

EUEHL: Earning User Engagement in Hybrid Adult Learning

Special track along with The Fourteenth International Conference on Mobile, Hybrid, and On-line Learning
eLmL 2022 - June 26, 2022 to June 30, 2022 - Porto, Portugal

Daniela Pellegrini

R&D department

Piazza Copernico s.r.l.

via F. Gentile 135/A, 00173 Rome (Italy)

e-mail: dpellegrini@pcopernico.it

Abstract— Expanding the view of engagement toward a complex perspective that considers additional elements related to user motivation and activation in learning design is a fundamental need for increasing the training processes' governance. Engagement is not something that is determined at a desk; it is a complex phenomenon that does not happen by magic. Every aspect of the training path can and must be curated from an engagement perspective to ensure an increase in training effectiveness. Instructional designers can be very creative in defining designs, but it is important that they consider all aspects involved in the user learning process. The special track EUEHL - Earning User Engagement in Hybrid Adult Learning aims to stimulate reflection on the factors involved concretely and practical practices in real projects to increase engagement.

Keywords: *learning design; engaging tools; adult learner motivation; user engaging issues.*

I. INTRODUCTION

Full digitalization of adult learning processes in the past two years (forced by the pandemic) highlighted the importance of refocusing learning programs on individual needs. Remote workers gained a renewed awareness of how their own effective contribution is highly strategic to business processes. So, it is adamant that online learning program must awake a great sense of self involvement and motivation to actually achieve learning goals especially in adult learning. Instructional designer mainly focused on their learning design, applied methodologies and tasks to enrich the user experience. This is one of the most important aspects of engagement but not the only one.

A few questions arise about engagement:

- How to design learning experiences to stand out in the overflow of information and digital communications?
- How to ensure the achievement of the learning objectives in online & hybrid courses?
- How to alternate and schedule the training activities beyond the content?
- How to evaluate users' engagement in the training courses?

With EUEHL special track we wanted to arise a broad consideration of opportunities given by hybrid learning that

requires focusing on teaching strategies, tools to be used, but also how to identify the correct engagement measures.

Hybrid learning offers additional important chances to be managed in adult learning, as enhancing contents in a medium-long path with individualized learning paths, design rich learning experiences, studying strategies and support. Dealing with engagement beyond instructional and content design, also means:

- **Choosing engagement strategies:** gaming strategies, engaging communication, anonymous activities, individual assessment and paths, exercise' scheduling, etc.
- **Tools:** rapid and collaborative learning, interactive video formats, call to action mailings, community sharing, learning analytics supporting learning strategies, etc.
- **Engagement effective measure:** experience reports, lessons learned, evaluation metrics, content-aware metrics, content-driven metrics, humankind society facets vs technical aspects, robots-driven learning, digital immersion, etc.

Student and trainee's motivation is an innate topic in learning and using correct strategies to drive this motivation to training goals is one of the fundamental tasks that every teacher must do.

II. SUBMISSION

The first paper about "Remote Working - The Webseries: training meets people caring and the liberating power of laughter" by Elena Messoro explains a project in an organizational context in which engagement is pursued all through the design & development stages. In this way engagement not only regards chosen methods but become a global issue and goal for the course effectiveness. According to Moore [6] there are different kind of interactions in distance learning (student-student, student-teacher-student-content). In digital learning often digital materials play both

as teacher (to ensure knowledge transfer) and meanings (relating the content to previous knowledge and apply it to problem solving). So, it become even more important to gain a significant level of motivation about digital material, especially in adult training (study is characterized by high level of autonomy and time flexibility). In the paper the author presents a real project in which engagement was pursued at all stages of the project, i.e.:

- in the design of real-realistic situations related to the working context,
- in filming by involving company people and places,
- in the direct, ironic, and emblematic language,
- in dissemination on the company's social networks.

The project has shown multiple potential transferability elements, as this methodology is exportable to other contexts, contents, and organizational change process.

The paper, “Competitive game towards big engagement”, from L. Ducci, A. Catone, T. Terenzio, D. Pellegrini focus on competitive and real time gamification as a versatile opportunity in distance learning to boost engagement towards real-situations and actual work-goals (es. Economics and sales objectives). The project regards a digital business game for insurance agencies and their network. Gamification is an interesting experience especially for those training targets that are used to mandatory and content-based training, generally about product and regulations. Gamification activities also allow to conduct intra-group cooperation, while manage inter-group competition. This dynamic is very functional to experience work topics, in real context simulation and also provide a great stimulus to correctly act in group decisions. This paper highlight how it is mainly important in a learning process to maintain engagement, as explained in an emergency online learning context, Hodges et al. [5], and take care of how plan and conduct all supporting activities and interactions all over the learning process.

Then, the paper about the product demo of “Engagement as accessibility & inclusion” by C. Falconio show an example of how the learning design must broadly consider inclusion of people with different disabilities. Accessibility standards and common solutions not always provide a real accessibility. In the product explained there is an example of sign language translation on a digital learning content (video-based) and all its implications on instructional design.

