Future University

P8 DIGITAL SKILLS

Steering the development
of digital skills for teaching and learning
in higher education

An institutional maturity matrix

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Target audience

Governances of higher education institutions engaged or wishing to engage in a project to develop digital skills for teaching and learning.

Objectives

The institutional maturity matrix aims to provide governance bodies with tools on all the dimensions to be considered when designing, developing, or reorienting a project in line with the institution's strategic objectives. It enables the identification of the obstacles and levers for achieving the operational goals. More specifically, it aims to

- identify the intrinsic dimensions of a project to develop digital skills for teaching and learning,
- help measure the school's level of maturity in each of the project's dimensions,
- facilitate observation, goal setting, planning, prioritisation, self-evaluation, and analysis of skills development schemes across a range of dimensions.

Authors

Jean-Michel Jullien & Emmanuel Sylvestre, October 2022

The Future University project

This project, led by the University of Lausanne and UniDistance Switzerland and supported by swissuniversities, aims to:

- reduce the digital divide within the teaching and student communities by developing their skills
- disseminate teaching practices that integrate the use of digital technology
- support students' learning with digital tools
- to set up a system of recognition of digital skills

Institutional maturity matrix

The institutional maturity matrix is the result of four phases involving various actors:

1. a participatory approach that identified community members' needs and expectations to best support the development of digital skills for teaching and learning. This phase included members of the governance bodies of several higher education institutions, teachers, students, support staff from pedagogical support centres, researchers in university pedagogy or digital humanities (May 2021 - September 2021),

2. an in-depth study and external expertise to pre-structure the different dimensions of the matrix. This phase involved an external consultant, Antoine Yazigi, under the direction of Jean-Michel Jullien and Emmanuel Sylvestre (October 2021 - June 2022),

3. structuring of the information gathered in the 2 previous phases in the form of an institutional maturity matrix, inspired by the document A Center for Teaching and Learning Matrix [1], carried out by Jean-Michel Jullien and Emmanuel Sylvestre (July 2022),

4. validation of the maturity matrix by experts in the form of a call for comments from a limited number of key players in the field (September 2022).

The maturity matrix contains 3 levels of maturity for each of the 9 dimensions:

- **at level 1,** the dimension is emerging; it is not yet fully developed.
- **at level 2,** the dimension is in place but not fully completed.
- **at level 3,** the dimension is complete.

[1] https://podnetwork.org/content/uploads/ACE-POD-Teaching-Center-Matrix-2018.pdf

Participants in the initial consultation phase

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UNIL: University of Lausanne, Switzerland
UniDistance: UniDistance Suisse, FernUni Schweiz
UNIGE: University of Geneva, Switzerland
UniNE: University of Neuchâtel, Switzerland
Unibas: University of Basel, Switzerland
EPFL: École polytechnique fédérale de Lausanne, Switzerland
HEP-VS: Haute école pédagogique du Valais, Suisse
HES-SO Valais: Haute école spécialisée de Suisse Occidentale Valais-Wallis, Switzerland

ULiège: University of Liège, Belgium
ULB: Université libre de Bruxelles, Belgium
ULaval: Université Laval, Quebec
UdeS: Université de Sherbrooke, Quebec
DGESIP: Direction générale de l'enseignement supérieur et de l'insertion professionnelle, France
SciencesPo: Sciences Po Paris, France
EUA: European University Association

Developing digital skills for teaching and learning
in higher education institutions: **a maturity matrix**

STEERING			
Dimensions	**Level 1**	**Level 2**	**Level 3**
Digital strategy of the institution	The institution's digital strategy does not include a specific teaching and learning component.	The institution's digital strategy includes a specific teaching and learning component but does not mention the development of digital skills: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	The institution's digital strategy explicitly includes the development of digital skills: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff
Governance of digital skills development	A governance does exist but is not specific to the development of digital skills.	A specific governance for the development of digital skills is in place, but there is little or no coordination between management and faculties.	A specific governance for the development of digital skills is in place and is coordinated between management and faculties.
Community involvement	Members of the community (teachers, students, administrative staff) are consulted for the development of: • the digital strategy • the development plan • digital competence frameworks	Members of the community (teachers, students, administrative staff) participate in the development or validation of: • the digital strategy • the development plan • digital competence frameworks	Members of the community (teachers, students, administrative staff) participate in the development and validation of: • the digital strategy • the development plan • digital competence frameworks
Digital competence frameworks	The digital competence framework is either defined locally or a national or international framework is used: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	The digital competence framework is based on a national or international framework and adapted to the context of the institution: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	The digital competence frameworks (teacher, student, administrative staff) are based on national or international frameworks and adapted to the institution's context. The frameworks are aligned.

IMPLEMENTATION

Dimensions	Level 1	Level 2	Level 3
Digital skills development plan	Actions exist but are not integrated into a development plan: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	LThe development plan is established and includes actions to develop certain skills of the digital competence framework: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	The development plan is established and includes actions to develop all the skills of the digital competence framework: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff
Implementation of the development plan	The institution has the expertise OR resources to partially implement the development plan within the community: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	The institution has the expertise AND resources to implement the development plan for part of the community (faculties and/or departments): • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	The institution has the expertise AND resources to implement the development plan for the whole community: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff
Recognition of digital skills	A system for the recognition of the development of digital skills is in place at the institutional level but is not based on a competence framework: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	A system for the recognition of the development of digital skills is in place at the institutional level but is not based on a competence framework: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	A nationally and/or internationally recognised system for certifying digital skills is offered at the institutional level: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff
Digital infrastructure	A digital infrastructure is offered to the community but not linked to the digital strategy and/or development plan: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	A digital infrastructure is offered to the community but does not fully cover the different dimensions of the digital strategy and/or development plan: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff	A digital infrastructure is offered to the community and is in line with the digital strategy and development plan: • At the level of the teaching staff • At the level of the student body • At the level of administrative staff
Performance indicators	Performance indicators are identified at the action level, the development plan level, or the strategy level.	Performance indicators are identified at the action level, the development plan level, and the strategy level.	Performance indicators are used to regulate the actions, the development plan, and the strategy.

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