



D3.14 FRAMEWORK FOR INNOVATIVE PEDAGOGICAL APPROACHES AND GOOD PRACTICES REPORT (1ST REPORT)

Version 2.0

(20/08/2021)

(Häme University of Applied Sciences)





Table of Contents

Introduction – Pedagogical framework – Task of the Future and Advanced Skills Academies FASA) within the RUN-EU project
2. Description and purpose of mapping the best pedagogical practices – The Deliverable 3.4
. Data and participants
3.1 Context
3.2 Participants
3.3 Instrument
3.4 Analysis
3.5 Report
I. Findings
4.1 Generic or transferable skills the teachers described developing with students
4.2 How the teachers described developing generic or transferable skills with students1
4.3 Assessment and feedback methods the teachers described using to help students develop generic or transferable skills
generic or transferable skills
generic or transferable skills
generic or transferable skills 1 4.4 Collaboration with other teachers to develop generic or transferable skills 1 4.5 Challenges in developing generic or transferable skills 1
generic or transferable skills
generic or transferable skills 14 4.4 Collaboration with other teachers to develop generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5.1 What kind of challenges the teachers described? 14 4.5.2 How do the teachers respond to the challenges they described? 24
generic or transferable skills 14 4.4 Collaboration with other teachers to develop generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5.1 What kind of challenges the teachers described? 14 4.5.2 How do the teachers respond to the challenges they described? 25 4.6 Teachers' processes to improve teaching. 25
generic or transferable skills 14 4.4 Collaboration with other teachers to develop generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5.1 What kind of challenges the teachers described? 14 4.5.2 How do the teachers respond to the challenges they described? 24 4.6 Teachers' processes to improve teaching 24 4.7 Further support needs 24
generic or transferable skills 14 4.4 Collaboration with other teachers to develop generic or transferable skills 14 4.4 Collaboration with other teachers to develop generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5 Challenges in developing generic or transferable skills 14 4.5.1 What kind of challenges the teachers described? 14 4.5.2 How do the teachers respond to the challenges they described? 24 4.6 Teachers' processes to improve teaching 24 4.7 Further support needs 24 5. Discussion and implications of the findings within RUN-EU 24



Table of Images

Image 1 – Visualization of frequent words of teachers' descriptions of general or transferable	
skills they develop with students)
Image 2 – Visualization of frequent words of how the teachers described developing the skills	
with students	2
Image 3 – Visualisation of the most common words used by the teachers about	
assessment15	
Image 4 – Visualisation of the most common words used by the teachers about	
feedback16	5
Image 5 – OECD Learning Compass 203027	7

Table of Tables

Table of Figures

Figure 2 – Generic or transferable skills the teachers described developing with students
(proportions of the responses by the participants)10
Figure 3 – A conceptual compilation of the different ways the teachers described promoting
generic or transferable skills with students13
Figure 4 – Different ways of collaboration and their proportions of the responses18
Figure 5 – Illustration of what the challenges in developing generic or transferable skills
considered19
Figure 6 – How the teachers described responding to the challenges
Figure 7 – Teachers processes to improve teaching23
Figure 8 – Teachers' support needs25



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 between 2021 and 2023 in WP3 under the RUN-EU project. Hence, 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 participating institutions are Polytechnic of Leiria, Limerick Institute of Technology, Häme University of Applied Sciences, Vorarlberg University of Applied Sciences, Polytechnic of Cávado and Ave, Athlone Institute of Technology, NHL Stenden University of Applied Sciences, and University of Győr – Széchenyi Istvan University.

This is the first of 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 report will be yearly updated during 2022 and 2023.

The pedagogical framework will be research-based while it will be in line with the recent results concerning quality learning, teaching, and well-being in higher education. Specifically,

- 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 in each partner) and students (minimum of 120 students in each partner), in total.
- The findings of the research, survey and good practices will be included in the framework and in this report.
- The content of the report will be updated regularly, 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.
- Finally, all the 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 pedagogical framework is one of the main tasks of Work Package 3 (WP3) which will create Future and Advanced Skills Academies (FASA) enabling 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 by RUN-EU.

