



AGAINST THE ALGORITHM

**GAMIFY+: ENHANCING ORGANIZATIONAL
CAPACITY THROUGH HYBRID GAMING**



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“We will start to realise that being chained to your mobile phone is a low-status behaviour, similar to smoking.”

– Max Fisher, The Chaos Machine

We have never had to learn how to use a book beyond opening it the correct side up, and then reading with understanding (hopefully!). There's a common agreement that there are no borders with the usability of books across all disciplines. Media Literacy, though, as an educational focus touches more complicated media than books. And those, from news platforms through digital entertainment to social media, as tools remain interdisciplinary. Hence, there is a need for borderless, not enclosed within one specialised classroom or workshop, development of competencies connected to their consumption, use and interpretation. Please check another text in our project booklet if you are interested in Media Literacy as a competency. Here, we wanted to share with you an overview from an educator's perspective (no matter the setting or the format, from school to Erasmus mobilities, and everything in between). **The interdisciplinary Media Literacy can enhance teaching and learning practices:**

- **Critical thinking and problem-solving:** By analyzing media critically, one can develop essential skills useful in everyday life (i.e. evaluating information, identifying biases, and solving problems).
- **Engagement and motivation:** Using media-based activities, and getting closer to the common communication styles of various audiences, can make learning more engaging and relevant to one's lives, increasing motivation and participation.
- **Collaboration and communication:** Working on media-related projects, making them relevant to the target group (i.e. via using games), can foster collaboration, communication, and teamwork skills.
- **Cultural awareness:** Exploring media from various sources can help students develop a better understanding of different perspectives and values (i.e. migrants compared to 'locals').

One might ask about practical strategies for integrating media literacy into different subjects (media being potentially both means to achieve and results of a project-based learning activity, Literacy developed within and through the process):

- **English/Languages/Communication:** Analyze media products for literary elements, rhetorical devices, and persuasive techniques. Create media projects like short films, video games, podcasts, or blog posts.
- **History/Culture/Politics:** Use primary sources like pamphlets, historical films, documentaries, or newsreels to analyze historical events. Create media projects like the ones mentioned above, historical simulations/reenactments, LARPs, social media campaigns or time capsules.
- **Sciences/Sustainability:** Explore scientific concepts, and miscommunications, conspiracy theories connected to sciences, through media, such as documentaries, animations... Create media projects like the ones mentioned above, interviews with experts, science experiments or educational videos.
- **Maths/STE(a)M:** Use media to visualize mathematical concepts and solve problems. Create media projects like data visualizations or math-related games.

That being said, the third sector – namely NGOs and community groups – can greatly support the system by organising for their target audiences educational activities and also unorthodox partnerships utilizing contemporary media. An interesting case would be video game industry and charities.

War Child [<https://www.warchild.net/>] has been working with games developers since 2006. In 2015 they created a successful partnership with the developer 11 Bit Studios around their game This War of Mine [the game itself is now part of Polish extended curriculum as a supplementary reading recommendation - <https://11bitstudios.com/this-war-of-mine-is-set-to-be-added-to-the-core-curriculum-of-polish-schools/>] But “its most successful campaign, Armistice, marks Armistice Day by attempting to “pacify” games – for example, by offering players in a game where they would normally shoot at opponents the opportunity to throw snowballs instead. In one game, Verdun, set during the First World War, players can play football as part of the 1914 Christmas truce. The campaign has raised \$760,000 (£599,400) so far and involves 20 studios.” [<https://www.thirdsector.co.uk/gaming-good/fundraising/article/1591275>]

Using video games for the sake of good or the education itself shouldn't come as a surprise as it is simply a natural evolution, should one look at games in general for the sake of sharing knowledge and growth of competencies. Let's consider playing with soldier figurines with additional rules, and we will get... “Professional wargames (Kriegsspiele) had been adopted by the Prussian army at the start of the nineteenth century. They received a major boost after the Prussian successes during the German Wars of Unifications (1864–70) and were subsequently introduced by the armies of other European powers, the United States and Japan.” [<https://journals.sagepub.com/doi/full/10.1177/0968344519855104>] It shouldn't be a surprise then that cca 200 years later a video game (or rather its more ‘professional’ iteration) by a Czech developer of ARMA series is used by militaries all over the world to train their soldiers [<https://pro.bohemia.net/services/other-services/military-training>].

