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## **ELENE4LIFE: ACTIVE LEARNING FOR SOFT SKILLS – UNIVERSITY-CORPORATE CONNECTIONS AND CROSS-FERTILISATION**

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### **Abstract**

According to the 2018 World Economic Forum Report “Towards a Reskilling Revolution: A Future of Jobs for All”, the rise of artificial intelligence, robotics and other digital developments is upending the primacy of human expertise in the economy. The individuals who will succeed in the economy of the future will be those who can complement the work done by mechanical or algorithmic technologies, and “work with the machines”. The 2018 European Commission Proposal on Key Competences also draws attention to these disruptions affecting European societies and economies, stating that “Skills such as creativity, critical thinking, taking initiative and problem solving play an important role in coping with complexity and change in today’s society.”

In a previous Erasmus+ project, eLene4work, the development of HE students’ (digital) soft skills was experimented through the use of MOOCs and OERs. The results showed that, while autonomous learning indeed played a significant role, real impact would only come from fully integrating these into the curriculum. The project also found a mismatch between employers’ expectations and students’ perceptions of the labour market with respect to these soft skills.

This paper reports specifically on the initial results of the follow-up Erasmus+ project, eLene4Life: Learning and Interacting to Foster Employability, in the form of a combined foresight analysis exploring how soft skills are and can be developed through active learning in both Higher Education and corporate training. It also highlights the potential for cross-fertilisation of these approaches in both directions and lays the ground for future actions, connections and collaborations.

### **Background**

Many studies (Deloitte, 2017; Manpower Group, 2018; World Economic Forum, 2018) point out that soft skills are becoming as important as hard skills when looking for a job. Yet transversal or soft skills are the hardest skills to document and, at present, there is a mismatch between academic education and the skills required in the labour market.

A number of documents issued by the European Commission confirm that soft skills are “closely connected with employability” (European Commission, 2010; 2012a; 2012b) but they are not thought of as such within many universities. Companies need a more skilled

workforce and opportunities should be given to young people to develop those soft skills, such as entrepreneurial skills, coping skills (i.e., the capacity to deal with a problem in a creative way), learning to learn, and other skills (such as the ability to work in teams, to communicate clearly and effectively, to adapt to different cultural contexts, to solve problems, to manage conflicts, and to show endurance in complicated or stressful situations) that will help university students make a successful transition from full-time education to entering the labour market. The importance of these soft skills is also highlighted in the Council Recommendation of 22 May 2018 on key competences for lifelong learning (The Council of the European Union, 2018).

However, at present, different countries have different methodologies and approaches to the teaching and recognition of skills for employability. This has led to a mismatch between academic education and skills required in the labour market. According to Mourshed et al. (2014), providers, employers, and young people seem to live in “parallel universes”. For example, in Europe, 74 percent of education providers were confident that their graduates were prepared for work, yet only 38 percent of youth and 35 percent of employers agreed. The existence of such discrepancies implies that cooperation should be strengthened among the different stakeholders to identify and further develop solutions in the form of educational models which mobilise appropriate learning and teaching approaches for the development and recognition of soft skills, embedded within the curriculum.

## **The eLene4Life project**

eLene4Life is an Erasmus+ Key Activity 2 Strategic Partnership project which was launched in September 2018 and runs for three years. It involves 8 partners from 6 countries (France, Italy, Germany, Belgium, Poland, the United Kingdom) and is coordinated by AUNEGe, the French digital university for management and economics.

The project approach is focused on the self-empowerment of students, through a learning process where their independence is fostered (active learning). Soft skills development is embedded in *traditional* courses through appropriate teaching methodologies (case studies, problem-based learning, project-based learning). Some of these methodologies are drawn from the experiences of company training and are based on *experiential learning* through internal (or, in some cases, external) practical activities. In both cases, reflection on the outcomes and student self-assessment will be fostered and enriched by the use of digital technologies.

The project is creating the methodological basis for the interaction with companies to foster a permanent Corporate/Higher Education Community of Practice for innovation in learning and teaching, in which the different stakeholders (teachers/instructors, students, representatives of private companies) will be involved in order to exchange experiences, discuss, update the common knowledge and evaluate the results of the experimentations.

A key point of the project is the analysis of the real practices of companies and their internal dynamics in terms of teamworking, e-collaboration, communication, change management

and situations that involve soft skills in general. Both methodologies and tools used by companies to support newly graduated employees offer an interesting point of view from which to start the research activity.

