







#### **Editor**

European Association of Distance Teaching Universities (EADTU) | George Ubachs

#### Logistics and lay-out

European Association of Distance Teaching Universities (EADTU) | Beau Nijsten and Stefan Meuleman

#### **Authors**

#### Anadolu University | Turkey

Cengiz Hakan Aydin, Evrim Genç-Kumtepe, Elif Toprak, Firat, M.

#### **Dublin City University | Ireland**

Eamon Costello, Mark Brown, Deirdre Butler, Prajakta Girme, Sila Kaya, Colette Kirwan, Eilish McLoughlin and Michael O'Leary

#### FernUniversität in Hagen | Germany

Cendon, E., Zarebski, M.

# Hellenic Open University | Greece

Vassilios S. Verykios, Evgenia Paxinou, & Dimitrios Kalles

#### Norwegian University of Science and Technology | Norway

Mikhail Fominykh

Ormond Simpson

#### Rheinisch-Westfälische Technische Hochschule | Germany

Ralf Klamna, Benedikt Hensen

#### Smartlearning | Denmark

Henrik Køhler Simonsen

#### Tampere University of Applied Sciences | Finland

Teija Lehto and Kristiina Engblom-Pelkkala

#### The Open University | The United Kingdom

Andy Lane, Inma Álvarez, Azumah Dennis, Philippa Waterhouse, Francisco Iniesto, Will Guest, Fridolin Wild, Abbas Jafari.

### Universidade Aberta | Portugal

José Bidarra, Bastos, G.

#### Università Telematica Internazionale Uninettuno | Italy

Dario Assante, Marta Flamini, Cristina Ada Ranieri

# University College Dublin | Ireland

Rob Hillman, John Murphy, Alex Shubin

#### University of Jyväskylä | Finland

Kananen P., Juutinen, S., Uotinen, V.

#### Universidad Nacional de Educación a Distancia | Spain

Esteban Vázquez-Cano, Paz Díez-Arcón, Jorge-Botana, G., Luzón Encabo, J.M., Bermudo Delgado, M., Contreras Felipe, A., Sánchez-Elvira, A.M., Pérez-García, A.M., Covadonga Rodrigo and Alfonso Herrero de Egaña Espinosa de los Monteros

#### Universitat Oberta de Catalunya | Spain

Marcelo Maina, Lourdes Guàrdia, Nati Cabrera and Maite Fernández

#### University of Patras | Greece

Christos T. Panagiotakopoulos

#### **Published by**

European Association of Distance Teaching Universities, The Netherlands

#### Correspondence

European Association of Distance Teaching Universities (EADTU) att George Ubachs, Managing Director Parkweg 27, 6212 XN Maastricht, The Netherlands Tel: +31 43 311 87 12 | E-mail: secretariat@eadtu.eu www.eadtu.eu | empower.eadtu.eu

#### Suggested citation

Author(s) (2021) Title of paper. In G. Ubachs (Ed.) The Envisioning Report for Empowering Universities. (pp. Pages). Maastricht, NL: EADTU.

#### License used

This work is licensed under a Creative Commons Attribution ShareAlike 4.0 International License: https://creativecommons.org/licenses/by/4.0/ This license lets others distribute, remix, tweak, and build upon this work (even commercially) as long as credit is provided for the original creation. This is among the most accommodating of CC licenses offered, and recommended for maximum dissemination and use of licensed materials.



#### **Disclaimer**

This research is conducted as part of the EMPOWER project. This project is supported by the European Commission, DG EAC, under the Erasmus+ Programme. The European Commission supports for the production of this publication and does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



