Introduction

High quality research into open learning is indispensable. It provides important information to enhance learning with technologies, improving the learner’s experience, to assist effective decision-making, and helps to ensure the viability of products and services. This is vital in a field where change is constant and new innovations arise on a daily basis.

Significant interest from the professional community has clearly confirmed the relevance of the EDEN initiative to run the forum of the bi-annual Research Workshops. The RWSH series represent the meeting place of top European and global research for open learning and draws the map of major trends in the field.

EDEN’s 2018 Workshop “Towards Personalized Guidance and Support for Learning” focused on the crucial and changing roles of teachers in supporting student learning in the digital world. This includes the creation of enabling conditions that encourage learning personalization, learner agency and self-direction. Experiences of learner empowerment resulting from balanced “guide on the side” teaching, timely teaching interventions, consistent feedback and feedforward, explicit teaching of learning-to-learn strategies, assessment for learning, and technology-based adaptive teaching provided substantive background for reflection and discussion.

Research topics of interest included: Personalized learning: accompanying learners while addressing distinct learning needs, situations or preferences – Teachers’ and learners’ roles: rethinking teaching facilitation strategies using the potential of digital technologies – Open education: making the most of openness to ensure student success – Adaptive teaching: enhancing teacher decisions through course analytics and course awareness methodologies – Formative assessment: assessment for learning and the implementation of complementary approaches – Feedback: reinforcing teacher-learner dialogue through different channels in networked environments.

The tradition of awarding the “EDEN Best Research Paper” will be continued. The selection process takes place in collaboration with the Ulrich Bernath Foundation for Research in Open and Distance Learning. In 2018, the 10th Anniversary of this movement has been celebrated. The Foundation also supported five young scholars with grants for successfully submitting a conference paper to be presented in Barcelona in 2018.

A PhD Student Symposium was organised the day before the Research Workshop, hosted by the Universitat Oberta de Catalunya (UOC), with the participation of 30 young scholars. The Symposium has been designed to foster the exchange of experiences and knowledge among doctoral students doing research in the area of the event’s theme, while providing a discussion forum for the advancement of doctoral research. The Symposium was led by a panel of international experts on e-learning.

Higher Education is changing in nature. The new way of thinking, shaping a new paradigm is based on modularization. In this paradigm, the vision of personalized pathways of higher learning, qualifications and certification is manifested. In frames of the RWSH10, the OEPass Multiplier Event was organised, as initiative of the Open Education Passport project on the topic of micro-credentials, a timely and relevant concept in higher education and adult learning.

András Szűcs
Secretary General
European Distance and E-Learning Network

Professor Josep M. Duart
Universitat Oberta de Catalunya (UOC)
Acknowledgement and thanks are given to the Programme and Evaluation Committee

Conference Chairs:

Airina Volungeviciene, EDEN President, Director of Innovative Studies Institute at Vytautas Magnus University, Lithuania;

Josep Maria Duart, Universitat Oberta de Catalunya, Spain

Francesco Agrusti, University Roma III, Italy;
Diana Andone, eLearning Center, Romania;
Deborah Arnold, Universitat Oberta de Catalunya, Spain;
Quelic Berga Carreras, Universitat Oberta de Catalunya, Spain;
Ulrich Bernath, Ulrich Bernath Foundation for Research in ODL, Germany;
Lisa Marie Blaschke, Carl von Ossietzky University of Oldenburg, Germany;
Mark Brown, National Institute for Digital Learning, Dublin City University, Ireland;
Nati Cabrera, Universitat Oberta de Catalunya, Spain;
Elena Caldirola, University of Pavia, Italy;
Helga Dorner, Central European University, Hungary;
Ulf-Daniel Ehlers, DHBW, Germany;
Kurt Galle, VIVES University, Belgium;
Iolanda Garcia Gonzalez, Universitat Oberta de Catalunya, Spain;
Lourdes Guardia, Universitat Oberta de Catalunya, Spain;
Teresa Guasch, Dean of the Faculty of Psychology and Education Sciences, Universitat Oberta de Catalunya, Spain;
Montse Guitert, Universitat Oberta de Catalunya, Spain;
Sandra Kucina Softic, University of Zagreb, Croatia;
Marcelo Fabian Maina, Universitat Oberta de Catalunya, Spain;
Mark Nichols, The Open University, United Kingdom;
Ebba Ossiannilsson, Swedish Association of Distance Education, Sweden;
Antoni Perez-Navarro, Universitat Oberta de Catalunya, Spain;
Antonella Pocé, University Roma III, Italy;
Juliana E. Raffaghelli, Universitat Oberta de Catalunya, Spain;
Timothy Read, UNED, Spain;
Maria Rosaria Re, University Roma III, Italy;
Albert Sangra Morer, Universitat Oberta de Catalunya, Spain;
Andras Szucs, EDEN, United Kingdom;
Ferenc Tatrai, EDEN, United Kingdom;
Leen Thys, VIVES University, Belgium;
Sylke Vandercruysse, VIVES University, Belgium;
Delphine Wante, VIVES University, Belgium.
# TABLE OF CONTENTS