The project supports the co-design between European companies and universities of new teaching/learning practices integrated in to academic curricula, aimed at fostering students' development of transversal skills, while addressing the critical issues faced by many higher education institutions in terms of class size and physical spaces. Indeed, at macro level, the project addresses the need for new, realistic means of interaction and communication between higher education and the corporate sector. Teaching and training methodologies have the potential to become a point of union through which to create a continuum, as behind the choices of companies in training investment, and in applying innovative approaches, there is the awareness of the expected result and of the perceived need. Bringing together these different experiences will open a window in the sometimes-difficult communication between the two sectors.

The variations across member states with respect to University-Corporate collaboration in curriculum innovation mean that a transnational approach is vital for addressing this issue, enabling the partnership to draw on a wide base of experience and to address the inherent cultural differences, for example in terms of attitudes towards and maturity of cross-sectoral collaboration. By bringing together and analysing examples from the different participant member states, the project enables each partner to learn from experiences outside their national context and thus to be in a stronger position to bring about change through the pilot projects they implement, and to feed the results back in to the project in order to develop a truly transnational perspective on cross-sectoral collaboration for the integration of soft skills in the curriculum.

### **Active learning: what do we mean?**

This working definition of active learning is adapted from Bonwell and Eison (1991), Prince (2004), Raynal and Rieunier (2010), University of Minnesota – Center for Educational Innovation.

According to Prince (2004),

*“It is not possible to provide universally accepted definitions for all of the vocabulary of active learning since different authors in the field have interpreted some terms differently. However, it is possible to provide some generally accepted definitions and to highlight distinctions in how common terms are used. Active learning is generally defined as any instructional method that engages students in the learning process. In short, active learning requires students to do meaningful learning activities and think about what they are doing...[in] the classroom.” (Prince, 2004; p.223).*

Active learning refers to a broad range of teaching strategies which engage students or trainees as active participants in their learning. Typically, these strategies involve learners working together during class, but may also involve individual work and/or reflection, as well as group work outside the classroom. The focus is on how to learn rather than what to learn, placing the learner at the heart of the process. Active learning can be on a spectrum of learner and teacher control of the learning process and learning environment.

The main characteristic of active learning is that students are engaged in activities which involve more than just listening and note-taking (e.g. reading, discussing, writing).

One or more of the following should be present to fully exploit the potential of active learning:

- Less emphasis is placed on transmitting information and more on developing students' skills.
- Students are engaged in the (co)creation of new knowledge based on their previous knowledge and socio-cultural context.
- Students are involved in higher-order thinking (analysis, synthesis, evaluation, critical thinking, problem-solving, metacognition and reflexivity).
- Greater emphasis is placed on students' exploration of their own attitudes and values.

Teaching approaches to support active learning range from short, simple activities like journal writing, problem solving and paired discussions, to more complex activities such as case studies, debating, role playing, team-based problem solving, collaborative game-based learning and project-based learning.

## **Initial results: foresight analysis on active learning for soft skills development**

### ***Foresight analysis on innovative higher education learning models for soft skills***

Transnational research has been conducted to analyse the state-of-the-art of innovative methodologies and activities which foster the acquisition of soft skills in Higher Education. The main purpose of this research is to provide universities, HE institutions and companies with examples, scenarios and good practices for the improvement of soft skills that are used in HE. Desk research and semi-structured interviews with HE teachers in 5 European countries are combined with the same approach at cross-national level to provide valuable insights in the ways that soft skills are embedded into the curriculum or developed as specific transversal modules.

The data is collected in such a way as to facilitate the creation of a Dynamic Toolkit in the form of practical advice to support the transferability of innovative practices. Questions such as the number of students, the physical environment required for successful active learning and the various assessment methods are covered, as well as issues of institutional support, cost and recognition.

Initial insights from these interviews show a keen understanding of the principles of active learning in accordance with the proposed working definition. In terms of the benefits observed for students, these included:

*“increased faith in one’s own strengths, abilities and skills, identification of own personal and social competences, broadly understood knowledge of interpersonal communication, learning assertive behaviour and effective communication with people, knowledge of the principles of good behaviour, practical interpersonal training” (training provider in HE context, Poland).*

Unexpected benefits were also reported in the form of high participation during discussions and comparisons at class level, as well as students doing things even if they are not mandatory.

