

# **BeyondScale**

Developing the Organisational Capacity of Higher Education Institutions using the HEInnovate platform to facilitate peer learning and a pan-European community of practice

# **Institutional Country Note**

## **FH Campus Wien**

May 2020



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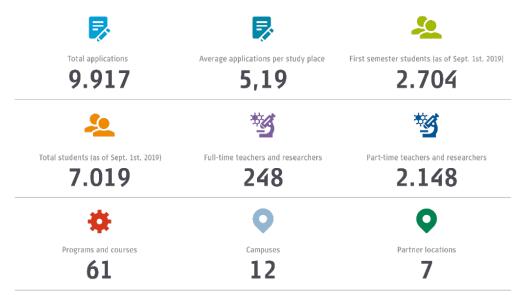


### Institutional Country Note FH Campus Wien

APPLIED LIFE SCIENCES
BUILDING AND DESIGN
HEALTH SCIENCES
APPLIED NURSING SCIENCE
SOCIAL WORK
ENGINEERING
ADMINISTRATION, ECONOMICS, SECURITY, POLITICS

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### Facts and Figures FH Campus Wien



The figures refer to the academic year 2018/19, excluding first semester students and total students.

#### 1 Country's HE system and characteristics of the HEI

The Austrian higher education (HE) system consists of four different sectors, which are uneven in size and organization. The largest sector consists of 22 public universities (orange in figure 1). 21 institutions belong to the sector of universities of Applied Sciences (Fachhochschulen [FH Campus Wien is one of these] – (yellow in figure 1). 16 universities form the sector of private universities (blue in figure 1) and the fourth sector of Austrian 's higher education system consists of 14 university colleges for teachers' education (green in figure 1) (the figure contains German expressions).

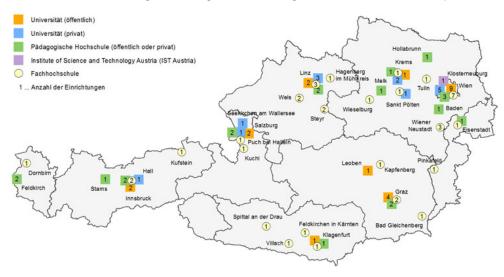


Figure 1: Overview of HEIs in Austria<sup>1</sup>

The sector of public universities represents about 80% of all higher education students. The second largest HE sector is that of Universities of Applied Sciences (Fachhochschulen). Universities of Applied Sciences (UAS) are bound to the general strategic outlines defined by the Austrian Federal Ministry of Education, Science and Research in collaboration with the national Association of Austrian Universities of Applied Sciences (Fachhochschulkonferenz – FHK).<sup>2</sup> University colleges for teacher education and private universities have only a small part of students and offer a small number of programs<sup>3</sup>. Nonetheless, Austria can capitalise on the institutional diversity of its higher education system and promotes partnerships and interdisciplinary study programs stimulating entrepreneurship and innovation in students and stakeholders.<sup>4</sup>

Over the past 25 years, a reform process<sup>5</sup> has profoundly shaped the Austrian HE system. One such important reform was the establishment of UAS. This new type of universities focuses on vocational-oriented academic training and applied research in close cooperation with the national industry.

With about 7000 students, the FH Campus Wien is the largest University of Applied Sciences in Austria. One example of the strong links between UAS and industrial players is the fact that many external lecturers at FH Campus Wien are involved in both the development of study programs and teaching. Besides, many study programs are especially designed for working professionals (>50% of all study programs enable a combination of working and studying). Furthermore, almost all study programs dedicate a considerable amount of time to internships. These firms often employ students after graduation.

<sup>&</sup>lt;sup>1</sup> See: Arbeitsmarktprofil 2017. AMS, <u>http://www.arbeitsmarktprofile.at/2017/6/teil\_08.html</u>

<sup>&</sup>lt;sup>2</sup> In October 2017, the association presented a plan promoting the entrepreneurial and innovation agendas at UAS. See:

http://www.fhk.ac.at/index.php?eID=tx\_nawsecuredI&u=0&file=uploads/tx\_sbdownloader/FHKPositionspapier\_Koa\_ litionsgespr2017.pdf&t=1587730967&hash=19272c240d548788294622185a6a40ffd1760ed6

 <sup>&</sup>lt;sup>3</sup> See: <u>http://www.statistik.at/web\_de/statistiken/menschen\_und\_gesellschaft/bildung/hochschulen/index.html</u>
 <sup>4</sup> See: Austrian HEInnovate Country Review: OECD Skills Studies - Supporting Entrepreneurship and Innovation in Higher Education in Austria (p. 5)

<sup>&</sup>lt;sup>5</sup> See: Austrian HEInnovate Country Review: OECD Skills Studies - Supporting Entrepreneurship and Innovation in Higher Education in Austria. *"The reform process is still ongoing and the federal legislator has played a key role by defining rules and financing, and promoting policy dialogue."* (p. 22)

At the FH Campus Wien students can choose from more than 60 bachelor's and master's degree programs, as well as especially designed master courses offered across the departments of Applied Life Sciences, Building and Design, Health Sciences, Applied Nursing Sciences, Administration, Economics, Security, Politics, Social Work and Engineering. More than half of the programs (especially all master programs, except for two) are offered as part-time study programs (i.e. these study programs enable a combination of working and studying).<sup>6</sup> The FH Campus Wien maintains strong ties to stakeholders and works closely with an established network of companies, associations, schools and public facilities. The FH Campus Wien does not receive any baseline funding. 63% of the FH Campus Wien's funding sources stem from "classic" standard per capita cost model, supplemented by additional funding of the public health sector and by other sources of financing, i.e. research grants, tuition fees, students' contributions and a recent development of per capita financing from industry.