EDEN 10th Research Workshop Contribution to Research in Open and Distance Learning

*Including Summarising Statements, Challenges Raised and Recommended Actions*

## MOOCS

- **Designing a New Generation MOOC for Undergraduate Mathematics** ......................................................... 7  
  Geoff Woolcott, Raina Mason, Carolyn Seton, Southern Cross University, Australia

- **Oscar and Niamh two MOOC Animation Robots: How did Learners Respond?** ........................................... 15  
  Sally Mhic Dhomhnaill, Mairéad Nic Giolla Mhíchíl, Dublin City University, Ireland

- **Moody MOOCs: An Exploration of Emotion in an LMOOC** .......................................................................... 22  
  Elaine Beirne, Conchur Mac Lochlainn, Mairéad Nic Giolla Mhíchíl, Dublin City University, Ireland

## LEARNER NEEDS, ATTITUDES, BEHAVIOUR

- **Can you Give me Sanctuary? Exploring the Transition Experiences of Refugees and Asylum Seekers to Online Distance Learning** ................................................................. 29  
  Orna Farrell, Mark Brown, James Brunton, Eamon Costello, L. Delaney, C. Foley, Dublin City University, Ireland

- **Support Holes: Distance Students Experience of Support in a Dual Mode University** ................................. 35  
  Lorraine Delaney, Mark Brown, Dublin City University, Ireland

- **The Experience of Distance Learners as Writers** ............................................................................................... 44  
  Phil Wood, Bishop Grosseteste University, Palitha Edirisingha, University of Leicester, United Kingdom

- **Scholars’ Changing Social Media use: Implications for Teaching and Learning in Higher Education** .......... 53  
  George Veletsianos, Royal Roads University, Canada, Nicole Johnson, Open University of Catalonia, Spain, Olga Belikov, Brigham Young University, United States of America

- **Virtual and Mobility Activities to Promote Dual Learning Approach in Higher Education:**  
  The EuroDuale Project Experience .................................................................................................................... 59  
  Antonella Poce, Maria Rosaria Re, Francesca Amenduni, Università degli Studi Roma Tre, Italy

- **Best Practice for Supporting Students in the Workplace** ................................................................................. 69  
  Fiona J. Aiken, Hilary A. MacQueen, The Open University, United Kingdom

- **Achieving Student Centred Facilitation in Online Synchronous Tutorials** .................................................... 76  
  Diane Butler, Lynda Cook, Vikki Haley-Mimran, Catherine Halliwell, Louise MacBrayne, The Open University, United Kingdom

- **How Science University Students use the Video in their Learning Process?** .............................................. 83  
  Victor Garcia, Antoni Perez-Navarro, Jordi Conesa, Universitat Oberta de Catalunya, Spain

- **Wiki Course Builder, a System for Managing and Sharing Didactic Material and Concept Maps** ............... 92  
  Carlo De Medio, Carla Limongelli, Fabio Gasparetti, Filippo Sciaronne, Roma Tre University, Giovanni Adorni, Frosina Koceva, Ilaria Torre, Genoa University, Italy

## EDUCATIONAL SYSTEMS

- **How do you Build a Bold Research Culture? Insights from the National Institute for Digital Learning Experience** .................................................................................................................. 99  
  Mark Brown, Gráinne Conole, Dublin City University, Ireland