There was also a high level of awareness among teachers and trainers of the constraints relating to the physical environment and class size:

*“A transversal module doesn’t depend on any particular teaching department so there is no admin support, you’re on your own! Fortunately, organising the course during the holidays means that the gymnasium is available, as well as a classroom in the sports department equipped with chairs on castors and a whole-wall whiteboard.” (HE teacher, France).*

*“The optimal class size is 25, if more then you need to run additional parallel courses. Work in small subgroups requires fluid physical environment where furniture can be moved around easily. It could be possible with up to 80 participants in a large empty room. But a problem with large groups is the loss of spontaneity with respect to oral participation.” (training provider in HE context, France).*

*“High workload for students and difficulties in completing the official programme as lot of time was dedicated to active learning.” (training provider in HE context, Italy).*

The question of how, or even whether, to assess soft skills was also raised. Techniques used are often a combination of observation, self-assessment and peer-assessment. In one case, the assessment involved evaluation of project work (group assessment), combined with a written exam (individual grade) and successful participation in a MOOC. In another example, teachers shared the evaluation rubric with students at the beginning of the course and discussed subsequent revisions. A third example consisted of a self-assessment questionnaire (at least once in each phase) to evaluate teamwork and collaborative processes as well as the learners’ own contribution. This activity was seen as very useful for students and teachers to reflect on the ongoing collaborative activity and intervene if needed. Finally, several participants questioned whether it is actually possible or desirable to assess soft skills and called for more insights from research that can be applied in practice.

***Foresight analysis on innovative corporate training models for soft skills***

This analysis captures the state-of-the-art of innovative methodologies and activities, fostering the acquisition of soft skills in the corporate field. Run in parallel to the foresight analysis for higher education, the main purpose is to provide universities with examples, scenarios and good practices for the improvement of soft skills that are used in corporate training. The innovative aspect of this approach resides in breaking down the barrier between “traditional” university teaching methodologies and some of the most active corporate training approaches linked to the concepts of coaching, empowerment and personal development.

In the corporate sector, the question of large groups is less prevalent than in HE, and indeed participants expressed a preference for small groups:

*“We tend to work with smaller groups, as this makes the reluctant ones more comfortable, so – this way – we can force them to express themselves a bit. In these cases, is also useful to use digital tools (like Sli.do for instance) to allow everyone to answer questions in a short span of time. Otherwise it’ll be impossible.” (HR manager, Italy).*

In terms of expectations within the corporate sector, some differences of focus were noted, for example one participant had high expectations regarding the soft skills that a new employee could bring to the job, whereas the experience of a training provider put the emphasis on applying these soft skills to a concrete business problem.

*“When someone new arrives in the company, you do not expect him to bring a new technical know-how, neither on the way to work. Or at least I expect it after a few months. Only after 6 months he can start to bring ideas and solutions opportunities. On soft skills, on the other hand, it could bring innovation to zero time!” (HR manager, Italy).*

*“Soft skills training for the corporate sector needs to address a specific need, such as customer relations, not soft skills for the sake of soft skills, though there is growing awareness of soft skills nowadays.” (Training provider, France).*

Aligned with this is the insight from the same training provider with respect to soft skills training in HE, where “the students’ goal is to get a diploma, so they are not interested in soft skills per se, as they are more interested in the discipline itself.” Referring to the approach taken by the University of Sherbrooke in Canada, the advice is to get students to mobilise and develop soft skills through active learning related to the discipline, for example an engineering project which requires collaboration, negotiation and creativity.

## Discussion: cross-fertilisation between the HE and corporate sectors

Examples of successful cross-fertilisation are rare and it is not uncommon to meet with resistance within HE regarding the “interference” of the corporate sector in defining the curriculum, for fear of HE becoming instrumentalised as a “provider of work-ready graduates”. However, the focus here is more on the methodologies used in corporate training than the actual content of the curriculum, and few would argue that soft skills do not contribute to the development of socially competent citizens, open to the world, to others and to the challenges of the 21<sup>st</sup> century. As one participant said:

*“the main objective is to discover one’s own talents within a ‘caring’ group. Employability is secondary to this. But the mix of ages in the group is an important factor... as it reflects the intergenerational reality of the workplace”. (HE teacher, France)*

A concrete example of such cross fertilisation identified during the foresight analysis stage is presented here as an example. One teacher took an interest in a soft skills training initiative, which started out as a project quite separate from the institution. The teacher took a *research inquiry* approach to explore the initiative and to gather enough data to be able to defend the idea to colleagues, who were very reticent at first. He participated in a *soft skills* course as a learner himself, observed other sessions and then made a formal proposal for the creation of a transversal module. He got three of four colleagues from different disciplines on board, who all followed the soft skills course as learners themselves. However, he still met with resistance when seeking to embed a soft skills module within a disciplinary course, suggesting that there is still some way to go before full recognition of the importance of soft skills in the curriculum. Again, the University of Sherbrooke recommendation to embed soft skills within disciplinary courses, rather than develop specific courses, might go some way to getting more HE teachers (and students) on board.

