

MOOCs and Free Digital Learning for the Inclusion of migrants and refugees: A European policy study

Elizabeth Colucci¹, Jonatan Castaño Muñoz², Axelle Devaux³

¹ Higher Education Consultant/Adviser for the European University Association, Seville, Spain
elizabeth.colucci@eua.be

² European Commission Joint Research Centre (*), Seville, Spain
jonatan.castano-munoz@ec.europa.eu

³ RAND Europe, Brussels, Belgium
adevaux@rand.org

(*)The views expressed in this article are purely those of the authors and should not be regarded as the official position of the European Commission.

Abstract. MOOCs and free digital learning (FDL) are among the tools used to respond to the education needs of migrants and refugees in Europe. However, there is little guidance on how to design institutional initiatives and supporting policies in this area. This paper presents the main findings of a study exploring the potential of MOOCs and other FDL offers for the integration, inclusion and further learning of migrants and refugees in Europe and in neighbourhood regions in conflict. The MOOCs4inclusion study was designed and financed by the Joint Research Centre of the European Commission and carried out between July-December 2016. Drawing from a literature review, focus groups with migrant/refugee learners in Europe and interviews with representatives of selected FDL initiatives, the study maps FDL initiatives, proposes a categorisation of them, and assesses both success factors and barriers to achieving the objective of migrant/refugee inclusion. Key to success in this area was found to be a combination of 'targeted' (aimed at migrants and refugees needs), 'blended' (mixing online and face-to-face instruction) 'and facilitated' (offering support services and mentoring) approaches. The study subsequently provides recommendations on how policymakers can support the design of FDL offers for migrants/refugees in the future.

Keywords: MOOCs, OER, Free Digital Learning, Migrants, Refugees.

1 Introduction

The European Commission's overall Europe 2020 strategy [1] and the "Rethinking Education" Communication [2] signal that the modernisation of the European Education and Training system is vital for increasing EU competitiveness and sustainable and inclusive growth. The Communication "Opening up Education: Innovative teaching and learning for all through new technologies and Open Educational Resources" [3] sets

out an agenda for stimulating high quality and innovative ways of learning and teaching through new technologies and digital content (ibid). More recently, “open innovative education and training, including by fully embracing the digital era” has been confirmed as one of the six priorities for the strategic framework for European cooperation in Education and Training (ET2020) for the 2016-2020 period [4].

In the last years the number of refugee asylum applications in EU has grown exponentially. Consequently, the role of education for the integration and acquisition of skills for migrants and refugees has become a priority in the European and national policy agendas. In this context, the potential use of MOOCs and free digital learning for developing the skills needed by migrants and refugees in host countries has been the target of great interest. The accompanying document to the New Skills Agenda for Europe states that “besides meeting refugees’ most urgent needs, such as accommodation and food, there is a need to help improve their long-term situation, including by helping them to quickly improve their skills in the language of their host countries, in order to integrate into society, and to find employment” [5]. This vision is reinforced by the 2016 Communication “Lives in Dignity: from Aid-dependence to Self-reliance” [6], where the EC highlights the role of education “to gradually end dependence on humanitarian assistance in existing displacement situations and by fostering self-reliance and enabling the displaced to live in dignity as contributors to their host societies, until voluntary return or resettlement”. In this same communication, the use of “technological advancements, such as the internet, smartphones and interactive learning, to make integration and learning easier” is specifically recommended. In addition, the communication also promotes actions aimed at facilitating access of migrants and refugees to universities “putting in place higher education distance learning and certified education programmes which provide flexible accreditation” (p14).

Despite the purported use of MOOCs and FDL to enhance access to education, there is little information on how they can be better adapted to the specific needs of migrants and refugees. Studies examining this field are starting to emerge. Two recent studies include Moser-Mercer [7] [8], which focused on the provision of MOOCs in emergencies and in refugee camps, and the World Bank report, which analysed the use of ICT in education in the Middle East and North Africa [9].