#### **Entrepreneurial Activities**

The Austrian federal authorities, who are concerned with the entrepreneurial and innovation agendas of the HE system, have put in place several measures to foster the entrepreneurial spirit. In particular, federal authorities implemented a series of policy measures<sup>7</sup>.

In 2018, Austria took part in the HEInnovate country reviews. Fourteen HEIs agreed to face the questions and discussions within the review teams. The Rector and the Vice Rectors supported the HEInnovate review, which was coordinated by the Head of the FH Campus Wien's Academic Institutional Development unit. Together with the FH Campus Wien's Start up Service, the Academic Institutional Development unit work specifically on integrating "Entrepreneurship" into the FH Campus Wien's teaching & learning portfolios, research & development agendas as well as into the FH Campus Wien's organization.

The FH Campus Wien has already conducted several activities in relation to entrepreneurship. The following examples demonstrate these:

- The FH Campus Wien linked its internationalization strategy with entrepreneurship by being part
  of a larger international network of universities of applied sciences; apart from the FH Campus
  Wien, the Munich University of Applied Sciences and the ZHAW Zurich University of Applied
  Sciences<sup>8</sup> are part of the network. The three institutions coordinate their curricula and experiment
  together in order to develop and promote entrepreneurial teaching.<sup>9</sup> These activities are
  coordinated by the International Offices of the respective universities.
- The FH Campus Wien has enhanced interdisciplinary teaching capacities through campus lectures, a lecture series of high profile experts of different fields.<sup>10</sup>
- The majority of courses taught at the FH Campus include elements that address the improvement of entrepreneurial skills in students. In particular, the master's degree program "Health Assisting Engineering" has successfully developed interdisciplinary competences.<sup>11</sup>
- The capacity to engage with external stakeholders in co-designing and co-delivering entrepreneurial education is well developed at the FH Campus Wien. External lecturers represent an important source of expertise for entrepreneurial teaching and learning. In total, 244 full-time and 2147 part-time teachers and researchers work for the FH Campus Wien.<sup>12</sup>
- Furthermore, the learning outcomes of the study programs of the FH Campus Wien feature its strategically important topics (i.e. digitalization, ethics, internationalization, entrepreneurship and sustainable development goals).<sup>13</sup>

<sup>&</sup>lt;sup>6</sup> See: <u>https://www.fh-campuswien.ac.at/en/studies/study-courses.html</u>

<sup>&</sup>lt;sup>7</sup> See: Austrian HEInnovate Country Review: OECD Skills Studies - Supporting Entrepreneurship and Innovation in Higher Education in Austria (p. 39)

<sup>&</sup>lt;sup>8</sup> See: https://www.inuas.org/en/

<sup>&</sup>lt;sup>9</sup> See: <u>https://www.fh-campuswien.ac.at/studium/internationales/inuas.html</u>

<sup>&</sup>lt;sup>10</sup> See: <u>https://www.fh-campuswien.ac.at/de/die-fh/events/campus-lectures.html</u>

<sup>&</sup>lt;sup>11</sup> See: <u>https://www.fh-campuswien.ac.at/en/studies/study-courses/detail/health-assisting-engineering-t.html</u>

<sup>&</sup>lt;sup>12</sup> See Business Report FH Campus Wien 2018-19: <u>https://www.fh-</u>

campuswien.ac.at/fileadmin/redakteure/Presse/Dokumente/Jahresbericht/Jahresbericht\_2018-19\_web.pdf

<sup>&</sup>lt;sup>13</sup> See also the mission, vision and strategic goals of the FH Campus Wien (not yet published)

 Finally, the FH Campus Wien is engaged in students projects such as "Kanu Reeves"<sup>14</sup> and "Formula Student"<sup>15</sup> in order to foster the entrepreneurial spirit among students The variety of skills necessary cross many more disciplines, requiring students to work together with many people from different backgrounds.<sup>16</sup>

#### Linking HEInnovate Country review to Beyond Scale

This Institutional Country Note focusses on the two activities planned by the FH Campus Wien as part of the project "Beyond Scale". Activity 1 relates to the HEInnovate dimension "Digital Transformation and Capability". The results from the HEInnovate Self-assessment (conducted in 2018 as part of the HEInnovate Country Review, see figure 2) show that this dimension was not yet introduced at the time of the self-assessment. Meanwhile, especially due to the sudden pandemic situation caused by the Covid-19 virus, a rapid expansion of remote teaching & learning became inevitable and essential. Therefore, a self-assessment of the FH Campus Wien on digital transformation and capability will be valuable. Activity 2 relates to "Entrepreneurial Teaching and Learning", a core area of the FH Campus Wien's overall mission. Although the FH Campus Wien's self-reflection on "Entrepreneurial Teaching and Learning" revealed a satisfactory result at, there is still room for improvement.



