

Future of LLL in a digital context

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1. Lifelong Learning (LLL) and Continuing Education (CE)

LLL will be for all persons, ages and universities the predominant enabler [1]. A definition of LLL by the European Commission is that LLL is designed to enable people, at any stage of their life, to take part in stimulating learning experiences, as well as developing education and training.

Education transforms lives and is at the heart of UNESCO's mission to build peace, eradicate poverty and drive sustainable development. UNESCO believes that education is a human right for all throughout life and that access must be matched by quality [2].

EUCEN – European University Continuing Education Network was created in 1991. The definition adopted was that Continuing Education is education and training acquired beyond attendance of educational or training institutions in accordance with formal national requirements [3].

Universities have been providing Continuing Education and Professional Development for adults since XIX century. Most universities have been developing activities beyond educating young students and researching towards providing training and education for adults. Universities have been researching and cooperating to develop structures, procedures, teaching methods, fora and know-how to provide the framework for adult education and training within the perspective of LLL.

Several networks and associations have been active in the last decades to develop. Examples are EUCEN (www.eucen.eu) and UPCEA (<http://upcea.edu>). Adult Education and Learning, Andragogy and Gerontagogy are areas researched by university members and their centres for education and training. These are areas that enable proper methods to address adult needs and learning profiles. A large number of universities have created centres, departments and external bodies to handle the provision of LLL training and education. These have been working for years in the provision of education and training (LLL) for a large sector of the population. An example of that panorama is the project ALLUME (<http://allume.eucen.eu/>) as well as its follow up COMMIT (<http://commit.eucen.eu>) and another is the initiative of the European University Association Charter of LLL [4].

Universities and other HE (Higher Education) institutions have been addressing the use of Open Educational Resources (OER). The last movement have been the MOOCs (Massive Online Learning Open Courses) that create free access to courses in most areas of knowledge. The MOOCs represent an effective development for the LLL for all. The attendance of courses comprehends learners from all over the world and without prerequisites in terms of previous education and training. The courses address different levels of the educational system although being produced, in a major portion, by HE staff.

Initiatives are spreading around the world with success. Some courses have attendances of hundreds of thousands of learners. Examples are Coursera (www.coursera.org) and EdX (www.edx.org). Most of these successful OER initiatives are led by prestigious universities leading to a visible improvement of the quality of the education and training available. This is a motivation for all potential attendants.

Universities and HE institutions have led research in terms of quality evaluation and assurance of LLL. Some examples are projects like EQUIPE (<http://equipe.up.pt>) and DIALOGUE (<http://dialogue.eucen.eu/>). HE institutions have also enabled the recognition of prior learning of learners. This recognition addresses informal learning and non-formal learning (as for instance work based learning and work place learning). The accreditation and validation, associated with the recognition, is relevant for qualification in professional or academic terms. Universities have played a large role in the research, definition of methods and innovation in the assessment and validation of the qualifications acquired outside the formal educational system. That leads also to accreditation of the competencies acquired and that can be a motivation for all to continue their LLL.

Many initiatives have been undertaken by universities or groups of universities to promote this advancement of the recognition of prior learning. Some examples are OBSERVAL and OBSERVAL-Net (<http://www.observal-net.eu>) and URPL (<http://www.u-rpl.eu/>). Many countries, like France, Denmark, Norway, Sweden, Finland, Belgium, Netherlands, Switzerland, Portugal, Germany and Australia, have published specific legislation to promote the recognition of prior learning performed by universities. In most cases the accreditation of the prior learning leads to partial qualification towards a degree but it is a major incentive for all to continue LLL.

Some HE institutions have been leading this process of addressing the inclusion of learning and training acquired outside the traditional educational system in their usual learning paths. This innovation is possible also for other levels of the educational systems and can be replicated in the primary and secondary sectors.

3. Online Learning and LLL Challenge

3.1. Characterization

Technology developments have been influencing daily life at an unexpected rate and with tremendous changes in the areas of learning and teaching. The media used in communication are playing an important role changing the format and the quantity of information available for educational purposes. These changes require a series of reflections and thoughts about the future role of learners and teachers. A specific area where transformations are more radical is Online Learning.

Most used media systems to be adopted for use in Online Learning is based on computers, smartphones, tablets including communication using email, social networks, cloud storage, data collected from the WWW, dedicated software and connections with other audio visual media using voice and image. Online Learning uses this electronic environment to make available educational resources to those who would otherwise not have access to them.

Learners have presently the possibility of continuous access to specific information and dedicated learning tools. Therefore, some teachers, researchers and administrators in a classical educational system must face this rapid change in education methodologies regarding course profiles, teaching procedures and other institutional issues that are connected with Online Learning practice. Open Education Resources (OER) have played an important role in providing access to many learners. OER models and platforms have been developed including some business for profit models [5].

