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Playful Design - Resource Document FLED Tool

FLeD: Learning design for flexible education
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FLeD Playful Design

The FLeD Garden

1. Playful Design – 2nd version

1.1 Introduction

The concept of "gamification" has gained attention to integrating game elements into non-game contexts (Deterding et al., 2011). By incorporating game mechanics such as points, badges, and leaderboards, educational activities can be made more enjoyable and motivating. Gamification has been shown to enhance learner engagement and achievement across various educational domains (Hamari et al., 2014). McGonigal (2011) argues that game mechanics can be leveraged to tackle real-world problems and engage individuals in meaningful activities. Salen and Zimmerman (2004), in their book "Rules of Play: Game Design Fundamentals", emphasize the transformative power of games and play in educational contexts, highlighting the potential for deep engagement and immersive experiences that promote active learning.

Although playful design uses game mechanisms, it does so indirectly. It is about creating simple and minor actions and situations that cause fun and that can be intuitively achieved without much effort.

Playful design and ludic learning spaces have emerged as influential approaches in the field of learning, offering innovative and engaging strategies to enhance educational experiences. Drawing inspiration from game design principles and the intrinsic motivation that games provide, these approaches have gained traction in various educational settings.

Playful design employs game-based aesthetics or incorporates game elements with limited usability in non-game contexts to captivate the user's attention, hence causing an emotional reaction (de Sousa Borges et.al., 2014). Ludic learning spaces (Kolb & Kolb, 2010) promote deep learning by fostering exploration, experimentation, and problem-solving skills while nurturing intrinsic motivation and a sense of autonomy.

This perspective aligns with the idea that incorporating playfulness into educational contexts can enhance motivation, creativity, and collaboration among learners (Hoicka et al., 2018; Gee, 2003; Csikszentmihalyi, 1990). By leveraging the engaging and motivating nature of play, educators can create learning experiences that foster creativity, collaboration, and intrinsic motivation, ultimately leading to more effective and enjoyable learning outcomes.

In the last decade, playful approaches to teaching and learning have been introduced and applied, and more recently, also in higher education and adult education (Meij et al., 2017). Below we present a proposal with the objective to develop a playful experience of learning design for lecturers' use of the pattern and scaffolding.

The proposal involves a scenario and several challenges to immerse the participant lecturers in a playful experience of co-designing Flipped learning, envisioning the FLeD website as a ludic space.

1.2 The FLeD Garden: Unveiling the Flipped Classroom Magic

Scenario

Lecturers receive an invitation to enter a magical realm known as the **FLeD Garden**. The invitation, sent by the esteemed organization **FLeDQuesters (the FLeD project team)** reveals that within the garden lies the transformative power of the **FLeD Tool**. This is a magical tool which has the power to transform traditional classrooms into engaging flipped learning contexts. To gain access, lecturers must embark on a journey filled with playful challenges and enchanting discoveries. But first they must pass through the **Flexible Gate**!

- **Challenge 1: Opening the Flexible Gate**

Lecturers gather in front of the majestic **Flexible Gate**, where they are greeted by a riddle-bearing **Guardian (FLeD team member providing instructions-Video + Infographic)**. The **Guardian** presents the challenge to the lecturers. Each lecturer is provided with a set of clues, once the clues are deciphered, the gate swings open, revealing the **FLeD Garden (the FLeD website)**.

STEPS: The challenge, is predefined and integrated into the website, it must be completed by all team members (lecturers) and consists of two activities:

- o **A1 - "FLeD BINGO":** given a CARD with 16 individual characteristics, each participant interacts with the others to fill in a line of the card and find, at least, one other participant who holds all these characteristics. Once they have completed the bingo like line, lecturers submit their answer.

Note on A1: the aim is to create a moment of sharing, exploration, socialization, and bonding between the participant lecturers. The BINGO CARD will be available and filled out online.

- o **A2 – "Gate Opening":** given a link/QR code each participant answers a short survey. Once they have submitted the form, they get a badge and move to the next phase: accessing the full FLeD website (patterns, tool, scaffolding).

Note on A2: the aim is to collect data about the lecturers' previous ideas and practices about Flipped Learning with a short online survey with 5 to 8 items.

- **Challenge 2: Exploring the FLeD Garden**

Inside the FLeD Garden, lecturers find themselves surrounded by lush greenery, vibrant flowers, and magical creatures such as the **Nameless Sage (the Scaffolding)**. As they navigate the garden's pathways, they find three distinct sections: the **Feedback Path**, the **Team Regulation Oasis**, and the **Prior Preparation Courtyard** (the 3 **FLeD Patterns**). Each pair of lecturers then chooses one pattern to explore and face the quest challenge of co-designing a Flipped learning scenario.

