



RISEN Thematic Hubs Workshop

Summary report for RISEN consortium

10.02.2022



Introduction

UIIN delivered a workshop for representatives from JAMK, HS Esslingen, IT Sligo/ATU, University of Obuda, University of Sannio and Karel de Grote Hogeschool on co-creating the future vision for the Risen University Alliance. The aim of the workshop was to further define the Hub areas as part of the RISEN alliance by bringing together representatives from the partner institutions to explore the purpose of the hubs, and identify collaborative opportunities and concrete ideas for development.

Agenda

Session 1: Setting the Scene

Thursday 27th January 2022 - 2 hours

1. **Introduction to RISEN alliance:** What is it, what are the aims and vision for RISEN, and what is it trying to achieve
2. **Introduction to thematic hubs:** Role and purpose of the hubs
3. **Partners Overview: Key Strengths** Presentation by each partner around areas of speciality, followed by general discussion about the hubs and their role.
4. **Collaboration formats:** Presentation by UIIN around potential collaborative activities, supplemented by global case studies
5. **Discussion on the thematic hubs** including purpose and goals, long-term vision, potential unique focus areas for RISEN

Session 2: Designing the Hubs

Friday 28th January 2022 - 4 hours

The participants were divided into five groups, representing the different areas (see p. 3) to work on:

1. **Vision and defining the hubs** – Why do we need these hubs (e.g. societal challenges), what are the strengths we bring, and hub goals for the next year and 3-5 year targets.
2. **Collaborative Activities** – Brainstorm around the potential collaborative programs and activities the partner universities could undertake
3. **Action plan** - Prioritise and agree on activities to take forward, and create an action plan for implementing these activities

Thematic hubs during the workshop

HUB 1

Sustainable development,
environment and energy

HUB 2

Sustainable manufacturing
(including supply chains) and digital
technology (including artificial
intelligence)

HUB 3

Health and Society, which will
include biopharma, medical devices,
health service delivery and social
services

HUB 4

Learning Innovation, covering pedagogical approaches,
design and use of technology to support learning,
lifelong learning and widening access to educational
opportunity

HUB 5

Internationalisation
e.g. student mobility, international education,
international work placements

Common theme of sustainable entrepreneurship

Hub 1: Vision & Goals

Vision: The hub will make sustainability an integral part of education, research and entrepreneurship, by rethinking the economic, social and ecological aspects of sustainability and teaching students/ future entrepreneurs to apply this way of thinking and operating in their entrepreneurial activities.

Why do we need this hub?

This hub is needed to look for a **common methodology** that links the social aspects to renewable energy, the economic perspective and the government policy and legislation, to be able to change the entrepreneurial mindset of students and transform the knowhow into sustainable applications. With this knowledge and mindset, **business models can be created that are still viable in 20 years.**

3-5 year targets

Have influence on policy makers

Integrate sustainability into the curriculum rather than an add-on to other activities

Drive systemic change

Develop shared and complementary curricula

Gain approval on the uptake of renewable energies & sustainable materials

Create collaborative sustainability modules

Why us?

All partners in this alliance have a passion to build sustainability into their work, across disciplines, education, and research. By combining the technological, social and economical departments of the institutions, a **sustainable and entrepreneurial mindset can be combined to create systemic change** in all fields. Furthermore, the global spread of the partners allows for knowledge exchange about how markets within sustainability are working in each of the partners' countries, to gain a broader understanding and the capability to **collaboratively influence national and international policy markets.**

One-year goals

Have not been created yet

Hub 1: Activities

Collaborative Activities

Build European knowledge-creating teams

- Create a framework of sustainability (incl. SDGs and indicators)
- Organise joint workshops with thematic subgroups (e.g. renewable energy, circular economy, EU policy making, etc.) and produce a position paper
- Create an open-source sustainable solutions platform

Challenge-based approaches to research and innovation, cross-disciplinary

- Collaboratively tackle 'wicked problems' across European cases
- Create cross-European cases

