Thank you. I feel honored to be here today, and to be allowed to address you – on this occasion – with a couple of words. I appreciate your kind introduction to our work and I specifically thank you for honoring particularly this paper[1] with this award. A work which, like most if not all scientific works, could only be achieved by joint effort and collaboration. And in this case, I am convinced that it would not exist at all without the indispensable groundwork of my colleagues and coauthors Dr. Rodolpho Cortez, Prof. Kristian Kiili, Antero Lindstedt, and Prof. Manuel Ninaus. So, it seems only fair to me to use some of this time given to me here to acknowledge their contribution, at least with a few words.

So, what was this contribution that made this work possible? Those who know me, also know, that before psychology I studied physics and that already back then, I was fascinated by the work of some of the early psychophysicists like Fechner or Weber, discovering fundamental law-like relations in human behavior; and by the fact of discovering them, exemplifying that something invariant enough to call it a natural law may even exist among all the noise and biases of human behavior and action.

And from my perspective, it was nothing less than such a fundamental relation, which my colleagues were after, long before I joined the group. Their specific question was: Is there a genuine effect of game- or playfulness on learning? With many years of experience in game-based learning, they have been well aware that games or elements of them can influence learning in many ways. Yet at the same time, learning is influenced by many other factors, like prior knowledge, or experience with a task or subject, personal dispositions, interests, motives, and many more. And such confounding factors, as we call them, make it very difficult to extract exactly that effect which a bit of added playfulness may exert on learning. However, the learning task and experimental design, which my colleagues had devised, would allow us, maybe not to minimize, but strongly reduce these confounding factors and provide some evidence for such a genuine effect.

In retrospective, the approach seems simple, obvious almost. Devise a learning task in which prior knowledge cannot play a role, which is basic enough not to be specific in relation to any subject domain, and with which learners can engage and disengage neither driven by necessity nor overly reward. And present two versions of this task, once in its original form and once with some game elements added to it. And then see what happens.

So, what is it that happens? What does a bit of playfulness do to learning? Let me put it like this. For me, a book is a good book if it makes me want to read more, and other books beyond it. And similarly, I would say, that a learning activity is a good one if it fuels my wish to learn more, and many other things beyond it. And I would claim that this is exactly what a little space for playfulness can, under some circumstances, do for learning. In the case of our study, it did not make people learn faster or more efficiently on average. But it helped them stick around a little longer, exploring and seeing through what otherwise they would have abandoned.

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[1] Huber, S. E., Cortez, R., Kiili, K., Lindstedt, A., & Ninaus, M. (2023). Game elements enhance engagement and mitigate attrition in online learning tasks. *Computers in Human Behavior, 149*, 107948. https://doi.org/10.1016/j.chb.2023.107948

Admittedly, one could say, that this does not sound like much either. What use does it have educationally that people stick around, play around, maybe just fool around a little longer? Well, for some of them it means that they would learn something which otherwise they would not have. And in general, I would not underestimate the difference a little space for playfulness can make, even if this may only be noticed on rare occasions.

I lack the time to make this last point more explicit. I can only point towards a source that can. A piece[2] more than 80 years of age, composed by an educator named Abraham Flexner, titled "The usefulness of useless knowledge". In this piece, Flexner describes many scientific discoveries not motivated by considerations of utility but by what Einstein[3] called "divine curiosity, play instinct" and "constructive fantasy". My favorite among them, the discovery of electricity and all its consequences hopefully helps us grasp the global scale on which a little space for playful exploration may make a difference.

The future of education will reveal how much and what kind of space for such curiosity and playfulness we can provide in our research and teaching. Yet, I am convinced that this relation goes in both directions, that how much space we can grant those qualities in our education will to a considerable part also determine its future. Thank you.

[2] Flexner, A. (1939). The usefulness of useless knowledge. *Harper's Magazine, 179*, 544-552.
[3] Einstein, A. (1930). In: Küpper, H. (2023). *Sound document of Albert Einstein*. Albert Einstein in the world wide web. https://einstein-website.de/en/sound-document/