Figure 2: Results from the HEInnovate self-assessment of FH Campus Wien (scores are averages on a scale from 1 lowest to 5 highest)<sup>17</sup>

Project sponsor of Beyond Scale is ao. Univ.-Prof. Mag. Dr. Arthur Mettinger, Vice Rector for Teaching and Department Head of Administration, Economics, Security, Politics. Also the Rector, FH-Prof.<sup>in</sup> Dr.<sup>in</sup> Barbara Bittner, in her role as the portfolio manager for projects on education and further education contributes significantly to the project "Beyond Scale". The "Beyond Scale" project team of the FH Campus Wien consists of Mag.<sup>a</sup> (FH) Susanna Boldrino (head of the Academic Institutional Development unit) as the project leader and Dr. Steffen Keijl as project team member.

Conclusively, the planned activities can stimulate further entrepreneurial activities in the dimensions "Digital Transformation and Capability" as well as "Entrepreneurial Teaching and Learning" and strengthen an interdisciplinary and an entrepreneurial spirit throughout the institution.

<sup>16</sup> See: Austrian HEInnovate Country Review: OECD Skills Studies - Supporting Entrepreneurship and Innovation in Higher Education in Austria (p. 127)

<sup>&</sup>lt;sup>14</sup> Concrete boatbuilding competition for civil engineering students.

<sup>&</sup>lt;sup>15</sup> Competition for student teams across the world who build from scratch small-scale formula-style racing cars.

<sup>&</sup>lt;sup>17</sup> See Profile Report FH Campus Wien to HEInnovate

#### 2 Activity 1 "Digital competencies in transition"

### 2.1 Planned activities of the HEI for the BeyondScale project which use the HEI nnovate platform

Activity 1 focuses on the HEInnovate dimension "Digital Transformation and Capability". The planned activities as stated below are inbound.

#### 2.1.1 Proposed Activity: description, rationale

The results of the HEInnovate self-assessment in 2018 (overview see figure 2) were used as a first step in the strategy development process as a SWOT analysis. Because the HEInnovate self-assessment did not yet include the dimension "Digital Transformation and Capability", the FH Campus Wien conducted a broad analysis of the environmental influencing factors that contribute to an increased digitalization in higher education.

As a result, the FH Campus Wien has defined "Digital Transformation and Social Change" as an important strategic field in its new strategy plan for the years 2020-2025. In detail, the strategy sets out a number of digitalization objectives in the areas of teaching and learning (1.1), research (1.2) and the organisational modernisation (1.3 in Box 1 below).

#### Digital transformation and social change

Our graduates\* and employees\* are familiar with the opportunities and challenges of digital transformation and social change. They use this knowledge to help shape developments in their professional fields in an ethically responsible manner.

1.1 All degree programs deal with the developments and effects of the digital, social and global transformation in the respective occupational field and anchor central contents in the curricula.

1.2 We establish an overarching field of research on digital, social and global transformation and promote related interdisciplinary activities.

1.3 We evaluate and prioritise the possibilities of digitalization for all administrative processes of the university and transform them accordingly. To this end, we expand the digital skills of our employees\*.

Box 1: Digital transformation and social change from the strategy of the FH Campus Wien<sup>18</sup>

In order to achieve the strategic goals of this strategic field, the FH Campus Wien first will plan concrete activities and measures in the next months. The HEInnovate tool will contribute to identifying the appropriate next steps.

Secondly, the identified measures will be applied at a program level (Strategic Objective 1.1)

Digitalization takes place:

- As content in curricula and in learning outcomes
- As digital teaching and learning methods

We plan to re-design curricula, in order to transform the digital competencies of students of the FH Campus Wien.

 $<sup>^{18}</sup>$  See the mission, vision and strategic goals of the FH Campus Wien

a. Learning Outcomes and Content in Curricula

The digital learning outcomes will be based on the "*Digital Competence Model for Austria (DigComp 2.2 AT)*" which derives from the European Reference Framework for Digital Competences (DigComp 2.1)<sup>19</sup>. The competence model serves to classify and compare digital competences. This competence model creates a link between knowledge and skills in a digital living and working environment and universities.

b. Teaching and Learning:

The FH Campus Wien currently carries out almost all educational activities through emergency distance learning of unclear quality. This triggers a learning process. The increased self-confidence in using digital teaching & learning methods will help to achieve the strategic objectives more quickly. The long-term aim of the FH Campus is to integrate a share of 20-30% of virtual courses of high quality into the curricula of all study programs.

#### Actions planned

The plan is to use the HEInnovate Self Assessment dimension "Digital Transformation and Capability" to identify concrete activities and measures for the operationalization of the strategic field "Digital transformation and social change".