The paper by D. Poce and S. Di Sanno, “The expert answer”, deals with one of the most common tools in digital learning, as the chat tool. But the authors present a learning perspective on how a common tool can be driven as a learning activity to engage people in a global reflexion on organizational topics. The presented experience explains how mediation in learning can be provided by user-friendly tools, that don’t need any preparation from teachers or users, and is possible to conduct important activities (such as the presented use for detection of learning needs in a company),

with event tracking, moderation, scheduling, and high engaging participation.

The last paper, “Attention and Meditation Quantification using Neural Networks” by A. O. Muresan and F. G. Hamza-Lup present an interesting research about attention processes that are involved in learning. This particular topic may be seen as an off-topic, but instructional designer must deeply know how attention processes work to correctly design the cognitive load of a digital learning experience. This is a very interesting contribution that highlights some neurological dynamics about the tasks required to participants. It explains a preliminary results of using a neural network and data analysis framework for evaluating the impact of various brainwave frequencies (delta, theta, alpha, beta, and gamma) on human attention. Considering how textual, auditory, figurative stimuli have an impact on participants' attention dynamics is a very important knowledge to enable to design training materials and activities in digital learning.

III. CONCLUSION

Research on Engagement in digital learning processes must deeply regards all different element of motivation (both internal and external), providing other perspective on how design experience and materials. There are studies suggesting that intrinsic and extrinsic motivation should be combined to motivate an individual to get into action for a goal, according to Hayenga and Corpus [4].

Many theories regard motivation, according to Seifert [10] focus on all-encompassing theories on student motivation, as the four most prominent motivational theories: self-efficacy theory, attribution theory, self-worth theory and achievement goal theory. Tahiroğlu and Aktepe [11].] have argued that learning achievement and effectiveness may vary according to motivators such as interest, desire and need.

Research, especially in adult learning must focus on many factors in the digital learning process, providing new solutions and ideas about how motivation could be awoken. Materials and content are a fundament part of the process, but also every activity and communication contribute to the user engagement and must correctly be driven.

REFERENCES

- [1] V. Abou-Khalil, S. Helou, E. Khalifé, M.A. Chen, R. Majumdar, H. Ogata, “Emergency Online Learning in Low-Resource Settings: Effective Student Engagement Strategies”. In *Educational Science*. Vol. 11, 24, 2021. Doi: <https://doi.org/10.3390/educsci11010024>
- [2] R. M. Bernard, P. C. Abrami, E. Borokhovski, C. A. Wade, R.M. Tamim, M.A. Surkes and E.C. Bethel. “A Meta-Analysis of Three Types of Interaction Treatments in Distance Education” *Review of*

- Educational Research, Vol. 79, no. 3, pp. 1243–1289. 2009. Doi: <https://doi.org/10.3102/0034654309333844>
- [3] B. C. Czerkowski and E. W. Lyman, “An Instructional Design Framework for Fostering Student Engagement in Online Learning Environments”. In *TechTrends* Vol. 60, pp. 532–539. 2016
- [4] A. O. Hayenga, J. H. Corpus, “Profiles of intrinsic and extrinsic motivations: A person-centered approach to motivation and achievement in middle school”. In *Motivation and Emotion*, vol. 34, pp. 371–383. 2010. Doi: <https://doi.org/10.1007/s11031-010-9181->
- [5] C. Hodges, S. Moore, B. Lockee, T. Trust and A. Bond, “The Difference between Emergency Remote Teaching and Online Learning”. In *Educause. ReView*, vol. 3, no. 27. 2020.
- [6] Moore, M.G. *Three Types of Interaction*; Taylor & Francis: Oxfordshire, UK, 1989.
- [7] S. Orhan-Özen. “The Effect of Motivation on Student Achievement”, pp. 35- 56. In E. Karadağ (eds.), “The Factors Effecting Student Achievement”. Engin Karadağ, Springer International Publishing, 2017. DOI: <https://doi.org/10.1007/978-3-319-56083-0>
- [8] Picciano, A. G., “Theories and frameworks for online education: Seeking an integrated model”. In *Online Learning*, 21(3), 166-190. 2017. Doi: 10.24059/olj.v21i3.1225
- [9] S. R. Sankaran, and B. Tung, "Impact of learning strategies and motivation on performance: A study in web-based instruction." In *Journal of Instructional psychology* vol. 28, no. 3, pp 191-198. 2001.
- [10] T. Seifert 2004. “Understanding student motivation”. *Educational Research*, vol. 46, no. 2, pp. 137-149. June 2004
- [11] M. Tahiroğlu and V. Aktepe, “Validity and reliability study on the motivation scale form designed for 4th and 5th grade social studies course.” In *International Periodical for the Languages, Literature and History of Turkish or Turkic*, Vol. 10, no. 3, pp. 907–932. 2008.