Better e-Learning for Innovation in Education

Edited by
Gülden İlin
Şükrü Çetin İlin
Bento Duarte da Silva
António J. Osório
José Alberto Lencastre
Table of Contents

Editors’ Introduction........................................................................................................5

'Better e-Learning for All' – Contributions on Bringing e-Learning to NGOs and to 'hard-to-reach' Groups................. 11
José Carlos Bronze
APLOAD Lda, Portugal

Online education beyond distance education: a phenomenon of cyberculture......................................................... 23
Edméa Santos
Rio de Janeiro State University (UERJ), Brazil

New Technologies: from Risk to Resources for the Weakest Participants................................................................. 41
Anita Gramigna and Giorgio Poletti
University of Ferrara, Italy

Media Multitasking: how does it affect learners and learning?.............................................................................. 59
Cláudia Barbosa, Jailma Bulhôes,
Yuxiong Zhang and Luís Pedro
University of Aveiro, Portugal

Innovation in B-learning: Feelings Experienced by the Students of the Masters in Educational Technology.......... 79
Bento Duarte da Silva
University of Minho, Portugal
Ana Lúcia Pereira and Laurinda Ramalho de Almeida
Catholic Pontifical University of São Paulo, Brazil

Competence-oriented e-Learning Design.............................. 105
Paula de Waal
University of Ferrara, Italy

Video pedagogy and online courses........................................ 115
Giovanni Ganino
University of Ferrara, Italy
A Multicultural Examination of the Dropout Problem for e-Learning Courses......................................................... 125
Yalın Kılıç Türel, Muhammed Turhan and Mehmet Turan
Firat University, Turkey

A Systematic Review of Design Factors to Prevent Attrition and Dropout in e-Learning Courses.................... 135
Sandro Monteiro, José Alberto Lencastre, Bento Duarte da Silva and António J. Osório
University of Minho, Portugal
Paula de Waal
University of Ferrara, Italy
Sukru Çetin İlin and Gülden İlin
University of Çukurova, Turkey

The Regulation of Learning Effort in Online Environments .......................................................... 155
Nuno Queirós Rodrigues and José Alberto Lencastre
University of Minho, Portugal

Teacher Training for Online Teaching in Brazil: Considerations on a Case Study.......................... 175
Marco Silva and Sheilane Avellar Cilento
Rio de Janeiro State University, Brazil

Digital Non-formal Education as an Opportunity to Transform School........................................... 197
Joana Viana, Helena Peralta and Fernando Albuquerque Costa
University of Lisbon, Portugal

Online Education: A Conundrum in this Contemporary Puzzle.......................................................... 215
José Lauro Martins, Liana Vidigal Rocha and Valdirene Cássia da Silva
Federal University of Tocantins, Brazil

Author Biographies................................................................. 229
Editors’ Introduction

There is a perpetual challenge for all providers of Adult Education to successfully engage people who can benefit most from the intentions at the foundation of this sector. Adult Education covers a wide target audience: many are employed with fulltime work and want to be able to do the work they already carry out to a higher standard. However, this sector also seeks to engage people who are much harder to reach and motivate.

The very nature of this challenge means that it is also difficult to gain the necessary data and evidence to create successful strategies that can reach these groups – groups that include people that benefit significantly from the kind of elementary skills, which can lead to successful employment, leading to increased economic security.

It was against this background that a range of organisations and educational departments came together to create a collaborative Strategic Partnership within the Erasmus Plus Programme run by the European Union under the title Better e-Learning for All. This project was formed to seek out ways in which the flexibility of e-Learning as a form placed firmly in a modern and relevant context can be deployed successfully by Adult Education providers on behalf of these groups.

To follow the aim of establishing quality standards that could reduce levels at which learners within social groups characterised by a fragile involvement with educational requirements drop out of learning courses, the approach required different forms of competence and expertise to be combined. Accordingly, the research partners, mainly represented by universities and the higher education sector, joined non-governmental organisations and private companies in this joint venture.

