D3.4 FRAMEWORK FOR INNOVATIVE PEDAGOGICAL APPROACHES AND GOOD PRACTICES REPORT (2ND REPORT)

Version 2.0

(12/10/2022)

(Häme University of Applied Sciences)

Table of Contents

Table of Figures

Table of Tables

1. Introduction – Pedagogical framework – Task of the Future and Advanced Skills Academies (FASA) within the RUN-EU project

This report concerns the pedagogical framework which will be designed during the years 2021-2023 in WP3 under the RUN-EU project. The framework will give common background for innovative pedagogical approaches and good practices implemented in all education, such as Short Advanced Programmes (SAPs) and degree programmes in RUN EU. The pedagogical framework, namely, the common quality framework will be created to promote new and open flexible programmes using the current and new pedagogical approaches including blended learning, design thinking, phenomenon-, and challenge-based curricula, among others.

This is the second of the three digital report versions containing a common framework for pedagogical design and delivery of innovative educational offers, complemented with good practices of pedagogical approaches to curricula design and delivery as well as recommendations to improve current pedagogical practices. The first version concerned teachers' perceptions, while this report focuses on students' perceptions. The report will be updated again during 2023.

1.1 Purpose of the pedagogical framework

The pedagogical framework enables the identification, promotion and development of new future and advanced skills programmes, providing students with immersive learning experiences containing the most up to date knowledge and skills in cutting edge areas. The FASA will inform WP6 and WP7 of the new skills programmes to be developed and also inform the pedagogical design process of the new Short-Advanced Programmes (WP6) and European double and joint degrees (WP7) as well as assess the relevance and quality of the innovative educational offers produced under RUN-EU.

The pedagogical framework forms the basis for the targets of WP3. These are: the creation of one central FASA and eight institutional FASAs; identifying and good practices and desk-research; surveying 320 teachers and 960 students; organization of five editions of the Continuous Development Advanced Programme involving 72 teachers; implementing two editions of the Design Factory Bootcamp involving 48 teachers; organizing two editions of the Design Factory Workshops involving 160 students. The outcomes are: RUN-EU skills bulletins (published regularly); a framework for innovative pedagogical approaches and good practices report; a catalogue of short courses for teachers' continuous development; Design Factory Bootcamp for teachers; Design Factory Workshops for students. The operating principles of the FASA are provided in Figure 1.

Figure 1 - The operating principles of the FASA
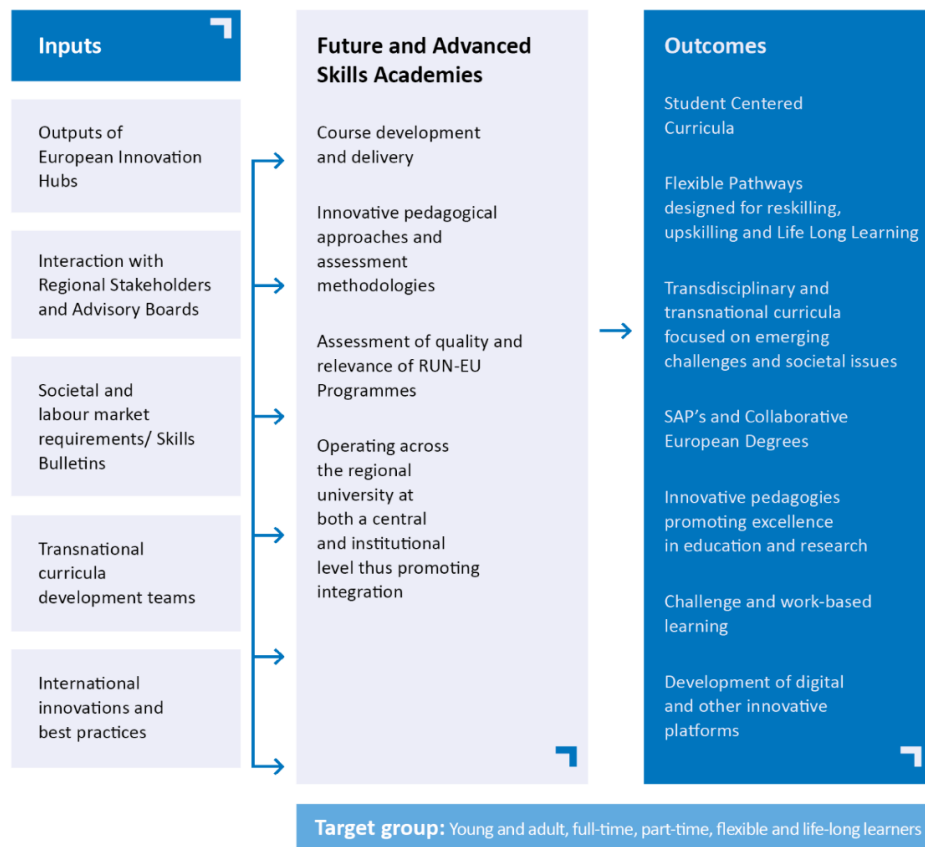
The pedagogical framework will be research-based and will be in line with the recent results concerning quality learning, teaching, and well-being in Higher Education. In brief,

- In compiling the framework, research results and literature in higher education will be used.
- Survey data from each institution in RUN-EU will be gathered for mapping the best pedagogical practices currently in use in each partner institute. The survey will be conducted altogether three times for teachers (minimum of 40 teachers from each partner university) and students (minimum of 120 students from each partner university).
- The findings of the research literature, survey and good practices will be included in the framework.
- All the study programmes or courses involved in RUN-EU will follow the pedagogical framework to support quality learning of all the students and quality teaching of all the teachers.
- The content of the report will be updated continuously, as a consequence of the monitoring and evaluation of the use of innovative pedagogical approaches to curricula design and delivery as well the yearly surveys.

1.2 Current understanding of best pedagogical practices

The first year (2021) survey was designed to map the best pedagogical practices of 'good' teachers in the RUN EU institutions. Hence, that process aimed to collect best pedagogical practices on how the learning of the generic or transferable skills are integrated into programmes or courses by asking teachers for their perceptions and experiences regarding these skills. The teachers described the generic skills they develop with their students as well as the teaching and assessment methods and the challenges they face. In general, the findings emphasised the importance of student-centred and interactive approaches in developing generic skills with students. Thus, the findings were in line with previous results suggesting the importance of students' active role as well as collaborative methods in supporting the development of generic skills (see Crebert et al., 2004; Kember & Leung, 2005). This is also linked to the learning compass which highlights both student agency and co-agency when approaching the well-being of society. In addition to student agency and collaborative approaches, the crucial role of connecting theory and practice and linking studies to real-life contexts was emphasised by the teachers.

The findings of the 2021 survey support the Pedagogical Guide which was developed in WP3 to support teachers in designing, implementing and evaluating jointly developed programmes in the RUN-EU context (Pedagogical Guide, 2021, https://issuu.com/hamkuas/docs/pedagogical_guide_for_short_advanced_programmes_s). The Pedagogical Guide uses research on quality learning and teaching and it gives a vision of a learning teaching environment in which well-being in study is an integral part of teaching and learning activities. Following the principles of the theory of self-determination (Deci & Ryan, 2012; Ryan & Deci, 2000), students' autonomy, belonging, and competence need to be supported when approaching well-being in studying. Further, the principle of constructive alignment (Biggs, 1996, 2014 ; Biggs & Tang, 2011) is relevant in designing teaching. In short, teaching and learning activities as well as assessment should be designed to support deep learning of the intended learning outcomes.

