

## MOOCs in Europe: Evidence from pilot surveys with universities and MOOC learners

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### Headlines

- MOOCs are an important part of non-formal learning for individuals with higher education experience, particularly those who are either unemployed or low earners.
- MOOC certificates currently have low value in the labour market and in formal education.
- Data from studies of MOOCs in Europe sometimes differ from US studies.
- The number of MOOCs offered by HEIs in Europe is growing but they are not yet widespread.
- Digital competence is very important for participation in MOOCs.
- The socio-economic profile of MOOC learners varies according to the subject of the course.
- Feedback and interaction with peers and teachers is important for MOOC learners, but often does not happen in practice.

### Policy context

The integration of Open Education into EU education systems is a policy objective which was raised by the Opening Up Education Communication (September 2013)<sup>1</sup>. It is also one of the

<sup>1</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52013DC0654>

renewed priorities of ET2020 to provide "open and innovative education and training, including by fully embracing the digital era" (November 2015)<sup>2</sup>.

Open Education is understood as "a mode of realising education, often enabled by digital technologies. It aims to widen access and participation to everyone by removing barriers and making learning accessible, abundant, and customisable for all. It offers multiple ways of teaching and learning, building and sharing knowledge, as well as a variety of access routes to formal and non-formal education, bridging them"<sup>3</sup>

Even if Massive Open Online Courses (MOOCs) are only one element of Open Education, having information about their prevalence in Europe is important for policy makers and educational stakeholders. The number of MOOCs on offer is growing, and available data refers mainly to the US context.

This note briefly summarises the evidence from three JRC-IPTS studies on the situation of MOOCs in Europe in 2015: [MOOCKnowledge](#), [OpenSurvey](#) and [OpenCred](#).

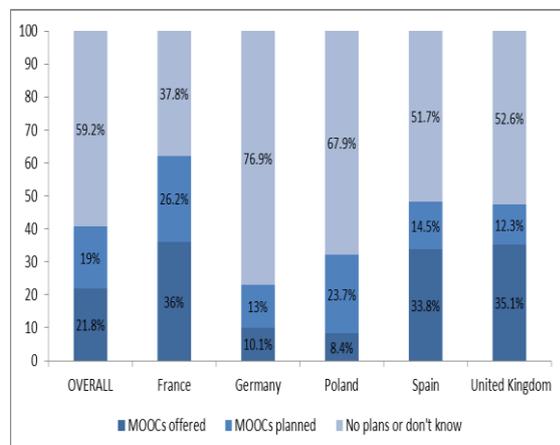
### Offer of MOOCs by HEIs

In a recent survey in France, Germany, Poland, Spain and the UK (OpenSurvey),

<sup>2</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52015XG1215%2802%29>

<sup>3</sup> Source: forthcoming JRC-IPTS report on "Opening up Education: a Support Framework for Higher Education Institutions".

22% of HEIs declared they are already offering MOOCs and 19% are planning to do so<sup>4</sup>. This suggests there is important growth potential in Europe<sup>5</sup>. The survey also points to significant country (and language) differences.



## Profile of MOOC learners in Europe

Initial results from the pilot MOOCKnowledge<sup>6</sup> study suggest that MOOCs offered by selected European institutions attract diverse socio-economic profiles (gender, age, education, origin, employment situation, salary) which vary according to the topic of the course.

Overall, MOOC learners in Europe are individuals from privileged socio-economic backgrounds. The pilot study found that they have usually completed higher education (80%) and have high levels of digital competence (mean=6 in a scale from 1 to 7). Most of them are of working age.

However, MOOCs are often followed as a means of lifelong learning by (educated) individuals who are either unemployed or low earners. A significant percentage

<sup>4</sup> Data from Spring 2015.

<sup>5</sup> As a comparison, a recent study in the US shows that 11.3% of all HEI were offering MOOCs in 2015, and only 2.3% were planning to do so:

<http://www.onlinelearningsurvey.com/reports/2015SurveyInfo.pdf>

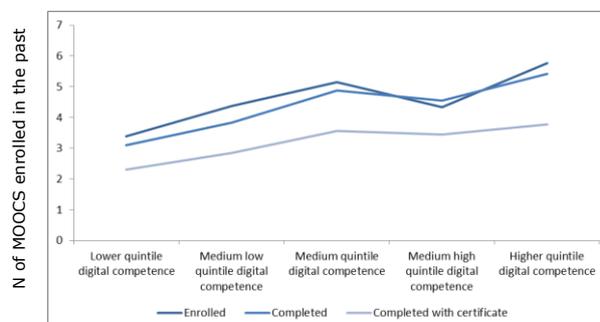
<sup>6</sup> These results come from a pilot study of 6 MOOCs, half of which were Spanish (3 out of the 6). They are therefore not representative for the MOOC offer in Europe.

of MOOC learners in the pilot study are unemployed (e.g. the unemployment rate<sup>7</sup> for Spaniards with higher education was 14% in the first quarter of 2015 but it was 28.8% for comparable MOOC learners in the MOOCKnowledge study). In addition, many have low incomes: 20.2% of MOOC learners residing in Spain who are working declare they have an annual salary below €9,000. Interestingly, these learners also have stronger intentions to enrol in more MOOCs in the future than employed and high income individuals. In addition, despite having lower digital competence, unemployed people usually participate in more MOOCs than those who are employed.