One of the direct and universal benefits of playing video games is strengthening eye-hand coordination, and there interesting studies that show that i.e. that surgeons saving life might benefit from that [see: <https://www.reuters.com/article/economy/surgeons-who-play-video-games-more-skilled-us-study-idUSN2J303978/> ; <https://www.tutordocor.com/blog/2020/january/the-cognitive-benefits-of-playing-video-games/>]. The other would be the video games engaging nature that can translate to... healthy habits, with cancer treatment being a great example as there exists “a video game that might help young cancer patients with treatment compliance” called Re-Mission [<https://hopelab.org/case-study/re-mission/>]. So, to shortly sum up, games in general and video games in particular, from peace to war and everything in between can have a great impact on one’s growth. And part of our project’s mission is building bridges between education focused on Media Literacy and the proper use of... well, media, more specifically - games.

Events unfolding globally during the months of implementation of our project have strengthened our understanding of its importance. Let's look at one case study to make our vision - empowering educators, youth workers and anyone interested with gamified tools supporting Media Literacy education - clearer. [Fragments used are from The Washington Post’s ‘WorldView’, [Britain’s riots put spotlight on far-right misinformation](#), by Ishaan Tharoor, Aug 9, 2024]

[...] far-right rioters set cities ablaze, attacking mosques and hostels hosting asylum seekers and harassing ethnic minorities across Britain [...]

The explosive scenes that rocked the nation were triggered by the horrific fatal stabbing of three girls in the seaside town of Southport on July 29 [2024]. They were, more specifically, triggered by false reports on social media linking the attack to a Muslim migrant.

Social media trends, globally, are proving humankind's drive towards digital interconnectedness. The number of users, across various platforms, grew from 4,72 billion in January 2023 to 5,04 billion in January 2024 [<https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/>]. They, social media, have become a staple medium of both our days and those yet to come. Their growth goes hand in hand with accessibility to mobile devices and internet. Unfortunately, all that was given to people who, in general, are not ready nor have an understanding of how those tools are made, and how algorithms of contemporary media are there to exploit our biology for the sake of engagement. That results in a situation when people are increasingly interacting with others in social media environments where algorithms control the flow of social information they see. Algorithms determine in part which messages, which people and which ideas social media users see. [by William Brady "Social Media Algorithms Warp How People Learn from Each Other", August 25, 2023, <https://www.scientificamerican.com/article/social-media-algorithms-warp-how-people-learn-from-each-other/>]

"We've reached a point where things that are popular and emotionally resonant are much more likely to be seen by you than things that are true,"

– Max Fisher, [The Chaos Machine](#)

The algorithm is an ever-evolving mechanism with a commercial purpose behind keeping a person locked in a labyrinth of social media. They have expanded rapidly since the early days of platforms like Facebook, YouTube and Twitter (X). Initially, these algorithms were relatively simple. They have been prioritizing content from users' close circles of friends and family. However, as platforms grew in popularity and competition intensified, the algorithms became more complex and sophisticated with their host platform's growth in digital minds. Early algorithms focused on chronological order and social connections, but as platforms sought to increase user engagement (and advertising revenue!) algorithms began to prioritize content that was likely to generate clicks, likes, shares, and comments - interactions that keep people glued to their devices. All using 'gamified' tricks of dopamine bursts. Over the years, the development of machine learning techniques allowed algorithms to become increasingly suave, learning from user behaviour and adapting to individual preferences.

