

Deal Me In: an inclusive lens on digital storytelling and game-based learning with young people and adults

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Introduction

Technological development has caused a gradual but constant set of changes in the educational scenario over the past 20 years. According to Demartini and Benussi (2017) these changes can be related to four configurations of education: Education 1.0. in which the teacher is the main knowledge source, the learning process values lessons, essays, papers and tests, while technological mediation is done through an institutional learning management system (LMS); Education 2.0 is where the teacher is a guide or a consultant, learning is facilitated by the development of classroom projects, the student has an active role and collaboration is encouraged, but the institution's boundaries are maintained; Education 3.0 promotes the collaborative construction of knowledge through open activities developed in networks that value creativity, and innovation, while digital mediation is done through Web technologies that integrate a set of applications for different purposes. Finally, Education 4.0 is an emerging profile that provides for a greater symbiosis between people and technologies in flexible, customisable, adaptive, integrated environments without national, regional and institutional borders.

In these environments, skills such as creativity and innovation are mobilised and, according to the World Economic Forum (2020, p. 4): “Include content that fosters skills required for innovation, including complex problem-solving, analytical thinking, creativity and systems analysis”. In this sense and, according to Almeida and Simões (2019, p. 122), "the Education 4.0 paradigm empowers students to define their model and pace of learning (...) technology is used to propel learning according to the specific needs of each student".

The World Economic Forum (2020, p.10) defined the four main characteristics of Education 4.0's innovative pedagogies: (1) playful includes free play, guided play, and games; (2) experiential integrates content into real-world applications; (3) computational supports problem-solving; while (4) embodied incorporates the physical body into learning through movement. These go together with a multiliteracy approach that focuses on diversity and the multiple ways in which language is used and shared and connects learning to cultural awareness.

The innovative pedagogies learning meets the principles of game-based learning, as will be discussed later. We believe that self-paced learning, flexibility and adaptability can contribute to remove barriers and increase the opportunity for access, inclusion and participation for all. Based on these assumptions, digital storytelling and game-based learning practices – developed for educational purposes with young people and adults in vulnerable situations – were analysed through an inclusive lens.

The inclusive and equity lens has been used by public entities, non-profit organizations and community associations to guide actions and decision-making, while one engages in:

- *Reflecting the needs of people with a range of experiences;*
- *Applying knowledge of [local]history (...);*
- *Finding a diversity of ways for people to participate (no one-size-fits-all),*
- *Understanding how and why exclusion happens, resulting in action steps.*

Simmonds, 2019, p. 4

According to the same author, the equity lens's main components: "Identify barriers where they occur; eliminate barriers by making adaptations that reflect the life experiences of those affected; create new ways of working by considering inclusion at the earliest stages rather than at the end" (idem, p. 4).

This chapter, after establishing preliminary considerations about the concepts of equity, diversity, inclusion and game-based learning, presents and analyses two projects that involve digital storytelling and game-based learning through the principles of an inclusive lens, followed by final considerations.

Equity, diversity, inclusion and game-based learning

The universal right to Education and the principles of lifelong learning enable access for an increasingly diverse audience of young people and adults to learning in different contexts, with different objectives and at different stages of life. The Learning by Design framework (Cope & Kalantzis, 2015) recognises that learner-identities are diverse, complex and multi-layered, and that their differences should be taken into account. The authors also classify these differences as demographics ((1) material – social status, resources, relationship; corporeal – age, race, sex, abilities; symbolic – language, ethnos, gender) and as attributions from a life well-lived (life experiences, belonging, identity, dispositions, sensibilities, networks, interests, values, etc.).

In the diversity of these students' equity, conditions must be guaranteed (Kyriakides, L. et al., 2019) that materialise inclusion principles to promote social justice (Vincent, 2003; Santomé 2013; Sampaio & Leite, 2018). To accomplish this, it is important to create conditions that foster student involvement, based on their characteristics and different starting points, where interaction with their peers, reflection focused on the contents, and situations that are being worked on will be possible.

To provide equity, according to the City of Ottawa and City for All Women Initiative (2018, p.10), means that "they are given different

supports to make it possible for them to have equal access to the game” or even removing systemic barriers to participation.