The pedagogical framework forms the basis for the targets of WP3: 1 central FASA and 8 institutional FASAs are created; desk-research and good practices identification; 320 teachers and 960 students surveyed; 5 editions of the Continuous Development Advanced Programme involving 72 teachers; 2 editions of the Design Factory Bootcamp involving 48 teachers; 2 editions of the Design Factory Workshops involving 160 students. Outcomes: regular RUN-EU skills bulletins; a framework for innovative pedagogical approaches and good practices report; catalogue of short courses for teachers' continuous development; a Design Factory Bootcamp for teachers; a Design Factory Workshops for students. The operating principles of the FASA are provided in Figure 1.

Figure 1 – The operating principles of the FASA

	FUTURE AND ADVANCED SKILLS ACADEMIES		OUTCOMES
Outputs of European Innovation Hubs	Course development and delivery		Student-centred curricula Flexible pathways designed for reskilling, upskilling and life-long learning
Interaction with regional stakeholders and advisory boards	Innovative pedagogical approaches and assessment methodologies		Transdisciplinary and transnational curricula focused on emerging challenges and societal issues
Societal and labour market requirements/ Skills Bulletins	Assessment of quality and relevance of RUN-EU Programmes	-•	SAPs and Collaborative European Degrees Innovative pedagogies promoting excellence
Transnational curricula	Operating across the regional university at both central and institutional level		in education and research Challenge and work-based learning Development of digital and
International innovations	thus promoting integration		other innovative platforms
	Target group: Young and adult, full-t	ime, part	-time, flexible and life-long learners



2. Description and purpose of mapping the best pedagogical practices – The Deliverable 3.4

As part of the FASA, a 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. The FASA teams research innovative pedagogical approaches to design a common quality framework.

To complement the research, HAMK will promote an online survey addressing teachers and students and focusing on teaching and learning processes to spot innovative aspects to update and improve pedagogical approaches to curricula design and delivery. Partners will also identify good practices of pedagogical models currently in use in each partner institute and relevant practices in use in other universities. These practices will be mapped and described in a report. The findings of the research, survey and good practices will be included in the framework and good practices report. The content of the report will be updated continuously under the activities of task 3.5 (promoting staff pedagogical development) as a consequence of the monitoring and evaluation of the use of innovative pedagogical approaches to curricula design and delivery.

The current report presents the findings of the first survey focusing on mapping best pedagogical practices to support the development of future skills based on the perceptions and experiences of the teachers working in different RUN-EU institutions. Additional surveys will be conducted during the project focusing on both teachers and students' perspectives for the development of a common framework for innovative pedagogical approaches and good practices.



3. Data and participants

3.1 Context

Altogether, three versions of a survey will be conducted (in 2021, 2022, and 2023), for mapping the best pedagogical practices currently in use in each partner institute in RUN-EU. The target groups are RUN-EU teachers (minimum of 40 teachers in each partner institution) and RUN-EU students (minimum of 120 students in each partner institution).

The Pedagogical Team of WP3 is responsible for conducting and designing the survey. The first survey (2021) was designed to map the best pedagogical practices based on the perceptions and experiences of the teachers who are recognised in their institutions due to their scholarship in teaching. The term 'teacher' is used in the report to represent the higher education teachers who answered the survey.

Each Institutional FASA group (N=8) organised the data collection in their institutions using purposive sampling, through the selection of teachers who were known to engage in innovative practices. The aim was to gather a minimum of five teachers to respond to the survey in each institution. The survey data was collected via e-platform in MS Forms for two weeks at the end of April 2021.

3.2. Participants

The data consists of the responses of 39 teachers. Participants were from all the RUN-EU universities (Polytechnic of Leiria, Limerick Institute of Technology, Häme University of Applied Sciences, Vorarlberg University of Applied Sciences, Polytechnic of Cávado and Ave, Athlone Institute of Technology, NHL Stenden University of Applied Sciences, University of Győr – Széchenyi Istvan University. There were not many participants from each university, specific information about the number of participants in each institution is not presented to guarantee the anonymity of the respondents. Two of the teachers had less than three years of teaching experience, one of them had 4-10 years, 14 of them had 11-19 years, and 22 of them had more than 20 years.

Of the 39 respondents, 30 teachers had an accredited teacher qualification, whereas nine teachers did not. The teachers represented a variety of disciplines such as humanities, business, technology, natural sciences, education, and social sciences. Some participants gave a specific answer about their discipline, whereas others described it at a general level. As there was no coherent way to categorize the different disciplines, no comparison between different disciplines was conducted.



