Transnational Analysis on Innovative Higher Education Learning Models on Soft Skills

This transnational qualitative study captures the state-of-the-art of active learning methods which foster the acquisition of soft skills in the Higher Education context.

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Version 2.0 – 8th July 2019

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The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This project has been funded by Erasmus + programme of the European Union.
Project number: 2018-1-FR01-KA203-047829 (eLene4Life – ERASMUS+ programme – KA2)

To cite this work:
eLene4Life (2019). *Transnational Analysis on Innovative Higher Education Learning Models on Soft Skills*.
Retrieved from http://elene4life.eu/project-outputs/trans-analysis-he/

Table of contents

1. Introduction

1.1 Background

This Transnational Analysis on Innovative Higher Education Learning Models on Soft Skills has been carried out within the EU funded Erasmus+ international project eLene4Life, that is the sixth of a series of projects in the field of innovation in teaching methodologies carried by the same network of academics and professionals who have been collaborating on European projects since 2003.

The current project of the group is eLene4Life - Learning and Interacting to Foster Employability, supports curriculum innovation in Higher Education (HE) through the development of active learning approaches for soft skills, with the ultimate aim of improving students' employability.
To find out more about the project: http://elene4life.eu/ and about the eLene group in general http://www.elene-center.net/

An open discussion group is available on Facebook here:
https://www.facebook.com/groups/eLenenetwork/

This first report takes the form of a transnational qualitative study that analyses the state-of-the-art of innovative methodologies and activities which foster the acquisition of soft skills in HE institutions and actors. The results highlight the consolidated practices, future developments of the activities already performed in different contexts, demands and challenges, risks, and opportunities.

1.2 Objectives

This output's main purpose is to map examples of active learning approaches in soft skills teaching that will help higher education actors to develop an innovative curriculum that improves students' employability.

The objectives of this output can be summarised as follows:

- Run a strategic transnational analysis on **innovative didactical methodologies and activities** in **soft skills training** in higher education contexts;
- Define the **context and the set of resources available** in different countries for innovation in soft skills training;
- Identify the **criteria to select the good innovative practices** to be included in the "Innovative teaching and training activities dynamic toolkit";
- Improve the **transferability** of innovative practices both in higher education and companies sectors via the project dissemination efforts;
- Set up the basis for the development of the scenarios of the **Lessons Learned Kit**.

The beneficiaries of this report are:

1. Higher Education teachers and, by extension, their students, but also institutional decision-makers are targeted, as they will be able to integrate and improve some practices across higher education actors;

2. companies (HR managers and trainers) that will have the opportunity to enrich their training activities with highHr Education practices. By extension, their employees will benefit as well from new training activities planned and realized, taking into account the results of this research.

1.3. Methodology

Period: the analysis has been carried through a set of desk analysis and qualitative interviews between December 2018 and the end of March 2019.

Numbers and geographic coverage: the project partnerships gathered 35 initiatives that involved soft skills training as part of the desk analysis, and conducted 43 qualitative interviews with Higher Education teachers and student affairs professionals from university halls of residence. The countries covered are: Belgium, France, Germany, Hungary, Italy, Netherlands, Spain, Poland, Portugal, United Kingdom, and the United States of America.

Mapping **phases** of the output:
Phase 1: desk analysis; from an evaluation of the data collected in phase 1, each partner decided which institution could be involved in the qualitative interviews;
Phase 2: each partner did at least 6 interviews, either in person or via (video)calls.

The **mapping**, both in its quantitative and qualitative phase, focused on:

- institutional and educational contexts and practices that support the development of soft skills curricula (better explored via qualitative interviews)
- methodologies, tools and resources used to develop students' soft skills, with a focus on the employability

In terms of **target** interviewees, the partnership focused on two categories:

- teachers from Higher Education Institutions;
- students affairs professionals from University Halls of Residence.

