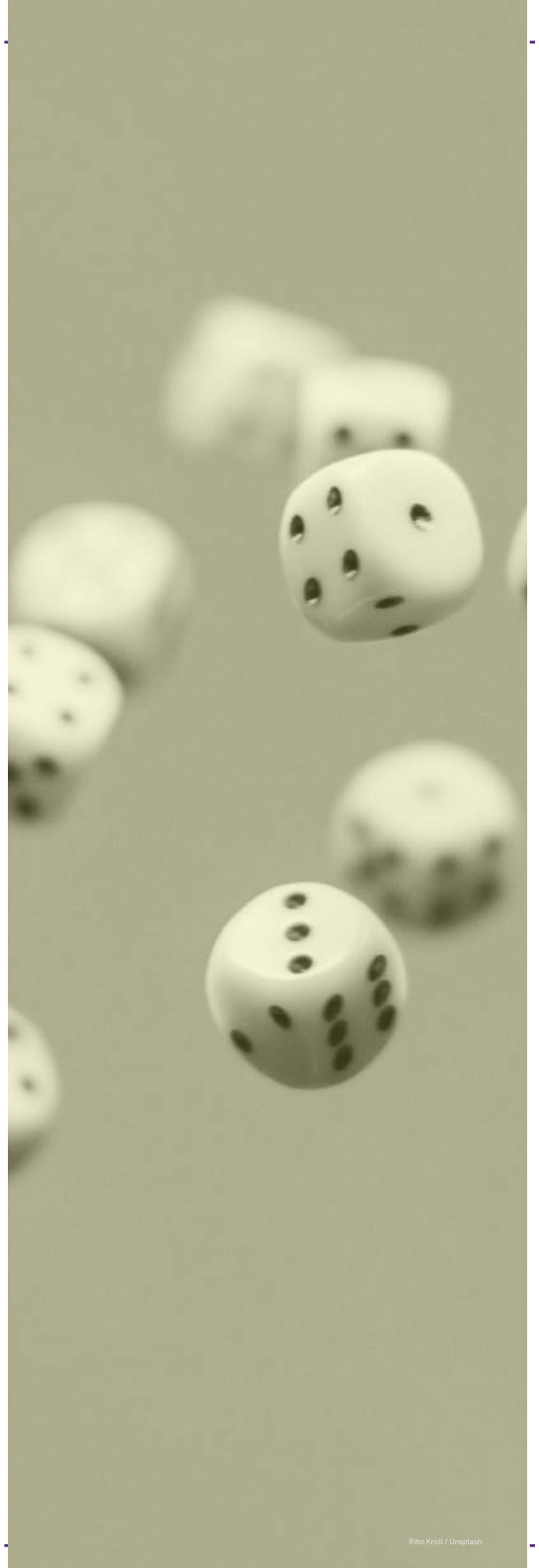
The cases demonstrated the true measure of any educational methodology lies in its real-world application and impact. Through compelling case studies and real-life testimonies, the transformative potential of game-based learning is clear. From gamification in educational planning to board games and e-learning, each case highlights significant improvements in student engagement, motivation, and performance. These examples underscore the power of integrating game elements into education, confirming that game-based learning is not just innovative but highly effective for meeting the evolving needs of learners across various fields.

CONCLUSION

Serious games and game-based learning give positive outcomes in many aspects: motivational, cognitive, psychological, and social, as well as for developing problem-solving and critical thinking skills. It is worth redesigning the structure of classes but it always depends on what we are going to achieve and the way we choose to do it. It is possible to create such a game from scratch but we can also find a lot of serious games created especially as learning tools.

As we know from scientific research, improvement in motivation, affection and learning effect can be different depending on specific design features in games. We need to pay attention to potential problems in using too many distracting features to avoid exhausting the cognitive capacity needed for essential and generative processing for meaningful learning.

It is worth paying attention to the case studies for inspiration and having in mind the psychological influence of the games we select. If we remember about it, GBL can become our great ally and effective tool for learning, teaching and activating the group. The possibility of using games in classes only from time to time or even only once facilitates the process of experimenting and changing methods and lets us check whether game-based learning is the method we need to implement. This approach is still developing. By collecting feedback and exchanging experience we can improve the effectiveness of our implementation of GBL and hence contribute to the improvement of the effectiveness of games as learning tools.



Riho Kroll / Unsplash

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THE LABYRINTH OF THE GAME-BASED LEARNING

Pavel Vassilijev

EXPLORE "MIND-THE-GAME CANVAS" TO DESIGN YOUR EDUCATIONAL EXPERIENCE

When gamifying curricula in Mind the Game, we used a tool that we call the Gamified Learning Curriculum Design Canvas. It is designed to help educators and youth workers create a formal school curriculum or a series of non-formal learning workshops that are engaging and interactive for learners. By incorporating game elements into the curriculum, we create a more immersive learning experience that can help raise engagement, maintain motivation levels during different learning periods, and increase retention of learning.

The nature of a canvas means that there is no one place to start and finish. It is rather a tool that can always be further developed and enhanced. This specific canvas is meant to be developed in four distinct stages.

THE FIRST STAGE of the canvas is also known as the foundation. It can be filled out starting and finishing with any of the sections. Here, it is important to set the base of the curriculum by identifying the context in which it will be facilitated and the target group for whom the curriculum is being developed. It is crucial to understand the size of the group, the duration of the curriculum, the duration of each meeting, and the frequency of meetings.

It is also important to identify key learning objectives that the group should reach by the end of the curriculum. In this stage, you can also identify what kind of resources the educator has access to, such as books, tablets, costumes, technological equipment, or colleagues who can assist in facilitating the curriculum. Finally, in this stage, you can put down themes that can be interesting for the target group, fit the learning objectives, and can be supported by the resources you have access to.

THE SECOND STAGE is the most creative stage. Here, it is important to refer back to the foundation and define the dynamics that the curriculum should support. Is it more about competition or a sense of community? Does the theme invoke the need for exploration or mastery and upgrade? Different gamification elements such as achievement tokens, currency, badges, progress bars, and character sheets can be used. The curriculum can be a mix of known, appropriated, or tailor-made games that help reach the learning objective, assess achievements, or serve to influence group dynamics. This stage is also the place to look at possible assessment metrics that can be identified through the games, visual aesthetics that can enhance the experience, and curriculum narrative through storytelling and characters. A gamified curriculum with younger audiences works well when there is an overarching story that is unraveled throughout the course of the curriculum or if players take up a role of some characters or groups. For slightly older audiences, roleplaying throughout the curriculum might not be so exciting, and a different theme for each meeting can be a better fit.

THE THIRD STAGE is the most demanding stage of the canvas. It is where a designer builds the flow based on the ideas generated previously and the foundation defined in the beginning of the process. Here, the designer puts down the structure of the course as a logical flow of the meetings and rough themes of each meeting. It is also possible to add any thematic home task activities to be completed. Once the meeting flow and their rough content are clearly defined, assessment techniques should be thought upon. If needed, what will be the assessment technique and how it can be tied to the overarching theme?

THE FINAL STAGE is designed to review what, if any, interdisciplinary connections can be made so that another subject can be linked to the curriculum. It is also important to identify what materials are needed and what costs might occur. It is crucial to have a backup plan if something does not go as initially envisioned, and to identify substitute materials or activities that can be offered. Finally, each curriculum should have a name, and after taking a look at everything pre-designed, a name can be added.

After all four stages are complete, the designer is advised to review the canvas as a whole and make changes to any of the sections that seem to require it. To review the curriculum before piloting it, it is worth asking questions like: "Is this feasible?"; "Does the build-up tell a whole story?"; "Can the learning objectives be achieved through these activities?"; "Is there enough room for interaction and freedom?"; "Is it worth simplifying something?". Once the canvas gives a good feel, then it is time to start designing the details of the curriculum with detailed content plans, meeting minutes, and visual materials.