3.3 Instrument

The survey with nine open-ended questions aimed to collect the best pedagogical practices on how learning of the generic or transferable skills is integrated into programmes/courses. A decision to use the concept of generic or transferable skills instead of future skills in the survey was done because it was considered that the respondents are more familiar with the concepts of generic or transferable skills. In the beginning of the survey, a definition, and examples of generic or transferable skills (critical thinking skills, problem-solving, teamwork, creativity, communication, digital skills) were provided to the respondents, which correspond to the definition of future skills provided in the Skills Bulleting (D3.3).

In the open-ended questions the participants were asked to describe what general or transferable skills they develop with students, and further, they were asked about assessment methods, feedback methods, challenges in teaching, and needs for improvement concerning teaching future skills. Background information included institution, discipline, teaching experience in years (below 3, 4-10, 11-19, more than 20), and accredited teacher qualification.

3.4 Analysis

At first, the WP3 team members in each institution read through the responses of the participants from their institutions to get an overall understanding of their data. In this phase, the team also analysed and discussed how the data reflected the institution's main pedagogical approach. Afterwards, the team commented on one page what was discussed together within RUN-EU WP3 Pedagogical Team. This phase was done to ensure that the WP3 team had a common understanding of the responses provided from different universities.

The complete data was analysed at Häme University of Applied Sciences by using NVivo 12 Plus (QSR International Pty Ltd, Australia). The data analysis proceeded from familiarisation with the data to coding of contents and creation of categories. That is, similar codes were categorised under the same category. However, in some cases formal categorization was not conducted; there were, for example, questions that included mainly brief or unspecific responses. The analysis was data-driven; however, links to existing pedagogical concepts are presented in the discussion.

3.5 Report

The report was prepared at Häme University of Applied Sciences. However, all institutions were asked to provide feedback about the report. The final version of the report includes improvements based on institutional feedback.



4. Findings

The findings are presented in each subsection regarding the different themes of the survey. The findings are presented through visualizations, a table, and figures. In addition, data quotations are presented to illustrate the teachers' responses.

4.1 Generic or transferable skills the teachers described developing with students

The teachers were asked: In your teaching, what general or transferable skills do you develop with students?

A wide variety of skills were given; however, most of the responses were statements or brief descriptions of skills. The responses were categorized under six main categories based on their similarity, which are presented in Table 1. The table also presents the skills that were categorised under six categories. The skills that are listed are the ones that the teachers themselves described. Thus, the table also presents the different terms the teachers used. The idea of the categorization is to illustrate the different types of skills the teachers described; however, the skills are interrelated and some of the skills could be categorised under several categories.

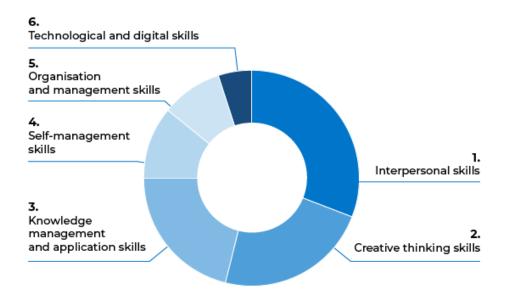
Table 1 – Categories of generic or transferable skills with data examples

1. Interpersonal skills communication, teamwork, relationship building, dialogue, empathy, emotional intelligence, intercultural awareness, conflict management, feedback skills, argumentation, negotiation, listening	2. Creative thinking skills critical thinking, creative thinking, problem-solving, reflection, analysing and systematic thinking, curiosity, design thinking, experimenting, risk-taking, reasoning, decision making, mathematical skills, innovation	3. Knowledge management and application literacy, knowledge management, research, language skills, presentation, reading, writing, investigation
4. Self-management skills adaptability, self-regulation, self-awareness, stress management, self-control, self-reflection, self-assessment, ethics	5. Organising and management skills leadership, project management, independent working, time management, planning, entrepreneurial skills, learning skills	6. Technological and digital skills application of technological devices, digital competence, IT skills, computer skills



Most of the participants described developing skills with students concerning *interpersonal skills* such as skills in communication, teamwork, and relationship building. In addition, *creative thinking skills* such as skills in problem-solving and critical thinking were often mentioned. Skills related to *knowledge management and application* such as literacy, research and writing skills were also often described. Some of the participants described developing *self-management, organising and management* skills and *technological and digital* skills. In addition, subject-specific skills or unrelated descriptions were given, which were left out of the categorization. Figure 2 presents the proportions of the responses by the participants according to the six categories. The purpose of Figure 2 is to provide only an approximate proportion of the most mentioned skills, as some of the skills could be categorised under different categories.