Research shows that the teaching–learning environment plays an important role in the development of generic competences (e.g., Lizzio, Wilson & Simons, 2002). Findings show that teaching practices including collaboration and interaction as well as integrative pedagogy support university students in the acquisition of generic skills (Virtanen & Tynjälä, 2018). Further, results indicate that the development of self-regulated learning is supported by an environment which utilises student-centred approaches (e.g., Lahdenperä, Rämö &Postareff, 2022). Hence, it can be concluded that for generic skills or future skills to become an integral part of learning and teaching processes, it is necessary to employ student-centred approaches and collaborative methods, which will also support the development of students' active agency as well as the development of students' co-agency.

The suggestions that evolved based on the first report are as follows:

- Establishment of a common understanding between students, teachers, and institutions, of the importance of the skills
- Alignment of teaching: intended learning outcomes, teaching and learning activities (methods, tasks) and assessment should be aligned and should support the learning of future skills
- Recognition of the importance of generic skills at the institutional level; Institutional support to enhance the role of future skills
- Employment of collaborative approaches in teaching and supporting the development of reflective thinking and active agency of students
- Promotion of practice or link between classroom and real-life contexts when developing the skills
- Helping the students to identify the skills and notice their competence development
- Guaranteeing teachers' possibilities for pedagogical development
- Establishment of teacher collaboration to work towards common objectives.

2. Mapping the best pedagogical practices from the students' perspective

The current report presents the findings based on the students' perceptions and experiences about quality teaching for the development of common framework for innovative pedagogical approaches and good practices. The FASA pedagogical team agreed that report version 2 focuses on students only (the report version 1 in this process solely focused on teachers). In accordance, the findings here concern the students' perspectives and findings are based on two data collection processes: data collected by the FASA pedagogy and skills teams; data collected from SAP workshop.

It was decided that the first data collection for report version 2 be carried out in collaboration with the skills team for skills bulletin #3 (Spring 2022). Skills bulletin 3 primarily aimed at identifying future skills. However, it also identified innovative aspects of teaching and learning and good practices and pedagogical models in each institution. Second, workshop data was gathered during one Short Advanced Programme (SAP – How to Navigate Through Unfamiliar Contexts) that was organised at HAMK in May 2022.

The report presents the data collection procedures, findings, and compares and draws conclusions between the students' perspective and teachers' perspective, which was described in the first version of the report.

3. Data collection

3.1 Institutional workshops conducted as part of Skills Bulletin #3

The FASA Skills Team collected data from students in each RUN-EU institution in spring 2022. This process focused on the development of future skills. Each institution organised a workshop with members of their Student Boards. The type of workshop (e.g., group work, focus groups) was decided by each university. The organizers were asked to give a short introduction to the OECD Learning Compass at the beginning of the workshop. A detailed description of the data collection procedure can be found in the document SKILLS BULLETIN #3 - The Students' Perspective on Future Skills.

The participants were altogether 39 students, representing the members of all RUN-EU Student Advisory Boards. The gender distribution showed that 59% were male and 41% female. The students represented a variety of disciplines such as IT, engineering, health, design, arts, humanities and business, as well as different nationalities such as Portuguese, Finnish, Hungarian, Iraqi, Austrian, Russian, Curacao, Qatari, Dutch and Indian. The educational level varied as follows: Bachelor 55%, Master 26%, and PhD 19%. In addition, as it is explained here https://miro.com/app/board/uXjVPbFXtFA=/?share_link_id=783244694226), IPCA also collected data from 16 students who participated in co-creation projects and one representative of the students' association.

In this report, our interest is in understanding students' perceptions and experiences about quality teaching, namely, best pedagogical practices. As the target of FASA is also to map innovative teaching methods, we decided to ask the students to reflect on those learning experiences that have both inspired them as well as promoting the development of future skills. In addition, we wished to capture the moments of teaching in which positive emotions were present given that the research on learning and teaching emphasizes the link between well-being, deep learning and teaching methods. Thus, students were asked to describe the following:

What kind of teaching or learning situation has inspired you the most? Please, describe (e.g., what kind of learning activities; what the role of the teacher was; what the students did) and give an example.

a. *Recall a course or other learning situation that has contributed to your well-being or positive emotions. How did the teaching or teacher promote your well-being?*
b. *Recall a situation where you apply a skill mentioned before and how the teaching promoted that skill development. Something like: "Do you remember a situation where you used Future Skills and how the development of this skill was supported in your studies?"*

The main findings related to these questions are presented in this report. This report also refers to Skills Bulletin #3 from which these questions are drawn. In addition, the members of the FASA pedagogical team in each institution formed "student personas" based on the data. Persona is commonly used in design thinking where a persona represents a user or customer. Creating personas helps us to understand the needs, thinking, and acting of the user or customer (Ferreira, Silva, Barbosa, & Conte, 2017). In addition, the use of personas arguably helps to create a good customer experience. In this report, a persona is a fictional student character that represents a type of university student. Various personas are included here to show that there are many types of students with different study experiences. On the other hand, creating the persona on the basis of institutional data aids in identifying the possible similarities between the student experiences in different countries. Thus, the variation of persona is presented in this report.

3.2 Student workshop during the SAP at HAMK

As part of the contact week of the SAP "How to navigate through unfamiliar contexts" at HAMK in spring 2022, a workshop was organised for the students regarding their ideas of innovative teaching and learning. Altogether, 17 students from different RUN-EU institutions participated in the workshop. Consent for the utilisation of workshop data was gathered from the students (Appendix 1). In the workshop, the students discussed their experiences of innovative learning and teaching situations and designed a dream course.

In the workshop, the students were divided into four groups so that each group consisted of participants from different institutions. The students were first asked to share experiences with their group by recalling a learning situation that had inspired them and describe that situation (e.g., what kind of learning activities were there; what the role of the teacher was; what the students did). After a 15-minute discussion, the students were instructed to design their dream course. The students were given guidelines that especially emphasized the development of future skills as learning objectives of the course. The instructions given for the students are presented in Figure (Figure 2).

Figure 2 - The instructions given for the SAP students to design a dream course

4. Findings

4.1 Institutional findings (Skills bulletin data)

Table 1 illustrates the findings by the Skills Team. In inspiring teaching-learning situations, students emphasised especially opportunities for collaborative learning and discussions, co-operation with working life, feedback and guidance of teachers, putting the theory into practice and finding a real-life connection of the studies.

Table 1. The findings of the Skills team: Inspiring teaching-learning situations described by the students.