On the issue of barriers to education-business cooperation:

*“Companies are eager to be in touch with young talent, but we see they are more interested in short term gains because they want to be involved in activities mostly with last year students. But we have soft skills training also for younger students, 1<sup>st</sup> or 2<sup>nd</sup> year. This is why we highlight the concept of brand, to present themselves as an attractive company to younger students and build their brand, and have thus a medium-term talent investment approach.” (Training provider in HE context, Italy)*

Finally, the following advice was formulated for universities wanting to promote soft skills learning:

- offer teacher training to professors to promote a new approach to didactics through active learning;

- talk with students during and after activities in order to draw out difficulties and needs;
- identify the challenges to changing one's way of teaching: avoid frontal lessons, recognise that it is not possible to cover all contents, think differently about the course structure, add priorities, recognise that probably not everything is necessary;
- develop active learning approaches related to the curriculum, which mobilise soft skills but where soft skills are not the primary focus.

## Conclusion

This paper provides some initial insights into the way in which universities are using active learning for the development of soft skills, as well as the point of view of companies and training providers. The consolidated results will enable the creation of a concrete toolkit and a MOOC for all those wishing to develop soft skills training. A transnational University-Corporate Community of Practice will bring together stakeholders from both sectors to further the exchange of innovative practice for cross-fertilisation. In particular, further research on the assessment of soft skills would be welcomed.

The expected outcome for HE teachers will be a heightened awareness of needs and practices in the corporate sector as well as access to human and digital resources in order to bring about curriculum innovation. Similarly, corporate representatives will gain a better understanding of HE practices, with the opportunity to engage in dialogue. Ultimately, the impact for students will be a more relevant learning experience, offering them the chance to develop contextualised transversal skills during the course of their studies and thus be better prepared for the workforce and society in general, as competent and confident 21<sup>st</sup> century citizens.

## References

- Bonwell, C. C., & Eison, J.A. (1991). *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report No. 1. Washington, D.C.: The George Washington University, School of Education and Human Development.
- Deloitte (2017). *Soft Skills for business success*. Retrieved from <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-deakin-soft-skills-business-success-170517.pdf>
- European Commission (2010). *An agenda for new skills and new jobs*. Retrieved from <https://publications.europa.eu/en/publication-detail/-/publication/7f39a8c6-068e-434d-a7ce-a9665bf227f9>
- European Commission (2012a). *New skills and jobs in Europe: Pathways towards full employment*. Retrieved from <https://ec.europa.eu/epale/en/resource-centre/content/new-skills-and-jobs-europe-pathways-towards-full-employment>
- European Commission (2012b). *Rethinking education: Investing in skills for better socio-economic outcomes – COM(2012) 669*. Retrieved from



[https://ec.europa.eu/europeaid/rethinking-education-investing-skills-better-socio-economic-outcomes-com2012-669\\_en](https://ec.europa.eu/europeaid/rethinking-education-investing-skills-better-socio-economic-outcomes-com2012-669_en)

Manpower Group (2018). *Solving the Talent Shortage: Build, Buy, Borrow and Bridge*. 2018 *Talent Shortage Survey*. Retrieved from [https://www.manpowergroup.co.uk/wp-content/uploads/2018/07/MG\\_TalentShortage2018.pdf](https://www.manpowergroup.co.uk/wp-content/uploads/2018/07/MG_TalentShortage2018.pdf)

Mourshed, M., Patel, J., & Suder, K. (2014, January). Education to Employment: Getting Europe's Youth into Work. McKinsey Center for Government [Blog post]. Retrieved from <https://www.mckinsey.com/industries/social-sector/our-insights/converting-education-to-employment-in-europe>

Prince, M. (2004). Does Active Learning Work? A Review of the Research. *Journal of Engineering Education*, 93, 223-231.

Raynal, F., & Rieunier, A. (2010). *Pédagogie: Dictionnaire des concepts clés*. Paris: ESF.

The Council of the European Union (2018). *Council Recommendation of 22 May 2018 on key competences for lifelong learning*. Retrieved from [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604\(01\)&rid=7](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0604(01)&rid=7)

University of Minnesota – Center for Educational Innovation. Retrieved from <https://cei.umn.edu/active-learning>

World Economic Forum (2018). *Towards a Reskilling Revolution: A Future of Jobs for All*. Retrieved from [http://www3.weforum.org/docs/WEF\\_FOW\\_Reskilling\\_Revolution.pdf](http://www3.weforum.org/docs/WEF_FOW_Reskilling_Revolution.pdf)