The interrelation of different skills was identified in the responses, as the next quote illustrates:

I aim to help students develop critical thinking about the subjects I teach as well as skills that enable problem solving and communication between the various agents that are involved in our area of study. These skills are fundamental and allow students to organise, communicate and build professional relationships in the future.



4.2 How the teachers described developing generic or transferable skills with students

The teachers were asked: *How do you help students develop these skills through your teaching? What methods do you use?*

Participants described various ways to develop the skills with students. However, most of the responses were lists of words without a deeper description of their implementation. The participants' responses were categorised under different types of categories, which are presented in Figure 3 as a conceptual compilation. First, the figure presents different *teaching and learning related approaches* (eg problem-based learning, flipped learning), which were stated by the participants. Second, the figure presents different *teaching and learning activities, which were often described to* promote both *individual and collaborative learning* of students. The activities include more teacher-related activities (eg setting learning objectives, coaching) as well activities implemented in the teaching-learning situations together with students (eg dialogue). In addition, activities are related to the organisation of the teaching-learning situation (eg lecture, workshop), concrete learning tasks (eg portfolios) and use of tools and technology (games, open badges). *Connecting theory and practice*, as well as *the promotion of real-life or working life connection*, emerged in the data as an overarching theme regarding the development of generic or transferable skills.



Figure 3 – A conceptual compilation of the different ways the teachers described promoting generic or transferable skills with students

APPROACHES





The following data quotations illustrate some of the main elements that were described in the data.

Theory-practice connection:

In my courses, students mainly operate with projects directly from local or areal organisations, to both understand the theory and connect it to empirical knowledge.

Participant 1

Group work and collaborative learning:

Finally, collaboration is developed through discussing different aspects of the same big topic in group work (each group with one major question) and then they are regrouped and they ask each other in the new group by being "moderators" and at the end of the discussion, they share what they have discussed in the original group.

Participant 8

The following quotation includes a variety of ways to support the learning of generic or transferable skills: project-based learning, theory-practice connection, collaborative learning through discussion, use of feedback and presentations, coaching:

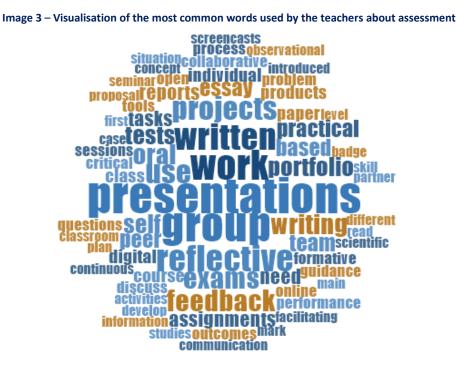
I structure my courses in a way that students work on small projects (sometimes individually, other times in teams – both approaches are important and implemented in the course structure). There are always input phases, either before they start a task or after starting the process. Here it is important that students bring in their opinion and experience and that we reflect on the interplay of theory versus practice. Students presentations also play an important role, especially the discussion and feedback session when the whole class is involved. I give the groups enough time to work in pairs or small groups and exchange ideas in a structured way. Also, individual or group coaching are used and help students to develop important aspects of teamwork and communication skills in general.



4.3 Assessment and feedback methods the teachers described using to help students develop generic or transferable skills

The teachers were asked to: *List the assessment approaches you use to help students develop these skills?*

Most of the participants gave a brief list of different assessment approaches. These are shown in Image 3.



The list of approaches included approaches focusing on both individuals (eg self-assessment, self-reflection) or collaborative approaches (eg group work, peer-assessment) as well as approaches emphasising teacher's actions (eg guidance, feedback). Concrete practices included, for instance, presentations, portfolios, learning tasks, exams, and essays.