The characteristics of Online Learning Courses imply that some initiatives are created as a replacement for face-to-face tutorials and treated as the primary teaching medium. Others are accomplished for purposes relating to student access to learning centres and as complimentary learning tools. Some important questions relate to the availability of computers, smartphones, tablets and to technical support and the allocation of teaching staff to produce these materials. Most attempts to implement Online Learning courses in educational settings have added it on to already existing course materials rather than revising course structure and content. Generally, Online Learning materials become more integrated when the course is designed specifically for the particular medium [6].

Factors to be considered for Online Learning course design are: the maturity and profile of students, the interface friendliness, the active interaction with other students and tutors, and the flexibility of the learning pace. Another typical characteristic of Online Learning is that it may promote co-operation between learners if a group is set regularly to address joint projects/tasks or problems. This is a fundamental change from the vertical structure of classical educational systems and in some cases, such as adult education, may represent an enormous added value to teaching and learning.

In Online Learning courses there are materials that are permanent and reusable, unlike face to face instruction. This has advantages such as the chance for all learners to have access to the whole set of information and data, for students to study at their own pace, for Online Learning courses/modules to be better prepared than traditional ones and for enabling interaction between learners and tutors in a more open communication environment [7].

For teachers the overload of students may be unbearable if there is no fixed upper limit to the number of learners interacting with each Online Learning course tutor. As additional tasks to the traditional teaching responsibilities, it may be a heavy burden if the workload is not adequately defined and limited. Since learners can incorporate outside resource materials into their response, it can improve the level of discussion but also increase the complexity of the tutoring process. In some cases, this may be a barrier for the involvement of tutors/teachers/mentors in Online Learning, for instance if learners are active professionals.

Online Learning teaching requires some reorganisation, despite the fact that much of an instructor's expertise in face-to-face interaction or distance teaching will have to be generalised properly to the Online Learning environment. Online Learning tutor training might occur through procedure manuals that include the differences between Online Learning and face-to-face interaction, a basic list of right ways and wrong ways, examples of Online Learning interactions and analyses of basic communication problems and possible solutions. Some issues are particularly relevant such as the techniques used to moderate and facilitate discussion and interaction between the learners and tutors or the adequate procedure to train instructors in effective ways to teach using Online Learning. Another concern is the effective pace of work of the learners using Online Learning material that has to be chosen and controlled so that it will meet the deadlines or learning rate qualifying factors and pedagogical/andragogic requirements [8].

3.2. Seven challenges for Teaching and Course Design

Challenge 1: Flexibility - Some materials for the courses are requested by a number of learners with very different educational backgrounds. Therefore, the courses have to be prepared with enough flexibility to support a range of different learning demands. The materials need a degree of user friendliness to meet many different attitudes towards the learning medium used, such as people being afraid of using computers or falling asleep watching an educational video.

Challenge 2: Universality - The Online Learning materials have production costs that can only be met if their use is as large as possible and must therefore be prepared for a mass audience enabling a potential use that guarantees the elimination of geographical frontiers. This means that they must also consider cultural and educational characteristics inside or outside the country(ies)/region(s) of production that may represent a barrier to the use of Online Learning materials.

Challenge 3: Innovative Models - The new technologies available for Online Learning courses are in some cases the opposite of traditional courses in terms of structure, organisation and evaluation. The teaching and learning models adopted have to be innovative and adapted to these media and tools so that courses make use of the full potential of Online Learning. There is a great need to rethink the teaching models in the design and delivery stage and to create new pedagogical guidelines to achieve proper learning.

Challenge 4: Co-operation - The production of Online Learning courses and their materials have to be executed in cooperation with other institutions and groups of users, such as industrial and associations of professionals. In this way the product will be guaranteed a certain degree of success in terms of destination group. The industry and other educational/training stakeholders in society have a cooperative role that may improve the quality of the courses and their use. Cooperation between teachers from different institutions is also highly desirable since it will contribute to lower costs and increase the potential target group of the courses.

Challenge 5: Teaching activities - These are the most difficult challenges since the motivation of academia to change their teaching methods is traditionally low. The new activities have to be considered as new tasks for the instructors and not as additional work on top of the existing tasks. When it is an additional task it should be rewarded in accordance. In cases where it is a new type of work for the instructors there must be an adequate training phase where they are also learners of the new learning and teaching technologies.

Challenge 6: Organizational infrastructures - The production of Online Learning materials requires new administrative infrastructures together with equipment facilities for the delivery of this type of course. The established system will suffer considerable changes that must be addressed

adequately by the administration allowing the Online Learning teaching and tutoring functions to be implemented with the necessary support including proper technicians to manipulate the new equipment and technologies.

Challenge 7: Learning evaluation - Online Learning needs a proper and new system of quantifying the learning progress. Considering the different forms of learning achievements such as skills, knowledge acquisition or understanding, the assessment and evaluation has to be designed to measure the full amount of learning achieved by the learner. This evaluation can be done on an open mode but it must address the characteristics of the Online Learning course and the types of learning outcomes.

4. Conclusions

Online Learning courses and materials are an inevitable development for the future of the teaching activities and must be faced as soon as possible. The consequence of being outdated on this issue may mean that universities lose the public service these are supposed to fulfil because others have already prepared Online Learning materials that may fit the needs of the expected customers. Another danger is the decrease of traditional teaching leading possibly to unemployment since the learners in Continuing Education/LLL are in most cases capable of using the Online Learning material and the information technologies without direct tutoring and teaching.