Inspiring teaching-learning situations	
Cluster 3	
Q4. What kind of teaching or learning situation has inspired you the most? Please, describe (e.g., what kind of learning activities; what the role of the teacher was; what the students did) and give an example. **Q4.1 Recall a course or other learning situation that has contributed to your well-being or positive emotions. How did the teaching or teacher promote your well-being?** **Q4.2 Recall a situation where you apply a skill mentioned before and how the teaching promoted that skill development.**	**Challenges**/Competition and Successes, share goals; **Learning by playing,** (business) **games,** successes; Day trip/external experiences, **real-life experience; Connection with real CEO's, mentors, investors, experts**; Partnership, (own, mini) projects; Entrepreneurs' workshops with expertise, different fields/topics; Learning by doing / **Practical experience**, real examples (in class); Create a new business; Practice the theory, learning by doing method; Share experiences; Peer groups, learning form more advanced or another perspective (change of perspective, interdisciplinary); Encourage to doing things outside the classes; Opportunity to develop curiosity, let it emerge; **Multi-Disciplinary team/ Teamwork / Interdisciplinary cooperation,** be part of something beautiful; **Group works**; Design thinking, actively thinking and collaboration; Critical and logical thinking; Finding solutions / problem to solve; Self-learning, self-reflection / transcendence resolves conflicts; Learning through Magic tricks; **Informal education, contexts, chats**; **Teacher as Supporter** (supervisors, attentive and critical / rely on a teacher, teacher's attitude; Lecturers interested, passion for innovation; **Teacher was motivated**; Teacher involved everyone very dynamically, cooperation at eye level, helping students to develop and establish a way of thinking; Teacher promotes and ensure understanding; Teacher helps students to organize their ideas; Humour, jokes; Guidance in a respectful manner, sharing own experiences; Relationships to pass information efficiently; Learn more by asking questions – think about things; Ways for tension, e.g., learning how to breathe, de-escalation/ addressing emotions (avoid stress); Share positive emotions; **Positive, individualized feedback;** Online-Learning and collaboration.

In general, traditional pedagogical teacher-led methods were not mentioned by the students. For example, self-assessment was among the approaches to assessment that was pointed out as the following excerpt shows:

> *In maths we could **rate ourselves for each excercise**. When we marked one exercise as completed the teacher asked us to show it at the blackboard That motivated everyone to do the exercises even though they were voluntary.*

Based on the student perceptions, each institution formed "student personas" to give insight into what kinds of aspects are present in a learning teaching environment that support quality learning and well-being. An example is given from the Netherlands in Figure 3.

Figure 3 – Student persona from NHL Stenden data
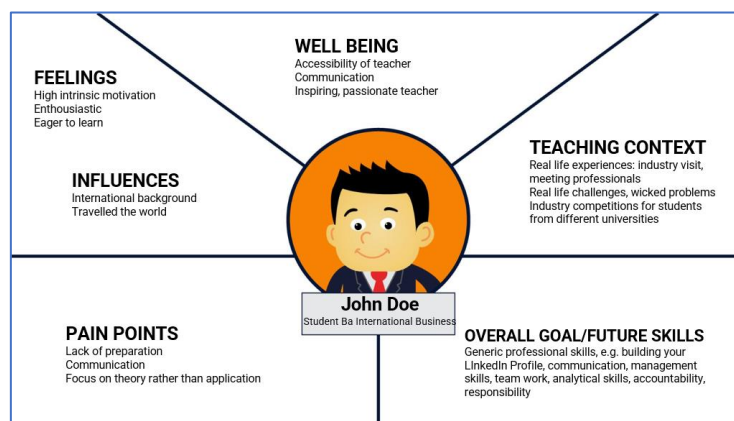
Certain common topics emerged from the data such as future skills, well-being, learning environment and university role, assessment (for learning), student role, and teacher role. These topics were used as subtitles in the personas to describe what supports learning. Students' viewpoints about assessment concerned mainly how assessment can support and develop student learning, e.g., by ensuring feedback (assessment for learning) and not on how assessment is used for measuring learning outcomes (assessment of learning).   Hence, the subtitle assessment (for learning) points that out. Each institution was asked to add more topics as suggested by the data. Institutions were also asked to add student quotes from the data to illustrate the findings.

In Figure 4 there is 'Student persona' from Ireland TUS showing what supports learning based on the students' interview data, and Figure 5 shows what are the challenges for learning based on the students' perceptions.

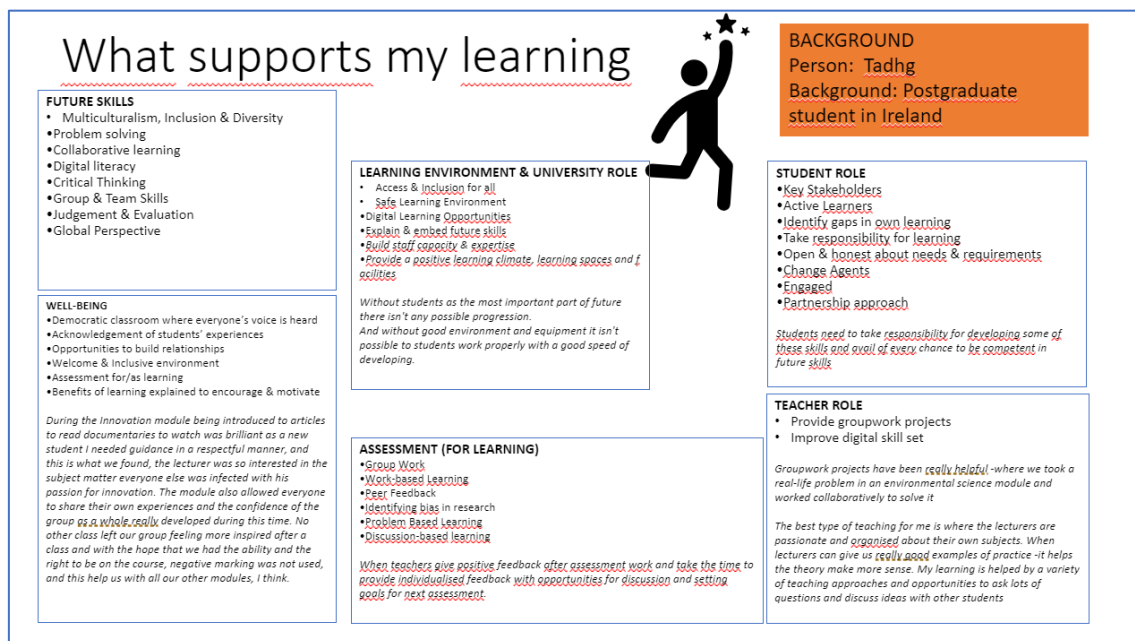**Figure 4– Student persona (support) from TUS data**

Figure 5 – Student persona (challenges) from TUS data

What I need but I do not get / Challenges

FUTURE SKILLS
We will need to be able to navigate new technologies ever evolving and acquire skills to do so

INTERNATIONALISATION
On our programme -there hasn't been many opportunities for international experience or exchanges. I think any opportunities for international experience would be helpful. In some of our work as Social Care workers -we work with refugees and emigrants to Ireland. Understanding diverse cultures is therefore important

ASSESSMENT
Take the time to provide individualised feedback with opportunities for discussion and setting goals for next assessment.

LEARNING ENVIRONMENT
Our Institute has a big role here -in providing opportunities for students to develop future skills. The facilities and technologies provided, the way courses are designed and how staff promote future skills are all important.