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GAMIFIED LEARNING CURRICULUM CANVAS

Context Academic course, training session, workshop	**Theme** What theme fits well with the learning objectives and will resonate with the target group? Is it possible to make an overarching theme or divide the curriculum into thematic blocks? Does something like fairytale, zombie, superhero, traveling fit?	**Aesthetics** How can we enhance the atmosphere and engagement? Is there space for music soundtracks, clothing, design of slides or handouts?
Target Group Age and relevant socio-cultural background	**Dynamics** How do you want the students to interact and behave during the course? What kind of emotions, feelings do you want to invoke? Do you want to invoke achievement, collection, mastery, exploration or anything similar?	
Number of Learners How many people do you have in the group?		**Storytelling & Characters** How do you set the atmosphere? What characters are involved? What role do the learners play? Is there a scenario?
Curriculum Duration How long does it take in hours? Are there any independent work hours planned?	**Gamification Elements** What elements will enhance the experience? Is there space for role cards, badges, currency, progress bars, maps, character sheets?	
Meeting Duration How long is each meeting?	**Appropriate Games** What educational games can fit here? What commercial games can be used? What games can be used for inspiration or modified for this curriculum?	**Course Structure** What is the flow and schedule of each meeting? If any, what is homework that is given?
Meeting Intensity How often are meetings?		
Learning Objectives What competencies should the students acquire throughout the curriculum?	**Assessment Metrics** What are key indicators of learning progress?	**Assessment Technique** Looking at the assessment metrics, the theme and structure, how can you perform the assessment? Is there space for self or peer assessment?
		Interdisciplinary connection Can you link this curriculum with another subject? What can be done in cooperation with a colleague? If applicable, can the students get an extra grade?
Resources What technology, equipment, human resources do you have access to?	**Materials** What materials will you need for the curriculum?	**Costs** Any costs that have to occur?
	Backup Plan What materials, games or curriculum ideas can be substituted?	**Name** Come up with catchy name for this curriculum

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GAMIFIED LEARNING CURRICULUM CANVAS

Context
Academic course, training session, workshop

Target Group
Age and relevant socio-cultural background

Number of Learners
How many people do you have in the group?

Curriculum Duration
How long does it take in hours? Are there any independent work hours planned?

Meeting Duration
How long is each meeting?

Meeting Intensity
How often are meetings?

Learning Objectives
What competencies should the students acquire throughout the curriculum?

Resources
What technology, equipment, human resources do you have access to?

Theme
What theme fits well with the learning objectives and will resonate with the target group? Is it possible to make an overarching theme or divide the curriculum into thematic blocks? Does something like fairytale, zombie, superhero, traveling fit?

Dynamics
How do you want the students to interact and behave during the course? What kind of emotions, feelings do you want to invoke? Do you want to invoke achievement, collection, mastery, exploration or anything similar?

Gamification Elements
What elements will enhance the experience? Is there space for role cards, badges, currency, progress bars, maps, character sheets?

Appropriate Games
What educational games can fit here? What commercial games can be used? What games can be used for inspiration or modified for this curriculum?

Assessment Metrics
What are key indicators of learning progress?

Materials
What materials will you need for the curriculum?

Backup Plan
What materials, games or curriculum ideas can be substituted?

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How can we enhance the atmosphere and engagement? Is there space for music soundtracks, clothing, design of slides or handouts?

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How do you set the atmosphere? What characters are involved? What role do the learners play? Is there a scenario?

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What is the flow and schedule of each meeting? If any, what is homework that is given?

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Looking at the assessment metrics, the theme and structure, how can you perform the assessment? Is there space for self or peer assessment?

Interdisciplinary connection
Can you link this curriculum with another subject? What can be done in cooperation with a colleague? If applicable, can the students get an extra grade?

Costs
Any costs that have to occur?

Name
Come up with catchy name for this curriculum

*Print the Canvas for your design of game-based learning

LANDSCAPING THE FIELD

4

PILOTING ACTIVITIES TO RETHINK, REDESIGN, AND TEST

Throughout Mind the Game project we have not only reflected on the use of gamified learning in various educational contexts but took up a practical approach to trying ideas out. We have invited educators to gamify a learning curriculum for their working practice and pilot it with a group of learners.

A total of 8 gamified learning activities were executed in Estonia, Germany and Poland involving 204 participants.

Activities ranged from gamifying an English language course at a high school to creating an asynchronous gamified learning intervention for developing fundraising skills of young artists.

Below you can find visual stories of Mind The Game that we have collected during the final reflection meeting of the project.

FROM PILOTING PRACTICES PARTICIPANTS POINT OUT A FEW IMPORTANT CONSIDERATIONS:

- Once you take up gamifying a learning curriculum it is important to step into the shoes of your target group. Looking at their real learning needs, finding practice gaps, creating space to interact and mix personal and group activities will provide a better opportunity to engage different profiles of learners more.
- Finding an overarching theme can be challenging but drives curiosity and engagement of learners to a big extent. Thus, find a theme for the curriculum and have it represented at least a little bit in every meeting. It can be a ritualistic start & finish to a session, updating progress in a visual manner or even dressing up before the start of the meeting.
- If you are gamifying a curriculum for a formal education setting then it is a good idea to reach out to colleagues and make it an interdisciplinary project. Chances are high that what you are creating will put to practice more than one competence area.
- Flexibility not only in time but in the number of participants is important. When planning the curriculum, think through how you will approach when some participants miss a session or meeting and how they can get back on track.
- When gamifying a learning curriculum be aware that things take longer than you expect and be ready to apply flexibility. Approaching your curriculum like a LEGO constructor is a good way to keep your ability to add or take out some elements according to the pace of the group.

MIND the GAME

CURRICULA EXPERIENCES

GERMANY

1 PROGRAM

GRANT WRITING + FUNDRAISING + PRESENTATION SKILLS

5+1 NEWSLETTER series

30 PAX

YOUNG/EMERGING ARTISTS + CULTURAL WORKERS + ACTIVISTS

STRUCTURED STORYTELLING & MAPPING OF NEEDS

EN PL RU DE

ESTONIA

3 PROGRAMS

"LIFE SKILLS" — YOUTH CLUB

"BECOMING A MASTERCHEF" — SCHOOL SETTING

- VOCABULARY
- INSTRUCTIONS
- VIDEO-MAKING

COMPULSORY

"LOOK INTO YOURSELF TO DISCOVER YOUR FUTURE" — YOUTH NGO

- VALUES MAPPING
- COMMUNITY
- SELF-DISCOVERY

VOLUNTARY

EFFECTIVENESS, ENGAGEMENT, MOTIVATION & CURIOSITY

47 STUDENTS aged 12-19 Y.O.

POLAND

4 PROGRAMS

REACHING DIFFERENT PARTS OF THE COUNTRY

DIVERSITY OF CONTEXTS & TARGET AUDIENCES

PHOTOGRAPHY

80 STUDENTS
7 SESSIONS
TECHNICAL HIGH SCHOOL

JUGGLING

40 STUDENTS
40 SESSIONS
SCHOOL (online)

MENTAL RESILIENCE

12 STUDENTS
2 SESSIONS
PRIMARY AND SECONDARY SCHOOL

DARKNESS TEAMBUILDING

15 STUDENTS
2 SESSIONS
COMMUNITY CENTER

GRAPHIC NOTES: @MYINKTHINK

SELENE

Selene Streich led the Sensory-adventure workshops as part of the Mind the Game project, aiming to explore senses, trust, and perception. The workshops provided a unique learning experience by immersing participants in a fictional scenario where they had to navigate darkness to find magic crystals. The workshops began with an introduction and rule-setting session, followed by a phase where participants brainstormed routes and prepared for the adventure. In the action phase, participants navigated blindfolded paths, traded crystals for gems, and completed tasks, experiencing firsthand the challenges and rewards of relying on senses other than sight.

Selene seamlessly integrated game-based learning materials, such as cool glowing stones and detailed maps, to enhance engagement and immersion. Despite challenges in rule clarity and adaptability, the workshops were a success. Participants were highly engaged and motivated, gaining confidence in navigating without sight and developing a deeper appreciation for their senses.

Reflecting on the experience, Selene plans to incorporate more game-based learning activities into her practice, particularly in contexts where sensory exploration and trust-building are beneficial.

MIŁOSZ

Miłosz Bałdyga embarked on a fascinating journey with his pilot activity, Neurobic Galaxy, within the Mind the Game project. His mission was clear: to introduce participants to the world of juggling in a manner that transcends age and background, fostering enjoyment, self-confidence, and enhanced coordination.

In his hometown's local culture center and online classrooms, Miłosz welcomed a diverse group of participants, ranging from adults and seniors to elementary and high school students. The goal was to create a universally engaging experience, where everyone could find excitement and motivation regardless of their differences.