The MOOCs4inclusion project contributes to this research, approaching the issue from a different angle. Its objective was to assess the potential of MOOCs and FDL offers for the integration, inclusion and further learning of migrants and refugees in Europe and in neighbourhood regions in conflict. The aim of the project was to formulate policy recommendations for policy-makers, international organisations and other investors who design and implement policies or programmes supporting migrant and refugee learning and integration, using MOOCs or FDL. A five-month study (July-December 2016) covering a fast-changing field, MOOCs4inclusion was designed by the Human Capital and Employment unit of the Joint Research Centre of the European Commission (JRC) and commissioned to a team of researchers headed by Elizabeth Colucci. The final report [10] can be found here: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106146/jrc106146.pdf> This paper presents the main findings of the project.

2 Problem description / challenges

The specific dimension of ICT, MOOCs and refugee/migrant inclusion has generated renewed interest since the start of what is referred to as the refugee crisis in Europe, notably when the number of asylum applications hit 1.3 million in 2015 [11], three times what it was in 2013 and twice what it was in 2014. Many countries are scrambling to put in place rapid response solutions and educational access is seen as an important piece of the puzzle. EC communications [6] and other international organisations [12] highlight the fact that education is of the utmost importance for refugees who on average spend 20 years in exile. Only half have access to primary education, compared with a global level of more than 90 per cent. Eighty-four percent of non-refugee adolescents attend lower secondary school, but only 22 percent of refugee adolescents have that same opportunity. At the higher education level, just one per cent of refugees attend university compared to 34 per cent globally [12].

The MOOCs movement, amongst other reasons, was developed to maximise access to education. However, the inclusion of vulnerable groups (e.g. migrants and refugees) into this movement has generally been neglected, which risks creating unbalanced effects between vulnerable and non-vulnerable learners [13]. Evidence also shows that MOOCs users are not necessarily disadvantaged [14], but often have a high level of education, digital skills and are usually working [13] [15]. Recent JRC research also shows that, in Europe, MOOCs are more likely to be taken by unemployed people and workers with these characteristics, who lack access to more formal ways of professional development [16]. This may indeed be the case for some privileged migrants and refugees, who enter their host countries with higher education qualifications and higher digital literacy, but do not (yet) have access to the labour market. Another caveat of the use of MOOCs and FDL for migrant and refugee education is the lack of recognition by formal learning providers and/or acknowledgement by employers [17] [18].

However, given that many international donors concur that digital learning offers great promise for migrants and refugees [12] and that there is significant NGO and private-sector interest in this field, a plethora of new initiatives have either been developed or are under development. Given their novelty, there is a lack of public, coordinated information about such initiatives and also very little evidence about their impact at this stage. The JRC thus commissioned MOOCs4Inclusion to map and analyse the potential of MOOCs and FDL specifically for the inclusion of migrants and refugees in Europe, examining not only the perceptions of potential learners, but the practices of existing initiatives.

In order to assess the adequacy of FDL for developing the skills needed by migrants and refugees and shed light about good design principles, the methodology for MOOCs4Inclusion included:

- a literature review on this area;
- a mapping of relevant initiatives featured in a searchable website (see: <http://moocs4inclusion.org>); and,
- a SWOT analysis based on twenty-five semi-structured interviews with key informants from ten different FDL initiatives ([Edraak](#), [Funzi](#), [Information Sweden](#),

InZone, Jamiya project, KIRON Open Higher Education, LASER – Language, Academic Skills and E-learning Resources, MEET – Meeting the Health Literacy Needs of Immigrant Populations, Ready for Study, and Welcomm!) and four focus groups with 39 migrants/refugees in different situations and with different profiles (in Brussels, Nicosia, Berlin and Trollhattan).