“Facebook’s “Like” feature, some version of which now exists on every platform, is the equivalent of a car battery hooked up to that sociometer. It gives whoever controls the electric jolts tremendous power over our behavior. It’s not just that “likes” provide the social validation we spend so much of our energy pursuing; it’s that they offer it at an immediacy and scale heretofore unknown in the human experience. Off-line, explicit validation is relatively infrequent. Even rarer is hearing it announced publicly, which is the most powerful form of approval because it conveys our value to the broader community. When’s the last time fifty, sixty, seventy people publicly applauded you off-line? Maybe once every few years—if ever? On social media, it’s a normal morning. Further,”

– Max Fisher, [The Chaos Machine](#)

Avoiding the pitfalls of social media algorithms is one of the bases of effective Media Literacy education. Key points that one needs to remember when choosing tools and activities are:

- **Understanding how algorithms work.**
- **Recognizing patterns.**
- **Evaluating sources.**
- **Diversifying information sources.**
- **Setting limits.**
- **Critical thinking.**

It should already be clear that in our project we believe that one of the best ways how to engage audiences with relevant content and help them grow is through games. Using some of the same principles ruling algorithms (i.e. user engagement, dopamine hits, immersion) for good. One of the formats we want to promote brings together books and gaming in a way that should be more flexible technologically and from the perspective of various generations. We are talking about... Gamebooks, but before a few more words are shared about them in this text, let's return to the case study.

Within hours of the stabbings, an obscure social media account associated with an outlet calling itself Channel 3 Now News shared that the attacker was an immigrant who had come to Britain illegally by boat and had been on watch lists related to security and mental health," reported my colleagues William Booth and Leo Sands. "The post, on the X platform, gave a name for the suspect that police said was wrong."

The post would get amplified by an ecosystem of far-right personalities on social media, both within and outside of Britain. It would turn out later that many of its reported details were flatly wrong and that the assailant was a teen, born in Britain to Rwandan migrants. His religious identity was likely not Muslim. But a match had already been lit.

"It looks like the tweet has been deliberately fabricated to generate hostility toward ethnic minorities and immigrants, and it's a potentially Islamophobic piece of propaganda," Andrew Chadwick, professor of political communication at Loughborough University and expert in the spread of online misinformation, told my colleagues.

Now imagine this story retold and interactive, rewritten with an even clearer educational purpose. Gamebooks would be the way. You can create your own or use the workshop outline from this booklet with your learners! Then what's a gamebook? “Simply put, a gamebook is a book which has branching paths, often with Role Playing Game (RPG) elements included.” All are complemented with illustrations and occasionally puzzles/riddles. “The gamebook is a genre of analogue interactive fiction that originated in the US and in the UK in the 1970s and expanded internationally to produce thousands of works and sell millions of copies in the 1980s and early 1990s. The “Choose Your Own Adventure” series dominated the gamebook market for children and tweens with simple branching stories, and it became the most iconic line of them all.” [Studying Gamebooks: A Framework for Analysis by Marco Arnaudo, <https://analoggamestudies.org/2023/09/studying-gamebooks-a-framework-for-analysis/>] Nowadays, gamebooks are no longer analogue only, and can very effectively build bridges across media. They often blend mechanisms found in video games (branching narratives complexity straight from the biggest titles or interactive graphical elements), especially when they are prepared in a digital format. At the same time, they remain closer to what books are, making them more ‘digestible’ by older generations. An interesting example related to sustainability can be found here: <https://enviroedgamebooks.co.uk/gamebook-2/>

In general, there's a big "variety of strategies that educators can follow to promote learning with gamebooks and branching fiction. They can have learners read and play the stories as well as engage the learners in designing and writing their own adventures [...]. Moreover, both reading and writing activities can be performed by the teacher together with the classroom, or assigned to the pupils. In addition, **learning activities with gamebooks and branching narratives can be designed for individual student and group work, refer to either paper or digital fiction, employ either analogue (e.g., dice) or digital (e.g., real-time clock) game mechanics, and use analogue or digital [...]** tools to assist the learners in the creation. [Gamebooks and branching narratives in education: fostering sustainability competencies to promote positive social change by Marco Fenici & Ivan Mosca, <https://www.frontiersin.org/journals/education/articles/10.3389/educ.2023.1335605/full>]

We will conclude with the words of Kevin Riste that "a thorough understanding of the mechanics behind social media algorithms and engagement strategies is essential for effectively navigating these platforms. By being selective in our interactions, we can influence the type of content we encounter and foster a more positive online experience." This way we have defined one of the most important elements of the educational puzzle called Media Literacy education. Our approach through games freely available to anyone interested is partially a response to the fact that no mobile device nor social media platform comes with an obligatory tutorial on how to use it responsibly. One exercise tested during the capacity-building fragments of the series of meetings, the creation of gamebooks, provides an excellent pathway across media.