The heart of Neurobic Galaxy lay in its objectives. Miłosz aimed not just to teach juggling but to instill in participants a sense of accomplishment and self-assurance. Through meticulously crafted game-based learning materials, including digital instructional cards and progress tracking tools, Miłosz facilitated a learning journey both in-person and online.

Yet, challenges emerged along the way. Ensuring clarity in instructions and materials proved tricky, as did convincing all participants of the value of tracking dropped balls. Nevertheless, Miłosz pressed on, adapting his approach to meet the diverse needs of his participants.

Amidst these challenges, successes shone through. Participants found the progress tracking tool motivating, and a tight-knit community formed around the online classes. Competitive elements injected an extra dose of excitement, fueling engagement and motivation among participants.

Miłosz's personal reflection on the project underscored the importance of collaboration and feedback. A pivotal conversation prompted him to refocus on the core elements of the game-based system, leading to significant improvements in design and approach.

As Miłosz looks ahead, he envisions further refining Neurobic Galaxy to enrich learning experiences for participants of all ages. His journey exemplifies the transformative power of game-based learning, emphasizing growth, community, and the joy of discovery.

DARINA

In the heart of the Mind the Game project, Darina Petrova embarked on a profound journey with her pilot activity titled "Look into Yourself to Discover Your Future." Her aim was to guide a group of young individuals, aged 16 to 19, through a series of workshops designed to unveil their inner selves, enlighten them about societal dynamics, and explore potential career paths.

Darina's journey unfolded over four weekly sessions, each carefully crafted to facilitate personal growth and exploration. Her workspace, nestled within the cozy confines of an NGO's office or a bustling youth center, provided the ideal backdrop for introspection and discovery.

The goals were clear from the outset: to nurture self-worth, foster understanding, and inspire appreciation among participants. Through engaging activities and discussions, Darina encouraged the group to delve deep into their inner worlds, pinpointing their strengths, weaknesses, and sources of joy.

Drawing inspiration from the game-based learning canvas and insights gained from training, Darina seamlessly integrated gamified elements into the workshops. These elements not only enhanced engagement but also provided a cohesive thread linking each session to the overarching theme.

Yet, as with any journey, challenges emerged along the way. Darina grappled with maintaining consistency with the project's theme throughout the workshop series. Despite initial success in incorporating a movie/autobiography creation theme, sustaining it proved challenging in subsequent sessions.

Despite these challenges, Darina's efforts bore fruit. Participants eagerly embraced the workshops, with one remarking, "Is it really over? This had become a part of my weekly schedule, I'm going to miss it." This enthusiastic response underscored the project's success in engaging participants and fostering meaningful connections.

Darina's journey was one of discovery and growth. She learned the importance of structured yet flexible curriculum development, the power of continuous feedback, and the transformative potential of game-based learning in empowering young minds.

As she reflected on her experience, Darina emerged with a newfound conviction in the necessity of game-based learning in education. Armed with this insight, she looks forward to further refining her facilitation skills and creating value for society through non-formal education initiatives.

OLESYA AND LISA

Olesya Radilova and Lisa Siomicheva embarked on a dynamic journey with their pilot activity titled "Mapping Opportunities" within the Mind the Game project. Their mission was to support artists at risk and activists seeking funding, promotion, and marketing opportunities for their projects.

Their innovative approach consisted of a gamified email course supplemented by an offline seminar, offering practical guidance on fundraising and project development. Through five engaging emails, participants navigated challenges and crafted fundraising and communication plans for their projects.

The goals were ambitious yet clear: to address uncertainties surrounding funding sources, boost self-confidence, and equip participants with the skills needed to succeed in their endeavors.

Implementing the gamified learning activities posed its own set of challenges. Adapting the course format and integrating suitable game techniques into the email format required creativity and flexibility. However, their perseverance paid off as they witnessed improved knowledge retention and understanding among participants during the offline seminar.

The gamified aspect not only made the learning process enjoyable but also fostered a sense of community among participants. Collaborative activities like "Competency Bingo" and online quizzes added an extra layer of fun and motivation.

Reflecting on their experience, Olesya and Lisa recognized the effectiveness of gamified learning activities in increasing engagement and improving learning outcomes. They plan to incorporate more gamified elements into future courses and workshops, recognizing the importance of flexibility and adaptability in responding to participant feedback.

Their journey underscores the transformative potential of gamified learning in empowering individuals and fostering collaborative learning environments. As they continue to refine their approach, they remain committed to creating meaningful educational experiences for their participants.

SYLWIA

Sylwia Ejsymont embarked on an engaging journey with her pilot activity titled "Come Closer - Photo Quiz" within the Mind the Game project. Her goal was to create a universal board game tailored for grades 1-4 of a technical school specializing in photography and multimedia.

Initially, Sylwia envisioned integrating theoretical questions and practical tasks into the game, inspired by Robert Capa's quote, "If your pictures aren't good enough, you aren't close enough." However, she discovered that photography itself didn't need gamification; instead, she focused on creating an attractive group division to encourage teamwork.

Implementing the game-based learning activities posed its challenges, especially as she had ambitious plans for expansion. However, she successfully engaged her students in the game's creation process, fostering creativity and collaboration.

The success of the Photo Quiz game was evident in the students' enjoyment and active participation. It served as a valuable tool for introducing new material, assessing knowledge gaps, and fostering collaboration between different student groups.

Sylwia reflected on her experience as an educator, recognizing the need to streamline the game and integrate it into a larger project. She plans to continue using gamified learning activities in the future, aiming for better planning and integration into the curriculum.

Overall, Sylwia's experience highlights the effectiveness of gamified learning in engaging students and enhancing learning outcomes in photography education. As she continues to refine her approach, she remains committed to creating meaningful educational experiences for her students.

JULIAN

Julian Czurko led the creation of "MindCraft," a game-based learning activity aimed at school students aged 12–18, focusing on developing mental resilience. The core element was the board game "MindCraft," designed to provide insights into resilience and serve as a catalyst for further educational work.

The goals were twofold: engaging students in an interactive experience about resilience while also designing a flexible framework adaptable to different lesson durations. Implementing the game involved extensive testing and feedback loops to refine mechanics and ensure coherence.

Challenges arose, particularly in estimating project timelines and managing competing responsibilities. Lessons learned included the importance of careful time estimation, longer work sessions for efficiency, and maintaining focus on the core project amidst creative ideation.

Successes included fostering collaboration within the Foundation, using the game as a creative catalyst for educational material development, and maintaining simplicity without sacrificing depth.

Participant engagement focused on game mechanics during testing phases, with insights suggesting coherence between game elements and educational objectives. Innovations emerged from designing a custom resilience model and leveraging it as an effective educational tool beyond the game.

Reflecting on his experience, Julian emphasized the need for strong project management and leadership to balance innovation with practicality. He recognized the value of feedback sessions in refining the project's impact and product quality.

In conclusion, Julian's journey with MindCraft underscored the transformative potential of gamified learning experiences in fostering resilience and well-being among students, while also highlighting the importance of effective project management and feedback integration for success.

ADELE

"Becoming a MasterChef," led by Adele Teres, is a fun, game-based learning activity for culinary students aged 12-14. Over five 80-minute sessions, students aim to become MasterChefs by completing various cooking tasks. This activity blends cooking with English language learning, focusing on food vocabulary, giving instructions, and using reported speech.

Students work in teams, taking on different roles in a kitchen setting. They wear aprons and use kitchen props while cooking sounds and videos play in the background. Activities include a QR code scavenger hunt, role-playing in a restaurant, and online quizzes to encourage teamwork and communication.

Assessment methods include traditional tests, self-assessments, and peer feedback. Students also practice converting measurements from the imperial to the metric system, linking cooking with math skills.

"Becoming a MasterChef" is a lively, engaging activity that helps students learn through hands-on experience, fostering curiosity and a sense of achievement.

BEST PRACTICES BEYOND THE PROJECT

This article below is part of a Flip book showcasing diverse applications of game-based learning beyond the scope of the Mind the Game partnership. We invited our colleague, Eszter Toth, to delve into the application of game-based learning in urban education and participatory processes with communities of young people, thus expanding the conversation on the efficacy of game-based learning.

