

ENHANCING STAFF RESEARCH AND INNOVATION CAPACITY IN PROFESSIONAL HIGHER EDUCATION

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RECAPHE

Enhancing Staff Research and
Innovation Capacity In Professional
Higher Education

SHORT DESCRIPTION OF THE RECAPHE PROJECT

Professional Higher Education Institutions play an important role in enhancing European competitiveness and innovation capacity, especially on the regional level where they act as connectors and crucial links between the regional SMEs, regional organisations and society. However, further support is needed for development and enhancement of staff capacity to engage into applied research & innovation activities, link these to teaching and develop relevant ways for engagement of students in these activities. The RECAPHE project, therefore, aims to broaden insight and awareness of applied research & innovation activities within Professional Higher Education Institutions in Europe and to create a platform for imparting further competences to research staff and students related to their specific experience and needs.

AGENDA

01 **Introduction to the RECAPHE Project**

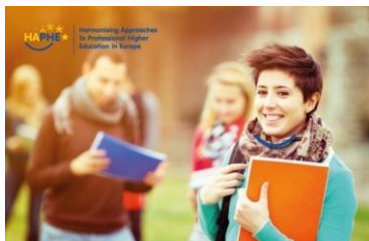
02 **Overview Output 1**

Competence Inventory

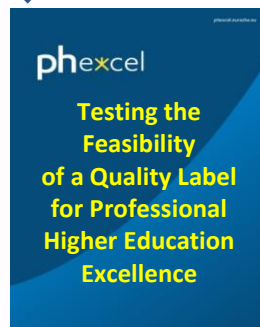
03 **Overview Output 2**

Learning Outcomes

1. INTRODUCTION



**Harmonising
Approaches to
Professional Higher
Education in Europe**



**Building Professional Higher
Education Capacity in Europe**



RECAPHE

Enhancing Staff Research and
Innovation Capacity In Professional
Higher Education

The RECAPH Consortium



ENHANCING STAFF RESEARCH AND INNOVATION CAPACITY IN PROFESSIONAL HIGHER EDUCATION



Our Objectives

The main objective of RECAPHE is to strengthen the profile of applied RDI in PHE in Europe, by:

- Gaining insight into the scope and nature of applied RDI activities within PHE institutions in Europe
- Distinguishing the different competences required of applied researchers
- Assisting researchers in RDI to enhance their capacities
- Providing a clear future vision for applied RDI in Europe and a strategy on how to achieve it



RECAPHE Project Overview

Intellectual Output 1

- Staff competence profiles for Research & Innovation in Professional Higher Education (PHE)

Intellectual Output 2

- Training Materials for PHE Research & Innovation Professionals

Intellectual Output 3

- Online training videos and infrastructure on Research and Innovation competences for PHE

Intellectual Output 4

- Report with policy recommendations on Research, Development and Innovation (RDI) for PHE

2. Overview Output 1

OUTPUT 1

O1A1

Screening of RDI activities and capacities at European PHE institutions

12/19-03/20: Collecting documents on applied research

O1A2

Mapping/Collecting RDI competences

12/19-03/20: Collecting documents (frameworks, background materials...) on applied research competences

03/20: Inventory of evidence for applied PHE research competences → long list of competences

03/20: Agreeing on a research life cycle, PHE research specificities, target groups

04/20: Short list of competences focused on PHE-relevant research competences (JU, ISP, VIKO, DHBW)

