CONTRIBUTION TO TECHNOLOGY INNOVATION
FROM OER ECOSYSTEM - OPEN EDUCATIONAL RESOURCES

OER
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MOTIVATION

"... Everyone can innovate, but we must do on important and not interesting issues. We must solve real problems in the region ... "

"... There is an unresolved dichotomy of how to integrate technologies in education ..."

"...Further research is claimed to improve expectations and use of ICT in this sector..."

"...Recent research states that although OER are present more than 10 years ago, are in infancy stage..."

How can we promote educational innovation, mainly related to ICT, among teachers based on the OER model for open education?

REUSE   REDISTRIBUTE   REMIX   REVISE

OBJECTIVE

Develop a methodoly based on TAM (Technology Acceptance Model), to promote the educational innovation of teachers, from adoption of the OER Ecosystem

Make a diagnosis of the current situation and knowledge about the ecosystem on the OER that teachers have in higher education.

Evaluate and share knowledge generated, beyond quantitative data, with all stakelholders: teachers, academics, researchers, bussineses and society in general

RESEARCH PLAN

1ST PHASE
Research current situation, application of data collection procedure, theoretical study of OER, innovation and technological adoption. This phase will allow us to identify and characterize the elements necessary for technological adoption through the open model for OER.

1st. PHASE
2nd PHASE
3rd PHASE

2ND PHASE
Design the methodology and the adoption model using an incremental prototype, based on data analysis for initial validation by experts, with constant feedback for the improvement of the methodology.

3RD PHASE
Apply in a case study the methodology of technological adoption through an evaluation and control, feedback the incremental prototype to present the analysis of research results.
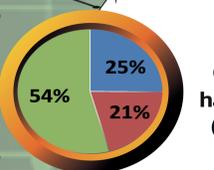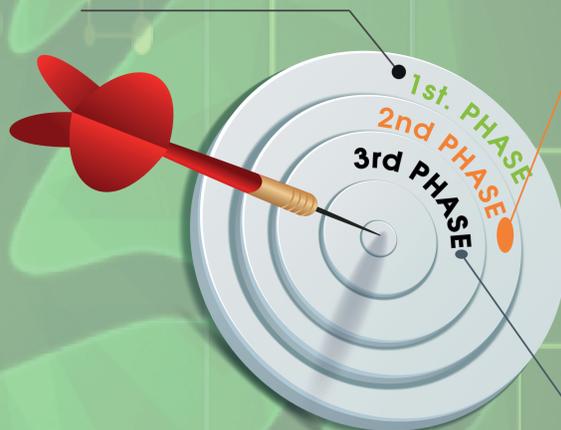
PRELIMINARY RESULTS AND DISCUSSION

99% are willing to use in their class a web platform that facilitates technological innovation based on a model and guide for the use of OER

21% NO
25% YES
54% I do not know

REPOSITORY?

Initial survey of 650 university teachers was carried out

63% Men
37% Women

64% Tradicional classroom course
32% Blended / Hibryd course

That their universities do no have support for the creation of OER

INSTRUMENT:
Questionnaire has 27 questions (regarding ICT, TLK, OER)

DATA COLLECTION:
Quostionnaire On Line

68% to 88%

Predisposition to be trained

85%

43% NO
34% Yes, I have heard of them, I have not used them.
8% Yes, I used OER from other teachers
7% If I have used, created OER but I have not shared
8% Yes, I used and created OER, which I have

OER KNOWLEDGE

Believe that their university should have an Educational Resources development team that can create content based on requirement

ICT (Information and Communication Technologies)
TLK (Technologies for Learning and Knowledge)

http://www.innovarea.org

SCHEDULE

- Analysis of data survey
- Design and development of the incremental prototype and innovation model
- Articles preparation
- Defense 2nd year

2016
- Identification and characterization for technology innovation of the OER open model
- Theoretical Study of the OER Ecosystem
- Articles preparation

2017

2018
- Presentation Plan and Reference Guide for implementation OER Ecosystem
- Articles preparation.
- Presentation in conferences
- Technical training for innovation & adoption OER Ecosystem
- Writing and defense thesis

PAPERS PRESENTED AT CONFERENCES

[1] España C., Caeiro M., (2016) OER: Proposal for efficient use of OER in Higher Education, presented in the 10th International Conference on Digital Exclusion in the Information and Knowledge Society, Lisbon, Portugal

[2] España C., Caeiro M. (2016) Contributions to the development of the Open Educational Resources Ecosystems presented at the II Doctoral Conference, Murcia University, Spain

[3] España C. (2016), Contribuciones al Desarrollo de Ecosistema de Recursos Educativos Abiertos: Reflexiones y propuesta de investigación para la adopción tecnológica de los REA, XXI Congreso internacional de Tecnologías, Madrid, Spain

[4] España C., Caeiro M., (2016), Research proposal for technology adoption in the oer ecosystem, Computers in Education (SIIE), 2016 International Symposium, Salamanca, Spain

[5] España C. (2016), Contribución para la difusión y uso del Ecosistema REA, Coloquie International EUROMIME, University of Poitiers, France

[6] España C., Caeiro M. (2017), Technology adoption in Education: Challenges to create and share with the OER Ecosystem, Open Education Global Conference 2017, Cape Town, South Africa

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[1] Weller, M., de los Arcos, B., Farrow, R., Pitt, B., & McAndrew, P. (2015). The impact of OER on teaching and learning practice. Open Praxis, 7(4), 351-361.

[2] A. García-Holgado y F. J. García-Peñalvo, «The Evolution of the Technological Ecosystems: An Architectural Proposal to Enhancing Learning Processes», en Proceedings of the First International Conference on Technological Ecosystem for Enhancing Multiculturality, New York, NY, USA, 2013, pp. 565–571.

[3] Zancanaro, A., Todesco, J. L., & Ramos, F. (2015). A bibliometric mapping of open educational resources. The International Review of Research in Open and Distributed Learning, 16(1).

[4] Drucker, P. (2014). Innovation and entrepreneurship. Routledge.

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