In "Why games can contribute to more open and inclusive urban development processes," Eszter Tóth explores the transformative power of game-based learning in fostering inclusive urban development, particularly for young people. Traditional urban planning often struggles to engage citizens effectively in collaborative processes. Tóth argues that well-designed games offer a unique approach to overcoming this challenge. By examining the intersection of game mechanics and urban development, Tóth highlights several key ways games can enhance participation, promote understanding, enable equal participation, and transform practices. Drawing from her practical experience in Pécs, Hungary, Tóth shares insights into the ParticiPécs game, demonstrating how it empowers young people to actively shape their urban environments. Through engaging narratives and rule-based interactions, games like ParticiPécs provide a platform for inclusive dialogue and creative problem-solving, ultimately leading to tangible and impactful changes in urban spaces.

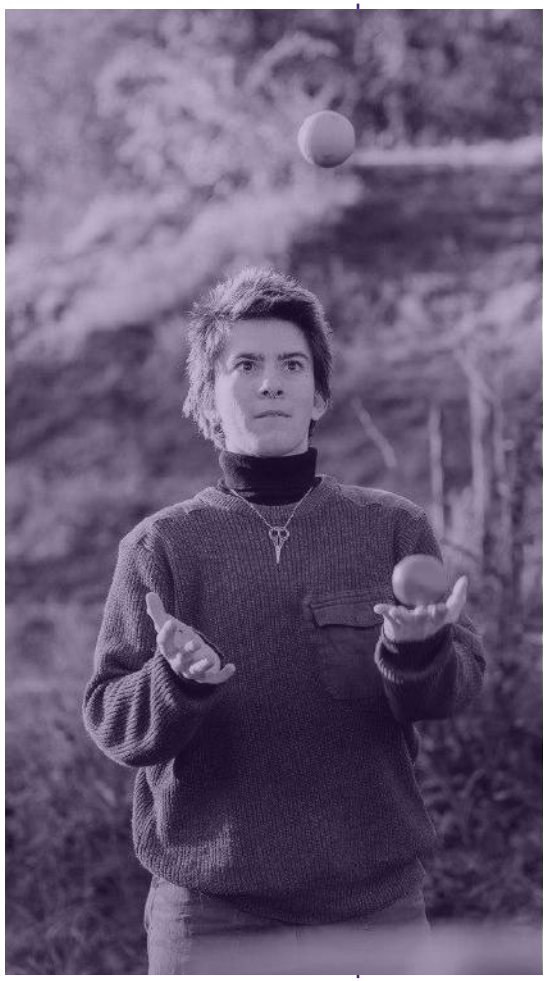
WHY GAMES CAN CONTRIBUTE TO MORE OPEN AND INCLUSIVE URBAN DEVELOPMENT PROCESSES

Eszter Tóth

Citizens' participation and collaboration have received increasing attention in urban planning and development, some part of professionals even recognized this is a paradigm shift (Healey 1996; Innes 1995). Participatory and collaborative approaches consider urban planning and development as interactive and communicative activities whereby local residents, experts, and officials collectively discuss, develop, negotiate, and implement ideas for their neighborhoods. The positive impact of such collaborative and participatory approaches on society, spaces, and their interrelationships is widely acknowledged. And so are the difficulties of designing and implementing such processes. The development of truly inclusive, sustainable, and successful participatory processes requires a lot of time, energy, and resources. It is not surprising, therefore, that there is a growing interest in alternative and innovative tools and methods that can effectively support the co-production of spaces and places. In this chapter, I will argue that well-designed games can be useful tools for making urban development processes more open and inclusive.

GAMES CAN INCREASE PEOPLE'S ENGAGEMENT THROUGH FUN

The most essential feature of games is fun. While playing, we forget about the outside world and immerse ourselves in a magical space-time (Huizinga 2014). This captivating positive feeling is so decisive that, for a long time, games were treated as merely a means of pleasure and entertainment. And consequently, as the opposite of work. This traditional view of games has been based on a dualistic world view, which is based on the contrast between hard, laborious, and productive work on the one side, and entertaining, liberated but self-serving leisure on the other side. This contrast in our thinking is, however, gradually dissolving. As play theorist Brian Sutton-Smith (1997) pointed out, the opposite of play is not work, but depression. So why not use the joy, motivation, energy, and capacity for innovation that emerge from the positive experience of games at the service of life's serious issues and problems (McGonigal 2011)? Indeed, one of the key challenges in community urban development processes is the lack of residents' and communities' interest and motivation. Traditional public engagement approaches generally take a longer time, require a lot of effort from everyone involved, have often less satisfying experiences and results, and these can lead to a lower rate of participation. In his book Making Democracy Fun, Josh Lerner (2014) explains comprehensible on the basis of practice examples how games and game mechanics can support participatory processes by making them more enticing, efficient, transparent, and fair. Indeed, games are increasingly being used in urban development to encourage and motivate participation and involvement of the wider society through the positive qualities of play.



GAMES CAN PROMOTE UNDERSTANDING THROUGH THE DYNAMIC REPRESENTATION OF SPATIAL SITUATIONS

Another defining quality of games is that they can represent any details and processes of the real world (Salen and Zimmerman 2003). Urban development is often perceived as highly complex and abstract, something that requires certain expertise and understanding that non-professionals lack. The lack of public literacy on planning issues can lead to a loss of public interest and less informed debates. So why not use games to present and explain the complex, interacting aspects of urban development? Cities are complex systems in that different factors, the social, physical, environmental, economic, and cultural aspects of urban processes are interconnected. Simulation games like SimCity are able to represent these interactions in urban development in a very tangible way. That is why such games have long been used in the training of architects and planners, as well as in urban planning processes. Games developed specifically to facilitate participatory planning often build on the representative capacity of games. For example, the games developed by the collective Play the City (Tan 2017) are extensively elaborated mock-ups of specific locations and not only the physical environment but also the different actors, their relations, and power structures are integrated into the contents and mechanics of the games. In this way, a whole real-life design situation is temporarily transposed into the magical space of the game.

GAMES CAN ENABLE EQUAL PARTICIPATION THROUGH RULE-BASED INTERACTION

The third key feature of games is that they are interactive systems. The game experience is largely based on the interaction between players, and this interaction is shaped by a predefined set of rules, which drive, stimulate, and balance communication processes. Participatory and collaborative urban development approaches are interactive practices (Innes 1995), which gather stakeholders and engage them in a collective meaning-making and decision-taking process that respects the positions of all involved (Healey 1996). But these have been often citicized for neglecting relations of power and inequality, which have a decisive impact on both process and outcome (Tewdwr-Jones and Allmendinger 1998). Participants' different levels of competence, information, verbal expression, and courage to express their opinions create inequalities in communication and collective action. So why not use the rule-based interaction emerging in games to balance these inequalities? Games manage communication processes according to a strict set of rules that can be used to even out these differences and give everyone a similar chance to express their opinions. Stadtspieler, for instance, is a traditional board game, where players have to develop, present and evaluate ideas and scenarios for urban development. The main aim of Stadtpieler is to improve communication, bring together stakeholders at eye level, and initiate negotiation and consensus.

TRANSFORMING PRACTICES THROUGH SUBVERSION

A game's rules system is unique and artificial and only applies in the magical space-time of the game. This is the fourth quality that can effectively contribute to making urban development processes more open and inclusive. An artificial rule system can subvert the status quo of real life, opening up new perspectives, impulses, and forms of action to break with exclusionary or outdated practices. Deep-rooted, culturally produced barriers are often the biggest obstacle to community participation. If certain groups in society are traditionally excluded from community decision-making, this can result in cultural entrenchment that can only be overcome with a great deal of conscious effort and time. This can be helped by games whose rule systems consciously break established practices, allowing players to try out new patterns of action and thinking in the safety of a magical space. And from there, it's just a matter of transposing what we have experienced and tried in the magical space into the real world through transformative play.

IN PRACTICE

In my practical work, I engage children and young people in thinking about the city and in urban development processes through transformative play. I observed frequently that young people faced difficulties to take the first steps, and that mental barriers were the main obstacle to their active and conscious participation in shaping their living environment. Several times I have found myself in the situation where they have been asked by professionals how they would transform a particular place and what they would need. But these situations have tended to scare and block them rather than encourage them to think together. In these situations, I began to use games to break down mental barriers and help them engage in creative and collaborative processes - both in formal and informal urban planning situations.