# **Table of contents**

# Foreword

The fifth Envisioning Report for Empowering Universities in the uptake of new modes of teaching and learning  George Ubachs	5
European Association of Distance Teaching Universities	
Digital Transformation in (post-) Covid Times	
Encouraging actions in tackling higher education pandemic challenges Teija Lehto and Kristiina Engblom-Pelkkala Tampere University of Applied Sciences	7
Researching from home. Doctoral research in a pandemic Dr Inma Álvarez, Dr Azumah Dennis, Dr Philippa Waterhouse The Open University, UK	10
Training higher education staff in online, open and distance learning at scale Andy Lane The Open University, United Kingdom	13
eLearning and Distance Learning Differences Alfonso Herrero de Egaña Espinosa de los Monteros UNED	16
Following the Money - Costs and benefits in online learning Ormond Simpson	19
Innovating Education by Digitalisation and Artificial Intelligence	
Artificial Intelligence and Learning Activities Henrik Køhler Simonsen and José Bidarra SmartLearning, DK and Universidade Aberta, PT	23
Latent Space Models for Assessing Dynamic Student Behaviour Vassilios S. Verykios, Evgenia Paxinou, Christos T. Panagiotakopoulos & Dimitrios Kalles Hellenic Open University, Greece and University of Patras, Greece	26
Transversal Skills in STEM: From policy to practice, digital and unplugged Eamon Costello, Mark Brown, Deirdre Butler, Prajakta Girme, Sila Kaya, Colette Kirwan, Eilish McLoughlin and Michael O'Leary Dublin City University	29

"IO", the chatbot of the Faculty of Psychology (UNED) that supports students with their Final Degree Project Jorge-Botana, G., Luzón Encabo, J.M., Bermudo Delgado, M., Contreras Felipe, A., Sánchez-Elvira, M.A. & Pérez-García, A.M. UNED	32
Learning in the Real World using Augmented Reality and Wearable Technology Will Guest, Fridolin Wild, Abbas Jafari, Mikhail Fominykh, Ralf Klamma, Benedikt Hensen, Rob Hillman, John Murphy, Alex Shubin Open University (UK), Norwegian University of Science and Technology, Rheinisch- Westfälische Technische Hochschule, University College Dublin	35
Industry 4.0 education: state of art and future trends Dario Assante, Marta Flamini, Cristina Ada Ranieri Università Telematica Internazionale UNINETTUNO	38
AIED: raising awareness on risks of biases in sexism and discrimination Covadonga Rodrigo and Francisco Iniesto UNED (Spain), The Open University (The United Kingdom)	41
Integrating Short Learning Programmes (SLPs) and MOOCs in	
HE Provision	
	45
HE Provision  AMED - Towards a dual-mode university: Co-design of a short learning program for capacity building  Marcelo Maina, Lourdes Guàrdia, Nati Cabrera & Maite Fernández	45 48
HE Provision  AMED - Towards a dual-mode university: Co-design of a short learning program for capacity building  Marcelo Maina, Lourdes Guàrdia, Nati Cabrera & Maite Fernández Universitat Oberta de Catalunya  Lessons learned from Creation of Digitally Competent Educators SLP  Bastos, G., Cendon, E., Firat, M., Juutinen, S., Kananen P., Uotinen, V. & Zarebski, M. University of Jyväskylä, FernUniversität in Hagen, Universidade Aberta and Anadolu	

Marcelo Maina, Lourdes Guàrdia, Nati Cabrera & Maite Fernández

Universitat Oberta de Catalunya

# **Innovative impact**

This contribution presents an overview of the process of design and development of a contextualized and tailor-made short learning program (SLP) (Maina et al., 2019) as part of a strategy leading to the institutional digital transformation of the Maldives National University (MNU). The program is targeted at the professional development of lecturers and senior level staff with the main purpose of training them in key aspects regarding the transformation of the university towards a bimodal model, thus implementing blended learning as a pivotal strategic approach for the institution.

# AMED - Towards a dualmode university: Co-design of a short learning program for capacity building

# Introduction

In recent years, and particularly during the COVID-19 global pandemic, the different modes in which higher level education is delivered has sparked much debate. Our new normal of social distancing highlights the urgent need to ensure that all students have access to quality education anywhere in the world at any time. However, this is no easy feat given the societal pressure that expects universities to provide said quality education and meet the needs of students while remaining innovative, affordable, cost-effective and relevant (Damewood, 2016). Although advances in technology have generated the "digital disruption of education" (De Wit et al., 2016, p. 77), higher education institutions face many challenges in terms of the societal and economic limitations to implement the use of technologies (Posselt et al., 2018). These limitations have been identified in countries such as the Maldives, which presents key issues for the implementation of online and distance education involving the technological infrastructure and policies but also the need to offer upskilling opportunities to academic staff (World Bank Report, 2016). In addition, the supply of more flexible and accessible learning in Maldives also responds to the challenge of overcoming the dispersed geography of the country and the demand of equal and better opportunities for lifelong learning within the post-secondary population distributed across the islands.