05/20: Internal validation meeting

O1A3

Structuring/Classifying RDI competences

06/20: First drafts of competence inventory

07-10/20: Reviews and refinement, e.g. transversal skills

10/20: Competence inventory shared with the consortium → comments and reviews

26.10.20: Final version competence inventory

Also: Work on competence reader

From 11/20: Reviewing and harmonising process with O2

O1A4+5

Designing and Piloting of self-evaluation tool

Based on and harmonised with the learning outcomes from O2

In progress

Competence Inventory

A

- UAS
Relevance

B

- Research
Lifecycle

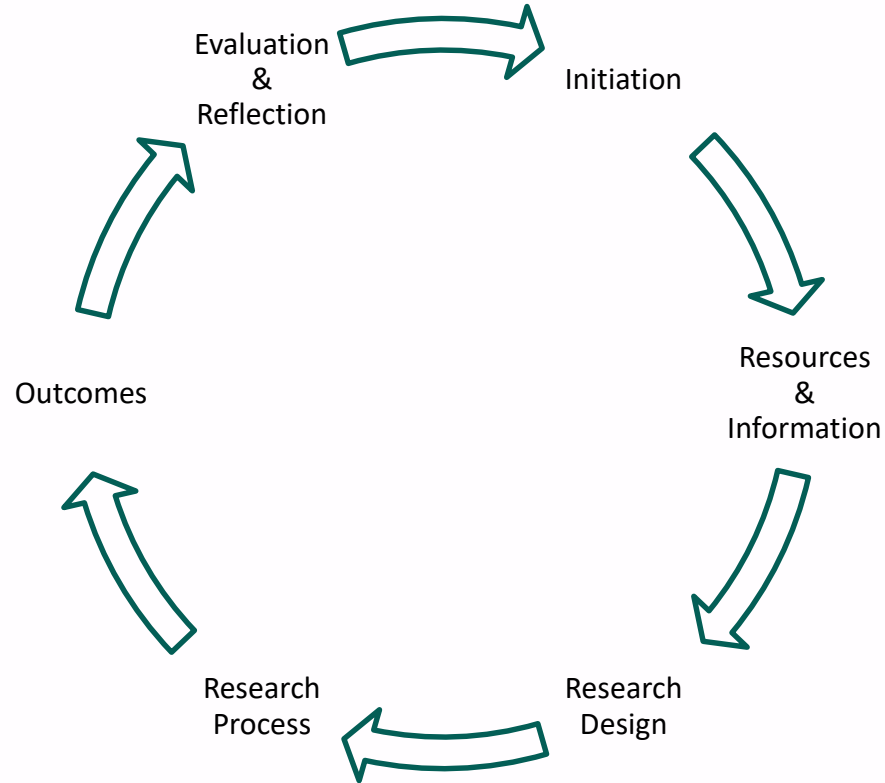
C

- Competence
Framework

A. Relevance to UAS

- 1 Research with cooperation partners
- 2 Applied research in contrast to foundational research
- 3 Research based on regional issues
- 4 Research with students as mediators between theory and practice
- 5 Research for practical innovation
- 6 Research with interdisciplinary approaches and research methods

B. Research Lifecycle



C. Competence Framework

(1) Competence Dimensions	Description of the Dimension		(2) Formulation of the prefix
Know-Know (K)	Theoretical Knowledge "I know how it is supposed to be done"		Knowledge of: Understanding of:
Know-How (S)	Practical Knowledge, Experience, Skill, Diligence "I know how to do it and can do it autonomously"		Ability to:
Know-How-to-Be (B)	Behaviour/Mindset (Will, Self-Confidence, Ethics) "I want to do it. I want to do it right. I trust I can do it"		Follow (Alternative suggestion: Will to/Respect:)

C. Competence Framework

Competence Clusters:

1. Research Design for Innovation
2. Research Management
3. External Cooperation and Knowledge Transfer
4. Teamwork
5. Research Based Teaching
6. Leadership, Scientific Guidance and Supervision

Research Design for Innovation

(S) Ability to acquire and foster knowledge and practical experience in applied research methods (including terminology and problem-solving techniques)

(S) Ability to communicate new and complex ideas to stakeholders

(B) Ability to respect ethical and academic standards

(B) Ability to develop and build an identity as researcher

(S) Ability to Anticipate future Research problems and to develop appropriate innovative Research based solutions

(S) Ability to incorporate societal needs in the design

Research Management

(S) Ability to foster a collaborative communication with the various Institutional Stakeholders

(S) Ability to define clear objectives, with the emphasis on identification of local needs and applicability of results

(B) Ability to demonstrate strong quality mindset during the various stages of research and

(S) Ability to monitor processes and activities

(K) Understand risk management

(B) Have/Hold a risk-based thinking mindset

(S) Ability to apply risk management strategies

(S) Ability to manage resources (time, materials, finances, human resources etc.);

(S) Ability to ensure transferability and sustainability of research results

External Cooperation and Knowledge Transfer

(S) Ability to network with stakeholders

(S) Ability to communicate research messages to a broader audience

(S) Ability to foster a collaborative community with external partners from the Research Community to ensure development of a Research Knowledge Transfer Ecosystem.

(S) Ability to develop and implement innovative solutions to close the gaps

(K) Knowledge of the business/industry and challenges they face;

(K) Knowledge of compliance and intellectual property regulations, including patents/registering procedures

(S) Ability to follow and implement compliance and intellectual property regulations including patents/registering procedures

(S) Ability to foster a collaborative research approach to ensure Stakeholder engagements are considered in a Research collaborative community

(S) Ability to build respectful and appreciative cooperation routines with other institutions and non-university research institutions.

(S) Ability to promote, organize and manage research activities on work-based learning

Teamwork

(B) Ability to develop and build self-awareness of one's strengths and weaknesses, potentials, limits and biases

(B) Ability to understand and appreciate the value of constructive criticism from others.