One of the games I have developed with local young people and professionals in Pécs, Hungary, is the ParticiPécs game, which aims to make young people aware of their own potential and power to make a positive change in their neighborhoods. The game tells the story of an extraordinary Saturday when young inhabitants gather to improve the city through small-scale interventions. Players are in a constant flow of communication, they form temporary groups, make appointments, and cooperate in order to implement actions and interventions in the urban space. They share one common goal: to make as many interventions as possible in the time and with the resources available. Meanwhile, they walk around the city, experience familiar and unexpected events of everyday life, and learn about concrete practices and tactics they can implement themselves, such as yarn bombing, bench painting, signature collection, or flower planting.

The ParticiPécs game was played with hundreds of students in different schools and public spaces in Pécs. We found that most of them were immediately immersed in the magic of the game: they were excited to roll the dice, eager to create common strategies to achieve better results, had fun with chance cards showing everyday events, continued to roll their own in-game stories based on these, and in the end, they did not want to stop playing. They did not even notice that while they were having fun, they were doing what they had previously been told was impossible (by reason of their young age, lack of competence, not being professionals, not being responsible for, etc.) in this magical space-time: they were shaping urban spaces. This only became evident and an "aha" experience for them when the first round of the game was over, and this change in perspectives and understanding became manifested in the second round of the game. In the second round, players had the chance to plan small-scale urban interventions in small groups. In four rounds, players chose a place and defined its problem, defined a goal and strategy for improvement, and developed an action plan. Most young people were now able to formulate a concrete problem in a few minutes, easily and reflectively, and to come up with solutions that they could implement with a minimum of resources. They came up with dozens of valuable and innovative ideas. The ideas offer a unique reading of the city of Pécs as experienced by the students. They highlight urban places relevant to teenagers, the problems they face in their everyday lives, and often unique proposals for solutions and interventions that truly reflect the needs and interests of this age group.

This rapid and positive change in young people's attitudes and participatory competencies was brought about by the impact of the transformative play. In other words, they were so engaged by the experience of play that they forgot that they

were doing something in which they did not feel competent, responsible, or relevant. In the game, they were simply transported into a whole other world in which mundane competencies, qualities, and sovereignties did not matter. Or rather, wrapped up in the story of the game, they were able to learn and try out patterns of action that they could transfer to real life. They could experience what it looks like and how it happens when they get together with friends and make a flower bed in a housing estate. And the fact that everyone had an equal opportunity to interact following the rules of the game, everyone's participation counted and was essential for success. And finally, the fact that the game turned the rules and processes experienced in real life completely on their head. Young people went from being a group that was usually marginalized in urban development processes, unable to make their voice heard, to be the catalyst for the transformation of the city. In this context, their opinions and actions have been brought to the fore and their will has been asserted.

A selection of 15 ideas was presented at an exhibition for the residents and decision-makers, who were surprised by the young people's bold and fresh ideas. Many of these ideas were realized, such as a romantic neon bench, artistic bird nests, a bicycle path, or a football pitch renovation, some of which were carried out by the young people themselves, and others that were later implemented by the city itself.

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GUIDING GAME-BASED LEARNING: UNDERSTANDING THE FACILITATOR'S ROLE

Authors: Julian Czurko and Bětka Wójcik
Contributed and edited by: Maksim Smekhov

INTRO

Game based learning (GBL) as one of the active approaches to education can help us to foster active participation during the learning process, develop concrete skills and competencies, increase the appetite for learning and motivation of learners. As a part of the non-formal education and form of experiential learning it encourages learners to take active part in the learning process, develop key competencies and attitudes.

The process of GBL involves not "only" playing the game but also designing and holding the learning space around it. This is the task of a facilitator. The role of the facilitator is crucial when it comes to non-formal education methods and active approaches to learning. Facilitators shape the learning space in which learners can learn in a self-directed way, reflect and develop new skills and competencies. Facilitator doesn't disseminate the knowledge but accompanies participants in the learning process and shapes the space in a way that can support the learning process of the group and each participant.

This article will help you to understand the role of facilitator in different phases of the learning process and develop your own competencies as a GBL facilitator.

This article is part of the Mind the Game project. The authors have compiled the main aspects of facilitating game-based learning, which you'll soon explore. Throughout the article, the horizontal school team shares their insights (marked as ➸ VOICE FROM THE FIELD), linking these aspects to real-world practices in international projects and programs where facilitation is central.

➸ VOICE FROM THE FIELD: At horizontal school, we have never labeled ourselves as GBL (Game-Based Learning) facilitators. However, the implementation of the Mind the Game Project revealed that we have been incorporating game-based learning into our practices for a long time, naturally and without needing to highlight the "playfulness" of the learning process. Reflecting on our experience, especially during the pandemic, we realized how much gamification helped us adapt to the new digital reality. It allowed us to design immersive online learning experiences, offering participants lively interactions despite the limitations of the online world. It was mind-blowing to see how gamified check-ins, polls, and immersive storytelling transformed us into not just facilitators, but also game designers and game masters.

EXPLORING THE STAGES OF EXPERIMENTAL LEARNING

GBL can be reviewed through the lens of phases of David Kolb's learning cycle[1]. It is a model which describes the experiential learning process in which new knowledge is created based on the interpretation and transformation of learner's experiences and which leads to the formulation of abstract conceptualization based on these experiences.

According to Kolb's model, the learning process starts with the **Experience phase**. The experience can be created through using elements of games or the whole play.

To provide the learning it is crucial to continue with the next phases of the cycle: **Observation** (debriefing and reflection), where we reflect on what has happened during the Experience phase and how did it affect the result of the activity and **Conceptualisation** (discussion), where we generate new concepts, models and rules.

The last phase – **Experimentation** – might be less obvious since it's applying new knowledge and skills in solving other challenges and it may already happen outside of the classroom. If the GBL activity is a part of the bigger learning process – next tasks might involve applying them in practice. Facilitators can also propose follow-up activity in which learners can use newly gained learnings (fe. drama method, play-role, discussion etc.).

VOICE FROM THE FIELD: Grounding this concept in our practice, the Civil Society Toolbox serves as a prime example. This co-creative, gamified organizational development approach guides teams and organizations through their growth journey. The toolbox comprises a set of gamified cards with various methods, offering a hands-on process where teams engage with organizational culture while exploring its different aspects. By following these stages, activities in the Civil Society Toolbox lead participants through Kolb's learning cycle. This ensures that the learning process is dynamic, iterative, and deeply rooted in practical experience, making it an effective tool for organizational development and growth.

EXAMPLE FROM TOOLBOX

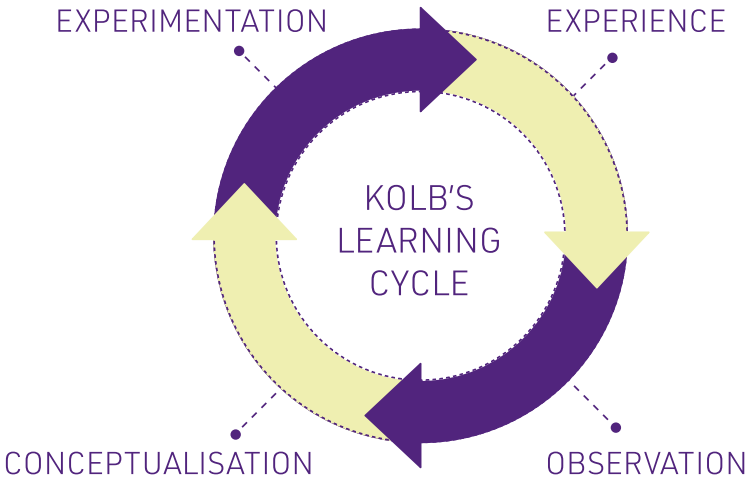
Activity with Gamified Cards (experience): A team uses a card that prompts them to build a strategy for a hypothetical crisis situation. They engage in discussions, providing a concrete experience.

Reflection Session (observation): After the activity, the team reflects on their performance, discussing what strategies worked, what didn't, and why.

Developing Insights (conceptualisation): The team then abstracts their reflections into broader insights about crisis management, such as the importance of clear communication and decisive leadership.