- **Don’t do Evil: Implementing Artificial Intelligence in Universities** ................................................................. 109  
  Mark Nichols, Wayne Holmes, The Open University, United Kingdom
Personalised Learning in Developing Countries – Is Higher Education Ready? ................................................................. 118
Jennifer Roberts, University of South Africa, South Africa

OPEN EDUCATION
Open Education Practices in Higher Education ................................................................................................................................. 132
Ulf-Daniel Ehlers, Baden-Wurttemberg Cooperative State University, Germany, Elena Trepule,
Estela Dauksiene, Marius Sadauskas, Vytautas Magnus University, Lithuania

University Teacher Skills and Attitudes to Create and use OER ........................................................................................................... 144
Marius Sadauskas, Margarita Teresevičienė, Estela Daukšienė, Vytautas Magnus University, Lithuania,
Ulf-Daniel Ehlers, Baden-Wurttemberg Cooperative State University, Germany

Open Virtual Mobility: A Learning Design 4 SRL ............................................................................................................................... 150
Gemma Tur, Santos Urbina, University of the Balearics Islands, Spain, Olga Firssova, Kamakshi Rajagopal,
Open University the Netherlands, The Netherlands, Ilona Buchem, Beuth University of Applied Sciences
Berlin, Germany

TEACHER TRAINING AND COMPETENCES
Enhancing Teacher Decisions through Learning Analytics ................................................................................................................. 158
Airina Volungevičienė, Vytautas Magnus University, Lithuania, Josep M. Duart, Universitat Oberta
de Catalunya, Spain, Giedrė Tamoliūnė, Justina Naujokaitienė, Vytautas Magnus University, Lithuania

Developing a Framework of e-Leadership Literacies for Technology-Enhanced Learning in
Higher Education: A Delphi Study .............................................................................................................................................................. 161
Deborah Arnold, Albert Sangrà, Universitat Oberta de Catalunya, Spain

Learner Agency and the “Self”-Pedagogies ................................................................................................................................................ 170
Lisa Marie Blaschke, Carl von Ossietzky Universität Oldenburg, Germany

Videomining for the Assessment of Teacher Skills in Higher Education ................................................................................................. 179
Mercè Gisbert, Mireia Usart, Universitat Rovira i Virgili, Spain

Teachers’ Perceptions on Digital Technologies: Identification of Patterns and Profiles in the
Catalan Context ........................................................................................................................................................................................................ 192
Montse Guitert, Teresa Romeu, Marc Romero, Pedro Jacobetty, UOC, Spain

Teachers’ Digital Competencies for e-Learning Application in Higher Education ............................................................................................. 201
Sandra Kučina Softić, University of Zagreb University Computing Centre, Croatia

ASSESSMENT
The Design of a Rubric for Defining and Assessing Digital Education Skills of
Higher Education Students ......................................................................................................................................................................... 211
Herve Platteaux, Emanuelle Salietti, Centre NTE DIT – University of Fribourg, Laura Molteni,
University of Fribourg, Switzerland

Rethinking Assessment Potential in Massive Open Online Courses to Support Student Learning:
The Experts’ Point of View ..................................................................................................................................................................... 220
Maite Fernández-Ferrer, Universitat Oberta de Catalunya, Spain

Digital Competence Assessment Framework for Primary and Secondary Schools in Europe:
The CRISS Project .................................................................................................................................................................................................. 229
Lourdes Guàrdia, Marcelo Maina, Pablo Baztán, Universitat Oberta de Catalunya, Spain
METHODOLOGY

Maturity Models for Improving the Quality of Digital Teaching .................................................. 238
Felix Sanchez-Puchol, Universitat Oberta de Catalunya (UOC) & SEIDOR SBS Learning Services,
Joan A. Pastor-Collado, Universitat Politècnica de Catalunya (UPC), Lourdes Guardia-Ortiz,
Universitat Oberta de Catalunya (UOC), Spain

Towards a Structured Process for Involving Distributed Teachers in
Facilitation Strategy Design and Review .......................................................................................................................... 254
Ann Walshe, The Open University, United Kingdom