Emphasis was placed on Europe and current migrants/refugees in Europe, though initiatives and examples were also taken from the Middle East and the Southern Mediterranean region. This approach embraced the diversity of the FDL initiative landscape, as the initiatives selected were of different natures, investment levels and often entailed different usage and types of FDL (for example, KIRON is a higher education initiative that utilises existing MOOCs and provides a segue into physical university programmes whereas Information Sweden is an only online platform that aggregates FDL resources for integration purposes). The focus groups reflected the needs of different migrants and refugees, depending on their background and where they stand in their migration journey.

3 Overview of FDL initiatives targeted at migrant or refugee learning, their effectiveness and implications for policy making

MOOCs4inclusion demonstrated that there is a plethora of new FDL initiatives for migrants and refugees that vary in nature, design and purpose. The landscape is changing almost daily, which makes it difficult to pinpoint how effective they are. It must also be remembered that most initiatives have yet to produce data which assesses their impact. According to our mapping of FDL initiatives, they can be compared/categorised according to their design:

- fully online/mobile versus ‘blended’ (a mix of online and face-to-face learning);
- targeted to migrants/refugees versus general (for any public or user); and,
- facilitated (providing support services and guidance to the learner) versus non-facilitated.

The research found that targeted and blended approaches are the most effective way to engage migrant/refugee learners, at least in formal education, but also to some extent in language learning and civic integration-related FDL. This is true both inside and outside refugee camps, though initiatives that deliver FDL inside camps have additional considerations, such as the quality of the learning environment, connectivity and security.

In terms of purpose, the majority of the initiatives identified for the study were online or digital language courses (of which there are many) and civic integration-related online courses and digital projects (on topics ranging from democratic participation to understanding the local social security system). A number of higher education initiatives were also identified, which were experimenting with approaches that involved partnering with European universities to develop FDL content or re-appropriating existing MOOCs. Some of these initiatives employed displaced scholars to help develop

online course content and teach/mentor and assist refugee students with their entry into higher education, even if their documentation was not yet in order.

It was found that language learning is a first-priority intervention for the general migrant and refugee community. Language learning and civic integration-related initiatives are commonly linked and the concept of ‘Content and Language Integrated Learning’ (CLIL) is gaining momentum. Furthermore, the largest growth area identified was mobile Apps for language learning and integration purposes.

The FDL landscape is developing fast. A number of competitions (‘hackathons’ and ‘innovation labs’) and open funding calls are being generated, and will continue to generate, which will help develop innovation in this field. The tech sector has taken a keen interest and, in some cases, refugees themselves are being empowered to develop their own solutions.

4 Recommendations

The MOOCs4inclusion study indicates that FDL for refugees and migrants has the potential to be a tool for integration and inclusion. The fact that 90 per cent of the world’s population own mobile phones, which this including migrants and refugees inside and outside of refugee camps and across different age groups, is a clear enabler. That being said, the one major take-away from MOOCs4inclusion is that research, awareness, coordination and impact assessment on this topic has only just begun and must be enhanced. Europe is in a transition period in many different ways and digitalisation is transforming the way we learn and communicate. At the same time, people themselves are on the move and the myriad of initiatives that are being developed can be an opportunity if good practices are shared and adopted. MOOCs4inclusion gives some recommendations to move in this direction.

4.1 Recommendations for designing and investing in FDL initiatives

It is clear that the FDL for the migrant/refugee field is ripe with new initiatives. Based on the findings of MOOCs4inclusion, designing an efficient and effective FDL offer or initiative for the inclusion of migrant and refugee target groups should consider the following:

Design

Formal versus non-formal learning and stand-alone versus structured (with student intake) offers. Initiatives for formal education may require different investments than those intended for non-formal or informal education. Notably, it must be decided to what extent the initiative intends to target a specific learning group, via a student intake in a structured learning offer, or rather provide a FDL resource that can be broadly utilised in a non-formal way. Objectives and subsequent considerations for impact assessment may vary accordingly.

'Targeted', 'blended' and 'facilitated'. Though this can be done in different formats, targeted, blended and facilitated approaches are unanimously seen as a means to enhance the success rate of any FDL initiative. The importance of mentorship and support should not be underestimated, as some learners are unfamiliar with digital learning and with the cultural learning environment in which they find themselves.