Some participants described the methods they were using and why in more detail, as the following quote illustrates:

There is usually a checklist - what we produce together and not just students give each other feedback but I also give them first oral, then written description on the basis of the assessment form. Of course, we need to mark students, but the marking system based on the previously introduced (written) assessment sheet is well-known for everyone. I also like when students use self-reflection. And I have found that they are aware of their strengths and weaknesses. If there is an essay they have to write, there are also guidelines on how to do that, we always discuss the major points beforehand, and they also use the Moodle platform where the discussed materials are uploaded.

Participant 8

Regarding feedback, the teachers were asked to: List the feedback approaches you use to help students develop these skills.

The responses about feedback were also brief lists of different approaches. Image 4 shows the responses. These were also often related to individual approaches (eg providing individual feedback) and collaborative approaches (eg providing team feedback, peer feedback). Written and oral feedback was also often mentioned. In addition, direct feedback, formative feedback, and encouragement for self-reflection were mentioned.



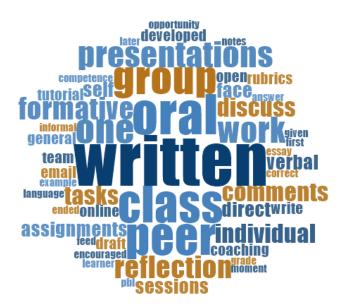


Image 4 – Visualisation of the most common words used by the teachers about feedback

Otherwise, the responses were similar to the ones focusing on assessment or with links to assessment as the next quote illustrates:

The feedback is often given informally, during the monitoring of the activities developed and to be, also, a contribution to the work that is being developed. This will constitute a moment of coaching, but there will also be evaluation feedback that is also desired by students to verify their evolution throughout the curricular unit.



4.4 Collaboration with other teachers to develop generic or transferable skills

The teachers were asked: How do you collaborate with other teachers to develop these skills?

Almost all teachers described having some collaboration; however, there was variation in the establishment of collaboration:

We are working with module teams, usually consisting of 3-4 teachers, where the courses are planned and monitored. This procedure, when functioning properly, helps a single teacher to focus on their part and also gives perspective on how to teach the transferable skills consistently during a module.

Participant 1

We do not often share courses but when yes, we usually discuss everything – aims, outcome, content, skills development, assessment. But when working with someone for a long time, we only discuss problems that come up and so problem-solving together.

Participant 8

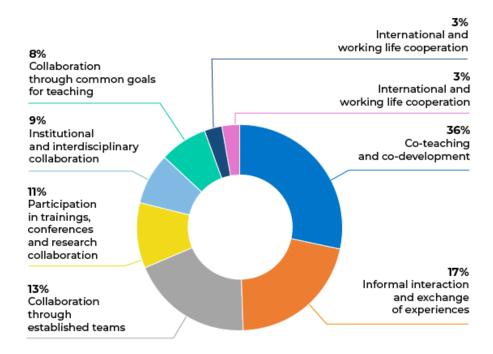
In addition, they mentioned the inexistence of collaboration with other teachers in general, as well as their desire for more formal collaboration:

Teaching is a job where you're "abandoned" at the coal face on day one and you learn to sink or swim - hence, I tend not to collaborate with colleagues, except informally... the "solo-run" teachers are forced to adopt early in their careers is a barrier to collaboration - team teaching early in one's career would make us all more willing to try new ideas/approaches.



Figure 4 presents the different ways the teachers described having collaboration and the proportions of the responses.

Figure 4 – Different ways of collaboration and proportions of their responses





4.5 Challenges in developing generic or transferable skills

4.5.1 What kind of challenges the teachers described?

The teachers were asked: What is the main challenge you experience in developing generic or transferable skills?

The challenges the teachers described had to do with the position of generic or transferable skills in teaching and learning processes. These were described on different levels: teacher-related, student-related, and institution-related. Figure 5 illustrates the different levels.

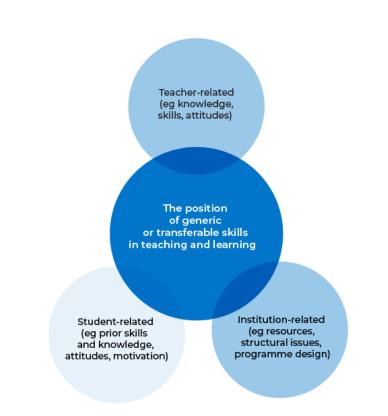


Figure 5 – Illustration of what the challenges in developing generic or transferable skills considered

The following quotation illustrates the teacher-related attitudes and the position of generic or transferable skills:

"I'm not entirely comfortable with the "soft skills" territory... more elusive etc. I know very few teachers/lecturers that enjoy or are comfortable with that aspect of the job...I'm happier with the technical stuff."