Personalised and Multi-Sensory Approaches to Engaging Students at A Distance:
A Case Study from Religious Studies ................................................................................................................................. 261
John Maiden, Stefanie Sinclair, The Open University, United Kingdom

THEORY

Selecting the Best Open Access Journal Articles: To What Extent does this go Beyond Being a
Subjective Exercise? ................................................................................................................................................................. 270
Mark Brown, Eamon Costello, Mairead Nic Giolla Mhichil, Dublin City University, Ireland

Revisiting the Transactional Distance Theory: A Qualitative Study of Two Web-based
Distance Learning Courses at a Campus-based University ................................................................................... 280
Palitha Edirisingha, Mengjie Jiang, University of Leicester, United Kingdom

Learning Explained: A Schema-building Scaffolding Framework to Make Sense of Personalised
Guidance and Support for Learning .................................................................................................................................. 289
Ignatius G.P. Gous, University of South Africa, South Africa

SOCIO-CULTURAL-ECONOMIC

Teacher Roles and Digital Threats: Preventing and Addressing Cyberbullying in European Schools ...... 312
Alan Bruce, Imelda Graham, Universal Learning Systems, Ireland

Understanding Media Usage Patterns of Students and Faculty via a Media Acceptance Approach:
A Case of a Multi-Campus University in Ghana ...................................................................................................................... 321
Frank Senyo Loglo, Carl von Ossietzky University Oldenburg, Germany, Selorm Agbleze,
Copenhagen Business School, Denmark

Supporting Learners and Societal Needs through Evolution of Innovative Digital Learning
Architectures ............................................................................................................................................................................... 333
Elsebeth Wejse Korsgaard Sorensen, Aalborg University, Denmark

POSTERS

Institutional Support to Provide Freshmen with Flexible Learning Paths at Course and
Semester Level in Open Higher Education .......................................................................................................................... 344
Loles González, eLearn Center (eLC) / Universitat Oberta de Catalunya (UOC), Julià Minguillón, UOC,
Josep Antoni Martinez-Aceituno, eLC / UOC, Julio Meneses, UOC, Spain

Meaningful Gamification in a Collaborative Learning Hub for Virtual Mobility Skills:
Research and Design ............................................................................................................................................................... 351
Ilona Buchem, Beuth University of Applied Sciences Berlin, Germany

The Time Factor in Studies on Dropout in Online Higher Education: Initial Review of
the Literature and Future Approaches .............................................................................................................................. 357
Marlon Xavier, Julio Meneses, Universitat Oberta de Catalunya (UOC), Spain
Supporting Autonomous Learning: The Role of Project Design and Students’ Coordination in Intercultural Exchange Practice ................................................................. Marta Fondo, Universitat Oberta de Catalunya, Spain, Michael Arnold, University of Minnesota, United States of America

Museum Education Communication in Facebook and Twitter .......................................................... Antonella Poce, Francesco Agrusti, Sebastiana Sabrina Trasolini, Roma TRE University, Italy

Future of Legal Education .................................................................................................................. Ausrine Pasvenskiene, Paulius Astromskis, Vytautas Magnus University, Lithuania

Teachers’ Training on Critical Thinking Teaching Strategies: The CRITHINKEDU Experience ............. Antonella Poce, Francesco Agrusti, Maria Rosaria Re, Roma Tre University, Italy

Network Learning Environments: Integrating an Online Learning Model with the WordPress Publishing Model for the Teaching-Learning of Graphic Design and Arts .......................................................... Quelic Berga, Laia Blasco, Javier Melenchón, Universitat Oberta de Catalunya (UOC), Spain

Learning Ecologies Oriented to the Professional Development of University Teachers ....................... Mercedes González-Sanmamed, Universidade de A Coruña, Albert Sangrà Morer, Universitat Oberta de Catalunya, Alba Souto-Seijo, Francisco Santos Caamaño, Iris Estévez Blanco, Universidade de A Coruña, Spain

Engaging Online Learners through Formative Feedback: UNED Developments and use of Automatized and Mobile Feedback for Closed and Open-ended Questions ........................................... Miguel Santamaría Lancho, Angeles Sánchez-Elvira Paniagua, UNED, Spain