After the self-assessment, the following actions are planned:

- a. Reflection of statements in the self-assessment of the "Digital Transformation and Capability" dimension with the HEInnovate community at the FH Campus Wien (about 100 persons).
- b. Identification of concrete activities and measures for the strategic objective 1.1. (Box 1)
- c. Explore possibilities for using the self-assessment tool at the level of the study programs in order to support study program managers in the screening of their programs. The HEInnovate website will also serve as a source of information to provide the study programmes with examples and different approaches to digitalization.
- d. Identification of learning outcomes with reference to the "Digital Competence Model for Austria" which acts as a reference point. Study programs in the re-design process of their curricula will focus on digital learning outcomes (up to 5 study programs).
- e. Make the learning outcomes, the content to digitalization and virtual teaching & learning visible in the database "eCurriculum". This database contains all curricula of the FH Campus Wien. It is possible to classify the learning outcomes. Learning outcomes are defined at three levels: At the study program level as a link to the professional field, as well as at module and course level. Learning outcomes are designed with representatives from the occupational field. This secures future-oriented competences of the students.
- f. Reflection of the use of the HEInnovate self-assessment tool at University and program level.

The planned activities will support the start of the deployment of the strategy of the FH Campus Wien for the next couple of years so that digitalization becomes omnipresent throughout the institution. The connection to the processes of new and further development of the study programs and university didactics at the FH Campus Wien will be ensured.

#### 2.1.2 Objectives & Outcomes

The **overall objective** of Activity 1is to re-design curricula, in order to transform the digital competencies of students of the FH Campus Wien

<sup>&</sup>lt;sup>19</sup> See also the DigiComp Framework on <u>https://www.bmdw.gv.at/dam/jcr:f64dce35-0e93-4505-b867-def111cc88dc/DigComp\_2.2%20AT-EN.pdf?lang=en</u>

- University Level: It is planned to make a blueprint of activities and measures for the strategic field "*Digital Transformation and social change*" (see box 1) of the FH Campus Wien strategy 2020-25.
- Program Level: The concrete focus of the activity will be on the first strategic objective "All degree programs deal with the developments and effects of the digital, social and global transformation in the respective occupational field and anchor central contents in the curricula." The activity will foster the transformation of curricula and teaching & learning regarding digitalization.

#### The **outcomes** are:

- Blueprint with activities and measures for the strategic field "Digital Transformation and social change" of the FH Campus Wien strategy 2020-25 is identified.

- Reflexions on the HEInnovate Tool and Website for quality development of study programs to foster digitalization with focus on extended possibilities of use.

- 5 study programs integrate digitalization learning outcomes and contents in curricula. The learning outcomes refer to the "Digital Competence Model for Austria". The learning outcomes for the programs are closely linked with the professional field.

- 5 study programs integrate a share of 20-30% of virtual courses of high quality in their curricula.

- Curricula are mapped in the database "eCurriculum" of the FH Campus Wien. Recommendations for shaping further digital transformations are provided for the study programs starting next with the redesign of their curricula.

- Strengths and weaknesses of the HEInnovate self-assessment tool on University and program level.

The monitoring of the Activity 1 will address how the digitalization for the University Management, the Heads of the study programs, teachers and students develops.

#### 2.1.3 Timing of the planned activities

	Phase			·										<u>.                                    </u>																		
	/ Action								20	20								2021														
		01	0	2	03	04	05	5	06	07	0	8	09	10	1	1	12	01	02	0	3	04	05	06	0	7	80	09	10	) 1	1	12
۲.	Self Assessment University Level																															
1.1	Preparation Self Assessment "Digital Transformation and Capability"																															
1.2	Perform self assessment																															
1.3	Reflect results of self assessment and questions of the HEInnovate Tool																															
1.4	Strengths and weaknesses of HEInnovate Tool on University level																															
2	Program Level																															
2.1	Derivation/redesign of the questions on the level of the study programs																															
2.2	Linkage to existing curricula processes: define learning outcomes, content and vitual courses																	-														
2.3	Mapping in the database "eCurriculum"																															
2.4	Framework for digital learning outcomes, content and virtual courses																															
2.5	Strengths and weaknesses of HEInnovate Tool on program level																															
2.6	Writing User story																						•									

Box 2: Timeline of the first HEI activity

#### 2.1.4 Barriers, challenges & opportunities

#### Barriers

Individual level	Plan to mitigate hindrances
Increased workload for teachers and therefore	Cooperation with teaching support center to
reduced motivation to participate.	support teachers.
Fears that one has not enough digital	Cooperation with personal development unit.
competences	Appreciative communication and open discussion
	culture in small groups.
Institutional level	Plan to mitigate hindrances
Tight resources of the FH Campus Vienna and	Integrate the activities in existing processes,
simply lack of time	combination with quality development.
	Strong involvement of the University
	Management.
Largest University of Applies Sciences in Austria	Involve people who are particularly innovative
and multidisciplinarity of study programs	and disseminate success stories and benefit.
Many ongoing activities	Linking activity with quality development
	processes
National/Regional level	Plan to mitigate hindrances
Emergency caused by Covid-19.	Use of different actions taken to overcome
	Covid-19 crisis (Polls, surveys, lessons learned).
Limited focus on UAS	Personal contact with responsible persons.
Challenges	

#### Challenges

	New is/are
Changes in curricula mean high responsibility. It	the speed at which the transformation must
is about giving people a future and about the	occur.
reputation of the University. However, future is	unforeseeable changes in the professional
not predictable. There are many possible	fields.
futures, and one has to decide clearly, which	all employees of the university are affected.
competencies will be necessary for the future.	