Testing Insights (experimentation): In subsequent team meetings or actual crisis situations, the team applies these insights, refining their crisis management strategy based on what they learn from these new experiences.

[1]Kolb, David A. Experiential Learning: Experience as the Source of Learning and Development. Prentice Hall, 1984.



VOICE FROM THE FIELD: Game-based learning activities naturally align with David Kolb's learning cycle, seamlessly integrating immersive experiences, reflective observations, conceptualization of strategies, and active experimentation. For instance, in an educational game on environmental issues Keep Cool, developed by our partners Ecovisio from Moldova, up to 50 city mayors try to find a balance between economic growth, climate protection and the wishes of their citizens to win the game, players directly engage with managing a virtual ecosystem (CE), reflect on their actions and receive feedback (RO), develop theories on sustainable practices (AC), and apply and refine their strategies in subsequent rounds (AE). This natural integration facilitates effective experiential learning in various educational and professional contexts. This example demonstrates that game-based learning effectively helps internalize knowledge by allowing individuals to experience and apply it in their own worldview, daily challenges, or professional practice.

FRONT-END PHASES IN A NUTSHELL

Designing a game-based activity is a complex journey that requires creativity, empathy, and a deep understanding of the learning process. It's not just about coming up with fun games; it's about crafting experiences that are meaningful and impactful for participants. This involves multiple iterations, from mapping out the emotions and experiences of the players through empathy mapping, to setting clear goals and objectives for the activity, and taking a holistic view of the entire learning, both before and after the game. However, let's focus on the front-end stages – the ones that happen when the activity begins – and consider what the facilitator needs to be mindful of or prepare for. Our goal is to understand how the typical steps used in facilitation are also highly relevant for facilitating gamified activities.

- FRONT-END: What users see and interact with directly.
- BACK-END: The behind-the-scenes process/steps/solutions that makes the front-end work.

INTRODUCTION

This phase involves introduction of the topic and preparation for the play. It serves the group process usually that we start from the check-in or other group activity. We also create the consent for the safe learning space. During this phase we can also introduce the topic and collect the existing knowledge around it. It can be done for example through brainstorming or group discussion. Depending on the situation and concrete game this phase may also involve other activities like team-building (especially if the group doesn't know each other well) or some introduction into the topic. This phase is aimed at setting the frames of the process, supporting group work, and helping participants to feel safe and welcomed.

- VOICE FROM THE FIELD: As facilitators employing game-based learning for well-being, we resonate deeply with the emphasis on setting the stage for safety and trust in the initial phase. It's essential for participants to feel secure and welcomed, especially when delving into sensitive topics. For instance, in all our workshops or training, we began by leading a check-in exercise where participants shared a word or phrase representing how they are feeling. This simple activity not only encouraged self-reflection but also fostered a sense of connection among the group members, laying a strong foundation for the work ahead. Or introducing the topic through a group live discussion not only taps into the collective wisdom of the group but also validates each individual's experiences and insights. This collaborative approach not only promotes engagement but also helps participants feel empowered and valued in the learning process. Creating a safer space, allowing the participants to enter the common room as a necessary step before the rules of the game can be voiced out. And at this phase we should also identify the boundary of a real world space and the realm of a game.

Clarissa Watson / Unsplash

GAME PLAYING

This phase involves actual gameplay. At the beginning the facilitator introduces the rules or provides participants with an instruction. During the phase participants gain experiences through playing. Facilitator is in the background. The task of the facilitator is to support participants if they ask for help and to check the time frame.

- VOICE FROM THE FIELD: In the realm of civic education, a game-based activity like a simulated town hall meeting can offer an immersive experience in democratic decision-making. To support a dynamic and safer space in this scenario, facilitators should emphasize active listening, constructive dialogue, and the understanding of differing viewpoints. For example, participants could take on roles such as elected officials, community activists, or concerned citizens, and work together to address pressing issues facing their fictional community. By navigating complex issues and practicing civic engagement in a controlled environment, participants can gain valuable insights and skills applicable to real-world situations. The facilitator's role is vital for maintaining a dynamic and safer space, providing support when needed without overshadowing participants. Monitoring group dynamics, encouraging collaboration, knowing when to step back allows participants to take ownership of their learning experience.

DEBRIEFING AND REFLECTION – are critical components of the learning process in game-based activities. This phase is where participants analyze their experiences, formulate reflections, and abstract concepts, linking new knowledge and skills to everyday life situations. The facilitator plays a key role in guiding this process, helping participants explore three main aspects:

NEW LEARNINGS: Participants reflect on the topics and concepts introduced through the game. They identify what they've learned and gained insight into during the activity, deepening their understanding of the subject matter.

GROUP PROCESS AND COLLABORATION: Reflection extends to the dynamics of the group and their collaborative efforts during the activity. Participants consider how they worked together, communicated, and problem-solved as a team, recognizing strengths and areas for improvement.

CONNECTION TO EVERYDAY LIFE: The facilitator encourages participants to bridge their learnings from the game to real-life situations. They help participants articulate how the skills and knowledge acquired can be applied in their personal and professional lives, fostering practical application and relevance.

Debriefing and reflection serve as the catalyst for meaningful learning, allowing participants to internalize their experiences, draw insights, and transfer newfound knowledge and skills into actionable real-world contexts.

- VOICE FROM THE FIELD: For example, in a game designed to teach young people critical thinking through analyzing media and identifying fake news, the facilitator plays a crucial role in guiding debriefing and reflection. The facilitator uses structured reflection models, for instance Gibbs' Reflective Cycle[2], to guide discussions, and visual aids to help articulate thoughts and see connections. They recognize and validate participants' emotional responses, helping them link these emotions to their learning process.

Adapting to group needs, the facilitator remains flexible, modifying their approach based on group dynamics and engagement levels. The facilitator also encourages long-term reflection through follow-up activities and creates a culture of ongoing reflective practice, ensuring participants internalize and apply their new critical thinking skills effectively in real-world contexts.

[2]Gibbs, Graham. Learning by Doing: A Guide to Teaching and Learning Methods. Further Education Unit, 1998.

CHECKLIST FOR FACILITATORS IN DESIGNING GAME-BASED LEARNING EXPERIENCES

Earlier, we briefly explored the main phases involved in implementing game-based learning activity. By emphasizing these phases, facilitators can ensure that participants actively engage in the learning process, absorb new knowledge and skills, and effectively apply them to real-world situations. Take a look at the checklist we've prepared–it can assist you in both preparing for and evaluating game-based learning activities:

INTRODUCTION PHASE:

- Establish a safe learning space through check-ins or group activities.
- Introduce the topic and gather existing knowledge through brainstorming or discussion.
- Set clear boundaries between the real world and the game realm.
- Foster a sense of connection and collaboration among participants.

GAME PLAYING PHASE:

- Clearly communicate the rules and instructions to participants.
- Provide support when needed without overshadowing participants' agency.
- Monitor the time frame to ensure the activity progresses smoothly.
- Encourage active participation and engagement while allowing participants to experience the game autonomously.

DEBRIEFING AND REFLECTION PHASE:

- Guide participants in analyzing their experiences and formulating reflections.
- Explore new learnings, group dynamics, and connections to everyday life.
- Use structured reflection models and visual aids to facilitate discussions.
- Validate participants' emotional responses and encourage long-term reflection.
- Adapt facilitation approach based on group dynamics and engagement levels.
- Foster a culture of ongoing reflective practice through follow-up activities.

By following this checklist, facilitators can effectively design and facilitate game-based learning experiences that are engaging, meaningful, and impactful for participants.

EMBRACING THE COMPLEXITY OF GROUP DYNAMIC

➥ VOICE FROM THE FIELD: In our practice, we emphasize the importance of mindful and careful work with group dynamics. This is crucial for any facilitation process, but it becomes particularly challenging when implementing game-based learning. Facilitators must navigate between two worlds: the real one and the world of the game. They need to hold these two spaces in parallel, integrating them and sensing when it's time to steer the focus back from the game.

For example, during our program "Cheberkana," focused on capacity building for youth organizations in Kyrgyzstan, we organized a role-playing game on public hearings in a hybrid format. The aim of the game was to immerse participants in topics such as participation, decision-making, democracy, accountability, and responsibility – both from citizens and public authorities.