STEPS: The challenge, is predefined and integrated into the website/tool, it must be completed by all team members (lecturers) and consists of two activities:

- o **A1 - "Walk around":** each lecturer registers on the FLeD Tool; upon registration they receive a badge. They now enter the "garden" and explore it. This exploration is about reading, commenting, and

getting to know the 3 patterns and, also, interacting with the scaffolding.

- o **A2 - "Choose a corner"**: lecturers must now decide which corner of the garden they like the best: **Feedback Path, the Team Regulation Oasis, and the Prior Preparation Courtyard** (that is, the pattern they wish to implement in a real context) and submit their choice in the device. Upon completing the task, they get a badge.

Note on A2: the FLeD Tool should include a decision device.

- **Challenge 3: Unifying the FLeD Garden**

Having gained insights from their chosen sections, lecturers reconvene in the **Collaborative Haven** (the FLeD virtual CoP). Here, pairs of lecturers unite, sharing their experiences and pooling their knowledge. Now that lecturers have learnt to use the FLeD Tool's features, each pair of lecturers embraces the co-design of a flipped classroom plan that integrates the strengths of their chosen patterns. The FLeD Tool serves as their guide, helping them visualize their plan and align it with their educational goals.

Steps: The challenge, is predefined and integrated into the website/tool, it must be completed by all pairs of lecturers and consists of one activity:

- o **A1 - "Flip with Me"**: each pair of lecturers engages in the co-design of the chosen flipped scenario, thus interacting with the resources (scaffolding and FLeD Tool) and sharing knowledge and helping other pairs.

Note on A1: the aim is to promote co-creation and collaboration between the FLeD participant lecturers and a sense of belonging.

- **Challenge 4: Blossoming Showcase**

The lecturers reach the **Blossoming Showcase**, a gathering where they can showcase their co-designed flipped classroom scenario implementations. Each pair showcases their unique journey, highlighting the synergy between the chosen patterns and the transformative power of the FLeD Tool. Fellow lecturers and the FLeDQuesters marvel at the presentations, celebrating the creativity and innovation displayed. The most exceptional implementations are recognized and rewarded with FLeD accolades (a badge, a recognition).

Steps: The challenge, is predefined and integrated into the website/tool, it must be completed by all pairs of lecturers and consists of two activities:

- o **A1 - "My Flip":** each pair of lecturers shares the implement scenario with the other pairs. Upon scenario sharing, they get a badge.

Note on A1: the aim is to develop a sense of achievement in the participants.

- o **A2 - "FLeD Stars":** Each participant visits the [FLeD Gallery](#) and observes the creation of other participants. Each participant can comment on the scenarios and will receive a badge from the [FLeDQuesters](#) for each constructive comment. In addition, you can assign a [FLeD Star](#) to your [5 favourite scenarios](#) and see how they rank on the [FLeD Garden Quest](#) board.

Note on A2: The social recognition features included in the FLeD Tool – such as “likes”, “views” and “comments” – provide the opportunity to create a moment of recognition between the participants, that can take the form of a scenario's leaderboard where the top 5 will be displayed (either through number of likes/stars or views). The aim is to develop peer-review, knowledge sharing and a sense of achievement in the participants.

- **Challenge 5: FLeDQuester Membership**

Upon completion of the scenario, teachers will have unlocked the secrets of the flipped classroom in the magical [FLeD Garden](#). They face a final challenge: to become a [FLeDQuester](#)! To do this, they must solve the final riddle ([FLeD Satisfaction Survey](#)) and become a member of the [FLeDQuest community](#) ([FLeD Certificate](#)). Once they become a valued member of the [FLeDQuest community](#), they are invited to continue to nurture the growth of the garden by sharing their wisdom and inspiring others to embrace the wonders of the flipped classroom by visiting the [Collaborative Haven](#). Through their efforts, they become the guiding lights that light the way for future [FLeDQuesters](#), ensuring the continuity of playful learning and the transformative power of the flipped classroom approach.

Steps: The challenge, is predefined and integrated into the website/tool, it must be completed by all pairs of lecturers and consists of two activities:

- o **A1 - "Final Riddle"**: each lecturer must answer a satisfaction survey about the FLeD experience. Upon survey completion they get a FLeD certificate.