#### Opportunities

	How can it help to promote the activity
Activity can strengthen strategic partnerships	Participation in the self-assessment; strategic
	partners will be invited.
Improved alignment of curricula to the	Motivates students to participate in the self-
requirements of the professional field	assessment and quality development processes.
FH Campus Wien demonstrates leadership as	Attention of the University board.
largest UAS in Austria.	
The results of the activity can be used in the	The Beyond Scale project has already been
upcoming institutional Audit	presented to about 70 senior managers of the
	FH Campus Wien at the Leadership Day 2020.

#### 2.2 Applying the HEInnovate platform to support Activity 1

As mentioned above the activity will start with a HEInnovate Self Assessment in the dimension "Digital Transformation and Capability" to identify concrete activities and measures for the operationalization of the strategic field "Digital transformation and social change". Chapter 2.1.3 shows the steps that will be taken to prepare, perform and reflect the self-assessment.

The difference to the self-assessment in 2018 will be that it is still not possible to foresee whether workshops can be conducted on the premises of the University. The FH Campus Wien is currently still closed and there are no workshops or events taking place. According to the university management, there will be no events in autumn either. It may be that the preparation, performance and the reflection of the self-assessment will have to be conducted and accompanied virtually. The online experiences will be collected and compared with the "classical" procedure.

#### 2.2.1 Deploying the toolbox for self-assessment

The HEInnovate toolbox will be used throughout the whole process. At the beginning the focus will be on the self-assessment of the dimension of "*Digital Transformation and Capability*", whereas later the focus will be on the refinement of the HEInnovate dimension and adapting this dimension (and the statements) to be useful for the further development and design of study programs. By reflecting on what the HEInnovate tool has achieved at both university and program level, strengths and weaknesses of the tool become visible.

In the course of the first comprehensive self-assessment in 2018, a number of improvement measures for the HEInnovate tool have already been identified in the approximately 15 workshops. These range from formal to substantive suggestions for the further development of the HEInnovate Tool. These suggestions will be clustered and applied to the digitalization dimension.

#### 2.2.2 Role of BeyondScale buddies

We plan to exchange with the buddies on the following topics (see 2.1.3 Timing of the planned activities):

- 1.3 Reflection of the results of self-assessment and questions
- 1.4 Reformulation on Statements of "Digital Transformation and Capability"
- 2.2 Comparison of relevant curricula

2.4 Reflection on the framework for digital learning outcomes, content and virtual courses

The FH Campus Wien can

- share experiences with the comprehensive self-assessment from 2018
- can make available the results of the self-assessment
- can present interdisciplinary activities
- can arrange contact to persons with entrepreneurial activities from the FH Campus Wien and the INUAS Network (Munich and Zürich).

The communication will take place on virtual platforms through online conferences, exchange of documents per Mail and phone calls. We anticipate an increased exchange of ideas for curricula development on digitalization of learning outcomes, content and teaching and learning.

#### 2.2.3 Further development of HEInnovate platform with regard to Activity 1

When re-designing their study programs, UAS have to discuss the content and quality with external stakeholders due to legal requirements. Each re-design process starts with an analysis of the quality of the study program. We plan to use the HEInnovate tool during these reorganization processes. The HEInnovate tool could thus become part of the analysis in quality development procedures. We expect to identify societal challenges and to adapt study programs better to the needs of the changing labour markets, which in particular considers digitalization. The reflection of the institution's digitalization with the HEInnovate tool may stimulate re-designing lectures, modules, curricula and profiles of study programs.

#### 2.3 Conclusion for Activity 1

The experiences made with the HEInnovate Tool in 2018 and the results and improvements obtained will be of added value for Activity 1. The HEInnovate results were also feeding the SWOT-analysis, which stimulated the development of the 2020-2025 strategy. In the project BeyondScale the FH Campus Wien will complete the self-assessment for the digitalization dimension, as digitalization is an essential field in the new strategy. The current developments of Covid-19 show the significance of digitalization for Universities. The Activity 1 of the FH Campus Wien is, to initiate the improvement of the digital competencies of students of the FH Campus Wien and therefore curricula regarding learning outcomes, content and teaching & learning. Furthermore, to use the self-assessment tool for quality development of study programs. The FH Campus Wien will assess its results of the Activity 1 with BeyondScale Buddies. The activity for BeyondScale has a high chance of success due to the connection to strategy and strong commitment of the Rector and Vice Rector.

#### 3 Activity 2 "Entrepreneurial spirit"

## 3.1 Planned activities of the HEI for the BeyondScale project which use the HEI nnovate platform

The primary focus of the second activity will be inbound. The dimension of HEInnovate *"Entrepreneurial Teaching and Learning"* form the core Activity 2 of the FH Campus Wien.