This contribution builds on the AMED Erasmus+ capacity building project aiming at supporting the modernisation, accessibility and internationalisation of higher education in Maldives. The approach focuses on the professional development of MNU staff for the introduction of blended-learning as a core feature of the curriculum. A tailor-made learning program and a local institutional framework supporting its long-term sustainable implementation were designed for this purpose.

# Understanding the needs for the learning program

The design process began with a comprehensive training needs analysis targeting student, lecturer and institutional readiness for digital learning. It was carried out through key interviews conducted during the kick off-meeting to investigate administrative, managerial and strategic issues regarding an elearning organizational strategy implementation with the Dean of Students, The Deputy Vice-Chancellor, the Quality Assurance Controller, and the Registrar.

#### References

Damewood, A. M. (2016). Current trends in higher education technology: Simulation. *TechTrends*, 60(3), 268-271. https://doi.org/10.1007/s11528-016-0048-1

De Wit, H., Hunter, F., Howard, L., & Egron-Polak, E. (2015). Internationalization of Higher eEducation. EU Directorate-General for Internal Policies. https://www.europarl.europa.eu/RegData/etudes/STUD/2015/540370/IPOL\_STU%282015%29540370 EN.pdf

Maina, M. F., Guàrdia, L., & Albert, S. (2019). Good practices in European Short Learning Programmes (E-SLP). In G. Ubachs (Eds.) *The Envisioning Report for Empowering Universities* (pp 6-8). EADTU. https://tinyurl.com/envisioning-report-2019

Maina, M. F., Guàrdia, L., Albert, S., Antonaci, A., Uotinen, V., Altinpulluk, H., Karolina, G., Chrząszcz, A., & Dunn, C. (2020). *Design guidelines for flexible and scalable SLPs* (Research Report No. 4.2). eSLP project. https://e-slp.eadtu.eu/images/D42\_Guidel ines\_final.pdf

Posselt, T., Abdelkafi, N., Fischer, L., & Tangour, C. (20189). Opportunities and challenges of Higher eEducation institutions in Europe: An analysis from a business model perspective. *Higher Education Quarterly*, 73(1), 100–-115. https://doi.org/10.1111/hequ.1 2192

World Bank Report. (2016). Country Partnership Framework for the Republic of Maldives for the Period FY16-FY19 (Report No. 103724-MV). http://documents.worldbank.org/curated/en/1255214681955635

12/pdf/103724-CPF-P157051-

Additionally, a focus group with six lecturers from different Faculties and a focus group and a meeting with the CETE team (MNU center for teaching support) were also led with the purpose to gain insights into faculty e-learning readiness and training needs. Two questionnaires were validated during the kick-off and distributed later on to MNU lecturers and students to develop e-learning maturity profiles.

The results established a clear and accurate portrait of the situation of the university and the corresponding lecturers and senior-level staff training needs. An in-depth analysis of these findings provided enough information to design and develop the SLP curriculum.

For each training need a set of topics was identified and organised into a thematic concept map used as the basis for the design phase. As a result, the SLP was organized around four modules and two capstone projects divided into two pathways, for lecturers and for senior-level decision-makers, as follows:

- "Foundations of e-learning" (common to all)
- "Leadership and management of e-learning" (senior level)
- "Designing digital learning" (lecturers)
- "The networked teacher" (lecturers)
- "Capstone project" (one per profile)

Capstone projects build on the hands-on modules, extending the initiated tasks. The lecturer's capstone project delves into the design, development, and prototyping of a blended sequence or course. Senior level staff is oriented towards the development of a Faculty/institutional blended learning implementation action plan.

Discussion, interviews and focus groups with MNU representatives also revealed the need for creating a learning programme that would adapt to lecturers and senior-level staff schedules in terms of workload and flexibility. It was also established that each module would have 2.5 MNU credits, which correspond to 25 hours of work. Capstones projects were assigned 50 hours for senior level staff and 75 hours for lecturers.