Innovative learning & training

- Develop blended intensive programmes
- Create a summer or winter school
- Acknowledge digital badges

Innovative solutions, adaptable to different regions in Europe

- Implement the Bioeconomy Business Accelerator concept
- Apply innovative business modelling, incl. a circular supply chain

Models of good practice in teaching or research

- Create living labs within sustainability topics
- Carry out dissemination activities on current knowledge, e.g. through a sustainability podcast
- Apply problem-based learning

New joint, flexible and innovative curriculum

- Create shared, interdisciplinary modules on sustainability in the European context, e.g. a shared module on European sustainability related to the Green Deal

Priorities / Focus areas

Prioritised activity 1: Gain a better understanding and alignment on the strengths, knowledge and activities of the partners

- Identify key topics that bring the institutions together
- Create subgroups and identify stakeholders who will start with concrete actions that can easily provide results
- Gain a deeper understanding of areas of alignment as well as identify the tools, skills and areas of work that can be brought in from the different partner universities to build on existing programs, tools and knowledge.
- Create a dissemination plan for collaborative knowledge creation and sharing, including
 - Podcasts
 - Living labs
 - Student exchanges on sustainability projects

Prioritised activity 2: Address sustainability in education and training

- Provide training for lecturers and research supervisors on how to integrate sustainability into their fields
- Create a program, digital badge module and joint workshops on sustainability

Prioritised activity 3: Collaborate on the research agenda

- Develop a collaborative journal article on sustainability
- Define how to measure sustainability and decide on frameworks to use
- Develop indicators/roadmaps for sustainability measurement and impact

Hub 2: Vision & Goals

Vision: The hub will empower European entrepreneurs to create products through economically-sound manufacturing processes that minimise negative environmental impacts, while conserving energy and natural resources. This will make digitalisation sustainable, trustworthy and fair for all of Europe.

Why do we need this hub?

Digitalisation is becoming increasingly important in mechanical engineering, and even more **critical for European SMEs and industry since Europe seems to fall behind China and the USA**. This hub will therefore play a crucial role in creating digital platforms, technologies, and ecosystems to help European SMEs, talent, and communities to incorporate, test, trial and scale new emerging technologies that maintain Europe's prosperity and independence from China or the USA. A **European-wide university alliance** could be a main driver by **bringing together the European economic and innovation space** and joining strengths to solve future challenges on sustainable manufacturing and digital innovation.

Why us?

The combination of universities and universities of applied sciences enables the hub to combine and **capitalise on each partner's expertise areas** (e.g. new materials, manufacturing, software engineering, cybersecurity, AI, etc.) to develop a unique **educational and research framework that optimises the manufacturing processes in order to achieve sustainable goals**. Furthermore, partners could **share facilities** to operate in optimal conditions, such as mechanical engineering hotspots, digital operating environments and modelling and simulation environments.

3-5 year targets

Make digitalisation sustainable, trustworthy and fair for SMEs

Facilitate trust by putting in the best ISO standards in place with the supply chain

Support European SMEs to digitalise and collaborate globally

Create European research hubs around sustainable manufacturing that inform the curricula of the alliance

Provide a network that enables talents, research institutions and companies to collaborate across national borders

Create a EU curriculum in manufacturing, integrating digital technologies of the future

European innovation framework

Develop a lab for SMEs to test out robotics, simulation, modeling & new technologies

One-year goals

Have start-ups operating both from the education and the RDI areas based on the strengths of the RISEN community

Hub 2: Activities

Collaborative Activities

Build European knowledge-creating teams

- Build a European-sized Menlo park
- Organise a student exchange program between universities and SMEs in the region of a partner university for joint research projects

Challenge-based approaches to research and innovation, cross-disciplinary

- Connect SMEs with large companies through:
 - An Innovator pool
 - Multidisciplinary (student) teams working on SME challenges
 - A virtual matching platform (e.g. for transfer and thesis projects)