#### 3.1.1 Proposed Activity: description, rationale

Activity 2 seeks to establish a network for teachers on entrepreneurship and innovation in order to enhance the quality of teaching entrepreneurship and to induce an entrepreneurial spirit throughout the institution.

Subsequently, this network of teachers evaluates and reflects on entrepreneurial learning outcomes in the respective curricula. *"Learning outcomes are statements of what the individual knows, understands and is able to do on completion of a learning process. The achievement of learning outcomes has to be assessed through procedures based on clear and transparent criteria. Learning outcomes are attributed to individual educational components and to programs at a whole. They are also used in European and national qualifications frameworks to describe the level of the individual qualification."<sup>20</sup> Learning outcomes are defined when a curriculum is developed for the first time and are re-defined in periods of 5-7 years when the curriculum is re-evaluated and re-designed.* 

Teachers on entrepreneurship mainly come from companies and from the professional field (part-time teachers). Teachers bring along experience in entrepreneurship and case studies. They initiate projects and develop practical applications, and thus contribute to a future-oriented approach to their teaching. They motivate students to be proactive and creative.

The establishment of the network of teachers for entrepreneurship and innovation may contribute to enhancing entrepreneurial teaching and learning outcomes at the FH Campus Wien. The students' competences will be visible and will attract the attention of the professional field to the FH Campus Wien. Wien.

Increased awareness on entrepreneurship and innovation should arise at the FH Campus Wien. Concretely, the awareness will be raised by using the "EEEPHEIC" (abbr. EPIC)<sup>21</sup> tool of HEInnovate or a similar tool for evaluating entrepreneurial teaching and learning.

In order to build the network of teachers on entrepreneurship and innovation, a close collaboration with the teaching support center of the FH Campus Wien is intended.

- a. The teaching support center gives teachers advice on the formulation of learning outcomes.
- b. Furthermore, the teaching support center can support these activities by making use of the newly designed platform "*Campus Connect*" that connects teachers on entrepreneurship and innovation.

Not only the construction of a network of teachers but also the various possibilities for exchange and the planned use of the "EPIC" tool will enhance the entrepreneurial spirit among the teachers and also among students and other stakeholders.

The EntreComp Framework can serve as a first step in classifying learning outcomes as entrepreneurial.

<sup>&</sup>lt;sup>20</sup> See ECTS User Guide, page 10, on

https://oead.at/fileadmin/Dokumente/oead.at/KIM/Veranstaltungen/2015/Vernetzungstreffen/ECTS\_Users\_Guide\_Web-final\_en.pdf

<sup>&</sup>lt;sup>21</sup> See EEEPHEIC Evaluation of Entrepreneurship Education Programmes in Higher Education Institutions and Centres, on <a href="https://heinnovate.eu/en/news/tell-us-about-your-experience-entrepreneurship-education">https://heinnovate.eu/en/news/tell-us-about-your-experience-entrepreneurship-education</a>

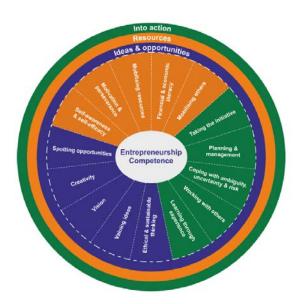


Figure 3: EntreComp Framework<sup>22</sup>

#### Reason for the establishment of the network

One of the recommendations of the HEInnovate reviewers was to integrate innovation and entrepreneurship more strongly into teaching.

The self-assessment in 2018 revealed that entrepreneurial teaching is the second best strength of the FH Campus Wien. However, the results for the individual items underlying this dimensions show that not all area have not developed as well to the same extent. While the co-design of curricula was reflected as working well/satisfactory, the reflection identified the integration of entrepreneurship research in the education offer and the validation of entrepreneurial learning outcomes as working less satisfactory.

Aspects with lower ratings such as the validation of learning outcomes and an evaluation of the entrepreneurial competencies of the students will be addressed in the course of this activity.

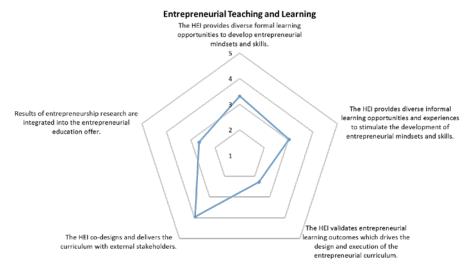


Figure 4: Detailed results from the HEInnovate self-assessment of FH Campus Wien in 2018 (scores are averages on a scale from 1 to 5)<sup>23</sup>

<sup>&</sup>lt;sup>22</sup> See the EntreComp Framework on https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework

<sup>&</sup>lt;sup>23</sup> See Profile Report FH Campus Wien to HEInnovate

#### Actions planned

The dimension of HEInnovate "Entrepreneurial Teaching and Learning" will be the focus of Activity 2 "Entrepreneurial spirit".

The plan is to build up a network of teachers on entrepreneurship and innovation to foster the "Entrepreneurial spirit" in teaching and learning.