Teachers are an important target group for MOOCs. Reflecting the teacher population in Europe, MOOCs providing teacher training have higher rates of female participation (69%) than other MOOCs. In addition, MOOCs that are not explicitly designed for teachers also attract people who work in education (between 10% and 25% of MOOC learners in other MOOCs). This may have an indirect impact on the level of competence and content knowledge of the teaching labour force.

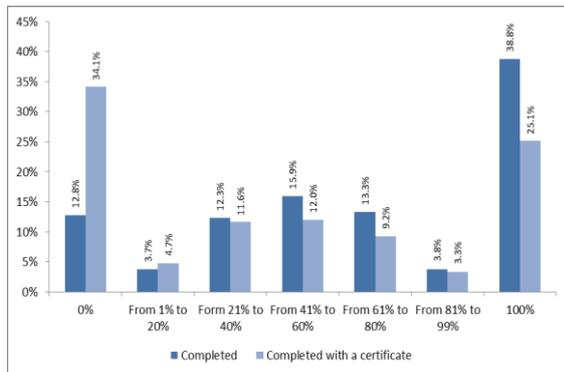
The majority of MOOCKnowledge respondents have followed several MOOCs. Only 19% of the respondents were participating in a MOOC for the first time.

Digital competence plays a key role in the intensity of participation in MOOCs. The better participants' digital competence was, the more MOOCs they followed.



<sup>7</sup> Defined as the number of people unemployed as a percentage of the labour force (Source: Eurostat)

39% of learners with previous experience with MOOCs completed all the MOOCs they were enrolled in. 48% completed some of them and 13% did not complete any. The figures also show that learners do not always seek certificates: 34% of the experienced learners did not obtain certificates from their previous MOOCs.



## Recognition of MOOC learning

Evidence indicates that the value of MOOC learning is not widely recognised.

MOOC learners believe that taking MOOCs has more value for personal development than it has for labour market outcomes (e.g. career development). Moreover, learners rarely consider MOOC certificates, in themselves, as useful for looking for a job or changing their current one (6.4% of employed and 16.7% of unemployed). Despite this, the majority of learners plan to include MOOC certificates in their CVs (66% of employed and 68% of unemployed).

Employers are often not aware that their employees are participating in MOOCs or other lifelong learning activities (58%). In addition, employer support to lifelong learning activities has a negative impact on employees' participation in MOOCs, but it is positively correlated to traditional training.

Most Higher Education Institutions (OpenSurvey data) do not have recognition mechanisms for MOOC-based learning. Even in cases where MOOC certificates are based on reliable assessment methods and linked to a specific number of ECTS, only 30% of HEIs are likely to recognise this type of qualification. This indicates there are

currently few opportunities for bridging MOOC-based learning and formal education.

On the basis of qualitative research and case studies, the OpenCred study has identified six elements that could be incorporated into the MOOC planning phase that might lead to greater possibilities of recognition of MOOC-based learning by HEIs and employers: 1) identity verification of the learner, 2) partnership and collaboration, 3) award of credit points, 4) quality assurance, 5) informative certificates or badges which acknowledge learning, and 6) suitable and supervised assessment.

## Learning through MOOCs

Low completion rates are a challenge for most MOOCs. In our pilot study, however, most of the learners declared, before starting the course, that they intend to finish all the activities. Just 14% of the unemployed and 21% of the employed learners aim to select only the parts of the MOOC that they are interested in. It shows the importance of studying the gap between intention and behaviour of MOOC learners.

When starting a MOOC, MOOCKnowledge respondents state that interaction with teachers and peers is very important (mean = 5.66 and 4.75 respectively in a scale from 1 to 7, n=1759) In practice, however, this interaction during courses happens less often, according to post-course surveys (mean = 3.59 and 3.61 respectively, n=431).

Despite this, our pilot data indicate that learners are highly satisfied overall with the courses. In addition, feedback activities that help participants to understand course content are correlated to higher levels of satisfaction<sup>8</sup>.

## Policy recommendations and related JRC work

On the basis of the results presented in this brief, two main policy recommendations can be identified:

<sup>8</sup> Moderate positive correlation with overall satisfaction is statistically significant (p=0.326\*\*\*, n=231)

**1 - Promote the use of MOOCs for re-skilling and up-skilling both unemployed people and workers,** especially for those without employer support to training activities. This would be especially relevant for EU countries with high unemployment rates.

**2 - Promote digital competence development in both formal education and professional development activities.** This could lead to a higher participation rate of individuals in an open education context and, indirectly, to a reduction in training costs and greater flexibility in education.

The MOOCknowledge analysis will be expanded in 2016-17 to provide more targeted analysis of policy interest (e.g. teacher training, employability, and migrants). JRC will explore the intention-behaviour gap as a new measurement of MOOC performance and will analyse the socio-economic impact of MOOC-based learning on learners' careers.

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