Co-development and communication. FDL initiatives can benefit from engaging the learners in development. Reaching out to potential learning groups via social media and in-conjunction with partners present in camps, for example, are two paths.

Embedding language learning into targeted interventions. Blending language training with content acquisition (and vice versa) can not only support civic integration and employability, but may also enhance the efficacy of formal education initiatives. The importance of mobile language learning through different media, such as Apps, platforms, YouTube videos, etc., should not be underestimated. These can be particularly useful to support the blended learning context.

Cooperation with other initiatives and sharing of good practice should be an integral part of FDL design. There is much experimentation in the FDL field for migrants and refugees at present. This must be further studied and leveraged. Investments should not be afraid of experimenting and testing through pilot initiatives.

Recognition, quality assurance and accreditation

Using Bologna tools. The Bologna architecture (recognition, quality assurance and qualification frameworks) and transparency tools (learning agreements, learning outcomes and ECTS) will be essential to facilitating the recognition of FDL initiatives and to align them to the European Higher Education Area (EHEA). In particular, FDL offers in higher education should consider employing these tools from the start, and working with partner universities and national authorities to do so.

European accreditation practices regarding FDL. The FDL HE initiatives generally have a high focus on quality assurance for quality enhancement. Where necessary, it would be important for the European quality assurance (QA) agencies to be able to accredit FDL, which would heighten the awareness of FDL among recognition authorities and employers.

Funding and sustainability

Generating income through small fees for certification and 'badges'. Innovative models can help learners cover costs, such as engaging employers in the FDL offer. However, even though fees may be integral to the business model and sustainability, the FDL should be as free as possible to the learner.

Promoting cross-sectorial, dynamic partnerships, engaging the public and private sector, European universities and migrant/refugee networks. Resource pooling, as well as public-private endeavours, will create a more solid financing structure and may be the basis for sustainability.

The EU role in supporting the development of initiatives. EU project and grant funding may be a useful tool to support bottom up solutions, such as dynamic partnerships of

NGOs, public, private actors, educational institutions and tech developers. For example, the Erasmus+ programme, the Madad Fund, and European projects (Erasmus+) can be useful tools and favour the use of European tools, structures and frameworks for recognition.

Avoiding fragmentation

The EC role in coordination, particularly in the European context. The risk of fragmentation of information, sources and initiatives has been identified throughout MOOCs4inclusion. The EC could play a role in uniting different actors, creating and supporting practice sharing forums. Coordination should be sought with other ‘unifying’ initiatives and platforms.

The EC role in communication. There is clearly a need to find collective ways to communicate the possibilities for FDL to refugees and migrants. Transparency and communication around the different initiatives is lacking and more must be understood about communication campaigns for the target groups. The EC would have clear added-value in supporting such transparency and communication.

Sharing data/Collaborative impact studies. There is clear will of a number of initiatives to share data and enhance transparency around impact assessment. The Platform of Al Fanar Media and ‘research.edraak’ should be noted. The EU and other actors in this field should consider joint impact assessment reports that incorporate and draw upon these initiatives.

References

1. European Commission (2010): Europe 2020 A European strategy for smart sustainable and inclusive growth.
2. European Commission (2012): Rethinking Education: Investing in skills for better socio-economic outcomes.
3. European Commission (2013): Opening up Education: Innovative teaching and learning for all through new Technologies and Open Educational Resources.
4. European Commission (2015) Joint Report of the Council and the Commission on the implementation of the strategic framework for European cooperation in education and training (ET 2020). New priorities for European cooperation in education and training .
5. European Commission (2016a): Analytical underpinning for a New Skills Agenda for Europe.
6. European Commission (2016b): Lives in Dignity: from Aid-dependence to Self-reliance.
7. Moser-Mercer, B. (2014): MOOCs in fragile contexts. In: Proceedings of the second European MOOC Stakeholder Summit, pp. 114–121, Lausanne (2014). Retrieved from: <https://www.emoocs2014.eu/sites/default/files/Proceedings-Moocs-Summit-2014.pdf>, last accessed 2017/04/27.
8. Moser-Mercer, B., E. Hayba and J. Goldsmith. (2016): Higher education spaces and protracted displacement: How learner-centered pedagogies and human-centered design can unleash refugee innovation. In: 2016 UNESCO Chair Conference on Technologies for Devel-