The following actions are planned:

- a. Identification of teachers on entrepreneurship and innovation. Selection of courses that can be assigned to this topic. Information of teachers about the activity.
- b. Usage of the platform "Campus Connect", established in 2019. Embedding information on the platform. A link to the HEInnovate toolbox enables a direct connection to European case studies and user stories, HEInnovate experts and tools.
- c. Reflection on "EntreComp" Framework with teachers. Usefulness for content, learning outcomes of the curricula and for entrepreneurial teaching & learning will be evaluated.
- d. Comparison of suitable tools to evaluate entrepreneurial teaching & learning in courses. One of the tools will be "EPIC" of HEInnovate. "EntreCompEdu" is planned as a second tool. Part of the teachers on entrepreneurship and innovation will use "EPIC", the other part will evaluate with "EntreCompEdu". An exchange of experiences and results will reveal strength and weaknesses of the tools, which lead to recommendations for improvement of "EPIC".
- e. Reflection of entrepreneurial learning outcomes, content of the courses and specific entrepreneurial teaching & learning methods. Teachers will be encouraged to adapt the existing learning outcomes, content and teaching & learning in curricula.
- f. Visualization of the changes in curricula in the database for curricula of the FH Campus Wien.
- g. Formulation of the specific frame of reference for the FH Campus Wien.

#### 3.1.2 Objectives & Outcomes

In the recently developed strategy of the FH Campus Wien Entrepreneurship and Innovation is defined as one of the main targets in the mission statement: *Innovative ideas from students and employees are supported and entrepreneurship is encouraged.* 

One goal of the strategy is that "we understand entrepreneurial spirit as an essential part of our university culture."

The **objective of this activity** is to establish a network of teachers on entrepreneurship and innovation at the FH Campus Wien to enhance the quality of teaching & learning entrepreneurship. Particularly, to induce an entrepreneurial spirit throughout the institution via adapting curricula.

- Network: Teachers use Campus Connect (virtual platform) and select a framework and a tool for evaluating the quality of entrepreneurial teaching and learning.
- Curricula: Identification of entrepreneurial learning outcomes at the FH Campus Wien

The **outcomes** are:

- Teachers on entrepreneurship and innovation are able to use Campus Connect (virtual platform).

- In accordance with the teachers, a framework for entrepreneurship and tools for evaluating the quality of teaching & learning entrepreneurship are selected. The tools will be evaluated.

- 5 study programs adapt learning outcomes, contents and teaching & learning methods in curricula. The learning outcomes refer to the chosen framework. The learning outcomes for the programs are closely linked with the professional field.

- The visualization of the transformation of curricula is mapped in the database "eCurriculum" of the FH Campus Wien. A FH Campus Wien specific framework with best practices is available.

The progress in achieving the intended outcomes will mainly depend on the number of teachers on entrepreneurship (approximately 30) and their willingness to exchange.

#### 3.1.3 Timing of the planned activities

	Phase / Action		2020 2021																										
		01	02	2	03	04	0	5	06	07	08	09	1	10	11	12	01	02	03	04	05	06	0	7 08	3 0	09	10	11	12
1	Network																												
	Identification of teachers of entrepreneurship and innovation																												
	Find out options to use the platform "Campus Connect" on the intranet for the network (Link to HEInnovate Toolbox)																												
1.3	Discuss the EntreComp Framework via "Campus Connect" or other virtual platforms																												
	Prepare the use of "EPIC" and a similar tool for the network																												
	Use of tools and reflection/comparison of experiences																												
2	Curricula																												
2.1	Linkage to existing curricula processes: define learning outcomes, content and vitual courses																												
2.2	Mapping in the database "eCurriculum"																												
2.3	Framework for entrepreneurial learning outcomes, content and teaching & learning				-																								
2.4	Writing User story																												

Box 3: Timeline of the second HEI activity

#### 3.1.4 Barriers, challenges & opportunities

#### Barriers

Individual level (teachers)	Plan to mitigate hindrances
Resistance against virtual platforms and	Provide most relevant information exclusively on
evaluations.	the platform.
Lack of interest in participating in the activity by	Integrating the Framework and tool for
part-time teachers.	evaluation into existing quality development
	processes.
Institutional level	Plan to mitigate hindrances
Tight resources of the FH Campus Vienna and	Strong involvement of the University
lack of time.	Management.
Different understandings of entrepreneurship	Is to be taken into consideration in the
and innovation across the departments.	framework and the selection of the tool for
	evaluation.
Increased work load in research & development	Linking Activity 2 with quality development
and the start-up service.	processes for curricula.
National/Regional level	Plan to mitigate hindrances
Narrow Understanding of Entrepreneurship: is	Selection of courses and teachers will show a
considered equivalent to start up activities.	broader range of meanings of entrepreneurship.
Companies expect comprehensive	Use of round tables in the quality development
entrepreneurial competences from students.	for curricula to enable realistic expectations.
Challenges	
	New is that
A creative and broad meaning of	our world is transforming rapidly. We need
entrepreneurship and innovation is difficult to	persons who think in different ways and who are
establish. Experts in their academic disciplines	creative and flexible.
have their specific understanding.	no age barriers to be entrepreneurial and

#### Opportunities

	How can it help to promote the activity
Activity can enhance reputation of the FH	Invitation of representatives of companies to
Campus Wien in the professional field.	"Round Tables" to discuss the future of the
	professional field.
Students can directly apply their competences in	Good job perspectives.
the professional field.	
The results of the activity can be used in the	The Beyond Scale project has already been
upcoming institutional Audit.	presented to about 70 senior managers of the
	FH Campus Wien at the Leadership Day 2020.

innovative exist anymore.

more and more closely connected.