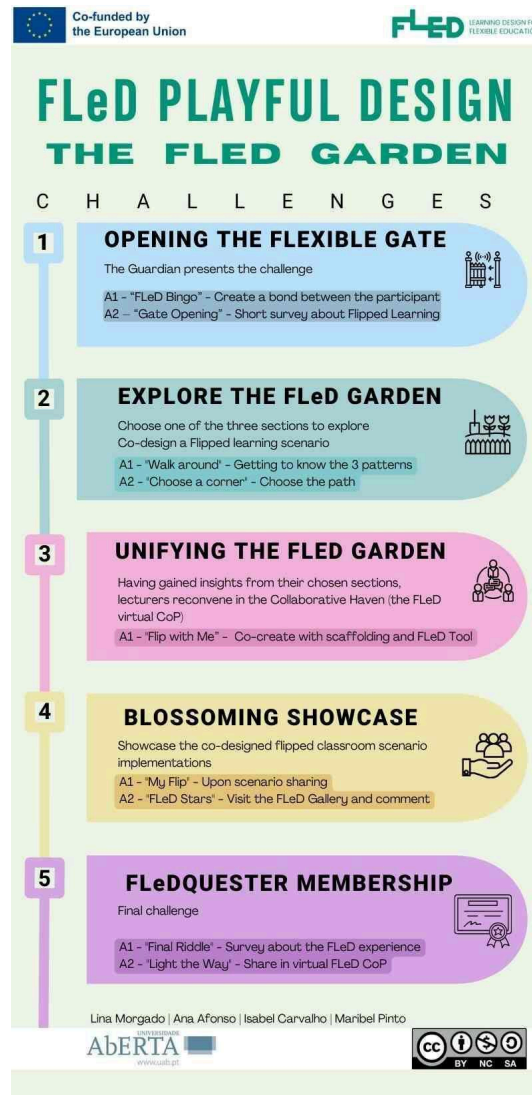
Note on A1: the aim is to collect participants' feedback on the FLeD overall experience and recognize their participation and contribution.

- o **A2 - "Light the Way"**: participants are invited to disseminate the FLeD experience among peers and share their knowledge, resources, and questions in the FLeD virtual community of practice.

Note on A2: The aim is to involve participant lecturers in the dissemination of the FLeD project and the Flipped and flexible learning model. This could be done through showcasing in multiplier events or through the development of a VCoP.

1.3 The FLeD Garden_Infographic

For a visualization of the proposed playful design, see the infographic below.



2. Final Notes

This scenario creates a sense of intrigue and camaraderie among lecturers from the very beginning. The garden setting fosters a serene and immersive atmosphere, allowing lecturers to explore their chosen flipped learning patterns with curiosity and enthusiasm. The collaborative elements and the use of the FLeD Tool empower lecturers to co-design comprehensive flipped classroom plans, resulting in meaningful and impactful educational experiences.

The aim is to provide a pathway to create a structured but playful journey for lecturers to experience the use of the proposed patterns, the scaffolding process, and the FLeD tool, in a collaborative, supportive, rewarding, and ludic environment. It is noteworthy that the virtual Community of Practice – Collaborative Haven – is proposed as a permanent and dynamic entity, to encourage more collaborative, engaging, effective and sustainable design approaches, supported by the sharing of experiences and best practices by the lecturers.

This proposal for a Playful Design is part of Work package n°2 - Pedagogical design, in its Milestone 2: As a result of activity 4, we will develop an open resource with a playful design for teachers' use of the pattern and scaffolding, as an infographic or interactive video.

3. References

- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Harper & Row.
- de Sousa Borges, S., Durelli, V., Reis, H. & Isotani, S.. (2014). A systematic mapping on gamification applied to education. In *Proceedings of the 29th Annual ACM Symposium on Applied Computing (SAC '14)*. Association for Computing Machinery, (pp. 216–222). <https://doi.org/10.1145/2554850.2554956>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011, September). From game design elements to gamefulness: defining "gamification". In *Proceedings of the 15th international academic MindTrek conference: Envisioning future media environments* (pp. 9-15).
- Gee, J. P. (2003). *What Video Games Have to Teach Us About Learning and Literacy*. Palgrave Macmillan.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does Gamification Work? -- A Literature Review of Empirical Studies on Gamification. In *Proceedings of the 47th Hawaii International Conference on System Sciences* (pp. 3025-3034).
- Hoicka, E.; Alexander, J.; Wu, Z. & Thomsen, B.. (2018). *LEGO Play Well Report* 2018. 94.

<https://cms.learningthroughplay.com/media/3oyhmaud/lego-play-well-report-2018.pdf>

- van der Meij, M.; Broerse, J. & Kupper, F.. (2017). Conceptualizing playfulness for reflection processes in responsible research and innovation contexts: a narrative literature review, *Journal of Responsible Innovation*, 4:1, 43-63, <https://doi.org/10.1080/23299460.2017.1326258>
- Websites
 - o Pleiade Project: <https://pleiade-project.eu/>
 - o URBACT Network Playful Paradigm: Towards a Playful and Sustainable Europe:
<https://ied.eu/blog/presentation-of-the-urbact-network-playful-paradigm/>