However, during the game, participants began to overplay their roles, intentionally provoking conflicts and prioritizing the excitement of the gameplay over the intended learning objectives. Once the game concluded, making sense of the experience proved challenging because participants struggled to relate their in-game experiences to real-life situations. While this contributed positively to team building and group cohesion, it hindered the efficiency of achieving our intended learning outcomes.

Let's look at the basics of group dynamics and connect them with the process of designing and facilitating game-based learning activities. We would like to spotlight three aspects we consider crucially important in maintaining group dynamics in a game-based learning process: **safer space**, **relational work**, and **roles**.

ESTABLISHING A SAFER SPACE for participants depends on different group characteristics; it may look different for a new group compared to a group with an already established relationship. However, for a new group, the foundation for a safer space can be created before the group gets to know each other.

For instance, when we organize training and workshops, we practice sending participants the "safer space policy," where we outline not only the rules and fundamental values but also provide an appreciative welcome that embraces diversity, the complexity of identities, and cultural backgrounds. We also practice recording guided meditations or audio walks so that people can connect with our caring approach right from the beginning.

Let's define "group process" as the interactions and activities that occur between individuals working toward the same goal(s) and/or in the same environment. Group learning has been extensively studied in both formal and non-formal education over the past decade, with numerous experiments and practical applications demonstrating its effectiveness. Our focus will be on the group process typically occurring in non-formal settings, though we will also consider how formal institutions, like schools, apply tools from non-formal learning.

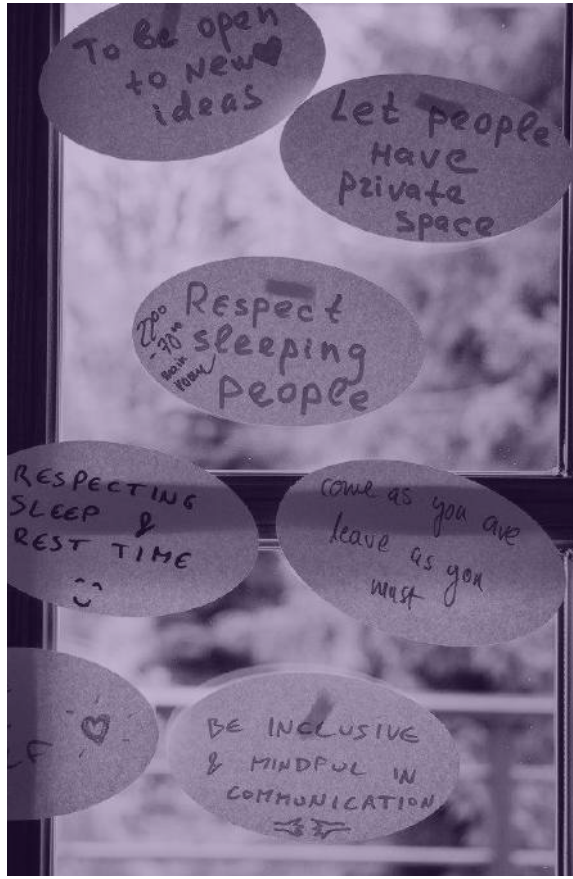
An important aspect of this process is that group members seek to determine how safe the group is to pursue their objectives. Creating a safer space in diverse groups requires preparation, clear communication, independence, relationship building, and fairness. If the group members feel safe enough, they will follow "motivation towards," which in terms of game-based learning might be:

- being engaged in all activities
- being open to challenges and getting out of the comfort zone
- communicating openly about the topics but also about challenges or emotions
- being present in the space with the full authenticity
- be in the flow of the play, stay curious, and bring energy to achieve the goal

Lack of safety in the group will cause the person to follow "motivation away", which means taking actions in order to avoid socially and emotionally difficult situations or even violence. This survival mode can be expressed in different ways:

- getting into conflicts whenever person feels that their status or wellbeing are questioned
- actively avoiding any kind of a challenge or social exposition, withdrawing, boycotting
- being passive, following the group while minimizing any input, not answering, declaring having low competences or not understanding the situation/ instruction/goal

A **safer space** is a supportive, non-threatening environment where all participants can feel comfortable to express themselves and share experiences without fear of discrimination or reprisal. We use the word safer to acknowledge that safety is relative: not everyone feels safe under the same conditions.



RELATIONAL WORK in game-based learning is crucial for creating an environment where participants feel connected, supported, and engaged. This involves fostering positive interactions, building trust, and encouraging collaboration. Here's what facilitators need to recheck and do at all stages: which effect relationships development and dynamic:

- clarity: being clear about the roles, goals, agreements and tasks, incl. being available in the case of additional questions
- autonomy: giving space to participants to express themselves, to look for solutions on their own, supporting independent thinking
- safety and relations - helping participants to know each other before playing and maintaining healthy relationships during the game (especially when someone plays an "in character" conflict that shouldn't be transferred outside the game)
- fairness - treating participants equally, solving or facilitating conflicts, executing the rules, drawing adequate consequences when someone is cheating

- VOICE FROM THE FIELD: Distinguishing between roles in game-based learning presents a unique challenge. On one hand, you must recognize the variety of group roles that naturally form. On the other hand, the game-based activity often disrupts these roles, altering their characteristics or power dynamics and introducing new roles and actions. Facilitating this process requires careful attention to the blurry boundary between play and reality.

  Such an experience happened to our partner in Hungary, "In Dialogue Association." They aimed to gamify community discussions on social issues using the Forum Theatre methodology. This approach allows everyone to participate in the performance and take any role. Participants, representing minority voices in the real world, began to assume roles of decision-makers, labeling them with offensive characteristics. Facilitating this process required focused and precise steps to normalize group dynamics.

In traditional group facilitation, discussions and problem-solving are key, focusing on real-world objectives. In contrast, game-based learning (GBL) immerses participants in structured gameplay to achieve specific learning outcomes through trial and error in a low-risk setting. GBL facilitation involves managing gameplay dynamics, leveraging technology, and providing tailored feedback. Facilitators must be adaptable, adjusting gameplay to meet emerging learning needs. Overall, GBL facilitation emphasizes experiential learning and engagement through gameplay, distinguishing it from traditional facilitation methods.

EVOLUTION OF ROLES IN GBL

In group dynamics, individuals naturally adopt **various roles** that evolve as the group progresses through stages like forming, storming, norming, and performing, as described by Bruce Tuckman[3]. These roles, ranging from task leaders to rebels to guardians of norms, contribute to the group's functioning and development. In game-based learning (GBL) facilitation, understanding these roles is crucial as they manifest differently in each stage of the learning process.

During the forming stage, where individuals get to know themselves and establish basic safety, roles like task leaders and stars emerge, facilitating introductions and highlighting similarities among participants. In norming, as the group sets basic rules and boundaries, roles such as rebels and navigators come into play, shaping agreements and fostering open dialogue.

In the storming stage, characterized by conflict or crisis, roles like kamikazes and scapegoats surface, requiring facilitators to manage crises and support conflict resolution. As the group progresses into performing, roles like navigators, sages, and weirdos emerge, driving the group towards success and motivating high performance.

In GBL, facilitators must navigate these roles within the context of gameplay, adapting challenges and interventions to suit the stage of the learning process. Facilitating GBL involves guiding participants through each stage, leveraging gameplay dynamics to achieve learning objectives effectively.

Ultimately, whether in traditional group settings or GBL facilitation, understanding and managing group roles is essential for fostering collaboration, resolving conflicts, and achieving collective goals.

Please review **the dictionary of roles** we've mentioned above. We gathered them over years of practice, initially inspired by J.A. Malarewicz:

- task leader – that person tries to take control over the tasks that the group focuses on
- emotional leader – that person models emotional openness, expresses their own emotions and helps to name emotions in the group
- navigator – that person tries to move the group towards focusing on a bigger goal (not just tasks as the task leader does)
- scapegoat – that person is accused of causing crisis in the group which easily escalates into violence against that specific person
- kamikaze – that person causes a situation that is too challenging for a group to handle and introduces a phase of crisis, easily becomes a scapegoat
- sage – that person shares insights and has an indirect authority in the group
- rebel – that person doesn't agree to rules and agreements or is constantly questioning them, doesn't agree to someone claiming a leading role
- star – that person wants to be in the center of the attention, it can be in a creative way (like sharing really interesting stories), or in an unsafe way (dominating space, doing risky things etc.)
- outsider – that person doesn't go along with the group process and decides to stay in the periphery, but not quit
- guardian of norms – that person mentions openly when someone doesn't follow the contract/rules
- weirdo – that person stays in a dysfunctional role (unchanged and transferred from the previous stage of the process) while the group doesn't fight with it, just starts avoiding that person.