...academic pathways and professional work are

#### 3.2 Applying the HEInnovate platform to support Activity 2

The core of the activity of the FH Campus Wien is "Entrepreneurial Teaching and Learning". We plan to make use of a possible connection to the newly established platform for teachers of the FH Campus Wien ("*Campus Connect*") and the HEInnovate Toolbox to generate individual advantage.

#### 3.2.1 Deploying the toolbox for self-assessment

As written above, the HEInnovate toolbox will be used to make information available on the virtual platform. Later on, tools for evaluation "*EPIC*" and probably "EntreCompEdu" will be the focus. Part of

the teachers on entrepreneurship and innovation will use "EPIC", the other part will evaluate with "EntreCompEdu". Strength and weaknesses of the tools will lead to recommendations for improvement of "EPIC". For the various possibilities of exchange and the classification of learning outcomes, the HEInnovate platform can serve as a source of inspiration. Finally, an adapted version of "EPIC" (as redeployment of the HEInnovate tool) will serve as the regular evaluation of entrepreneurial teaching and learning at FH Campus Wien. However, the redeployment of "EPIC" will only be possible after the BeyondScale project has already finished. Therefore Activity 2 will concentrate on evaluating EPIC's usability through a comparative approach.

#### 3.2.2 Role of BeyondScale buddies

Beyond Scale buddies can be generally involved in the activity as advisors.

The following topics are planned to be exchanged (see 3.1.3 Timing of the planned activities):

- 1.1 Exchange on how the terms entrepreneurship and innovation are understood in teaching & learning.
- 1.3 Reflection and advise on the use of the EntreComp Framework (see figure 3).
- 1.4 Experiences in evaluating entrepreneurial teaching & learning.
- 1.5 Reflection on the chosen tools for evaluation, "EPIC" and probably "EntreCompEdu".
- 2.1 Comparison of relevant curricula.
- 2.3 Reflection on the framework for entrepreneurial learning outcomes, content and teaching & learning.

The FH Campus Wien can

- share experiences with the comprehensive self-assessment from 2018
- can make available the results of the self-assessment
- can present interdisciplinary activities
- can arrange contact to persons with entrepreneurial activities from the FH Campus Wien and the INUAS Network (Munich and Zürich).

The communication will take place on virtual platforms through online conferences, exchange of documents per Mail and phone calls. We anticipate to exchanging knowledge on the experiences of evaluating entrepreneurial teaching & learning.

#### 3.2.3 Further development of HEInnovate platform with regard to Activity 2

The HEInnovate Toolbox and particularly the selected tools for evaluation "*EPIC*" and probably "EntreCompEdu" are a shared activity for an exchange of experience between teachers. The recently developed platform for teachers ("*Campus Connect*") of the FH Campus Wien can assist in this exchange throughout the activity. Results of the exchange will contribute to the further development of "EPIC".

Moreover, within the process of re-designing curricula, existing learning outcomes can be analyzed and compared to those of other study programs or HEIs. The digital database (*"eCurriculum"*) of the FH Campus Wien, which consists of all curricula of the study programs, makes learning outcomes and their further development visible. Furthermore, within this digital database learning outcomes can be easily classified as entrepreneurial (Figure 5). The EntreComp Framework might be an approach to develop the FH Campus Wien specific Framework in order to identify entrepreneurial learning outcomes, contents and teaching & Learning.



Figure 5: Screenshot of classifying learning outcomes ("Lernergebnis" in German)

Relevant stakeholders will have a clear understanding about the entrepreneurial learning outcomes across courses, modules, study programs, departments and the FH Campus Wien as a whole.

#### **Conclusion for Activity 2**

The first results from the self-assessment of using the HEInnovate Tool in 2018 shed light on the importance of the identification of entrepreneurial learning outcomes at the FH Campus Wien. While the corresponding dimension of HEInnovate seemed to be one of the strengths of the FH Campus Wien at a first glance, a closer look at the results per item (see figure 4) reveals the need to enhance entrepreneurial learning outcomes in curricula. Furthermore, a lively network of teachers on entrepreneurial spirit throughout the institution via adapting curricula and evaluating entrepreneurial teaching & learning in courses.

Since the Vice-Rector for Education particularly supports this activity and the Rector acts as ambassador for all education and training projects, a high level of commitment on the part of the university management is given.

Ultimately, the interdisciplinarity of the FH Campus Wien will be strengthened and the visibility of the students' competences in the professional field will be enhanced. This will also increase the visibility of the FH Campus Wien in the professional field and expand the network of the FH Campus Wien itself as well as of the students. This activity will contribute to foster the entrepreneurial spirit as an essential part of the culture of the FH Campus Wien.