Quality assurance has to be present in Online Learning courses produced and the absence of quality assurance can be a major obstacle to the acceptance of this type of learning by the teachers and learners. Some of the Online Learning courses have been designed based on the innovative capabilities of the supporting medium instead of the course pedagogical value. The challenge of quality evaluation and learning effectiveness of the Online Learning courses must be a priority in the course design and delivery. Without a generalized quality control of the Online Learning courses the learning achievements will not be guaranteed just by the use of sophisticated media.

It is envisaged that teachers will be trained in Online Learning technologies and pedagogy/andragogy together with organizational changes that allow the implementation of Online Learning courses in the classical teaching institutions. These are complex issues that need rethinking and adaptation but the future of the learning environment is evolving rather rapidly. The future of Online Learning courses is not only in Continuing Education/LLL, where the learners are working and educated are therefore more likely to succeed, but also in the traditional basic education. The approach to Continuing Education/LLL Learning must be adopted by all and, first

of all, by teachers, who have the duty and the responsibility of being the leaders in this change of attitude.

Another major interest of a study were the main barriers that can prevent open education policies (or, for countries where there is no policy, open education initiatives) from fully succeeding, as well as the potential enablers for open education [9]. The research team believes in fact that understanding the barriers and enablers to open education can help policymakers who are both currently running policies and planning future initiatives in the field to better steer their actions. The main barriers identified by the interviewees are: low digital tools-readiness, low policy priority assigned to open education, fragmentation of initiatives, lack of institutional support, resistance to cultural change, lack of awareness about open education, low open education capacity within the teaching population, and the absence of an open licenses national recognition scheme. The main enablers for open education to thrive are: a clear policy priority assigned to open education; awareness-raising on open education, targeting leaders and educators; capacity-building on open education for educators and other stakeholders; measures to empower educators; and Online Learning platforms and advocacy communities.

EUCEN has addressed these issues in several projects related to the use of digital tools and Online Learning. Recently, at the Bergen Conference in June of 2018, EUCEN announced the creation of a Community of Practice (eCoP) to share good examples and useful tools for the digitalisation of LLL. This eCoP will focus on existing examples of application of digital tools in an ULLL environment from cradle to grave. The goals are to:

- link with other organizations, like EDEN and IACEE, involved in this type of actions;
- be a repository of contributions in events, conferences, chats, fora, blogs, projects, websites and publications;
- select examples and/or case studies relevant for this group;
- attempt to promote virtual discussion through live debate or fora;
- provide a collaborative newsflash;
- present and analyse the Swiss Universities initiative on quality of digital learning

This eCoP is for professionals who have interest in digital transformation of education and training and willing to cooperate and to collaborate. Especially those with genuine interest in improving quality of LLL using and exploring new approaches to LLL.

5. References

[1] Soeiro, A., "Open Education 2030", Contribution to the JRC-IPTS Call for Vision Papers, Part III: Higher Education, Joint Research Center - European Commission, Sevilla, Spain, 2013.

- [2] UNESCO, "Lifelong Learning Programme", <http://uil.unesco.org/lifelong-learning>, accessed 20Jul18, 2017.
- [3] Soeiro, A., "THENUCE – Thematic Network on University Continuing Education", <https://paginas.fe.up.pt/nuce/>, accessed 20Jul18, 1999.
- [4] EUA – European Universities Association, "Charter of LLL", <http://www.eua.be>, accessed 20Jul18, 2008.
- [5] Bacsich, P., "Business Models for Opening up Education: Sustainability of MOOCs, OER and related Online Learning education approaches in Higher Education in Europe", D-TRANSFORM, D-TRANSFORM Deliverable O1.A2, <http://www.dtransform.eu/wp-content/uploads/2016/04/O1-A2Business-models-edition-1-final.pdf>, accessed 20Jul18, 2016.
- [6] Inamorato dos Santos, A., Castaño-Muñoz, J. and Punie, Y., "Opening Up Education – A Support Framework for Higher Education Institutions", Luxembourg: Publications Office of the European Union, <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/opening-education-support-framework-higher-education-institutions>, accessed 20Jul18, 2016.
- [7] UNESCO Institute for Information Technologies Education, "Open Educational Resources publications", <http://iite.unesco.org/publications/themes/oer/>, accessed 20Jul18, 2015.
- [8] Vandystadt, N. and Waldstein, J., "MEMO/18/103 – Key Competences for LLL", Europe Direct, [http://europa.eu/rapid/press-release MEMO-18-103 en.htm](http://europa.eu/rapid/press-release_MEMO-18-103_en.htm), accessed 20Jul18, 2018.
- [9] Santos, A., Nascimbeni F., Bacsich, P., Atenas, J., Aceto, S., Burgos, D., Punie, Y., "Policy Approaches to Open Education", JRC – European Commission, Technical Report 28776, Sevilla, Spain, 2017.