Innovative learning & training

- Design challenge-based learning for mixed teams from different universities
- Create virtual operating environments/laboratories to form networks for students and SMEs across the RISEN partners

Innovative solutions, adaptable to different regions in Europe

- Create a cyber security certificate for SMEs
- AI-based optimisation of different types of (manufacturing) processes and products (increase productivity, decrease cost and energy consumption)
- HUB-wide open source developments

Models of good practice in teaching or research

- Create RISEN-wide case-based connected laboratories
- Make teaching content available for all partner institutions

New joint, flexible and innovative curriculum

- Develop applied AI courses for non-cyber security curricula
- Enable increased and easier crediting of IT modules across university borders
- Develop micro-credentials

Priorities / Focus areas

Prioritised activity 1: Playground

- Create virtual laboratories that can be used across universities for SMEs who do not have these laboratory possibilities themselves, including:
 - Modelling and simulation services (AI, cyber security, logistics etc.)
 - Demo environments where to showcase and experience solutions, e.g. a robotics playground.

Prioritised activity 2: Education and learning

- Create certificates for SME's so that they can validate their skills and capabilities, e.g. in cyber security
- Develop applied learning projects in which students work on real life problems/topics from international companies
- Strengthen the interconnection between RISEN participants through
 - Joint masters programs based on the projects from companies
 - Pooling of teaching contents (modules, video materials etc.)

Prioritised activity 3: Research, Development and Innovation (RDI)

- Target: sustainable manufacturing project application, through sustainable, safe and trustworthy logistics and supply change as well as cyber security
- Connect SMEs with large companies through
 - Joint activities in RDI
 - Webinars
 - Dialogues with the companies
- Enable cocreation and knowledge sharing between members of the alliance as well as SMEs and large companies

Hub 3: Vision & Goals

Vision: The hub will provide a digital infrastructure for increased skills sharing and collaboration across Europe to improve innovation in health research and education.

Why do we need this hub?

Covid-19 has changed healthcare permanently, emphasising the need for collaboration to **create a critical mass of (digital) competencies to address health care challenges and future needs at the European level.** Through this hub, partners across Europe will be able to exchange knowledge and train skills to **support research and education and create centers of expertise** to test emerging technologies and develop new services and solutions for a **sustainable European health workforce.**

Why us?

RISEN partners bring together relevant expertise (health, data analytics, AI, biomedical technologies, chemics, entrepreneurship etc.), laboratory & innovation spaces, practical research and strong links with the educational fiels as well as the workplace, which combined allow the hub to create a **multidisciplinary learning ecosystem where emerging technologies can be tested and research results can be directly applied.**

3-5 year targets

Create joint projects for European research and funding

Set up a Postgraduate Research Training Network and deliver workshops to research students across priority areas relevant to healthcare innovation

European data collection across partners on health literacy and the influence of COVID, to define priority areas to inform future research directions and policy

Each institution develops own workshops in their area of expertise

Train students with 21st century skillsets

Create a skills-based network for students, crowdsourcing opportunities to apply the skills they have and be involved in multi-country initiatives

One-year goals

Develop the Postgraduate Research Training Network with virtual and physical training workshops in designated centres of excellence across all partners. Each partner develops 1 training workshop targeted at doctoral students

Develop an online platform between partners and their industry collaborators to further enhance collaboration opportunities

Map out expertises and infrastructures to be able to combine and form a network

Identify calls for project proposals

Provide international internship opportunities

Launch a course in health & society

Launch one common research activity

Hub 3: Activities

Collaborative Activities

Build European knowledge-creating teams

- Scale up national research activities to multi-country projects
- Set up longitudinal data collections across different countries with the help of international student teams and combine available national administrative datasets

Challenge-based approaches to research and innovation, cross-disciplinary

- Start joint initiatives for research to make medical device handling easier for both nurses and laboratory technicians
- Create joint centers of expertise and/or combine current HEI centers