Process description:

- A terminology was agreed upon between the partnership and compiled in a glossary
- Each partner institution collected information on soft skills training activities in their target countries, while EucA covered both Belgium and a transnational sample;
- In order to collect the data in a homogenous way, 2 templates were designed:
    1. A template for collecting soft skills initiatives for the quantitative phase
    2. A template for collecting the interview replies for qualitative phase

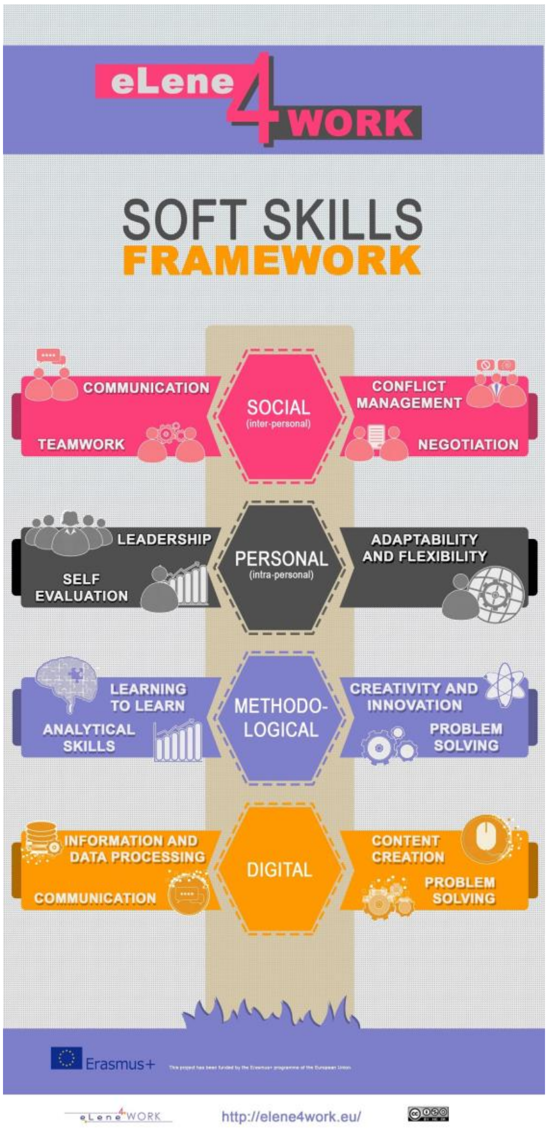
At the end of this document, Annexes 1 and 2 provide the desk analysis template for collecting soft skills initiatives and the sample questionnaire for mapping soft skills initiatives in higher education contexts.

2. Terminology

2.1 Soft skills definition

The definition of what “soft skills”, “transversal skills” or “essential skills” actually are has been heavily debated, not only within this specific project, but also in the research field in general. In the previous eLene project, eLene4work, the ModEs Project’s Taxonomy (2012) was chosen as reference:

“Soft skills represent a dynamic combination of cognitive and meta-cognitive skills, interpersonal, intellectual and practical skills. Soft skills help people to adapt and behave positively so that they can deal effectively with the challenges of their professional and everyday life.” (p.67 of the MoDEs project report)[1]



2.2. Active learning definition

Within eLene4Life, the concept of “active learning”, also central in the project, was debated among the partnership, with team members gathering and sharing definitions from the literature.

We therefore decided to propose a univocal “eLene4Life definition”:

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).*

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.

[1] For more info about the ModEs project: https://www.euca.eu/modes

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.

3. Summary of main findings

The strongest **motivators** to do soft skills training and use of active learning methods are: student learning and development, graduate employability, student engagement in classrooms.

Time is considered the biggest obstacle, as it can discourage teachers from using them for soft skills learning in various ways: in planning the training and the use of active learning methods, but also in classroom for the interactions (teacher - student, between students, or for personalised feedback). Whatever tools teachers can easily understand and transfer to their courses, are considered beneficial.

Soft skills training, assessment and use of active learning methods in classrooms need better teachers' training, hence the importance of professional development in this field. Teachers self-report a gap to engage in this training and methods using the same scientific standards for hard skills assessment.

In terms of soft skills assessment, a lot of diverse opinions emerged on the rationale, if it can or should be done since there is a perceived lack of objectivity, and what are the best practices to do so. An interesting consequence is that if we want to advance in soft skills training in a higher education context, more advancements are needed to improve a more objective assessment of the learning outcomes of such training.

4. Factors influencing soft skills integration into higher education curricula

All interviewees acknowledged that integrating soft skills using active learning methodologies into the curricula is mostly a personal initiative of teachers, also given the challenges of their implementation. Below is a list of the most common reasons that motivate teachers to invest time, energy and resources, as revealed in the interviews of the project.