Whereas the following quotation reflects the student-related attitudes and the position of generic or transferable skills:

They [students] often feel that other skills are more important and that these skills take up too much of their time. But with maturity and experience, they realize the importance of such skills and often – sometimes years later – they come back and comment on this.

Participant 20

In addition, several participants described the position of generic or transferable skills and their recognition at the institutional level:

"lack of understanding of the importance of those skills by institutions in general (focus on specific content)."

Participant 11

Other specific challenges are listed below:

Teacher-related

- assessment issues: how to assess the skills
- pedagogical knowledge: how to support the learning of generic or transferable skills
- need for up-to-date-knowledge

Student-related

- heterogenous student groups (different skill levels, backgrounds)
- motivation issues

Institution-related

- lack of time
- lack of suitable rooms, technical equipment
- incongruence in the course/programme design



In addition, the importance of developing the skills within a certain context was brought up and the need for the students to be able to notice their competence related to the skills:

I think we can't discuss transferable skills alone, but we have to implement these in substance fields' and professions' needs in a way that students learn these "besides" of professional skills. How to do this is the question. And how students' can make their competencies visible related to these skills is also a challenge.

Participant 36

4.5.2 How do the teachers respond to the challenges they described?

The teachers were asked: How do you respond to this challenge?

The teachers described different ways of responding to the challenges. Figure 6 presents the responses. The teachers' responses had to do with the position of generic or transferable skills and the development and implementation of teaching and learning practices to support their development. These descriptions represented the teacher-related, student-related, and institution-related levels (see chapter 4.5.1).

Figure 6 – How the teachers described responding to the challenges

Emphasising the importance of the skills and connecting them to something concrete	Instructional practices (variety of methods, collaborative practices, possibilities for different ways to learn)	Teacher collaboration and alignment of practices and assessment across different courses
Trying to influence at the institutional level or decision makers	Pedagogical development and continuous development of practices	Guidance, encouragement, feedback
Engaging the students, learning with students	Promotion of practice or working life connection	Use of technology and digital environments to develop the skills



The following quote illustrates the importance of alignment and co-operation at the programme and curriculum level in the institution:

It needs to be done systematically, written into the curriculum, adopted as important by a cohort of teachers, planned into courses and we don't have this. I am not sure how important people think transferable skills are.

Participant 35

4.6 Teachers' processes to improve teaching

The teachers were asked: *What processes do you use for the ongoing improvement of your teaching?*

The different ways the teachers described improving their teaching are presented in Figure 7. The descriptions can be seen presenting ideas of continuous learning and development.

Pedagogical de (participation workshops, cc reading; use materials; lear new appro	in courses, onferences; of online ming about	Reflection and continuous learning and development (self-organised or participation in organised trainings etc.)		interaction through discu	dent feedbak, with students ussions, listening r needs
Discussion with peer feec changing exp and best p	lback, periences	Research activities and participation in development projects		Curriculum	ı development
Open and interested attitude				orking /ledge	

Figure 7 – Teachers processes to improve teaching



The next quote illustrates the importance of reflection in the development:

I do self-reflection. At the end of each lesson, I put down some notes for myself - what went well and what needs to be done differently. I have learnt that each group is different, one technique, strategy works well with one of them, others with the other group, not to mention the individuals who make up the groups, so I try to focus on differentiation as well.

Participant 8

The next quote illustrates the connection of student feedback with curriculum development:

The main driver in the development of the curriculum, each year there is feedback from students to consider as well as a long term plan for the curriculum



4.7 Further support needs

The teachers were asked: What further support would be helpful for the development of your teaching practice?

The possibility to have time for personal pedagogical development and the development of teaching practices was emphasised by the teachers. In addition, many teachers highlighted the importance of collegial support and the possibility to share experiences and develop together. Altogether, different kind of support was anticipated. These are listed in figure 8.

