



Gaming in Action

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Erasmus+



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Editors' Introduction

When we talk about education in the 21st century, we are sometimes confronted with comments about how teachers' pedagogical practice has remained unchanged, or virtually unchanged, over the last century. When they are heard, sometimes teachers refer to many constraints that oblige them to keep classes essentially expositive, or in a model that values exposure, understanding, and application of learning more formally.

These positions were even more exposed in the last year due to the disease caused by SARS-CoV-2 (Severe Acute Respiratory Syndrome, Coronavirus 2), which the World Health Organization then called Covid-19. With the suspension of face-to-face classes due to the related pandemic, schools and higher education institutions resorted to so-called "emergency remote education" to try to complete the school year. This forced a sudden change to distance education, requiring rapid adaptation by teachers. This raises debates and interrogations: are teachers prepared for the demands of teaching beyond the face-to-face format? As Andreas Schleicher (Director of the OECD Department of Education and Skills, Responsible for PISA tests, 2016) said:

A generation ago, teachers had the expectation that what they taught students would be valid throughout life. Today, schools have to prepare students to a faster socio-economic change than it ever was, for jobs that have not even been created, to use technologies that still do not exist and solve problems that we do not yet know will arise. The successful education no longer resides mainly in the reproduction of contents, but in the extrapolation of what we know and in its creative application to new situations. The world no longer rewards people just for what they know – Google knows everything - but for what they can do with it. That is why education has more and more to do with the development of creativity, critical thinking, problem-solving and decision-making.

Regarding adult education, many times seen as less important training for unmotivated learners, the above considerations are even more evident. Most of the times, trainees of disadvantaged cultural, economic, and family backgrounds tend to reveal more academic difficulties, and those are accentuated over the years. Traditional training methods do not work when facing adults that, like children, live surrounded by technology and arrive in classes tired by their daily obligations. Therefore, we need to engage these learners in a new learning approach to show them how learning can be enjoyable compared to when they were in school.

In order to prepare all trainees for what is to come, we need them to focus on learning, and the training must be up to the requirements of the world of work and an increasingly expectant society. We want an innovative pedagogical scenario that allows trainees to use their learning tools. They experience virtual methods and utilise their strategies while building their knowledge and acquiring experience, motivation, and producing a self-reflection that is fundamental to learning. Due to the challenges identified that trainees with disadvantaged cultural, economic, and family backgrounds face, we believe that the innovative pedagogical scenario that underlies game-based learning and gamification is a valuable approach to prepare today's students to face the new challenges and involve them in answering their needs.

The «Gaming in Action» project, which brought the publication of this book, involved institutions from different countries that deal with adult education. For almost three years, the partners worked with teachers and trainers who applied innovative pedagogical scenarios of game-based learning and gamification, all oriented from a rigorous pedagogical perspective. The project's main goal was to increase the acquisition of pedagogical innovation skills in these models and incorporate them into their pedagogical practices. The project searched to highlight the need for quality pedagogical training in a new, technologically digital, era: in this, education has less to do with reproducing information passively and has more to do with the development of creativity, critical thinking, problem-solving and decision-making.

To enrich the project, we invited researchers who have been studying the use of games and gamification in education and training, published for an audience of practising researchers and academics and the general public interested in the theme of games and gamification. With such a 'big umbrella', the book is a collection of twelve chapters from scholarly articles and reports of experiences and perceptions about pedagogical practices.

In the preface, Professor Shafika Isaacs from the University of Johannesburg (South Africa), who has extensive research on the project's topics, sets the scene by reinforcing how gamification and game-based learning can support engaged, interactive and encouraged education and increase student motivation and student and teacher involvement.