Student learning and development

> *"The personal belief that soft skills can be a powerful mechanism to motivate learning, building learners' self-efficacy, providing soft skills aside from the ones that are promoted through the syllabus."*
> prof. Gabriella Agrusti, LUMSA University, Italy

Faculty observed students' difficulties in staying motivated or handling group work, specifically when collaborating with peers or communicating effectively in a group or in public.
Teachers reported that students themselves see the same challenges and demand to include soft skills into the curricula. This was collected from the feedback forms completed at the end of courses, a rapidly expanding practice across the higher education sector .

Graduate employability

> *"I noticed that students lack self-presentation skills and understanding of the text. The work of an interpreter is to a large extent working with people, I think that these competencies are very important."*
> prof. Tomasz Chudak, Maria Curie Sklodowska University, Poland

> *"Experienced professionals take communication or soft skills classes because they understand its importance in their daily work; why shouldn't we offer this training sooner, while they are enrolled in the university as students?"*
> prof. Claudio Pensieri, LUMSA University, Italy

Based on students' performance and the research on the changing nature of work, teachers already notice in class some of the difficulties students will face in their future jobs. Thus they wish to prepare them for professional life and improve students' employability. Moreover, when creating their course learning outcomes or when they decide what soft skills to include, many teachers reported taking into consideration graduates' employability rates or their own professional experience working outside academia.

Renewal of teaching methods

There is also a self-reported desire for renewal of teaching methods from faculty and trainers, that can allow a stronger teacher-student interaction or get more engagement and motivation from students during classroom time. This trend seems to be on the rise, especially with the increased use of flipped classrooms where basic content delivery happens online and classroom time is for more advanced coursework and discussions.

When soft skills are not the primary learning outcome of the course, teachers reported that the use of active learning methodologies generates curiosity or more engagement with the academic content: students ask more questions, are more involved with the coursework, and there is an increased level of trust between students and faculty.

Teachers report also an aspiration for academia to address societal needs in their courses, for example, showing students how to apply classroom knowledge to real-life contexts, improving graduate employability rates, or to developing sustainability-related knowledge.

Institutional commitment

Interviewees from business schools or university colleges mentioned that since some institutions have in their DNA the mission to educate holistically students, they are expected to have soft skills as an important part of their curricula. This can be seen in institutional mission statements, in the learning outcomes throughout the course descriptions, in their partnerships with actors from the world of work, or in the support available to staff to improve their teaching skills via centers for teaching and learning (although their names can vary from institution to institution).

The institutional commitment to soft skills training was reported to come also from an awareness of the needs of the student body the institution serves, from an accreditation system an institution wishes to submit to, or from national and international policies and trends.

5. Advice on teaching soft skills using active learning methods

Share expectations and allocate time

> *"[There is a] limited awareness among students about the importance of soft skills, resulting in a not-so-conscientious approach to the tasks performed, which in turn results in difficulties in a reliable assessment of such work."*
> prof. Karolina Podgórska, Maria Curie Sklodowska University, Poland

It is important to dedicate time to explain effectively to students the active learning activities the course foresees, teachers' expectations, course learning outcomes, and the evaluation criteria students will be faced with. For example, at the beginning of some courses, teachers shared the rubrics they would use for students' evaluations.
One piece of advice was not to over-use the concept or the theory behind soft skills learning, but to give specific examples of their real-life use or the situations when they are needed.

Time is also something to take into consideration: in each activity, many teachers saw it key to allow the necessary time both for the actual exchange, but also for reflection.

Institutional buy-in

In terms of staff and institutional support, the advice was clear: if teachers launch soft skills training as their personal initiative, it is important to build commitment from institutional peers or leadership.
It is important to share with colleagues the advantages of soft skills training, students' performance and learning outcomes. If the teacher who promotes the training keeps in mind their personal values or motivation, this ensures their commitment to invest the necessary time and energies and persevere in the face of difficulties.

Interviewees reported that institutional support is necessary not only in terms of logistics, but also in terms of teacher training and staff development opportunities via research conferences, collaborations or hands-on seminars on state-of-the-art learning techniques.