The Impact of the Flipped Classroom Methodology in the Acquisition of Learning to Learn Competence ......................................................................................................................... Vicent Fornons, Departament d’Ensenyament, Ramón Palau, Universitat Rovira I Virgili, Spain

An Experience of Flipped Classroom for the Training of Future Teachers ........................................ Ramon Palau, Tania Molero, Universitat Rovira I Virgili, Spain
INSTITUTIONAL SUPPORT TO PROVIDE FRESHMEN WITH FLEXIBLE LEARNING PATHS AT COURSE AND SEMESTER LEVEL IN OPEN HIGHER EDUCATION

Loles González, eLearn Center (eLC) / Universitat Oberta de Catalunya (UOC), Julià Minguillón, UOC, Josep Antoni Martínez-Aceituno, eLC / UOC, Julio Meneses, UOC, Spain

Summary

As an open university, at UOC there are nearly no enrolment requirements and, furthermore, students freely choose the courses they want to take each semester. But most of the students that choose UOC to combine their daily live with university studies are not really aware about the effort and workload implied. Therefore, there is a significant dropout rate after finalizing their first semester. In this paper we describe an institutional project named ESPRIA that combines the use of institutional learning analytics and the work with teachers at course design level, in order to provide students with some personalized support during their first enrolment. This guidance may help them to avoid an excessive burden due to a wrong course election, to gauge and meet their expectations by achieving their goals at the end of their first semester, and to be motivated to re-enrol in the following ones.

Introduction

Trying to answer “what are open universities for?”, Alan Tait states that open universities “are for development, not just for teaching and research, nor even for adult higher education at a distance.” Among their purposes, Tait (2008) emphasizes on “intervention to change the higher education system in terms of quality and innovation” (p.92), mostly by adopting ICT and offering online learning. Butcher and Rose-Adams (2015) discuss three key factors that allegedly define open universities, namely the possibility of choice, flexibility and employability, which need to be fully redefined to meet part-time students’ needs. Actually, flexibility may have different meanings according to each university. Among others, “open” means that there are no enrolment requirements that they are very weak, or that they are related to course calendar. In the case of the Universitat Oberta de Catalunya (UOC), open means, among others, that students freely choose the courses they want to take every semester under the guidance of a mentor, who provides non-bonding recommendations, a typical scenario in open higher education.

The number of different enrolment patterns among newcomers is surprisingly very high, despite mentor’s recommendations and all the available information about course syllabus and learning paths provided by the University. This shows the large diversity of part-time students’ interests. For instance, in the second semester of academic year 2016/2017, a total of 4,243 new
Institutional Support to Provide Freshmen with Flexible Learning Paths at Course and Semester Level in Open Higher Education

Loles González et al.

students started an official graduate degree, generating 2,193 different enrolment patterns. From these, 1,667 (76.0%) were unique (that is, selected by only one student). On the other hand, 90 (0.02%) students selected the same combination of courses (i.e. the most popular in one degree) as their first enrolment. This flexibility may be perceived by some students as an additional barrier to determine the best courses they should take during their first semester, due to the large number of possible combinations and the lack of information about their difficulty when taken at the same time. Furthermore, institutional data shows that a wrong choice of courses taken in the first semester may lead to dropout, not only from a given course but also from the degree (Minguillón, Santanach, & Appel, 2016). Unfortunately, each course is a silo that has been carefully designed according to UOC’s pedagogical model but without taking into account other courses in the same program, generating possible interactions that can only be analysed a posteriori using a learning analytics strategy.

According to Siemens and Gasevic (2012), learning analytics is defined as “the measurement, collection, analysis and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs.” (p.1). Dropout is one of the scenarios where learning analytics can be applied. It is a multifaceted problem, which needs to be addressed from several perspectives following an institutional a multilevel approach (Mor, Garreta-Domingo, Minguillón, & Lewis, 2007), using all information available about the learner. In this paper we describe the ongoing institutional project “First-year Students” ESPRIA (for its initials in Catalan) that uses institutional learning analytics (Minguillón, Santanach, & Appel, 2016) for providing freshmen with some personalized support during their first enrolment in their first academic semester, pursuing academic flexibility as well as improving overall course quality.