BACKGROUND
Person: Tadhg
Background: Postgraduate student in Ireland

STUDENT ROLE
To be open and honest about their needs and requirements. Not one solution fits all. Ability to pick and work on certain skills where they feel they need further development or training.

Students should identify and highlight their needs, their understanding of the world they live in, in the social media world, how they can best learn.

TEACHER ROLE
Explain as to why we are learning what we are learning, what benefit it will be. This is encourage and motivating
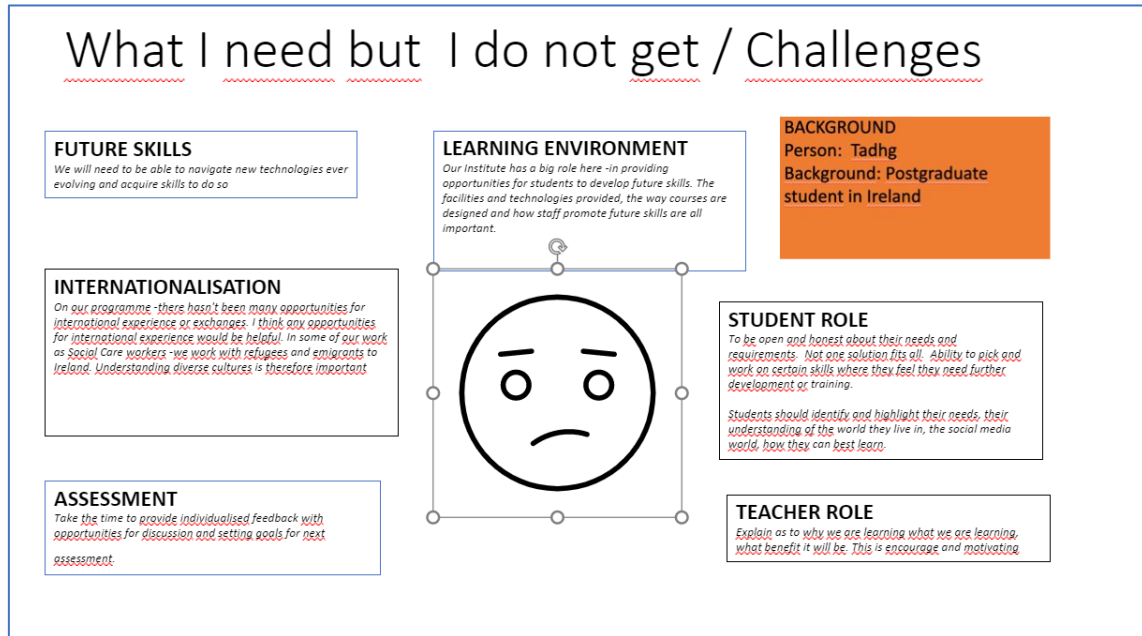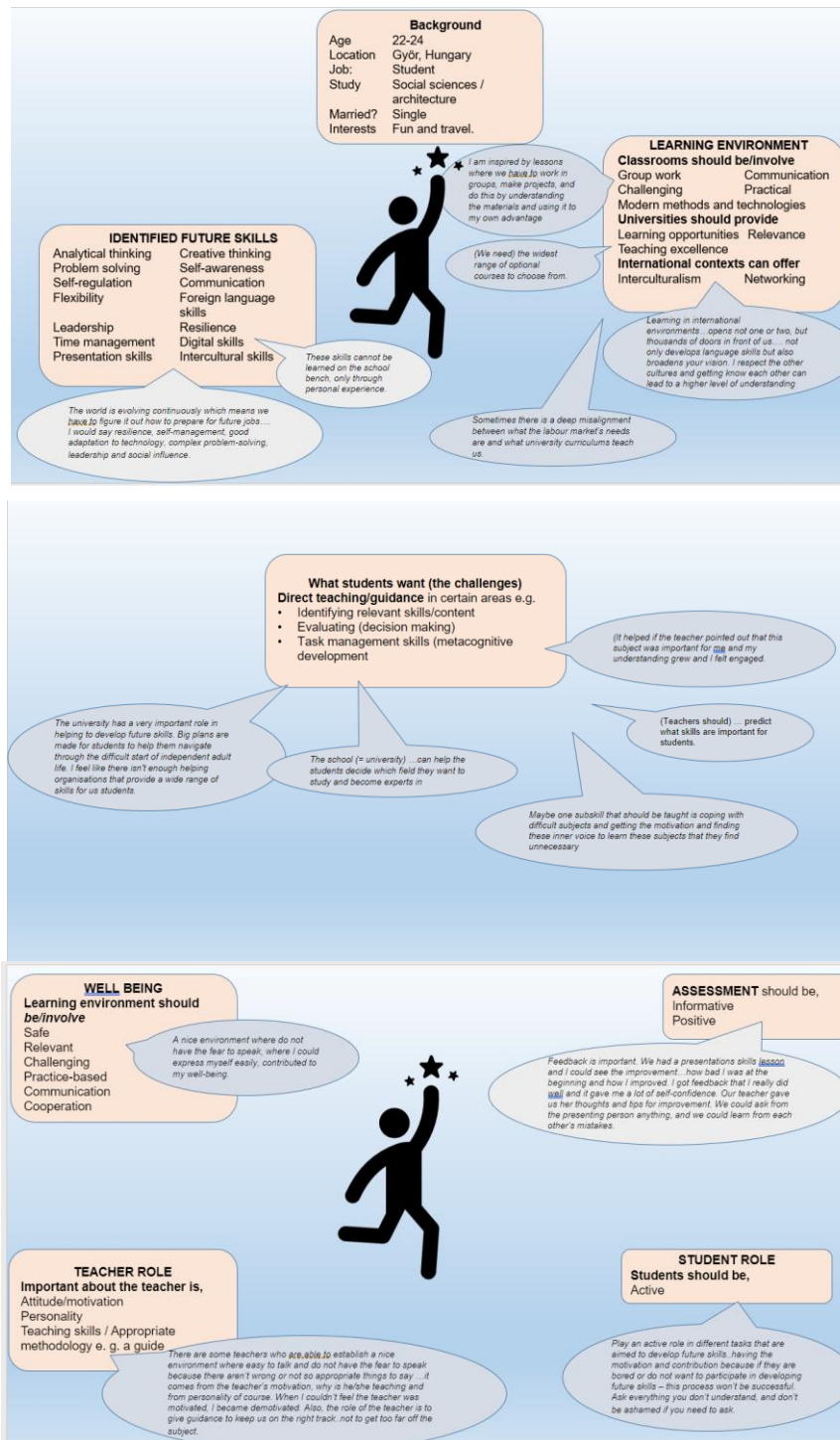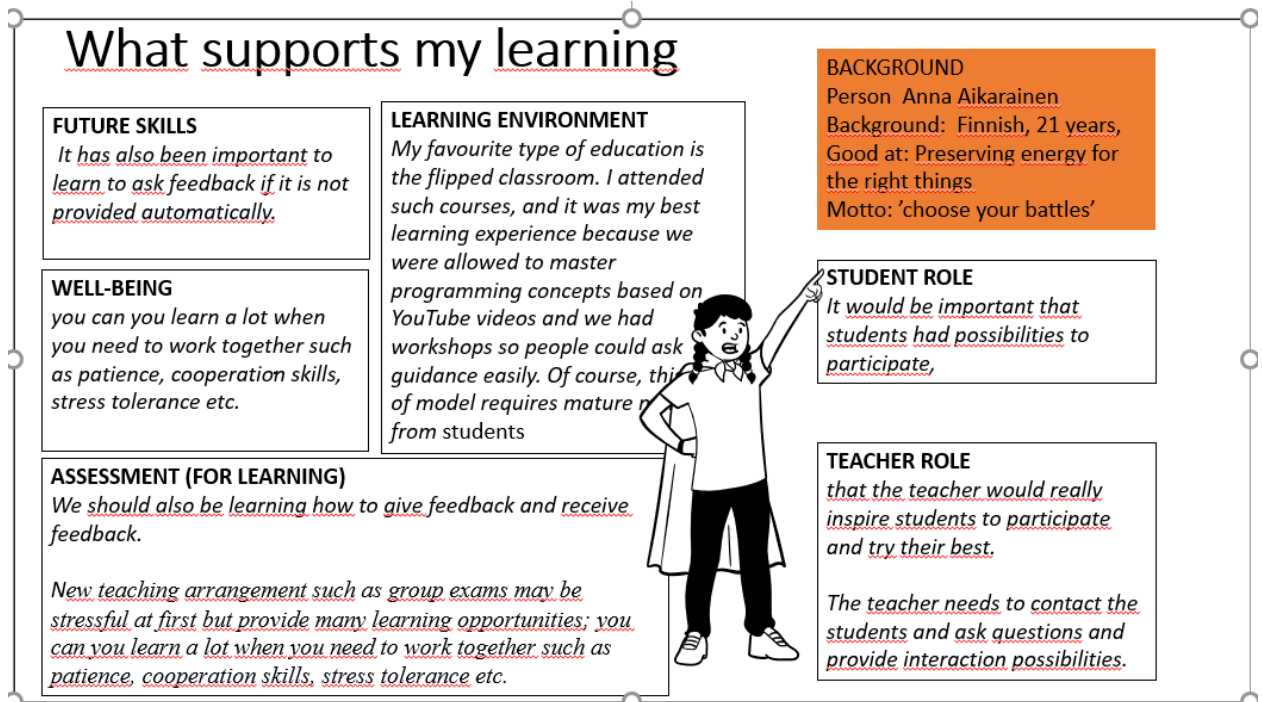
Figure 6 shows the results based on the Hungary data with excerpts from the student interviews.