(B) Ability to define goals and tasks

(B) Ability to understand the importance of communication in a Research Environment.

(S) Ability to adapt to different contexts and communicate criticism in a constructive way

(B) Develop and build an appreciation of diversity. (S) Ability to foster an inclusive research environment.

(B) Develop and build appreciation of collaborative work

(S) (Ability to) work collaboratively

(K) Knowledge of methods of conflict resolution in research

(S) Ability to resolve conflicts in an unbiased way

Research Based Teaching

(K) Knowledge of general and discipline-related higher education pedagogy

(S) Ability to assess students' prior knowledge and skills and adapt the course accordingly

(B) Ability to understand the importance of time management

(B) Develop and build an understanding of fair, respectful, self-reflective, inclusive and professional teaching habitus.

(S) Ability to create a fair, respectful, inclusive learning environment

(S) Ability to promote individual knowledge construction

(S) Ability to promote explorative and research-based learning

Leadership, Scientific Guidance and Supervision

(S) Ability to supervise and guide students and members of the research team scientifically as well as personally in their capacity for conducting research initiatives;

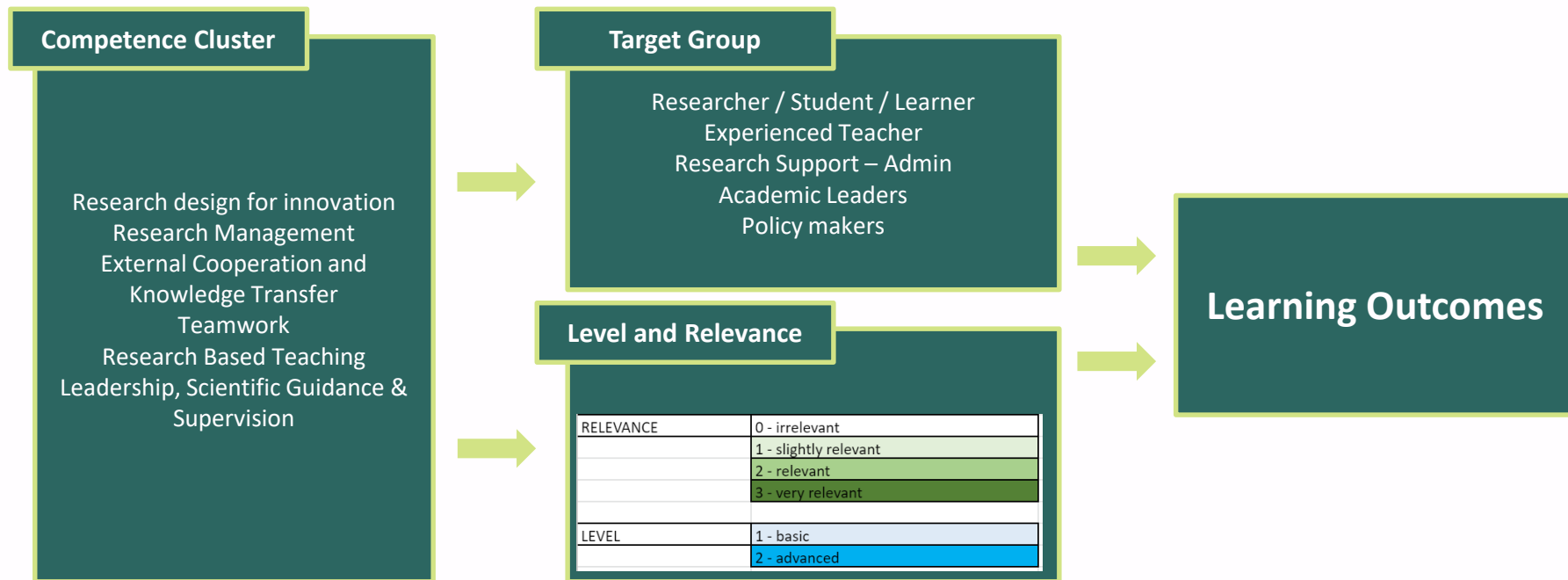
(S) Ability to foster a supportive and engaging research team to develop and enhance their research potential.

(S) Ability to lead the research team successfully throughout the entire research initiative;

(S) Ability to motivate students, provide feedback and advise concerning their professional development pathway

(S) Ability to monitor, mentor and coach individual progress of students.