- opment: From Innovation to Social Impact, Lausanne (2016). Retrieved from: http://cooperation.epfl.ch/files/content/sites/cooperation/files/Tech4Dev%202016/1216-Moser-Mercer-SE03-HUM_Full%20Paper.pdf, last accessed 2017/04/27.
9. Lewis, K.; and Thacker, S. (2016): ICT and the Education of Refugees: A Stocktaking of Innovative Approaches in the MENA Region. Lessons of Experience and Guiding Principles. World Bank Education, Technology & Innovation: SABER-ICT. Technical Paper Series (17). Washington, DC: The World Bank
 10. Colucci, E; Smidt, H; Devaux, A; Vrasidas, C; Safarjalani, M; and Castaño Muñoz, J. (2017): Free digital learning opportunities for migrants and refugees. An analysis of current initiatives and recommendations for their further use. EUR 28559 EN. Retrieved from: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC106146/jrc106146.pdf>, last accessed 2017/04/27.
 11. Eurostat (2016): Asylum quarterly report. Retrieved from: http://ec.europa.eu/eurostat/statistics-explained/index.php/Asylum_quarterly_report, last accessed 2017/04/27.
 12. UNHCR. (2016): Missing Out: Refugee Education in Crisis. Retrieved from: <http://www.unhcr.org/57d9d01d0>, last accessed 2017/04/27.
 13. de Waard, I; Gallagher, M.S; Zelezny-Green, R. Czerniewicz, L; Downes, S; Kukulska-Hulme, A; and Willems, J (2014): Challenges for conceptualising EU MOOC for vulnerable learner groups. In: Proceedings of the second European MOOC Stakeholder Summit, pp. 33–42, Lausanne (2014). Retrieved from: <https://www.emoocs2014.eu/sites/default/files/Proceedings-Moocs-Summit-2014.pdf>, last accessed 2017/04/27.
 14. Gaebel, M; Kupriyanova, V; Morais, R; and Colucci, E. (2014): E-learning in European Higher Education Institutions - Results of a mapping survey. European University Association Publication. Retrieved from: http://www.eua.be/Libraries/publication/e-learning_survey.pdf?sfvrsn=2, last accessed 2017/04/27.
 15. Liyanagunawardena, T; Williams, S; and Adams, A. (2013): The Impact and Reach of MOOCs: A Developing Countries' Perspective. E-learning papers, 33. Retrieved from: https://www.openeducationeuropa.eu/sites/default/files/legacy_files/asset/In-depth_33_1.pdf, last accessed 2017/04/27.
 16. Castaño Muñoz, J; Kreijns, K; and Kalz, M. (2017): Does digital competence and occupational setting influence MOOC participation? Evidence from a cross-course survey. Journal of Computing in Higher Education, 29 (1). Retrieved from: <http://rd.springer.com/article/10.1007/s12528-016-9123-z>, last accessed 2017/04/27.
 17. Devaux, A. and M. Souto. (2016): Validation of open educational resources (OER). Thematic report for the 2016 update of the European inventory on validation. Retrieved from: <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4149?src=email&freq=weekly>, last accessed 2017/04/27.
 18. Witthaus, G., Inamorato dos Santos, A., Childs, M., Tannhäuser, A., Conole, G., Nkuyubwatsi, B., Punie, Y. (2016): Validation of Non-formal MOOC-based Learning: An Analysis of Assessment and Recognition Practices in Europe (OpenCred). EUR 27660 EN Retrieved from: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC96968/lfn27660enn.pdf>, last accessed 2017/04/27.