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## **DEVELOPING SOFT SKILLS THROUGH ACTIVE LEARNING: STORYTELLING CONCRETE EXPERIENCES THROUGH A MOOC**

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### **Abstract**

The eLene4Life project aims to support curriculum innovation in higher education (HE) through the development of active learning approaches for transversal skills, with the ultimate aim of improving students' employability. The MOOC "Active Learning for Soft Skills Development", one of the project outputs, has been put in place as a space for learning through experience sharing and discussion. The MOOC aims at fostering the exchange of results achieved by instructors after the concrete experimentation of active learning methods and at increasing their sensibility and knowledge of the most effective modalities through which to implement those methods. This paper outlines the genesis of the MOOC. Its three main objectives are: (a) collecting and valorising different voices of the teachers who directly experimented one or more methodologies of active learning in their classroom (most of them during the pandemic); (b) embracing and sustaining experiences, as well as addressing doubts coming from a wider audience interested in putting into practice such methods oriented to soft and digital skills' development; (c) offering a non-formal learning opportunity in line with European indications about micro-credentialing through developing synergies with the ECCOE project (European Credit Clearinghouse for Opening up Education).

### **Introduction**

This paper wants to capitalize on the experience gained in the design and realization of an online learning path, a MOOC, in an international context where the storytelling of real experiences "embedded" in the curriculum plays the leading role. There are studies (Succi & Canovi, 2020; Cinque, 2016; Wilhelm et al., 2002) and reports (Manpower Group, 2018, Deloitte, 2017; European Commission, 2013; ISFOL, 2012) that highlight the importance of supporting and strengthening students' development of soft skills to meet the needs of the labour market and fill the existing gaps. Schultz (2008; p.152) says "students participating in a lecture with the aim of learning a hard skill will inevitably and

unconsciously practice a range of soft skills. This comes very close to an ideal way of lecturing ... no changes to a programme's curriculum are necessary; instead, the change will be reflected in the lecturers' teaching methodology." A re-design of the course, or part of it (a lesson or a module), putting students at the centre of the learning experience making them active and responsible for their learning, can respond to this need. Active learning methodologies are recommended to educators as a means to promote a wider and general knowledge base and interpersonal skills such as communication, problem solving and teamwork (Prince, 2004; Walker, 2003; Bean, 1996; Sutherland & Bonwell; 1996, Silberman, 1996).

Many universities have already moved in this direction, supporting teaching staff to gain awareness of these approaches and integrating them in their didactics, to improve students' engagement, knowledge retention and results. A survey conducted by the European University Association in 2017 indicates that higher education institutions worked on "the implementation of reforms in quality assurance, credit systems, as well as degrees and qualifications frameworks, emphasized the use of learning outcomes and student-centred learning approaches" (Gaebel et al., 2018; p.77). In such a scenario, the eLene4Life project highlights the importance on how to support and guide lecturers in implementing active learning methodologies to foster soft skills while teaching subject-matter courses.

### **The eLene4Life project**

eLene4life is the sixth project born in the frame of almost two decades of collaboration among institutions participating in the eLene Network. The current project aims at supporting curriculum innovation in higher education through the development of active learning approaches for soft skills' development, with the ultimate aim of improving students' employability. A framework for soft and digital skills has been developed in the previous project "eLene4Work" and it constituted the base from which the eLene4Life activities have been designed.

The MOOC is one of the project outputs, and comes at the end of two main phases. The first one is the analysis of innovative methodologies and activities which foster the acquisition of transversal skills, during which a benchmarking activity and interviews in the Higher Education & Corporate sectors were conducted in parallel. The second phase focused on the production of three closely related outputs:

- the Dynamic Toolkit – a selection of active learning methodologies collected during benchmarking phase;

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- the Pilot Projects – 12 Higher Education teachers chose one of the methodologies listed in the Dynamic Toolkit (Figure 1) and designed how to integrate it along their course during academic year 2019/2020 (see more in the Pilot Projects Report);
- the MOOC – aimed at collecting and valorising the Dynamic Toolkit methodologies and the pilot teacher experiences.