There are several elements associated with the integration of games in education that favour inclusion and consider diversity. Hawkins et al. (2019) argue that digital learning games are interactive and customisable, and can contribute to provide access to a more diverse group of individuals. Games in Education also involves hands-on, immersive activities (Bartlett & Anderson, 2019); "goal-oriented tasks that target both real-world and non-real-world scenarios, players feel responsible for success (...) turning errors into learning elements" (Almeida & Simões, 2019, p.124); "potential social benefits in terms of creating a sense of closeness, friendship and belonging, especially when linking online and offline relationships" (Hanghøj, Lieberoth & Misfeldt, 2018); "a sense of autonomy and creativity, challenge, and purpose, safe opportunities to "fail", and incremental information about how much progress they were making towards achieving in-game goals" (Bolstat & McDowell, 2019, p.).

All of the above characteristics are in line with the concept of inclusion. Having this reference in mind, two projects involving games and digital storytelling with young people and adults in situations of social vulnerability were analysed. Game-based learning and digital storytelling: analysing projects and practices through an inclusive lens

ReGap project

ReGap is an Erasmus+ project with the main goal of reducing the educational gap for migrants and refugees in EU countries through the development of open-access learning resources, and enhancing social belonging and inclusion. This intends to improve the terms of participation in the hosting society by promoting opportunities, the access to resources, and respect for rights (United Nations, 2016) – namely through knowledge and skills necessary to take part in employment, health, social security and schooling on an equal footing with EU citizens.

The project rationale is inspired in findings from a previous Erasmus+ project (Advenus) on the barriers to engagement in e-Learning, namely when resources are not deemed relevant and fail to engage with the learners' need for knowledge about vitally important life-sustaining areas. The project considered how language skills can impact on learning engagement, and the research about the role social belonging in massive open online courses (MOOCs), where it was found that the completion rate in online courses increases when learners experience some kind of social identity (Kizilcec et al., 2017).

Moreover, refugees and migrants are not a homogenous group, and ReGap wants to reach as many as possible. This requires e-Learning activities that are culturally and gender sensitive, that at the same time offer the opportunity to be delivered fully online (delivered through Moodle platform), but also face-to-face in blended mode for those who have lower ICT skills. It also requires cooperation with social and educational professionals that work within the scope of hosting institutions, programs and projects. Finally, ReGap actively supports learning by additionally utilising visual media such as digital narratives and visual signs as an integral part of the resources to overcome language barriers as much as possible.

Six online courses have been developed, covering Employment, Education, Health, Social Security and Welfare, Justice and Citizenship, and Gender as topics. The courses were trialled and evaluated by 300 refugees and migrants and 50 educators in 4 European countries (Norway, (North) Macedonia, Italy and Portugal).

A key concept in the project is (digital) storytelling, considering the importance to include the "voice" of adult migrants and refugees in all stages of the project: it argues that digital stories – featuring refugees and migrants, when used wisely and in context – may contribute to generating a feeling of social belonging and inclusion and foster the personal meaning of educational resources.

Digital storytelling can be defined in a broad sense, and embrace all stories – fiction and nonfiction – told with digital technologies

(Alexander, 2017). Still, a digital story is often personal, using the storyteller's own voice and "combines the art of telling stories with a mixture of digital media, including text, pictures, recorded audio narration, music and video" (Robin, 2016, p. 18).

According to Robin (2016), sharing stories with others "can promote gains in emotional intelligence, collaboration and social learning" (Robin, B. R., 201, p. 19). Also, Svoen, Dobson & Bjørge argue that "digital storytelling has several decades of tradition, and is also being used as a way of calling attention to migrants and refugees and bring forth their stories" (2019, p. 5). Moreover, digital storytelling can help to better deal with "episodes of conflict related to cultural, sociological and historical differences between diverse groups" (Rutta et al., 2019, p. 509).

In this regard, digital storytelling was used as a key concept and a pedagogical tool to create a feeling of social belonging in migrants and refugees. On one side, the research team has included in each of the educational resources a storytelling component, namely through short videos that link training content with daily life situations that migrants and refugees usually have to deal with in the hosting countries. These may contribute to their social inclusion, making the courses more relevant and promoting identification with these as well as a sense of social belonging (ReGap, 2019).