Time to plan and develop teaching	A pedagogical mentor or mentoring programme	More collegial support	More IT support
Support in early phases of teaching career	Collegial development and shared understanding of the teaching objectives	Conferences, mobility opportunities, interdisciplinary collaboration	More pedagogical or didactic training
Online meeting forums	Career guidance skills for teachers	Supportive pedagogical culture (allowed to try new things and make mistakes)	Feedback (from students, colleagues, supervisors)
	Job shadowing	Using learning analytics	

Figure 8 – Teachers' support needs

Especially, in the context of RUN-EU and international collaboration, participation possibilities in both formal and informal sharing of experiences and training were hoped for:

Regular official community of practice at a particular hour. With RUN perhaps this could be cross European – would be interested in different perspectives.

Participant 4

I would like to have some high-level lecture or education programme related to these very important skills and approaches of contemporary learning.



5. Discussion and implications of the findings within RUN-EU

According to the data, generic or transferable skills included a variety of skills that were interpreted to represent *interpersonal skills, creative thinking skills, knowledge management and application skills, self-management skills, organising and management skills and technological and digital skills.* Although they are categorised here into different categories, it is important to recognise their interrelatedness and that they can be considered together as an entity illustrating some of the key future skills necessary in everyday practices in all the areas of life. It is also good to notice that the concept of 'skills' may not be most appropriate when approaching these multifaceted items as they can be seen as consisting of different kinds of skills, attitudes, values and dispositions, which develop in varied circumstances through processes of knowledge and reflection (eg Hager and Holland 2006, 3). However, the teachers described a variety of skills representing the 'umbrella term' of generic or transferable skills, which creates a good basis for the further development of actions within WP3 and the development of the framework for innovative pedagogical approaches and good practices.

Future skills are at the core of functions within the RUN-EU project and WP3, where, for instance, the Central FASA Skills Team executes skills bulletins based on the analysis carried out on the future and advanced skills. The first skills bulletin (02/06/2021) approached the skills based on the OECD Learning Compass 2030, which "is an evolving learning framework that sets out an aspirational vision for the future of education. It provides points of orientation towards the future we want: individual and collective well-being." The findings of the current study can be reflected through the Learning Compass: different skills representing the core foundations defined as "the fundamental skills, knowledge, attitudes and values that are prerequisites for further learning. They provide a basis for developing student agency and transformative competencies". In addition, the compass identifies transformative competencies "that students need to contribute to our world and shape a better future: creating new value, reconciling tensions and dilemmas, and taking responsibility." OECD, 2021).

Image 5 shows the OECD Learning Compass 2030 and the process towards the well-being of individuals and communities.







The findings of the survey emphasised student-centred and interactive approaches in developing generic or transferable skills with students. Thus, the findings supported the importance of students' active role as well as collaborative methods in supporting the development of generic skills (see Crebert et al. 2004; Kember and Leung 2005). This is also linked to the learning compass that highlights both student agency and co-agency when approaching the well-being of society.

One of the most mentioned challenges concerning the development of generic or transferable skills in the data had to do with the position of generic or transferable skills as learning outcomes; whether they were considered important by the students or teachers or whether they should be integrated into everyday teaching and learning practices and how; or considered as something separate. Research shows that the teaching-learning environment plays an important role in the development of generic competencies (eg Lizzio, Wilson and Simons, 2002). For instance, the development of self-regulated learning is supported by an environment that uses student-centred approaches (eg Lahdenperä et al. 2021). Hence, it is



concluded, that for generic or transferable 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 co-agency. Based on the findings, this would require intentional efforts through *teaching and learning related approaches* as well as through *teaching and learning activities*. The data also highlighted the relevance of the connection between theory and practice as well as the importance of supporting working life connections through pedagogical approaches. A recent study also discovered the importance of working life orientation for the development of generic skills; it was concluded that the integration of working life orientation in studies may help students to recognise such skills and, thus, support their development (Myllykoski-Laine et al. 2021). Consequently, this requires collaboration from the teachers to define common learning outcomes as well as institutional development to recognise the future skills and their importance in teaching and learning processes.

The findings of this 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, including Short Advanced Programmes (SAPs), Joint Programmes (JPs) leading to a double, multiple or joint degree, and other related formats. The pedagogical guide aims to support high-quality learning, the use and experimenting of innovative pedagogies and learning activities, and the learning of future and advanced skills across SAPs and JPs (Pedagogical Guide, 2021,

https://issuu.com/hamkuas/docs/pedagogical_guide_for_short_advanced_programmes_s)

The documents together support the development of the common framework for innovative pedagogical approaches and good practices, which will be updated during the project. The findings of the current survey will be used in upcoming surveys for teachers and students for the development of the common framework.