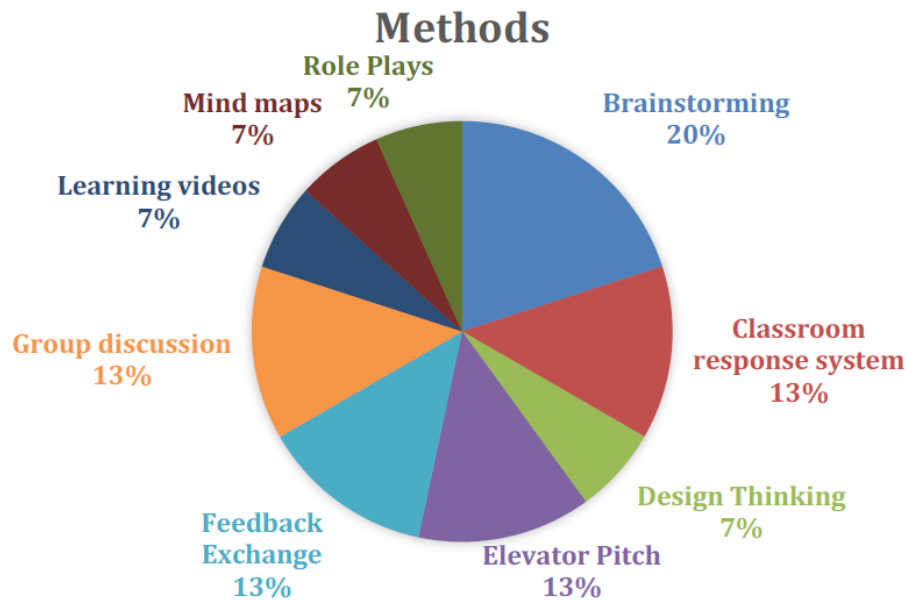


Figure 1. Methods tested during the pilots

### The MOOC “Active Learning for Soft Skills Development”: a discussion-based MOOC

The MOOC is available on Polimi Open Knowledge ([www.pok.polimi.it](http://www.pok.polimi.it)), the MOOC platform of Politecnico di Milano. Launched in 2014 for MOOC delivery, it currently counts more than 113 000 users from all over the world with 71 MOOCs produced. This MOOC is part of the series of MOOCs 4 teachers, devoted to faculty development. The course has been explicitly designed as a “discussion-based MOOC”, a format already tested with success during a past European Project (D-Transform).

The main purpose of the MOOC is the creation of an online environment fostering the exchange of innovative teaching and learning experiences for soft and transversal skills enhancement. Soft skills are crucial more than ever in a volatile, uncertain, complex and ambiguous (VUCA) context.

The MOOC has been designed carefully to be based on the sharing of experience, not only the ones coming directly from the teachers involved in the pilots, but also those coming from MOOC participants. This MOOC is not about teaching the best experience ever in active learning for soft skills’ development but is about sharing experiences both those that worked well and those that did not work so well, putting them on the table and discussing

with peers to gain insights and tips from their experience. In fact, sharing doubts, ideas, practical experiences is the significant added value of the MOOC.

Although the eLene4Life MOOC is mainly addressed to higher education teachers, it is beneficial also to teachers at other levels and also for the corporate sector, since not only is soft skills' development is crucial for them, but the methods tested and described can also be reused and adapted. Furthermore, the international dimension of exchange among participants highlighted that "teaching" soft skills is not something written in stone, and that different countries used different approaches. In this format of a discussion-based MOOC, the sharing of personal experiences, the possibility to see different implementations of different methods in different countries are the ways in which knowledge passes to participants, since knowledge is not something to be transmitted but something that we build collectively in the learning process itself. The role of the instructional designer in this format is fundamental since he/she is in charge of creating an environment that can be a safe and comfy place for people where everyone is welcomed, and his/her contribution is appreciated.

The course is organised in 7 weeks. The first one is devoted to the exploration of the relationship between active learning and soft skills. The next three are focused on the three elements of the Constructive alignment (Biggs, 2003): Intended Learning Outcomes, Assessment Strategies and Teaching and Learning Activities. The fifth week concentrates on the monitoring and evaluation of the learning and teaching experience. The 6th week is different, and it is devoted to peer assessment, an activity designed to capitalize what the learners discovered during the MOOC, asking them to submit the design project of the activity they'd like to implement in their class to foster soft skills. Finally, the 7<sup>th</sup> week brings all together the full teachers' interviews involved in the pilot experience.