External collaborations

> *"Sometimes companies are focused on short term gains, so they are eager to be involved in activities with students who are about to graduate; we try to highlight the concept of a brand, to present themselves as an attractive company to younger students, having thus a medium-term talent investment approach."*
> Simona Miano, Fondazione Rui, Italy

In order to show the real-world application of classroom knowledge, to facilitate the contact with the world of work or to bring in experts on soft skills training, the most common and successful collaborations teachers reported to have in place with external contributors are:

- entrepreneurs or experts who share their career path or success/failure stories
- exchanges with hands-on practitioners or company representatives to whom students can pitch their ideas and projects
- professionals who lead business or legal case studies completed as part of the coursework
- HR experts, trainers or certified coaches who lead workshops on certain soft skills or organise simulations, the most common mentioned being CV checks, interview or team building simulations
- partnerships for internships or traineeships, but also company study visits, presentations or career fairs.

5.1 Which Soft Skills To Choose?

The first step reported by interviewees in narrowing down which soft skills to include into their curriculum was to focus on those skills which are closely linked to the subject taught. The suggestions highlighted that learning outcomes can be defined by institutional or personal established practices, but also by functions, tasks or competencies required by real jobs in the target field.

Most teachers reported having used external input in terms of defining learning outcomes, format or content for their course. When building a curriculum, the most common collaborations take the form of advice from external experts or trainers from human resources staff from private sector or feedback from hands-on practitioners on business needs.

The most often quoted research used in choosing soft skills for university curricula, comes from the Organisation of Economic Cooperation and Development (OECD), the European Union (EU), the World Economic Forum (WEF), and the United Nations Sustainable Development Goals (UN SDGs).

Soft skills most taught in higher education

The following table lists the soft skills in order of the frequency with which they were mentioned by interviewees, from the most quoted, to the less common ones. We excluded from this list 2 terms that were quoted because they don't fit the soft skills category : accountability and productivity skills.
The definitions provided are mainly from the ModEs Project's taxonomy (2012) and the American Association of University and Colleges (AAC&U) VALUE Rubrics.

Communication skills	The ability to transmit ideas, information and opinions clearly and convincingly both verbally and in writing, while listening and being receptive to the proposals of others (ModEs Project, 2009).
Teamwork	The ability to build relationships of participation and cooperation with other people. It involves sharing resources and knowledge, harmonising interests and contributing actively to reach the objectives of the organisation (ModEs Project, 2009).
Critical thinking	Habit of mind characterized by the comprehensive exploration of issues, ideas, artefacts, and events before accepting or formulating an opinion or conclusion (AAC&U, 2009).
Analytical thinking	The ability to draw conclusions and forecasts for the future by getting information from different sources and establishing cause and effect relationships (ModEs Project, 2009).
Self-awareness	The ability to look at one's progress, development and learning to determine one's strengths and which areas need improvement. (Business Dictionary)
Emotional intelligence	The capacity to reason about emotions, and of emotions to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer, Salovey & Caruso, 2004, p. 197).
Leadership	The ability to motivate and guide others to get them to contribute effectively and adequately to the attainment of the objectives (ModEs Project, 2009).

Negotiation skills	The ability to argue clearly and coherently and conciliate different opinions to reach an agreement that satisfies everyone with the aim of achieving the proposed goals (ModEs Project, 2009).
Quantitative literacy	It is a "habit of mind," competency, and comfort in working with numerical data. Individuals with strong quantitative literacy skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc. as appropriate) (AAC&U, 2009).
Lifelong learning skills	Lifelong Learning encompasses "all learning activity undertaken throughout life, with the aim of improving knowledge, skills/competences and/or qualifications for personal, social and/or professional reasons. (Cedefop, 2008)
Creative thinking	Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking (AAC&U, 2009).
Problem solving	Problem solving is the process of designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal. (AAC&U, 2009)
Resilience	Resilience refers to a dynamic process encompassing positive adaptation within the context of significant adversity (Luthar, Cicheti and Becker, 2000).

5.2 What challenges to overcome?

Among the most frequently quoted barriers to start teaching soft skills using active learning methodologies we found: limited time, teacher and student workload, or number of training courses available.

Time

One of the most common obstacles is teachers' heavy workload: for lack of time or because of their professional routine, established practices or preferences, it is very difficult to have a widespread use of soft skills training or active learning methodologies included in university curricula.

All interviewees reported that introducing active methods is very demanding, as teachers need to allow more time to design, implement and adapt to a different approach. Interviewees admitted that the initial investment of time and energy in integrating active learning methodologies for soft skills training is very high, even though at the end teachers and students are more satisfied with the results.