Figure 6 – Student persona from SZE data

Student persona from HAMK Finland (Figure 7) shows what support learning based on the Finnish student group interview.

Figure 7 – Student persona from HAMK data

What supports my learning

BACKGROUND
Person Anna Aikarainen
Background: Finnish, 21 years,
Good at: Preserving energy for the right things
Motto: 'choose your battles'

FUTURE SKILLS
It has also been important to learn to ask feedback if it is not provided automatically.

LEARNING ENVIRONMENT
My favourite type of education is the flipped classroom. I attended such courses, and it was my best learning experience because we were allowed to master programming concepts based on YouTube videos and we had workshops so people could ask guidance easily. Of course, this of model requires mature from students

WELL-BEING
you can you learn a lot when you need to work together such as patience, cooperation skills, stress tolerance etc.

STUDENT ROLE
It would be important that students had possibilities to participate,

TEACHER ROLE
that the teacher would really inspire students to participate and try their best.

The teacher needs to contact the students and ask questions and provide interaction possibilities.

ASSESSMENT (FOR LEARNING)
We should also be learning how to give feedback and receive feedback.

New teaching arrangement such as group exams may be stressful at first but provide many learning opportunities; you can you learn a lot when you need to work together such as patience, cooperation skills, stress tolerance etc.

Student persona based on the students' perceptions from IPCA data is given in Figure 8 and available at https://miro.com/app/board/uXjVPbFXtFA=/?share_link_id=717040423452

Figure 8 – Student persona from the IPCA data
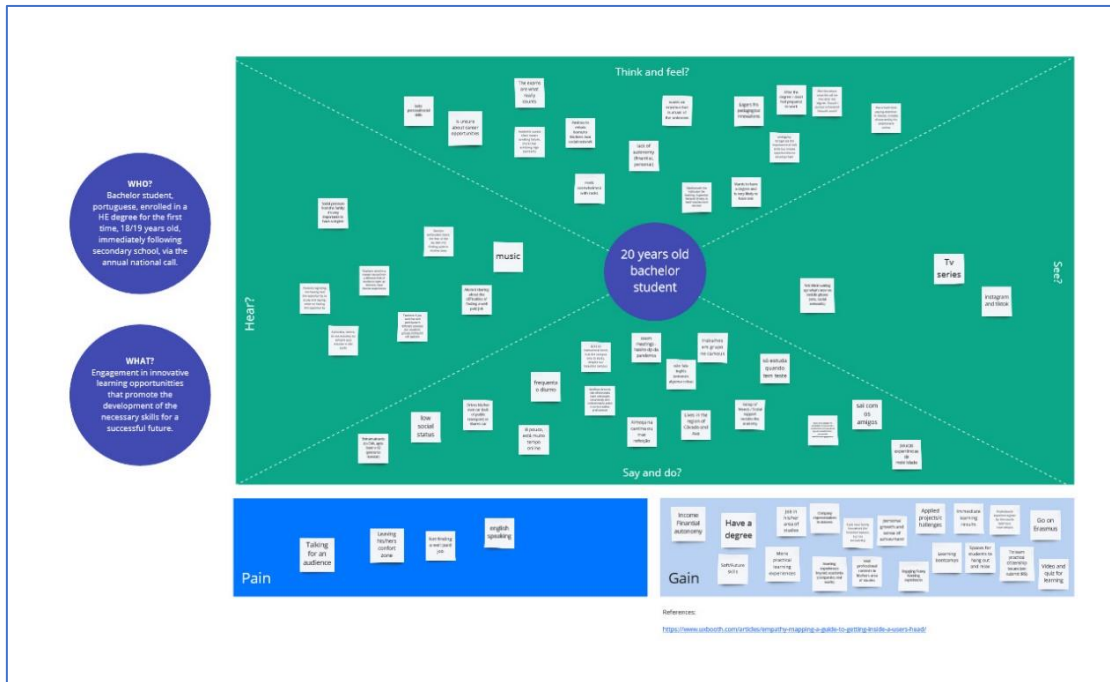
https://miro.com/app/board/uXjVPbFXtFA=/?share_link_id=717040423452

4.2 Workshop findings during the SAP at HAMK

Based on the students' presentations, some common findings are presented. The themes of the dream courses were related to wellbeing, personal development, and development of future skills. It was notable that the groups valued the development of soft skills and held these as the starting point of development of the dream course.

> *Main soft skills of like communication, teamwork, adaptability, resilience problem solving creativity networking, time management and organising and then we started thinking about what kind of classes should we do based on.*

All groups emphasised especially the importance of group work and communication skills in their dream courses, and it was seen important to support these in different ways during the course.