Early dropout in online higher education

A recent survey on educational data mining (Peña-Ayala, 2014) shows that there has been an increasing interest in recommendation systems at course and to minor extent in semester levels, boosted by students’ data availability. More recently, Slim, Heileman, Al-Doroubi, and Abdallah (2016) have shown that course enrolment has a large impact on final student’s achievements and engagement in both course and semester levels. As stated in Ognjanovic, Gasevic, and Dawson (2016), self-efficacy and efficacy expectations are well established as strong predictors of academic achievement and, conversely, dropout, especially in educational settings where students have partial or even complete freedom to select the courses they want to enrol in.

It is well known that dropout levels in distance education are usually higher than in its traditional face-to-face counterpart (Tello, 2007). It can be seen that, in both models, academic and social integration at the early stages of the relation student-institution are key issues. Lee and Choi (2011) identified and classified student, environmental, and course/program factors in online learning, being the latter the target of institutional policies against dropout, including course design and institutional support. In a recent literature review by Bawa (2016), the author
enumerates several critical factors that lead to high attrition rates in online environments. One of them is the misconceptions learners have about the workload, cognitive challenges, and general expectations, which may lead to a wrong selection of courses for the first semester.

In the case of open universities, where students can take a break one or more consecutive semesters, Grau-Valldosera, Minguillón, and Blasco-Moreno (2018) have shown that doing so after the first semester is, in practical terms, equivalent to dropping out. Nevertheless, the authors have also identified several factors that differentiate between continuance intention and effective re-enrolment (i.e., not dropping out). Among them, time management during the first semester emerges as a key issue, as most students choose UOC to save time. However, a negative perception on the amount of time needed to properly follow the semester is one of the factors for no further re-enrolment. Therefore, any institutional support should address balancing students’ expectations and goals during their enrolment (i.e. their selection of courses) with previous knowledge about academic results, as well as providing students with some flexibility during their first academic semester to face unexpected situations. As Rodríguez-Gómez, Meneses, Gairín, Feixas, and Muñoz (2016) showed, first enrolment is also a key issue in brick-and-mortar universities, taking into account that most students returned to the university system in the first year after dropout, but many of these students change to a different area of knowledge, which is clear evidence of dysfunctional and inefficient guidance systems during university entrance.

Providing first-year students with institutional support

The UOC is an innovative university that is rooted in Catalonia and open to the world. It offers people lifelong learning to help them and society advance, while carrying out research on the Knowledge Society. Its educational model is based on accompanying students using e-learning (Sangrà, 2002). Continuous evaluation is used to guide students through each course, by means of both formative and summative assessment. Actually, successful adherence to continuous evaluation is the best proxy for re-enrolment and vice versa. Hence, students not following the proposed continuous assessment activities are most likely to drop out. Therefore, continuous evaluation is a crucial element in UOC’s educational model, which needs to be embraced by new students. It is important to state that UOC’s student profile is typically 32 years old on average; she has prior university education, has a part-time or full-time job, and, usually, has family responsibilities.

In this sense, the ESPRIA project is aimed to face three typical situations faced by newcomers in their first semester, namely taking several courses with possibly overlapping schedules, reshaping their learning path if they cannot follow the proposed continuous assessment activities, and assuming an excessive burden due to a wrong course election. The main goal of ESPRIA is helping students to adhere to continuous assessment, providing them with flexible enrolment packages (i.e. subsets of courses), which have non-overlapping calendars, a revised course syllabus and workload, as well as additional or alternative opportunities to follow continuous assessment in case the student misses one of the proposed activities. Packages have
Institutional Support to Provide Freshmen with Flexible Learning Paths at Course and Semester Level in Open Higher Education

Loles González et al.

been designed in collaboration with professors taking into account previous data, namely typical enrolment patterns and course pass rates (Minguillón, Santanach, & Appel, 2016). Moreover, to create the packages in the involved graduate degrees we selected courses according to students’ interests. Each package (typically containing 3 courses) is a possible learning path (at semester level) that tries to minimize the aforementioned typical situations. Recommending packages increases freedom of choice while improving flexibility, because it guarantees the aforementioned benefits to the enrolled students. Each degree offers 3 packages and the students have flexibility to choose any package and the number of courses within the package they are interested in, taking into account that UOC’s typical enrolment is 2 or 3 courses.