Students’ own busy workload was quoted as sometimes problematic, especially in the science, technology, engineering and mathematics (STEM) university courses. Dedicating time to group work, presentations or other active learning methods is seen as taking students away from other projects or knowledge they need to learn. Related to this is an interesting and frequent, yet not verified, argument from teachers who do not include soft skills specifically among their course learning outcomes: given the workload of some academic courses, teachers consider that students develop almost by default resilience, critical thinking and time management skills if they pass the course.

But when there is a willingness from teachers and students to engage in active learning methodologies, the number of training hours is considered insufficient: teachers report that there is not enough time in the course for in-depth soft skills training, or even to explain their importance to students.

Thus, the first underlying problem seems to be time. Teachers consider that teaching soft skills using active learning methods and their assessment take a lot of time, either their own, the students’ or classroom time. They fear there is less time for completing the official hard skills programme, and if they do engage in soft skills training, they have the impression they are only scratching the surface. In the end it seems easier not to teach them at all and focus on going in depth with the hard skills learning outcomes.

Teacher support and professional development

For those who did start teaching soft skills and using active learning methodologies, the problems encountered emerge from staff, compartmentalisation or logistics.

Sometimes successful pilots depend on individual teachers and their personal initiative; there is a risk of losing continuity if the pilot is linked to a specific person and is not integrated into the curricula or among established institutional practices.

Teachers report that they face a lack of organisational or logistical support, especially when the course is not linked to a specific department in the university.
Access to proper equipment is important: a working projector and Wifi access being the most quoted basic needs for active learning methodologies. Easily overlooked, but crucial, is the classroom layout which should allow group work by moving chairs or tables around the room.

When soft skills and the use of active learning methods are the initiative of a teacher or are used sporadically in some courses, without a consistent perspective or intertwined in the university pathway, interviewees report they struggle with a type of “home-made” approach, both in the delivery of soft skills training and especially in their assessment.

> *“The lack of a holistic approach is the weakness of most courses and studies. It does not allow integration of knowledge and skills between courses, nor does it allow them to be applied in practice.”*
> - prof. Radosław Zając, Jagiellonian University, Poland

Class size

Regarding the use of these methods in large classrooms where teacher-student personal interaction is more difficult, learning is reported to be more limited than in small size groups. Many interviewees agreed that one can easily present to a group of 80 students basic content, raise awareness on soft skills in general or on one skill in particular, or give basic tips, do's and don'ts. But since many interviews reported that soft skills learning comes from practice, from the interaction of trainers with students and from the personalised feedback on students' work and performance, there were few examples of active learning methodologies for big size classrooms. Most teachers chose to divide students into smaller groups of 12-20 people where the quality of interaction is bigger.

5.3 What are the most frequently used active learning methods?

Below you can find a list of the active learning techniques interviewees quoted using most. The methods are listed in order of their frequency, from the most used, to the less common ones.

Active learning methodologies
Collaborative learning
Work in teams / pair
Think - pair - share
Group discussion
Socratic questioning
Presenting in class
Project based learning
Learning videos/blog posts made by students
Brainstorming
Mind maps
Delphi method
Debates
Theatre techniques: improvisation, drama skills
Scrum methodology
Experiential learning: simulations, role-playing, internships, hackathons, field trips

Classroom response system (a.k.a. personal response system, student response system, or audience response system)
Problem based learning: problem posing and solving, case studies

5.4 Most frequently used digital tools

When asked about which digital tools they use to facilitate planning and foster classroom interaction, interviewees provided a wide range of software used. The most common tool is represented by different kinds of classroom response systems, while file storage, workflow planning, assessment tools and learning platforms come in second place.

Audience response systems:

- **Kahoot!** https://kahoot.com
  It is a game-based platform used mainly for multiple-choice quizzes. The teacher creates the quiz and provides a code for students to log in with. They answer the quiz questions on their own devices. Its basic services are free, while a price plan is in place for teacher collaborative, tracking class performance etc.
- **Klaxoon** https://klaxoon.com/
  This is a shared virtual space aimed to increase collaboration in group meetings with quizzes, polling, challenges, brainstorming and word clouds. Participants use their own devices to contribute, and content is shared live, allowing everybody to react and see the group's opinion in real time.
- **Mentimeter** https://www.mentimeter.com
  Tool for interactive presentations that allows to add questions, polls, quizzes, slides, images, or gifs. During the presentation, the audience uses their smartphones to connect to the presentation where they can answer questions, give feedback and much more. The presenter is able to visualize their responses in real-time.
- **Pingo** https://trypingo.com
  This is a free classroom-response system that works as a fully featured poll-application. Presenters can ask multiple or single-choice questions, tag cloud or numeric questions. The audience answers from their devices and answers are shown in real time.
- **Socrative** https://socrative.com
  This is a student response system where students use their own devices to engage in assessment activities created by their teachers. The assessments can be formative or summative via multiple choice, true/false, and short answer. The free version only allows up to 50 participants in a virtual room at any given time.
- **Wooclap** https://www.wooclap.com
  This is a tool to make presentations more interactive: in realtime and from their devices, the audience can answer multiple/open questions or polls, rate statements on a scale, locate a correct area on an image, provide input for a word cloud, guess a number, prioritise between different propositions, sort or match elements, fill in the blanks or brainstorm.

Workflow planning software:

- **Asana** https://asana.com
  This is a collaborative software structured as a work-management platform that allows teams to work together on projects.
- **Google Drive**
  Google Drive is a file storage and synchronization service developed by Google, and it allows users to store, synchronize, share files across devices. It is an office suite that allows collaborative editing of documents, spreadsheets, presentations, drawings, forms, etc.
- **Trello** https://trello.com/en
  It is a web-based application that allows to organise workflow or create lists collaboratively.

Assessment tools:

- **ePortfolio** https://teaching.unsw.edu.au/assessing-eportfolios
  This is "a digitised collection of artefacts including demonstrations, resources, and accomplishments that represent an individual, group, or institution" (Lorenzo & Ittelson, 2005).
- **Open Badges** https://openbadges.org
  These tools show skills and achievements of learners by providing visual symbols of accomplishments packed with verifiable data and evidence that can be shared across the web. They were originally developed by the Mozilla Foundation.

- **Moodle** https://moodle.org
  This is a learning platform designed to provide educators, administrators and learners with an integrated system to create personalised learning environments. It is a free and open-source learning management system (LMS) and it is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors.
- **Sketch Engine** https://www.sketchengine.eu
  This tools' algorithms analyze authentic texts of billions of words to identify instantly what is typical in language and what is rare, unusual or emerging usage. It is also designed for text analysis, translation or text mining applications.

6. Soft skills assessment

> *"The challenge is to cope with the requirements of the formal learning institution and to add also a more focused assessment strategy of soft skills."*
> - prof. Gabriella Agrusti, LUMSA University - Italy

Almost all teachers who were interviewed admit to have limited knowledge or training on how to assess soft skills learning. The most common challenges found were how to determine the impact of the activity (how to measure the before and after mastery of the skill), how to assess the progression of the skill for each student, how to provide personalised feedback, or even how to analyse the learning data collected. Some teachers doubt they should even try any measurement for fear of lacking objectivity.

When taught transversally, soft skills are not part of the formal list of course learning outcomes, thus they are not assessed, although sometimes teachers report that they take into consideration the quality of teamwork or the ability to give a good presentation.

Another interesting input came from University Colleges, non-formal living and learning communities with dedicated student affairs professionals in charge of soft skills training. The answers illustrated how until recently the focus was to introduce soft skills training into university curricula, that is, start organising the training even though the assessment of the learning outcomes was superficial or incomplete, for the reasons quoted above. It was important to start piloting this type of training, even though teachers realised the importance of measuring impact. Now that there is widespread consensus of the need of these skills for graduates and the responsibility of higher education action to address the issue, the focus is shifting towards improving the quality of this training via assessment techniques, to make informed decisions on what works and what doesn't. This is done via increased professional development for the student affairs staff in order to create new habits: building assessment from the planning of the activity, more specifically building rubrics or integrating new technologies. In a nutshell, after creating a soft skills culture, these Colleges are now trying to build a culture of assessment of soft skills.

A common practice teachers use is to help students reflect on their learning and development via feedback collection or self assessment. This was reported to be very important for students' self-awareness and confidence, as they can present themselves better in the job market or they can determine their needs for future learning.

Most used assessment and evaluation techniques

Many respondents stated that when they used assessment practices systematically, they relied on a combination of self, peer and teacher assessment.