> *Every time, it didn't matter what we were doing, every time when we discussed future skills, communication came forward and out of that we created.*

The students also discussed the importance of self-reflection in learning and how it is important to notice the different ways students learn and solve problems. Thus, it was important that the skills to "learning to learn" were also promoted in the courses.

The identification of learning goals was brought out and it was emphasised that when you are starting something then you should know what to expect.

> *Better communication of planned activities and what we learn from them. Not only like today we're doing this, but also, we're doing this for this. Like you're going to learn this so that you come expecting or thinking or excited about where you're going to go.*

The importance of practical knowledge in studies was emphasised. It was seen that practical knowledge could be implemented, for instance, through the practical experience of the teachers, representation of current tools, knowledge and practices or utilisation of professionals with years of experience from the field of studies.

> *And, the meaning of practical knowledge, whether it is from the teacher, they have some current really relative knowledge or there are some experts from the field sharing their experiences*

A multidisciplinary approach was seen important but also sharing experiences with someone expert from their own field of studies.

> *It has to be multidisciplinary, but at the same time it would be good for the takers to also speak with someone expert close to their field, because that's also networking, not only with other fields*

The teacher's role was to be approachable, someone who helps with difficulties, guides the students, inspires, and offers a safe space within which collaboration and the sharing of experiences can occur.

> *…like someone you feel comfortable asking… you can ask whatever you need… not superior. So, for them keep telling us like I…I am secure, and you know just to feel the safe environment.*

Receiving feedback from the teacher during the learning process, was also seen as important.

> *The thing on that, it was about rewarding on the process and not on the outcome. So, we would like to think of the activities as a moment to develop the way we are processing things and to have a reward on our achievement.*

One group also suggested that instead of exams, an assessment interview could be organised at the end of the course and possibly together with the student, the lecturer, and someone outside the course context to avoid bias. The students' plans for the dream courses are presented in the following pictures (Figures 9-12).

Figure 9 - The Student Group 1 Plan for the Dream Course 'Wellbeing'

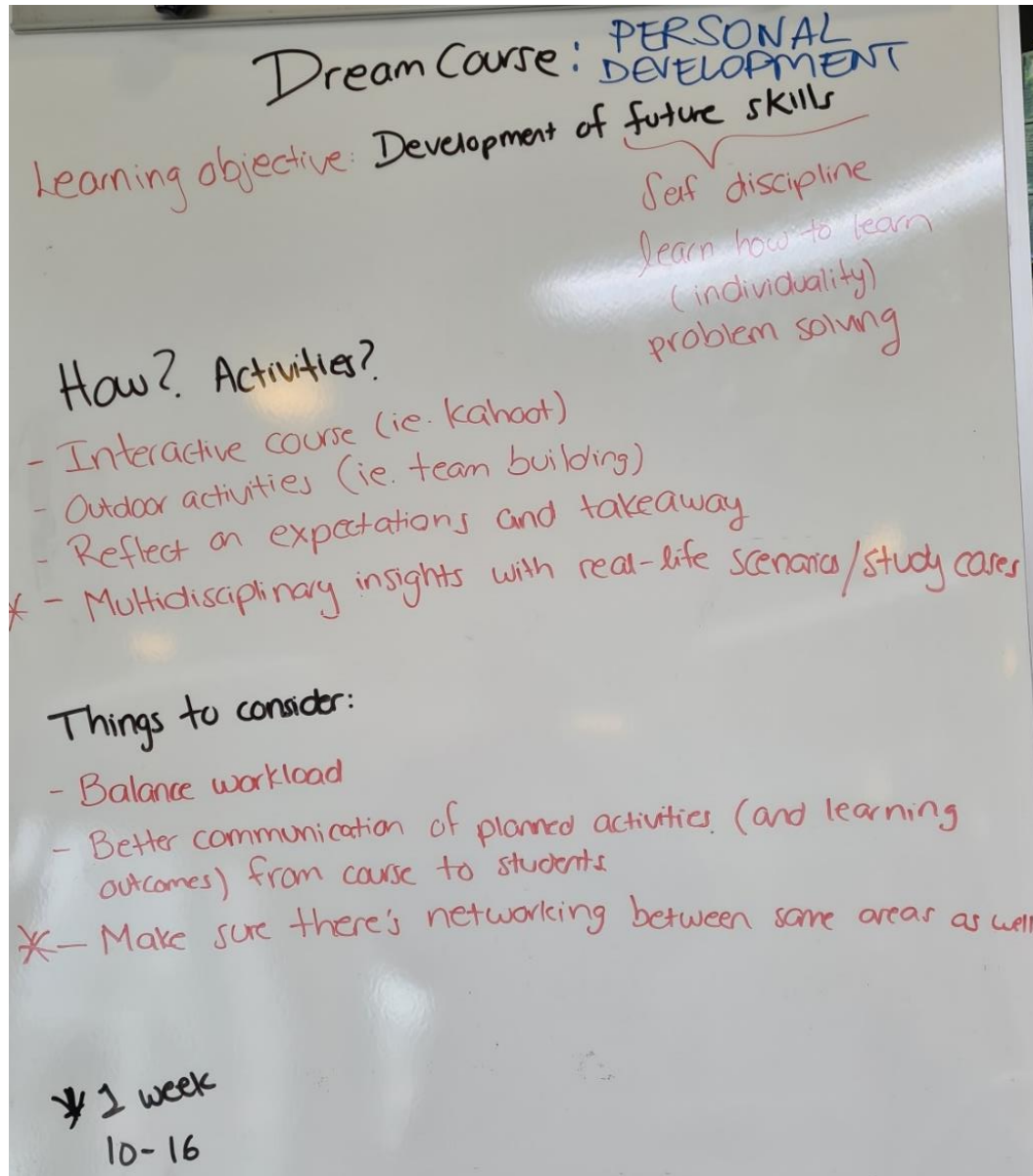**Figure 10 - The Student Group 2 Plan for the Dream Course 'Personal development'**