DESIGNING & WRITING A GAMEBOOK: PROJECT-BASED LEARNING ACTIVITY FOR YOUTH AND EDUCATORS

Understanding the Goals:

A gamebook project can be a fun and engaging way for youth and educators to explore storytelling, creativity, and critical thinking. When preparing a workshop, consider these goals:

- **Creative expression:** Encourage participants to develop their storytelling skills and imagination.
- **Problem-solving:** Challenge participants to think critically and make decisions within the gamebook's narrative.
- **Collaboration:** Foster teamwork and cooperation among participants.
- **Digital literacy:** Explore the use of digital tools for creating and publishing gamebooks.
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Additionally, the following is for more advanced groups of aspiring or established storytellers. For other groups consider taking even more steps at the beginning of your writing journey: exercises related to Hero's Journey, character and world-building, etc.

The Introduction:

We suggest starting with a series of smaller workshops, with their length and complexity depending on the target group and the facilitator's own competencies, available materials and comfort (i.e. doing the following in an analogue or digital forms).

1. **Creative writing flash exercise:** based on a thematic prompt, consider something connected to the core theme of your learning process, participants are asked to write and then read a short story or a poem.
2. **Sequential, visual storytelling:** based on the creation from 'a', participants are asked to create a one-page storyboard / comic book without dialogue lines - with the outcome showing an effective blend of visual and textual forms.
3. **Changing POV:** participants are asked to revisit their creations from 'a' and retell them from the second person perspective - the language of Dungeon Master's narration in roleplaying games.
4. **'What if' exercise:** participants are asked to think of a crossroads moment in their stories and ask themselves what if something changes, and how the story would have ended. One can exercise this on existing stories, myths and legends for a more culturally targeted workshop - thus, practicing the fairytale fracturing (<https://study.com/academy/lesson/what-is-a-fractured-fairy-tale-definition-examples.html>).

Gamebook Writing Workshop Outline:

1. Introduction to Gamebooks:

- Explain the concept of gamebooks and their history. See the following materials:

<https://enviroedgamebooks.co.uk/gamebook-2/>

<https://analoggamestudies.org/2023/09/studying-gamebooks-a-framework-for-analysis/>

<https://www.frontiersin.org/journals/education/articles/10.3389/educ.2023.1335605/full>

- Discuss examples of popular gamebooks and their impact on storytelling; if you do not have access to them, think of brainstorming videogames or RPG like D&D with your group (what makes the best story-driven titles stand out from the crowd, i.e. multiple endings).

2. Brainstorming Ideas for the gamebook and mapping the narrative:

- Participants should be encouraged to brainstorm to generate ideas for their gamebook's theme, setting, and characters.
- Help, if necessary, participants create a basic plot outline and identify key plot points.
- Discuss the importance of creating choices that affect the story's outcome.

3. Designing the Gamebook Structure:

- Discuss different gamebook structures, such as branching narratives or linear progression.
- Help, if necessary (depending on the group's level and number of examples used), participants choose a structure that best fits their story.

4. Creating the Gamebook Elements:

- Guide participants in creating gamebook elements like illustrations (nice touch helping visual learners!), maps (non-obligatory), and puzzles (non-obligatory, for inspiration you might check other section of this booklet - the one about escape games).
- Explore the use of digital tools for creating these elements (the gamebook can have a traditional paper format, an interactive ppt/canva/pdf, HTML, a simple creation in an engine like UNITY...).

5. Testing and Refining:

- Have participants test their gamebooks with each other to identify any issues or areas for improvement.
- Provide feedback and guidance on how to refine their work.

6. Publishing the Gamebooks:

- Discuss options for publishing gamebooks, such as self-publishing, online platforms, etc.
- Help participants choose a publishing method that suits their goals and budget.

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