However, many teachers report they regularly engage students in formative assessment (also known as classroom assessment techniques): either via classroom response tools or by seeking direct feedback from students.
In general, this type of assessment is informal and low stakes since is done in the classroom, without the pressure of the summative assessment; it aims to give a snapshot of student learning and understanding and then help teachers adjust content or delivery for the next class.
Some examples provided are: one-minute paper/essay, one-sentence summary, 3-2-1 response (3 things learned, 2 examples of how to apply them in a specific context, 1 doubt/ unclear point),

The most mentioned assessment tools were:

- Rubrics for evaluation of individual or group performance or work
- Portfolios
- Reflective essays

- Online quizzes
- Self assessment
- Peer assessment
- Project post-mortem (a common industry practice involving reflection and assessment of what went well and what did not go well during a project)

Although with a limited use, other exercises were reported which are worth mentioning: writing a book review from a list provided, writing blog posts, high quality real time video comments, video monitoring in the context of online courses.
Another interesting tool is the personal development plan students complete at the beginning of a course. Students can select a rating regarding a skill (not yet possessed, introductory, intermediate, and advanced levels) and type in their rationale behind the rating. Students submit two milestone entries per academic year; however, the form remains "live" throughout the year for students to edit, as during the course, students' understanding of their capabilities and of themselves evolve. Thus they can add or refine their responses as necessary.

Rubrics

A rubric is an assessment tool that takes the form of a matrix or a grid, and is used to evaluate students' work and performance against criteria and standards previously established. This allows teachers to grade assignments with consistency.
Interviewees who used rubrics mentioned that sharing them in advance is a good practice, since it shared expectations and increased clarity for students.

Portfolio

Students provide proof of learning related to real-life situations via a collection of documents or self reflection on experience in and outside the classroom.

Feedback

In most interviews, feedback was a very important part, if not of the assessment process, but for certain of the teacher-student interaction. Informally, many teachers report actively seek out students' feedback on their experience with content or active learning methodologies.

Some teachers described two moments for collecting feedback: "hot", immediately after the activity, or "cold" after some time has passed in order to allow students to reflect on their learning.

In some cases, where the performance assessment feedback is a critical aspect of the course, especially in leadership development courses, students may take time to become fully accustomed to it. When students are routinely assessed, they must submit a self-reflection after each time they receive an assessment. Teachers ensure students discuss this feedback process with their advisor, or the instructors.
Part of improving teaching methods and building an assessment culture, teachers did report a periodical review of feedback and assessment data that drives adjustments to the format, content or training.

7. Examples of formats of soft skills training using active learning methods for both small and large groups

We have extrapolated from the interviews some formats of courses that are either entirely dedicated to soft skills trainings or where they are transversally taught. They can applied both in small or big classrooms.

Example 1: Soft skills training (main topic is a soft skill):

- initial classroom session (presentation + assessment questionnaire)
- 2 workshops in small groups led by coaches
- one final lecture theatre session (presentation + assessment questionnaire)

Example 2: Flipped (main topics are hard skills - soft skills are transversal):

- Before lessons: individual study of videos, slides or readings provided by the teachers + work on exercises provided (count for the final grade) + student reflection on difficult questions
- During lessons: question time on the material provided, exercises, discussions on difficult questions, collaborative work on assigned projects
- After lessons: students continue their exercise and share them online with peers and teachers

Example 3: Flipped (main topics are hard skills - soft skills are transversal):

- Phase1 (1 month): individual study supported by a MOOC + 8h/week of in-person discussions on what students learned + project development + project revision (also via peer assessment)
- Phase2 (3 months): laboratories + project revision (teacher & self evaluation via questionnaire) + 4h of theory

Example 4: Flipped (main topics are hard skills - soft skills are transversal):

- Week 1 and 2 - independent study: students study on their own videos and other material prepared by the teacher; at the end of week 2 online quizzes verify students' comprehension
- Week 3 - 1 frontal lesson of 5 hours: 3 hours to discuss what learned at home and ask questions + 2 hours of exercises
- Week 4 assessment and group work to solve 2 challenges: a 40 minutes written test in class, a challenge is assigned to resolve during the week (student work collaborative to find a solution and materials to support it); at the end of the week teams will have to solve a final challenge that is a variation of the one developed at home.