Figure 11 - The Student Group 3 Plan for the Dream Course 'Become the future'
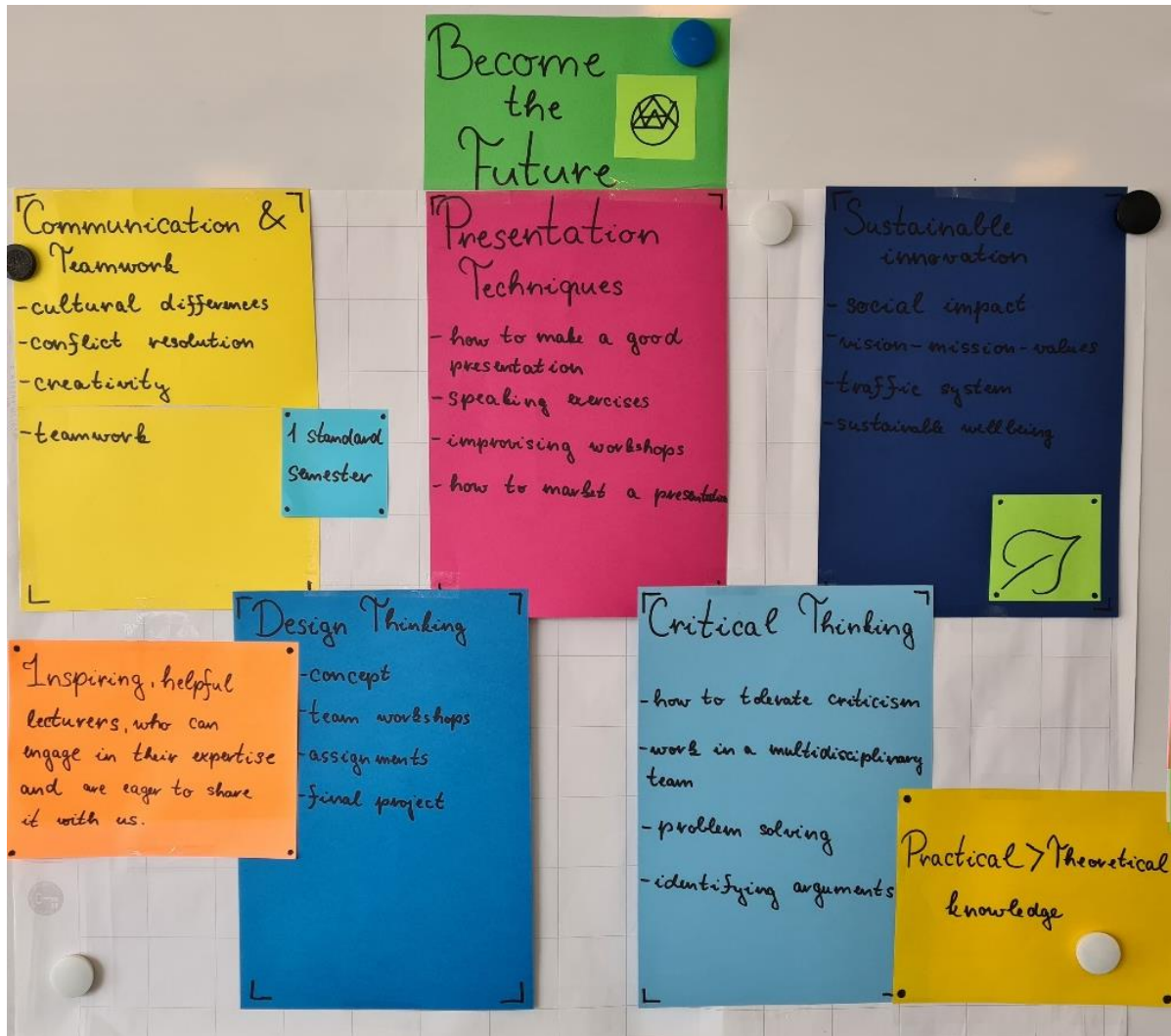
Figure 12 - The Student Group 4 Plan for the Dream Course 'International Job Searching'
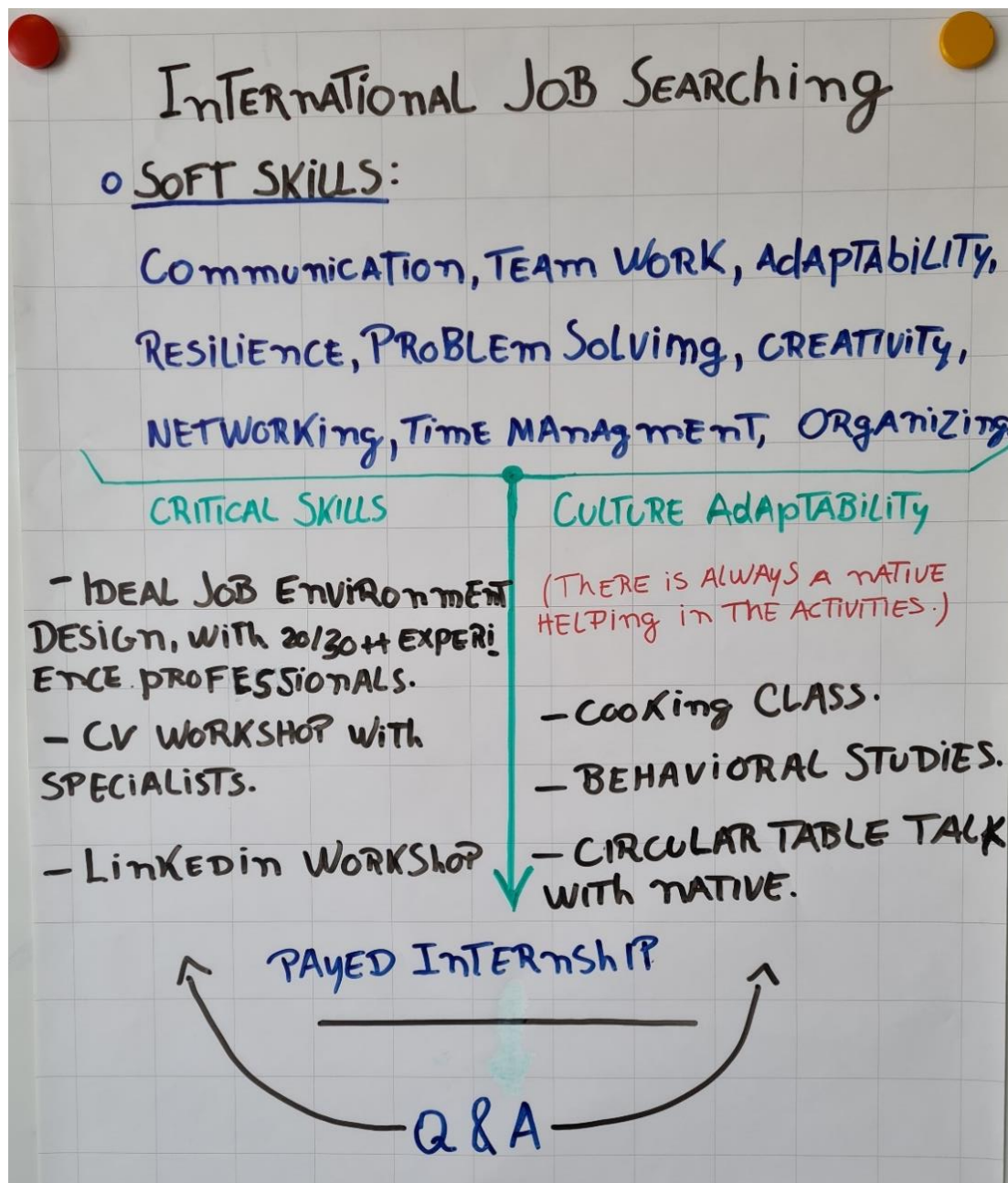
5. Discussion and implications of the findings within RUN-EU

Both students (report version 2.0) and teachers (report version 1.0) emphasised student-centred and interactive approaches in teaching and learning. The report reinforces previous findings (see the first version of the report 3.4 Framework for innovative pedagogical approaches and good practices) that collaborative approaches, the development of reflective thinking and active agency of students are all critical in teaching and learning. Figure 13 illustrates findings from teachers' perspective for innovative pedagogical approaches and good practices. It can be seen that the teachers' perceptions correspond closely to the students' viewpoints and provide an initial framework for future development. For instance, both the students and teachers emphasised the crucial role of linking theory to practice and linking studies to real-life contexts. However, students in particular identified the development of soft skills as important during learning and the important role the teacher plays in creating a safe space and atmosphere within which collaboration and the sharing of experiences can occur.