First semester students undergo an enrolment procedure where they are guided by a mentor, who helps them to select the courses they will take in their first semester, according to their profile and interests. As part of this procedure, new comers are invited to provide additional information by means of a survey (AQD) that contains questions about their available time for studying. According to this information and students’ preferences, their mentors provide a recommendation, based on the pre-designed packages or a subset of courses within the same package. The project has been designed to guide the students through their first academic year but placing more emphasis on the first semester. We expect students participating in ESPRIA to repeat the same enrolment procedure in their second semester, taking into account their actual academic results in their first semester.

To conclude, this project has been designed and implemented by the eLearn Center in coordination with degree managers, teachers, and mentors, providing them with advise and support to achieve ESPRIA objectives.

Results

In its first semester of deployment, ESPRIA has been implemented in six different graduate degrees (Business, Administration and Management, Law, Computer Engineering, Catalan Language and Literature, Communication Sciences, and Social Education), involving 51 different courses, 45 full-time teachers, 140 mentors, and 253 part-time teachers. A total of 1,647 students enrolled in their first semester in February 2018 in one of these degrees (representing the 41.6% of all new UOC students taking an official graduate degree), thus becoming potential ESPRIA participants. These figures show the importance of ESPRIA as part of UOC’s strategy to improve students’ support and fight early dropout while providing flexibility in their choices.

Table 1: Summary of participants in the ESPRIA project.

<table>
<thead>
<tr>
<th></th>
<th>ESPRIA N (%)</th>
<th>ESPRIA + OTHER N (%)</th>
<th>NON ESPRIA N (%)</th>
<th>TOTAL N</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS ADMINISTRATION AND MANAGEMENT</td>
<td>216 (51.18%)</td>
<td>142 (33.65%)</td>
<td>64 (15.17%)</td>
<td>422</td>
</tr>
<tr>
<td>LAW</td>
<td>185 (47.19%)</td>
<td>103 (26.28%)</td>
<td>104 (26.53%)</td>
<td>392</td>
</tr>
<tr>
<td>COMPUTER ENGINEERING</td>
<td>205 (48.93%)</td>
<td>149 (35.56%)</td>
<td>65 (15.51%)</td>
<td>419</td>
</tr>
</tbody>
</table>
Table 1 summarizes the number of students participating in the ESPRIA project according to their choice of courses in each degree. Notice that most of students take only courses within ESPRIA (51.61%), while only a minority of students chooses a combination of courses that are not part of ESPRIA (17.12%).

**Discussion**

As an ongoing project in its first stage (i.e. first cohort of students enrolling in accordance to the proposed enrolment packages of courses in each degree), ESPRIA will be fully evaluated in the following years, in order to determine its impact on freshmen, their academic performance and satisfaction, and their re-enrolment rate at their second semester. Nevertheless, several conclusions can be already drawn from this first semester of deployment.

Not surprisingly, the critical factors that emerged in this phase were those related to organizational changes. For instance, some teachers were reluctant to revise course syllabus and workload as well as coordinating course schedule with other teachers, breaking the traditional “silod” way of designing courses at UOC. Another important issue was training a high number of mentors and providing them with support and new tools to supervise the new enrolment process involving packages. In order to make mentors’ tasks easier, a web app with a friendly interface was developed according to their informed needs and preferences. This application helps mentors to check and look up information about each student and the courses / packages they have select, gathering also relevant information about the enrolment procedure (i.e. available time for studying). Nonetheless, preliminary results show that a large percentage of students (51.61%) chose to follow their mentors’ recommendations and finally enrolled only in specific courses / packages that were revised under the ESPRIA framework.

Current and future research in this topic includes analysing ESPRIA success with respect to continuous evaluation and effective re-enrolment of both participating and non-participating students and their level of engagement. On the other hand, more programs and courses will be part of ESPRIA in the next semesters, so more data about students and their course selections in a wider selection of graduate degrees will be available. Finally, all available data from ESPRIA could be also analysed in order to measure the idoneity of the proposed packages within each degree, trying to detect possible bottlenecks and improving enrolment in further recommendations.

**References**