Partners from Turkey, Greece, Italy, Portugal and the UK came together in this challenge to carry out research and deliver practical outputs that could support Adult Education providers in their efforts to effectively reach specific groups by using an e-Learning approach. This was seen to be particularly valuable as it was a learning paradigm that the
majority of the providers of Adult Education had not engaged with on behalf of their learners.

While the Partners were in charge of contributing with their expertise for the research to be carried out, they were also piloting the practical tools and seeking out ways to apply the results being achieved beyond the lifetime of the project: this was the way that Çukurova University as the project coordinator and Lead Partner envisaged for the project partners to fill the known gap under e-Learning promotion to serve people who are the hardest to reach for Adult Education providers.

*Better e-Learning for All* created a set of different project Outputs. These included a needs-based piece of research focused precisely on levels and definition of learner dropout, including the reasons behind it taking place and possible solutions. There were also two scientific articles addressing e-Learning as applied in the context of adult learning, and two pilot e-courses – one e-course centred on entrepreneurship for adult learners and another e-course supporting trainers to become e-trainers.

The Outputs also included a simplified e-Learning platform, intended for Adult Education providers, specifically those who seek to engage people from hard-to-reach groups.

Then the output that brings a conclusion to the work of the project is this book, *Better e-Learning for Innovation in Education*. This intends to provide an overview of the most important issues that the project partners faced, highlighting the scope of the matters an Adult Education provider may be confronted with when e-Learning becomes a designated part of their pedagogical approach.

It concludes the project’s cycle to facilitate the fruition of new and especially relevant variables to be considered by members of the Adult Education sector as e-Learning providers, granting them an additional set of research results and practical tool that they can apply in their work as they are stakeholders in the outcomes from *Better e-Learning for All*.

The book starts with three chapters that set the scene for the challenges being addressed. The first of these from José Carlos Bronze allows the reader to assess the combined challenge of engaging both the
potential learners as members of ‘hard-to-reach’ groups, in combination with convincing Adult Education providers with little experience of applying e-Learning strategies that this is an approach that they can – and essentially should – use. José Carlos Bronze represents APLOAD within the Better e-Learning for All project.

Then Edméa Santos sets out an investigation of the extent to which online education is a phenomenon of cyberculture, looking at the potential of digital technology to promote learning content.

Following this we go into more depth with a chapter from Anita Gramigna and Giorgio Poletti who consider the perceived risk in applying learning strategies that are heavily based on technology for learners that could be alienated from the education process, turning the sense of risk on its head by considering the potential for the liberating nature of technology’s capacity to mutate, as a means of chiming with people who may have not engaged with traditional approaches.

Cláudia Barbosa, Jailma Bulhões, Yuxiong Zhang and Luís Pedro look in depth at the implications of a world that has become used to the idea that young people are instinctive multitaskers, challenging this assumption through published research and considering the implications for applying e-Learning, concluding that there could be a need for providers to elaborate specific learning strategies that help the student develop competence in establishing focused attention and avoiding multitasking behaviours.

Bento Duarte da Silva, Ana Lúcia Pereira and Laurinda Ramalho de Almeida look in detail at the place of Blended Learning (or b-Learning), which is likely to be used frequently by Adult Education providers not wishing to give up all face-to-face tuition. The authors look at Education courses that cover the application of educational technologies – such as those behind e-Learning. For this, they show results from an investigation into the intensity and frequency of any positive or negative sensations that learners experience when attending courses that use b-Learning.
Paula de Waal represents University of Ferrara within the Better e-Learning for All project. Here sets out one of her specialist areas of expertise in her consideration of competence-oriented e-Learning design. Her chapter shows readers that there is a risk of there being a broad acceptance of the adoption of digital technology as sufficient evidence of quality, inclusion and innovation. She provides solutions for e-Learning designers so they focus on the problem-setting stage of a course before proceeding with the production and implementation of contents and learning environments.

Giovanni Ganino looks at the world of video in the context of online provision of learning resources. He proposes that videos can fulfil rich and stimulating functions from a pedagogic point of view, providing valid support for teaching and learning processes.