On the other side, all ReGap partners have conducted country-based workshops on digital storytelling; including refugees, migrants, and educators where all were given the opportunity to make their own digital stories. These digital stories are personal and visualised narratives and testimonials, where the storyteller's own voice is a driving force. As a result of the workshops, many stories have been produced as part of the ReGap project, including some by the project partners themselves, and with the author's consent, integrated/connected in the learning resources portfolio.

In conclusion, Education is at the centre of the challenges for the hosting countries of migrants and refugees to ensure their long-term social inclusion. Frequently, those groups struggle with a lack of language skills

as well as knowledge on everyday issues in the hosting society. Developing migrants and refugees' skills and competences, especially for those with low levels of education, is paramount for social inclusion: when wisely considered, namely by avoiding any ethical pitfalls, e-Learning resources and (digital) storytelling may be driving forces for it.

MINDtheGaps project

Established in 2015 by the United Nations, Sustainable Development Goal 4 targets both the elimination of all discrimination in education (especially those in vulnerable situations) and the provision of affordable, reliable and context-sensitive digital education as a guarantee of equal opportunities for young people.

MINDTheGaps (Media Literacy Towards Youth Social Inclusion) is an Erasmus+ project that aims to promote equal opportunities through media literacy development with socially vulnerable young people (aged 15 to 18 years old). Vulnerability is a broad concept, but this project identified those with economic and educational difficulties, cultural differences, and discrimination based on gender, race, religion, family and citizenship status.

The project uses a participatory intervention based on a training programme and multimedia open-educational resources development. In this sense, young people are involved in all steps of the open-educational resource's creation, including digital games. At schools, teachers identify vulnerable students and stimulate them to participate in the project: a workshop involving three students from each participant country (Portugal, Bulgaria and Turkey) is planned. In addition to promoting a discussion about data literacy and the risks and opportunities of the internet and social media, the experience of creating digital games will offer other chances to develop digital contents, creativity, critical thinking, problem-solving, safety issues communication, collaboration and citizenship. These students will organise local workshops based on peer-tutoring, in their own countries, for vulnerable young people from 12 to 16 years old.

As a snowball methodology, the project aims to reach at least 100 youngsters, as well as involving the entire educational community and reinforce a transnational collaboration. MINDTheGaps also predicts a multiplier event – “Media Literacy - raise awareness, spread ideas and play” – to disseminate the results to Portuguese teachers, and students from 12 to 16 years old. In this, they can play and evaluate the resources produced collaboratively by young people from participating countries).

Beyond digital games creation, the project will produce knowledge reflected on a Handbook publication and assessment/testing materials, including digital resource evaluation grids for this target audience.

Final Considerations

Given all the above, we conclude that digital storytelling and game-based learning can trigger inclusive, flexible, customisable, adaptive, integrated learning scenarios, in line with Education 4.0 innovative pedagogies.

Digital storytelling, as developed in ReGap, impacts on who tells the story, providing an opportunity to share with others ideas and feelings in a safe context. This also provides a sense of togetherness and the comfort of knowing someone is listening, while at the same time creating knowledge, empathy and sensitivity on who listens to the story, thus building social belonging (Konstantopoulou et al., 2019).

Inclusion through game-based learning, as addressed in MINDtheGaps, implicates young people in:

- analysing the context, resources and learning objectives;
- planning;
- developing and/or choosing games;
- playing and evaluating the process and
- the final result.

During all stages, the interaction between different actors and technologies provided real word experiences that promote digital inclusion. However, admitting that technology can also become another social exclusion element, in order to be able to provide young people and

adults facing socially vulnerable situations more opportunities to “stay on the game”, it is important to identify and remove systemic barriers so that everyone can:

- Know, discuss and co-create the rules of the learning activity/game;
- Interact with digital technologies and produce contents under fair conditions, taking into account different paces and starting points;
- Have an immersive, pleasant and amusing experience that allows the development of skills and self-awareness, construct relevant knowledge and interact with the group;
- Try it out, make mistakes, start over and receive support, feedback and contextual help whenever needed.

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