The main elements taken into consideration in the instructional design process are:

- the *fil rouge* must be the instructors experience during pilots: they should guide the whole learning path.
- to guide novices, who recognise the importance of potentiating students' soft skills, in understanding and designing all steps of integrating an active learning experience in their course.
- to favour an exchange of experiences, doubts and concrete applications coming from the learners (discussion-based).
- to offer an online learning experience able to support digital soft skills' development in learners (McAuley, 2010).
- To increase the value and attractiveness of the MOOC, by issuing proof of the achievement of the learning outcomes (micro-credential) (Engels-Perenyi &

Nomden, 2021) through the solutions developed by the sister project ECCOE (European Credit Clearinghouse for Opening up Education).

## **The design process**

The international dimension of collaboration has been a key factor in the MOOC design and development, considering the direct involvement of different stakeholders in the realization of contents. A first proposal for a course index was shared among partners, to give an idea of the pedagogical framework adopted and facilitate the discussion and collection of suggestions with partners. The main MOOC idea was to guide the learner in a first overview on the main aspects to be considered when renovating their own course (or just a small part of it) to better support students' soft skills' development, taking advantage of Biggs' Constructive alignment.

The first content of each week is a video presenting the experiences conducted by the teachers during the pilots that focus on one of those elements. Two critical aspects were considered in the MOOC design phase: teachers' contributions must not be too long, and learners should easily understand what is described in the video. So, when the video content production phase was launched, we opted for the interview format, as this can facilitate a deeper reflection on what they did and on the process they implemented. Their thoughts were presented coherently with the constructive alignment theory and accompanied by an infographic (Playcard) that synthesizes the methodologies implemented. Introducing a graphic element, such as an infographic, had the aim of helping users understand more clearly the specific design elements that instructors decided to implement in their pilot considering their context, constraints, attitudes. Since many videos were recorded at home due to the covid-19 crisis, precise instructions were made considering both technical and methodological aspects useful for self-recording.

The pilot teachers' video storytelling is followed by two different contributions from the partnership: the "Voices from eLene", aimed at highlighting stimuli from pilots enriching them with partners' experience, personal reflection and knowledge, concrete suggestions for learners to be applied; and the "Voice from the expert", aimed at deepening the theory behind the active learning methodologies implemented.