Yalın Kılıç Türel, Muhammed Turhan and Mehmet Turan set out some of the detailed results that have come from the Better e-Learning for All project. Their research covered an in-depth survey addressed to learners seeking to uncover the reasons for learners dropping out from courses. In this, they considered factors of correlation between ratings for course quality – in the administrative procedures, course content and technical accessibility – and (positive and negative) outcomes in the form of motivation, retention of information, levels of motivation and the likelihood of a learner dropping out from a course.

Sandro Monteiro, José Alberto Lencastre, Bento Duarte da Silva, António J. Osório, Paula de Waal, Sukru Çetin İlin and Gülden İlin present their systematic review of the design factors that can prevent attrition and the degree to which students dropout from e-Learning courses. This includes original analysis of the published research on this subject, based on the work of a team at the University of Minho, that concluded course design strategies cannot be devised without considering students and factors related to the course and program.

Nuno Queirós Rodrigues and José Alberto Lencastre present their work on the role of web-based connections between disciplines as points of reference in the regulation of learning effort by students in online
environments where they prefer to work and reflect on real-world problems, actively cooperating and collaborating in environments permanently mediated by technology. The research leads them to believe that class teachers could better regulate their students’ learning effort if they knew in advance the schedule of tasks proposed by their peers.

Marco Silva and Sheilane Avellar Cilento consider the new challenges online teaching and learning present to the management of educational systems and to the well-established traditional classroom teaching and learning practice. The chapter is in the form of a case study in Brazil that examined the impact of teacher training taking place in an online environment, looking at the changes in tutoring practice as a result of taking part in such a teacher training programme, and comparing the course participants’ views on online teaching before and after the course.

The final two chapters are more reflective on the bigger picture being addressed through the subject matter of the book. Joana Viana, Helena Peralta and Fernando Albuquerque Costa look at opportunities for transformation through non-formal education. They identify the value in analysing learning instances and manners of qualification presently available beyond any ‘school walls’, with due reference to the evolution of social, political and cultural fields that affect education in general, and learning forms and contexts in particular.

José Lauro Martins, Liana Vidigal Rocha and Valdirene Cássia da Silva invite the reader to take a transformative look at the future of education, one that can motivate educators to leave their ‘comfort zone’. They do this with a mind to education’s current position where it competes with new forms of social organisations that do not depend on territories, but depend on data networks, as well as people who connect, feed, and consume information.

At the back of the book, the reader can find a set of author biographies that identify the experience that each of them bring to this book through their contributions.
As well as thanking everyone who has contributed chapters to this book, at this point, we would like to add some special acknowledgement for additional support we have received.

First, from our colleagues within the Better e-Learning for All project. Among the contributors, Paula de Waal, Giorgio Poletti from Italy, José Carlos Bronze from Portugal, as well as Yalın Kılıç Türel, Muhammed Turhan and Mehmet Turan have all been a part of the Better e-Learning for All project since the start. We want to acknowledge their work in the project as well as thanking them for their contributions here. On the same theme, we would also like to thank Robin Beecroft at Searchlighter – a partner in the Better e-Learning for All project – for his work copy-editing the contributions and carrying out the production duties.

Then for our institutions: Çukurova University (Turkey) and University of Minho (Portugal) have given unstinting support in the production of the book. Without them, it would not have been possible and we want to state our gratitude here.

We also want to thank the Turkish National Agency in Ankara as the relevant body of the Ministry of the European Union in Turkey for their assistance throughout the Better e-Learning for All project, and the European Commission for their sponsorship of the Erasmus Plus Programme 2014–20.

We hope that this collection of chapters provides appropriate food for thought, and stimulates an enhanced provision of online e-Learning elements in Adult Education courses that will be applied for the benefit of people that may not as yet readily engage with the world of education.

Gülden İlın, Şükrü Çetin İlın,

Bento Duarte da Silva, António J. Osório & José Alberto Lancastre