Figure 13 – A conceptual compilation of the different ways the teachers described promoting generic skills with students
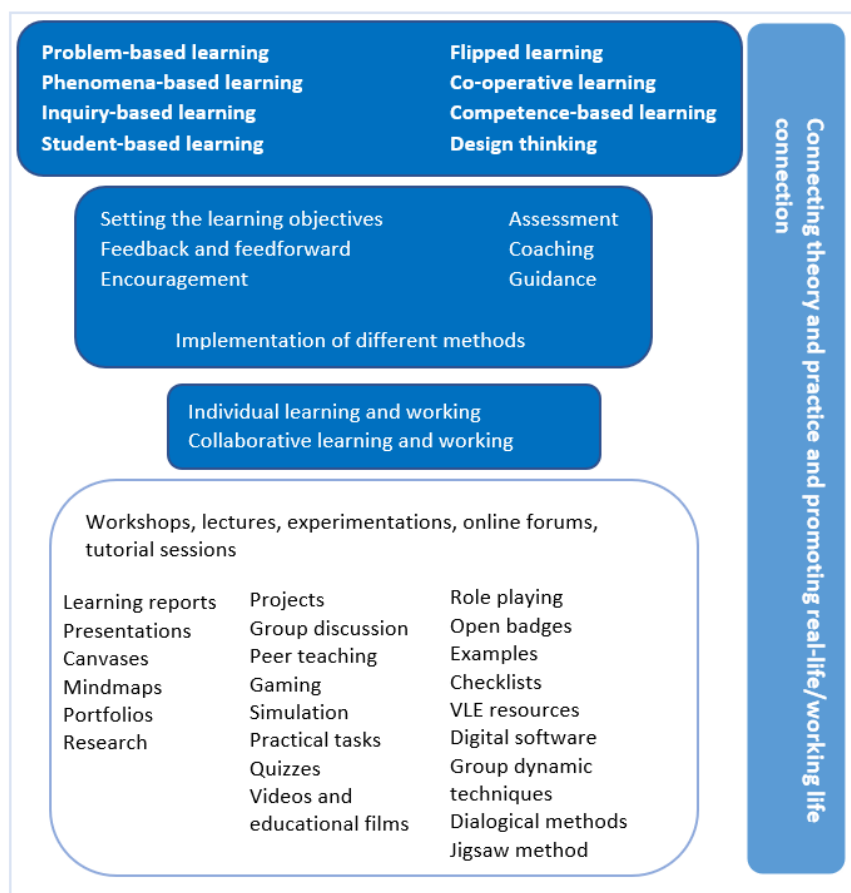
The findings clearly suggest that learning objectives should include soft skills and that these skills should be developed during studies. Among the soft skills, communication and team working were highlighted. In addition, the findings suggest that continuous discussion is needed to deepen our understanding of the importance of and quality of future skills. It is important to note that soft skills are not the only ones that are viewed as future advanced skills, and further, discussions about what future advanced skills are, need to be continued among RUN EU participants.

The results show that there are RUN-EU teachers who use innovative pedagogical practices (Figure 13) which conceivably support their students' learning of future skills through innovative learning activities. However, the results from the students' perceptions show that the development of future skills during their studies is not covered systematically as an integral part of their studies. These findings taken together support the need for the development of a common framework for innovative pedagogical approaches and good practices, as well as the need to create a common understanding of the importance of and a clear definition of future advanced skills by students, teachers, and institutions. The institutions have an important role to play in how future advanced skills can be incorporated into the curricula which in turn influences how the skills can be systematically developed during studies.

The findings also suggest that the teachers' role in how they facilitate student learning and support the development of future skills through learning and teaching activities, is of the utmost importance. It is important to highlight that the development of future skills will probably not happen systematically during degree studies, unless the teachers themselves are encouraged to participate in pedagogical development in the RUN-EU institutions. Through the pedagogical development programs the teachers' pedagogical competences can be supported in collaborative settings. In addition, a common understanding of the core concepts of the pedagogical framework such as the importance of a student-centered approach to teaching, can be strengthened.

In November 2021, May 2022, and September 2022, pedagogical programs and Design Factory bootcamps were organised for RUN EU teachers and other academics. The first occasion was for FASA participants, namely, for the educational developers leading the FASAs in their institutions. The second and the third programs were open to all academics with a limit of 6 participants from each RUN-EU institution. Data from the various research activities have shed light on the best pedagogical practices used in RUN EU institutions and the theories underpinning them. Hence, through the courses, the pedagogical framework and a common understanding of future skills has been further developed collaboratively by RUN EU institutional participants.

During 2023, two further pedagogical programs and design factory bootcamps will be provided for RUN EU teachers and other academics. During the programs, the academics will have formal opportunities to share their conceptions, ideas, and to develop collaboratively the concept and educational implementation of future and advanced skills. In addition, the participants are not only given possibilities to discuss and share their understandings, but they can also experience how soft skills such as self-compassion can be implemented into teaching and learning activities in practice. Thus, academics are provided with a variety of tools to develop the curricula and teaching and learning activities, to enhance student quality learning

according to the RUN-EU pedagogical framework. However, the RUN-EU pedagogical framework cannot be implemented at institutional-level if participants from each institution do not get the opportunity to collaborate and create a common understanding. Hence, institutional support and leadership is needed to guarantee that six participants from each institution should attend the pedagogic programs and bootcamps.

The findings of the current and previous surveys will be utilised in an upcoming survey for teachers and students for the development of the common framework. In addition, these findings are relevant to and can be applied to the WP3 skills team bulletins about future and advanced skills. Finally, based on the findings (version 1 and 2) suggestions for further improvement are given.

The suggestions based on the findings (version 1 and 2):

Communal pedagogical understanding within the RUN-EU alliance
- Communal understanding of the importance and the definition of the future skills by students, teachers, and institutions
- Communal understanding of the core concepts of pedagogical framework such as student-centred approach to teaching by teachers and institutions
- Recognition of the importance of future skills at the institutional level; Institutional support to enhance the role of future skills

Teaching and learning activities
- Including the future skills into curricula
- Alignment of teaching: intended learning outcomes, teaching and learning activities (methods, tasks) and assessment are aligned and support the learning of future skills
- Supporting the students to identify the skills and notice their competence development
- Promotion of practice or working life connection when developing the future skills

Pedagogical development of RUN-EU teachers
- Increasing engagement to participate in the pedagogical development programmes that are given by FASA and focusing on the pedagogical framework and the development of the future skills
- Employment of collaborative approaches in teaching and supporting the development of reflective thinking and active agency of students
- Guarantee teachers' possibilities for pedagogical development
- Establishment of teacher collaboration to work towards common objectives.

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Appendix 1. Consent for the utilisation of workshop data gathered from the students.