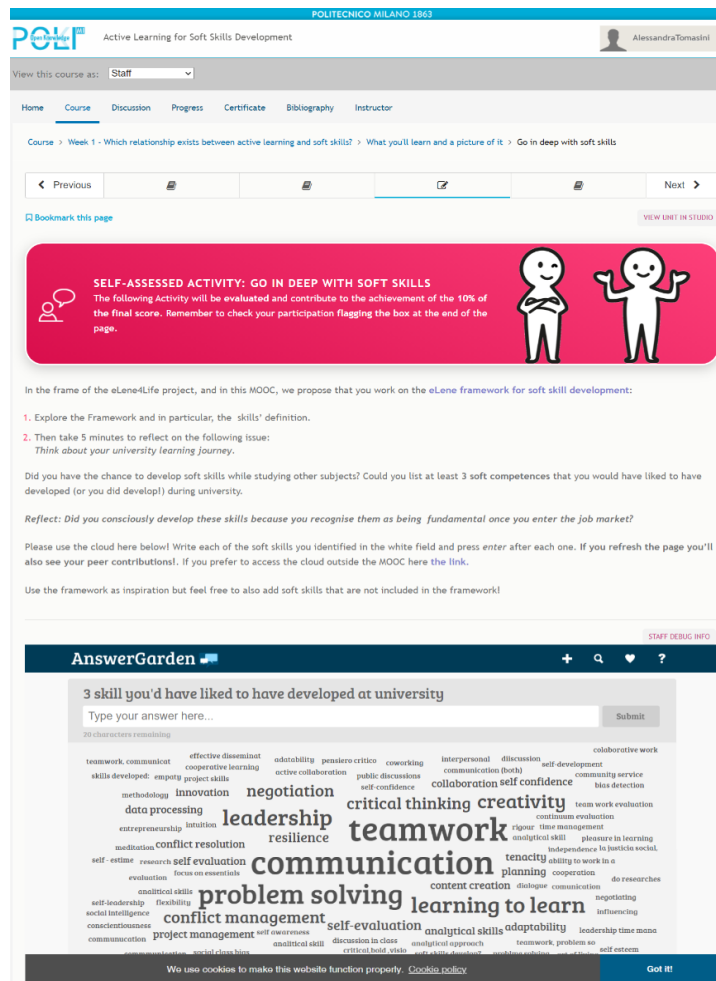


Figure 2. An example of a MOOC activity

A series of collaborative activities were designed to support the “discussion-based” characteristic of the MOOC and to foster experiences able to sustain digital soft skills development of participants:

- Polls and brainstorming tools (e.g. Answer garden and Padlet): these have been used as easy-to-do tasks to stimulate even unforthcoming learners to collaborate. Taking part in these activities requires a small amount of time, allowing users to see immediately their contributions together with the others.
- Peer-assessment activity: at the end of the path, learners have to develop a project about active learning methodologies. Here the activity plays different roles: firstly it is an assessed task, secondly it is an activity based on active learning methodologies itself, so it can be directly experimented by learners, thirdly it is a way to discover concrete implemented projects that can be taken as an inspiration.
- Discussion Forum: this is the virtual space to exchange ideas starting from specific content presented by pilot teachers or from external resources (aimed to deepen certain aspects). This design element is very much appreciated by learners because it adds further points of view to the whole discussion inside the MOOC community.

The eLene MOOC complies with the criteria devised by the ECCOE project to support transparency and recognition of the credential earned through this learning opportunity. The Erasmus+ ECCOE project – European Credit Clearinghouse for Opening up Education – is developing a system for the recognition of digital credentials. The project aims to increase trust in technology-enabled credentials among students, higher education institutions (HEIs) and employers.

To this end, the eLene MOOC complies with the European standards such as EQF and ESCO (European Skills, Competences, Qualifications and Occupations) in terms of course description and definition of Intended Learning Outcomes (ILOs) and assessment. Indeed, ECCOE identified the description of ILOs in terms of ESCO attitudes, knowledge and skills combined with direct reference to the ESCO unique identifier of each individual skill as a key criterion for increasing the quality of the digital credential associated with a given learning opportunity. Quality is further enhanced by precise indications about the kinds of activity that learners will engage in to develop these skills, as well as about the assessment methods mobilised.

### **Main takeaways and future improvements**

At the time of writing, the first edition of the MOOC is still ongoing and the results we present are only preliminary findings. Concerning the number of enrolled users so far, we have reached 450 participants, and the number of people who already finished all the activities and received their certificate of accomplishment is still low. Up to now we can say that one indicator of success is the fact that the forum is active, and the stimuli proposed to the discussion and for self-reflection are effective.

Furthermore, we conducted interviews with selected participants who reported a general positive impression, highlighting the usefulness of contents and theory presented also for those who are already familiar with active learning practice. The integration, in the course, of external resources as elements to enrich the discussion among peers, is particularly appreciated as it brings learners to really engage with them as part of the learning path and not only as an additional resource. Planning some synchronous interactions would be helpful to reinforce the exchange and, as one interviewee indicated, can make the difference on learning impact in terms of “what to take home”. As mentioned, the experience of the first edition is still ongoing and further hints and feedback from participants that will be collected at the end of the edition will give more visibility on the strengths and weaknesses of the learning experience. These will be integrated in the presentation for the 2021 EDEN Annual Conference.

This international experience, in terms of instructional design activity and project management, has been very challenging and satisfactory. The strict coordination among

all the actors involved has been the key element to structure the whole MOOC since its contents are highly interdependent; a delay on one element creation could have halted the implementation of the entire course. We will continue to work on the enrichment of the MOOC contents and the eLene4Life Dynamic Toolkit with further active methodologies contributed by MOOC participants and the competences acquired will be validated through the delivery of a micro-credential.

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