In October 2021, Pedagogical Programme and Design Factory Bootcamp will be organised for RUN-EU participants, mainly, for the educational developers leading the FASAs in their institutions. The need for getting research-based education about the theories behind and the best pedagogical practices emerged from the survey data. Hence, through these programmes, the pedagogical framework will further be developed collaboratively among RUN-EU institutional participants. Meanwhile, Short Advanced Programme (SAP) 'How to navigate through unfamiliar contexts - Develop your skills for the future' will be delivered to RUN-EU students. The three programmes are given during the same period and in the same organisation – HAMK. The groups of students and academics will have sessions to share their conceptions, ideas, and to develop the future advanced skills – concept and education collaboratively.



5.1 Suggestions

Based on the findings of the survey, some suggestions could be drawn to promote the development of practices, which would support the development of generic or transferable skills. These suggestions are provided by WP3 (FASA) members.

- A common understanding of the importance of the generic or transferable skills by students, teachers, and institutions
- Institutional support to enhance the role of the generic or transferable skills
- Alignment of teaching: intended learning outcomes, teaching and learning activities (methods, tasks) and assessment are aligned and support the learning of generic or transferable skills
- Establishment of teacher collaboration; employment of collaborative approaches in teaching and supporting the development of reflective thinking and active agency of students
- Promotion of practice or working life connection when developing the skills
- Supporting the students to identify the skills and notice their competence development
- Guarantee of teachers' possibilities for pedagogical development



References

Crebert, G., M. Bates, B. Bell, C-J. Patrick, and V. Cragnolini. 2004. "Developing generic skills at university, during work placement and in employment: graduates' perceptions." *Higher Education Research & Development* 23 (2): 147–165. https://doi.org/10.1080/0729436042000206636

Hager, P., and S. Holland. 2006. *Graduate attributes, learning and employability*. Springer. <u>https://doi-org.ezproxy.utu.fi/10.1007/1-4020-5342-8</u>.

Lahdenperä J., Rämö, J., & Postareff, L. (2021). Student-centred learning environments supporting undergraduate mathematics students to apply regulated learning: A mixed-methods approach. Manuscript submitted for publication.

Lizzio, A., K. Wilson, and R. Simons. 2002. "University Students' Perceptions of the Learning Environment and Academic Outcomes: Implications for theory and practice." *Studies in Higher Education*, 27 (1): 27–52. <u>https://doi.org/10.1080/03075070120099359</u>.

Kember, D., and D. Y. P. Leung. 2005. "The influence of the teaching and learning environment on the development of generic capabilities needed for a knowledge-based society." *Learning Environments Research* 8: 245–266.

https://doi.org/10.1007/s10984-005-1566-5.

Myllykoski-Laine, S., Lahdenperä, J., Nikander, L. & Postareff, L. 2021. Students' experiences of the development of generic competences in Finnish higher education context – recognising the role of the teaching-learning environment and students' approaches to learning. Manuscript under review.

OECD. 2019. OECD Future of Education and Skills 2030 Conceptual learning framework -LEARNING COMPASS 2030. <u>https://www.oecd.org/education/2030-project/teaching-and-</u> learning/learning/learning-compass-2030/OECD Learning Compass 2030 concept note.pdf

Pedagogical Guide. (2021). https://issuu.com/hamkuas/docs/pedagogical_guide_for_short_advanced_programmes_s



Attachment: The survey

Background questions:

Which institute are you from? What is your discipline/subject area? Number of years teaching Do you have an accredited teaching qualification?

Open-ended questions:

In your teaching, what general or transferable skills do you develop with students? (Max 200 words)

How do you help students develop these skills through your teaching? What methods do you use? (Max 200 words)

List the assessment approaches you use to help students develop these skills.

List the feedback approaches you use to help students develop these skills.

How do you collaborate with other colleagues to develop these skills? (Max 200 words) What is the main challenge you experience in developing general or transferable skills? (Max 200 words)

How do you respond to this challenge? (Max 200 words)

What processes do you use for the ongoing improvement of your teaching? (Max 200 words) What further supports would be helpful for the development of your teaching practice? (Max 200 words)