[3]Tuckman, B. W. (1965). Developmental sequence in small groups. Psychological Bulletin, 63(6), 384-399. https://doi.org/10.1037/h0022100

In conclusion, in game-based learning (GBL), prioritizing a safer space, nurturing relationships, and clarifying roles are vital for effective facilitation. These elements ensure a positive learning experience and help achieve collective goals. Below we summarize this article with the tips for facilitators of GBL embracing the group dynamic.

TIPS FOR DESIGNING GROUP-BASED LEARNING ACTIVITIES

Consider group dynamics: When crafting group-based learning (GBL) activities, remember to think about how they might impact the existing group dynamics. Every group, whether it's a class or a team, has its own unique history and interpersonal dynamics that can influence the effectiveness of the activity.

Align with group phase: Understand the current phase of group development. Tailor activities to resonate with the group's stage, whether they're forming, norming, storming, or performing. This ensures activities are relevant and beneficial to the group's progress.

Prioritize safety: Emphasize the importance of personal boundaries and safety, even during role-playing scenarios. Ensure that participants feel physically and emotionally secure throughout the activity. Establish clear guidelines for respectful interaction.

Differentiate roles: Acknowledge the distinction between being "in the role" and "out of the role." Recognize that individuals may adopt different personas during activities, which may not reflect their everyday behavior. Respect these differences to foster inclusivity and understanding.

Mind the thin line: Be mindful of the boundary between fiction/role-playing and reality. Emotions evoked during activities can feel real to participants. Create a supportive environment where everyone feels comfortable exploring roles without judgment.

Prepare dispute resolution: Anticipate potential conflicts and prepare dispute resolution mechanisms. Having clear rules and procedures in place helps address challenging situations objectively, minimizing the impact on individual performance.

By following these tips, you can design GBL activities that foster a positive learning environment, respect individual differences, promote inclusivity and connection among participants. In addition to this article, we provide you with an annex comprising a matrix of assignments and essential questions to enhance the preparation of GBL activities (see Annex 1), along with a competence framework for facilitators seeking to implement game-based learning in their practice (see Annex 2).

Annex 1

MATRIX OF ASSIGNMENTS AND ESSENTIAL QUESTIONS TO ENHANCE THE PREPARATION OF GBL ACTIVITIES

LEARNING PROCESS (achieving the learning objectives)	GROUP PROCESS (supporting the group and promoting collaboration)	GAME-MASTERING
BEFORE THE ACTIVITY		
setting the learning objectives choosing the game that align with the learning objectives (designing own game, choosing and/or customizing existing game) setting own learning goals as a facilitator	adjusting the game to the group's needs	preparing the materials (boards, kits, cards etc.) preparing the space - creating the atmosphere, adjusting the physical space so it supports the immersion
QUESTIONS		
What are the learning objectives? Can I achieve these learning objectives with this tool? Are the steps (activities) I planned leading me to reach the goal? What do I want to learn in this process as a facilitator? What do I want to try out?	What are the learning needs and abilities of participants? Does the tool correspond with them? Does it take them into consideration? What do I know about the group? Are there some tensions, conflicts in the group? Do I have some concerns, fears connected to the group process and my role? What are my resources that can support me in the facilitation of the group process? What do I know and use? What methods can I bring in?	Am I familiar enough with the game? Do I know the rules and the mechanism well? Did I try it out with the group? What space and materials can support the immersion and create the atmosphere? How can I use the potential of space, time, circumstances, and resources I have? What kind of experience do I want to give to the group? What will be fun? How can I provide it? What will be fun for me? What am I ready and/or curious to try out?

LEARNING PROCESS (achieving the learning objectives)	GROUP PROCESS (supporting the group and promoting collaboration)	GAME-MASTERING

INTRODUCTION

- providing introduction into the topic
- building on the existing knowledge, skills and competencies

- setting the consent about the safe space
- setting the clarity about the role of facilitator (especially important in the school context)
- supporting the group (getting to know each other, team-building)

- giving clear instruction and presenting the rules
- introducing the narration

GAMEPLAYING

- supporting the learning process according to the Kolb's cycle

- promoting the collaboration
- providing the feedback and support to help participants overcome challenges if they occur
- supporting participants in the case of conflict
- providing the support to participants in case of strong emotions

- supporting the engagement and involvement in the game and narration

DEBRIEFING AND REFLECTION

- supporting deeper understanding of topics and concepts (fe. through incorporating additional materials and resources)
- helping participants to reflect on the meta-level
- providing the reflection about how participants can apply what they have learned to other contexts and areas of life

- facilitating reflection about the group process and group roles

- supporting participants in stepping out of the role in the case of games involving role-playing
- providing the reflection on the level of method and tools

LEARNING PROCESS (achieving the learning objectives)	GROUP PROCESS (supporting the group and promoting collaboration)	GAME-MASTERING

DEBRIEFING QUESTIONS FOR THE GROUP

What did you learn?

What were the challenges and how did you overcome them?

What did you see as a chance for learning and how did you use it?

How have you been engaged in group work?

What supported you/helped you and what was the obstacle, challenge ?

What was your role and your contribution in group work?

What was the source of fun for you? What did you enjoy the most?

How do you relate to the story?

What kind of meaning do you find here?

AFTER THE ACTIVITY

- evaluation of the learning process
- reflection on the own learning process of the facilitator

- evaluation of the group process, my role and interventions
- reflection on the own learning process of the facilitator

- evaluation of the gameplay and the concrete game as a tool
- formulating new ideas and improvements

QUESTIONS

Was the learning goal achieved? What exactly supported/blocked the process of achieving the goal?

What would I do the same way and what would I change next time?

How was the group process going on? Did the group need my support? Was I ready to provide it?

Which group roles developed during the process, which stayed the same? And how did it impact the group?

How adequate were my reactions to the group's needs and my goals?

Were there moments when I left the group?

What were the highlights of the game?

What was the source of the fun?

What did work well? What would I change?

Annex 2

COMPETENCE FRAMEWORK FOR FACILITATORS SEEKING TO IMPLEMENT GAME-BASED LEARNING IN THEIR PRACTICE

Diagnosis diagnosis of learning needs and pre-existing skills, knowledge and barriers	**Holding the safe space** creating sacred space and safe space	**Managing enthusiasm** managing emotions, game dynamics, engaging learners into the process of playing
Managing goals setting educational goal and keeping it through the process, keeping it as a priority in a 3D process	**Group management** following and managing the group dynamics, noticing constructive and dysfunctional group roles	**Role-playing** playing different roles, characters, adjusting style and performance
Planning educational process planning the educational process and its concrete steps, analysis	**Selecting interventions** ability to choose consciously and adequately (to the phase, roles) interventions (methods, reactions) that support the group	**Planning fun** implementing structures and challenges aimed at engagement, immersion and fun
Supporting reflection supporting the group in formulating conclusions and relating them to the wider context (meta level)	**Conflict management** reacting to situations in the group, analyzing when to react and when to leave it to the group as a part of their process, supporting the group in the case of conflict they can't handle	**Improvisation** creativity and flexibility, adjusting to players, circumstances, events, potential, improvising
Debriefing debriefing, formulating questions, gathering conclusions and getting valuable feedback	**Self-reflection** awareness of educators' impact on the group	**Storytelling** creating meaningful narratives that participants can relate to on different levels

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APPRECIATING CONTRIBUTIONS

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6 STAY TUNED AND FIND OUT MORE

LISTEN TO PODCAST SERIES

The Mind the Game Podcast is not only a project podcast but also another creative output of the "Mind the Game" project, alongside the flip book. We leverage podcasting as an additional tool to delve deeper into the topic, with active participation from practitioners involved in the project.

This podcast is launched as part of the Horizontal Talks series, continuing to invite professional educators and facilitators to explore new and relevant topics for the community of practice. Join us as we bring together insightful discussions, interviews, and reflections to enhance understanding and drive innovation in game-based learning and education. Follow the link or scan the QR code.

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