# Increasing the Visibility of Graduate Students' Employability Skills: An ePortfolio Solution Addressing the Skills Gap

**Lourdes Guàrdia** Universitat Oberta de Catalunya, Spain

Marcelo Fabián Maina Universitat Oberta de Catalunya, Spain

Federica Mancini https://orcid.org/0000-0003-1029-1131 Universitat Oberta de Catalunya, Spain

# **EXECUTIVE SUMMARY**

This chapter highlights the contributions of the EPICA project in reducing the skills gap of graduate students in sub-Saharan Africa. It presents the solution designed and implemented to improve the quality of employability skills development and visibility to prospective employers. The first part of this chapter provides an overview of the skills gap between higher education institutions and the workplace in sub-Saharan Africa. It includes the description of the specific eAssessment pedagogical framework and methodology supported by the EPICA ePortfolio as a transition tool designed to address this gap. The second part of the chapter outlines the challenges that could hinder the solution's implementation and the full exploitation of its benefits. Solutions and recommendations are also discussed with the aim to increase the impact in the EPICA stakeholder community and encourage the implementation of the proposed solution in other universities, especially those adopting blended and online learning models.

# INTRODUCTION

In the 'Agenda 2063', the African Union Commission (AUC) makes a call to action to "Catalyse education and skills revolution and actively promote science, technology, research and innovation, to build knowledge, human capital, capabilities and skills to drive innovations for the African century" (AUC, 2015, p. 14). Nevertheless, a significant mismatch still exists between the skills of young African workers and the skills that employers demand for today's global workforce. To address this situation, higher education institutions and the education curricula in Africa must evolve to provide the right education and training for jobs in today's labour pool.

Likewise, in the new 'Skills Agenda for Europe', the European Commission (EC, 2016) invites social partners, industry and other stakeholders to work together to pursue very similar priorities to those of the AUC. These include the improvement of the quality and relevance of skills development, the visibility and comparability of skills, and the skills intelligence and information for making better career choices. The EC also emphasises the potential of Information, Communications and Technologies (ICT) to encourage innovation in teaching and learning approaches.

In response to this challenge, EPICA, a new strategic partnership between Europe and Africa, was launched in January 2018 by an international consortium composed of four EU organisations (International Council for Open and Distance Education [ICDE], MyDocumenta, Open University of Catalonia [UOC], and Integrated Communications, Worldwide Events [ICWE]) and four East African institutions (Maseno University [MU], Africa Virtual University [AVU], Makerere University [MK] and Open University of Tanzania [OUT]). The project, co-funded by the H2020 Research and Innovation Programme of the European Union, brings together the aforementioned businesses, organisations and universities to design an innovative, scalable ePortfolio to improve the visibility of employability skills.

With the goal to reduce the skill-gap in mind, EPICA aimed to (1) support universities in implementing new active and blended pedagogical methodologies to face the growing demand of better-skilled workers, (2) help students by increasing visibility and awareness of the skills and competencies acquired in and out the academic institution, and (3) assist companies in identifying the most reliable and suitable candidates for a given vacancy. To achieve this goal, a solution which entails a specific methodology for employability skills visibility, assessment and micro-credentialing supported by a competency-based ePortfolio as a transition tool was designed and implemented in four of the partner universities: MU (Kenya), MK (Uganda), OUT (Tanzania) and UOC (Spain). The latter, renowned for both its extensive experience in online and competence-based education as well as the integration of ePortfolios in academic curricula, led the EPICA ePortfolio's co-design process and tested the solution's adequacy and potential transferability to other contexts outside of Africa.

The EPICA competency-based ePortfolio and specific methodology enhancing its effective use incorporated the Active Blended Learning (ABL) principles focusing on student engagement in a) reflective practices on digital and non-digital artefacts which prove the acquisition or development of their employability skills, be it in academic or non-academic settings, b) the digital presentation and communication of said acquisition and development to academics and prospective employers, c) meaningful learnercentred interactions with content, peers, teachers and employers and, d) the systematic improvement of employability skills such as digital competence, oral and written communication, learning to learn, self-regulation and reflective thinking.

Following an introductory overview of the skills gap in East Africa, this chapter presents the solution designed under the EPICA project and the main features implemented in the ePortfolio after an in-depth

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/increasing-the-visibility-of-graduate-studentsemployability-skills/275683

# **Related Content**

## Metaheuristics in Data Mining

Miguel García Torres (2009). Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1200-1206).

www.irma-international.org/chapter/metaheuristics-data-mining/10975

## A Data Mining Methodology for Product Family Design

Seung Ki Moon (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 497-505).* www.irma-international.org/chapter/data-mining-methodology-product-family/10866

## On Interactive Data Mining

Yan Zhao (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1085-1090).* www.irma-international.org/chapter/interactive-data-mining/10956

## Semi-Structured Document Classification

Ludovic Denoyer (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1779-1786).* www.irma-international.org/chapter/semi-structured-document-classification/11059

## Outlier Detection Techniques for Data Mining

Fabrizio Angiulli (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition (pp. 1483-1488).* www.irma-international.org/chapter/outlier-detection-techniques-data-mining/11016