### Co-designing the AMED SLP

A co-design process was led by the Universitat Oberta de Catalunya (UOC) with the close participation of the other three partners (FOI and CARNET from Croatia, and MNU). The co-design adopted the primary design approach of starting from scratch and combined cooperative and collaborative work (Maina et al., 2020). As such, the development of each module was assigned to a module leader and a main contributor pertaining to different partner institutions. The peer design process undertaken to work on the assigned module was led through online codesigners working meetings organised according to emerging needs and left to the discretion of each co-design pair. The latest progression of their work was then submitted to a third partner institution which was assigned the role of reviewer and provided feedback on the work done. A set of design templates scaffolded the whole process.

The independent cooperation of every co-designer pair in the development of their module was combined with monthly group online meetings attended by all the members of the design team. These regular meetings were scheduled to discuss the design of the modules (description, topics, competences and learning outcomes, activities, resources, assessment and environment), ensure their coherence and

IDA-R2016-0053-IFC-R2016-0077-MIGA-R2016-0016-Box394878B-OUO-9.pdf dynamism, and avoid duplication of contents and activities (Maina et al., 2020).

Moreover, a protocol to structure the work dynamics for the co-creation of the SLP was set up by UOC envisaging all the issues to be tackled in the group online meetings. Among them were a) the assignment of roles (lead, contributor and reviewer), b) the discussion of the first draft of the topics, competences, learning outcomes and description of each module, c) the refinement of the content and style, d) the elaboration of guidance targeted to the facilitators of the program, e) the consolidation of the module design and, f) the implementation of the final modifications after the review of the partners and the relevant target group representatives. Capstone projects were directly connected to the modules and had to be designed in parallel with them. The role of the coordinator of the SLP design was to ensure progress and macro and micro design alignment. As such, UOC closely followed the entire process and elaborated a specific document to gather the progress in the design of each module's elements (description, topics, competences and learning outcomes, activities, resources, assessment and environment), thus enabling partners to check it against their expected achievements.

In addition, the coherence of each module with its learning path was reviewed by UOC which also worked to harmonise competences and learning outcomes and avoid dissonance in the design. The macrodesign related to the complete educational strategy, the program's structure, the quality and the final credentialization, therefore, was increasingly aligned with the micro-design of its constituents. To make this objective possible, UOC also recommended that each module leader monitor possible overlap of topics, competencies, learning outcomes and content with other modules during the design phase, refining their content accordingly.

The result of this co-design process led to the deployment of the AMED e-Learning Study Programme which is currently being piloted at the Maldives National University with 75 lecturers and decision-makers.

# Conclusion

This contribution presented the process of co-design of the AMED Study Program which involved a group of partners in a cooperative and collaborative development endeavour. The aforementioned process relied on a strategy that combined the co-design of the single learning blocks with monthly group online meetings to set common key milestones to be followed. The learning program which was developed and designed during this co-design process provides an outline of a potential sustainable e-learning model that could be rolled out across the Maldives. As such, this would contribute to the overall educational transformation towards a dual-mode university with the aim to provide quality higher education for those where until now it has not been possible.

AMED - Advancing higher education in Maldives through Elearning Development", is funded by Erasmus+ programme - KA2 Cooperation for innovation and the exchange of good practice, Capacity Building in the field of Higher Education

# **Contributing Institutions**

Anadolu University | Turkey **Dublin City University | Ireland** European Association of Distance Teaching Universities | The Netherlands FernUniversität in Hagen | Germany Hellenic Open University | Greece Norwegian University of Science and Technology | Norway Rheinisch-Westfälische Technische Hochschule | Germany Smartlearning | Denmark Tampere University of Applied Sciences | Finland The Open University | The United Kingdom Universidade Aberta | Portugal University College Dublin | Greece Università Telematica Internazionale Uninettuno | Italy University of Jyväskylä | Finland Universidad Nacional de Educación a Distancia | Spain Universitat Oberta de Catalunya | Spain University of Patras | Greece

Published by: European Association of Distance Teaching Universities

ISBN/EAN: 9789079730438

2021, European Association of Distance Teaching Universities (EADTU)





Attribution 4.0 International (CC BY 4.0)