3. Overview Output 2



COMPETENCE	LEARNING OUTCOMES
RESEARCH DESIGN FOR INNOVATION	<ol style="list-style-type: none"> 1. Evaluate and synthesize research materials to identify relevant areas for specific research focus 2. Apply an understanding of the characteristics of quantitative and qualitative research methodologies in Research design and practise 3. Identify the overall process of designing a research study from its inception to its reporting stage. 4. Demonstrate a better understanding of the communication process by identifying, explaining, and applying current communication theories as they relate to a variety of contexts (e.g. interpersonal, intercultural, group, public and professional communication 5. Apply a key understanding of the importance of effective Communication in a Research Environment. 6. Apply an understanding of ethical research and Research Integrity considerations in a Research Project 7. Describe three major theoretical approaches in integrity and ethics and the importance of applying them in a Research project. 8. Identify ethical dilemmas and apply different theoretical approaches relevant to Researchers behaviour.

EXTERNAL COOPERATION & KNOWLEDGE TRANSFER

1. Search and identify the most appropriate regional stakeholder companies for research-based cooperation.
2. Build strong research-oriented partnerships with the regional companies and create common research strategies for the development of applied research projects.
3. Apply team work skills for successful development of research projects.
4. Gain and purify understanding of stakeholders field demands.
5. Demonstrate motivation and determination to collaborate with regional stakeholders in creation of common research projects.
6. Apply research input from the world of work in the education process.
7. Describe needs and opportunities of research input for regional stakeholders' requests.
8. Identify regional stakeholders' contributions and cooperate effectively.
9. Act in collaborative external environment (world of work, civil society, public administration etc.), selecting and applying appropriate strategies and measures for external cooperation.
10. Demonstrate organizational and management skills for creating effective internships, field work, work placements, dual education.
Develop team-work activities with the company's staff responsible for internships, work placement, dual education and research projects.
11. Apply knowledge of quantitative and qualitative research methodologies in creating effective work placement programmes and tasks.
Demonstrate team building and leadership skills for effective organization of work placements.
12. Demonstrate the knowledge of a particular field and public speaking skills to effectively present research idea, design and strategy in real work environment.
13. Demonstrate organizational skills.
14. Apply an understanding of the characteristics of quantitative and qualitative research methodologies conducting research in real work Environment.
15. Evaluate research materials to identify relevant areas for research internships.
16. Identify the process of research design during research internships.
17. Apply principles of ethical research and research integrity considerations in real work environment.

TEAMWORK	<ul style="list-style-type: none"> · 1. Develop an Understanding of the importance of effective Communication in Research 2. Identify and list the stages of Team formation and the importance of team effectiveness in the field of Research? · 3. Demonstrate the main aspects of Team effectiveness in Research 4. Explain how team norms influence team behaviours in a Research environment 5. Apply the importance of Diversity and inclusion and its importance in the field of Research
RESEARCH BASED TEACHING	<ul style="list-style-type: none"> 1. Identify and justify appropriate methods (quantitative, qualitative or <u>mixed-methods</u>) for investigating a well refined research question(s) in the context of a Research project. 2. Demonstrate a critical awareness of the proposed research topic by providing a clear rationale for the research objectives and design. 3. Demonstrate understanding of a range of standard and more specialised research or equivalent tools and techniques of enquiry appropriate to the chosen research field. 4. Demonstrate compliance with recommended ethical guidelines in planning and conducting research. 5. Demonstrate capacity to select from, scrutinise, reflect upon and critically evaluate data in the context of set research objectives. 6. Synthesise research findings and critically evaluate in the context of existing knowledge in the chosen Research field. 7. Demonstrate insight into the chosen research field by making recommendations that effectively communicate the outcomes and implications of the research. 8. Demonstrate a systematic understanding of knowledge informed by the forefront of learning in their chosen research field by conducting a literature review in the specific Research area.
LEADERSHIP, SCIENTIFIC GUIDANCE AND SUPERVISION	<ul style="list-style-type: none"> 1. What is effective Leadership in Research? 2. Identify the various types and traits of leaders and the importance of Leadership in your Research project? 3. List the leadership competencies and behavioural traits of an effective leader in <u>research</u> ? 4. Identify and gain an understanding of negotiation skills to successfully resolve complex situations and achieve productive solutions to conflicting and differing

RESEARCH MANGEMENT

1. Identify the concepts, skills and knowledge of project management in the field of Research?
2. Identify the importance of to understand the area of Risk Management in Research?
3. Apply a comprehensive exploration and examination of options for mitigating Risk in Research
4. Develop an Understanding the importance of effective Communication in Research

THANK YOU FOR YOUR ATTENTION

RECAPHE CONSORTIUM
2021

You can download this presentation at:
recaphe.eu

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Q & A