8. Promising practices

Below you can find a list of what we consider promising practices on soft skills training in Higher Education contexts, both formal and non-formal. Throughout the project we will continue to update the list with concrete examples on the elene website and social media, as they can inspire practitioners in implementing or improving their work on soft skills training and active learning methodologies.

1. **Virtual Academy of Sustainability, Germany:** http://en.va-bne.de
2. **University of Burgundy - TalentCampus, France:** http://www.talent-campus.fr
3. **University of Rennes 1 - SoftSkills Camp, France:** https://suptice.univ-rennes1.fr/dispositif-softskills-camp
4. **JUMP - Job University Matching Project, Italy:** http://jump.rui.it
5. **Colegio Mayor Francisco de Vitoria, Spain:** https://www.ufv.es/la-universidad/colegio-mayor/
6. **Job Campus Contamination Lab, Collegio Mazza, Padova, Italy:** https://www.jobcampus.it
7. **Bernard M. Gordon - Engineering Leadership Program - Massachusetts Institute of Technology, USA**: https://gelp.mit.edu/student

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Annex 1. Template for collecting soft skills initiatives for the desk analysis

eLene4Life desk analysis	Description
Number of students	
Number training hours	
Soft skills developed	
Discipline	
Number of instructors	
Pedagogical approach	
Soft skills assessment	
Tools used	
Resources used	
Comments	

Annex 2. Template for mapping soft skills initiatives in Higher Education contexts

Area	Question	Interview replies
General info	For how long has the initiative been running?	
	Why? What factors influenced your decision to start soft skills training? For eg. institutional needs/philosophy, external socio-economic factors etc	
	Who asked to start soft skills training (students, companies, leadership..)?	
	Who created and implemented the initiative?	
	Who is the target group?	
Initiative info	Please briefly describe it.	
	How many students attend it?	
	Which are the soft skills the initiative tackled (if not clear from the description)?	
	What language(s) is/are used?	
	How did you define the curriculum learning objectives?	
	How did graduate employability issues influence you when building the initiative?	
	What pedagogies do you use?	
	What active learning methodologies do you use/find useful?	
	Do you use any digital tools or resources?	
	If so how?	
	What general constraints did you had to deal with (e.g. related to class size, physical spaces, number of training hours)?	
Assessment	Why do you think is important to assess soft skills learning?	
	How do you assess the achievement of the learning	

	outcomes?	
	How do you collect students' feedback on the initiative?	
	Is the assessment or feedback data used for planning future activities/improvements? If yes, how?	
	Do you use any digital tools for assessment/evaluation?	
	Do you provide any evidence for the soft skills learning (certificates, badges)?	
	What kind of challenges do you encounter in assessing soft skills development?	
Staff	What is the ratio trainer-student in the activity?	
	Are trainers institutional staff or outside experts?	
	Did staff need additional training for the active learning methodologies used?	
University - business cooperation	Were companies involved in defining the learning objectives or other parts of the initiative?	
	Did you have speakers from the private/corporate sectors?	
	Did you have any other collaboration with the private sector?	
	Were there any barriers to this collaboration?	
Transferability	What advice would you give to universities which want to promote soft skills learning?	
	How transferable do you think your curriculum is (can other HE actors implement it)?	
	Would it be easy/relatively cheap for other HE actors to implement it?	
Closing questions	Would you like to receive the results of the project?	
	Are there any other comments you would like to make?	
	Whom would you suggest to talk to in order to get better insight into this topic?	

Related products

Other useful documents have been developed within this project:

Infographic on "Innovative higher education learning models on Soft Skills"

https://create.piktochart.com/output/39175058-elene4life-infopraphic-o1

Transnational Analysis on Innovative Higher Education Learning Models on Soft Skills

http://elene4life.eu/project-outputs/trans-analysis-corporate/

Website

For further and updated information about this project please see:

http://elene4life.eu/

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The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This project No. 2018-1-FR01-KA203-047829 has been funded by Erasmus + programme of the European Union.

eLene4Life - Learning and Interacting to Foster Employability

eLene4Life is an Erasmus+ KA2 project (2018-2021) supporting curriculum innovation in higher education through the development of active learning approaches for soft skills, with the ultimate aim of improving students' employability.

www.elene4life.eu

Universities can demonstrate that, in spite of the big number of students in classes, the limited budget and human resources and the time constraints, they can improve their learning - with the help of digital technologies, OERs and methodologies - in order to support, in any field, the development of individuals.

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