Innovative learning & training

- Develop VR-based simulation training in nursing and midwifery
- Identify key skills for health researchers in emerging themes and develop a European Health Researcher Digital Badge

Innovative solutions, adaptable to different regions in Europe

- Set up joint research projects for European funding
- Research how to align priority setting principles across European countries to achieve improved efficiency and equity

Models of good practice in teaching or research

- Crowd-source research tasks among partners and students
- Develop an open data policy between RISEN partners and create shared data platforms

New joint, flexible and innovative curriculum

- Develop a curriculum in health literacy and health informatics
- Develop micro-credentials

Priorities / Focus areas

Prioritised activity 1: Map out expertise and infrastructure

- Organise face-to-face seminars and meetings to identify shared interests
- Do research on who is involved and future joint research opportunities
- Create a joint website for students (via integration)
- Create an academics interface for research collaboration, displaying skills in a structured format with functionality to receive invites and an auditing system to rank suitability

Responsible: Richéal and Zsombor

Prioritised activity 2: Data collection to inform future research directions and policy

- Set up a research project for European data collection across partners on health literacy and informatics, to learn about:
 - How this has changed due to COVID, and
 - What have been the impacts and priority areas to inform future research direction
- Combine and use national datasets

Responsible: Zsombor

Prioritised activity 3: Education, skills transfer and knowledge sharing

- Each institution develops a workshop on an area of speciality
- Launch the Postgraduate Research Training Network
- Develop a skills-based network with students registered as part of it, crowd-sourcing opportunities to apply the skills they have and be involved in multi-country initiatives
- See whether similar networks could be created in other discipline areas

Responsible: Richéal

Hub 4: Vision & Goals

Vision: This HUB envisions developing pedagogical and didactical expertise for RISEN's learning ecosystem on how to implement challenge-based approaches and foster entrepreneurial competencies. Collaboratively with the other HUBS, HUB 4 aims to build a knowledge ecosystem within and outside the Alliance Universities.

Why do we need this hub?

This hub focuses on:

- **Advising, guiding and supporting** the HUBs 1-3.
- Push for **sustainability** as a societal focus, but also as a **prerequisite in developing a learning ecosystem** through a challenge-based approach for a variety of core internal university and external stakeholders.
- **Building common knowledge** through the exchange of educational experiences; the development of pedagogical tools, skills and competencies; and the creation of a common culture among different student and teacher groups.
- Developing an **entrepreneurial mindset**.

Why us?

The HUB participants constitute an **interdisciplinary team**, which stands out for its expertise in **innovative pedagogical and didactical approaches**. The **complementarity of skills and resources**, enable partners to build on top of each other's experience. They are also experts in **entrepreneurship**, eager to apply their entrepreneurial mindset to **create (alternative) learning pathways** for a wider audience of students. Moreover, they are supporters of **lifelong learning** for **professional development**.

3-5 year targets

Identify and recognise ourselves

Create places (within the network) for hands-on training & knowledge share

Create pathways for learning & flexible study modules

Identify and address legal frameworks

Build an ecosystem management model

Create educational content, platform & offerings catalogue

Create a recruitment & dissemination group

Share a skills development program for educators, staff & pedagogical leaders

Establish operational sandbox unit to support innovation

One-year goals

Analyse partners and core stakeholders

Run workshops to develop an entrepreneurial learning ecosystem

Map state of the art

Run workshops to develop sustainable learning culture

Create common understand of core concepts, e.g., sustainability, mindset, etc.

Hub 4: Activities

Collaborative Activities

Build European knowledge-creating teams

- Mutual recognition agreements (i.e., for credits, resources, subjects, etc.).
- A physical assets database.
- Technology infrastructure to share research and teaching laboratories.
- Educational offer database (i.e., file format, records, research keys, etc.).
- A communications group.

Challenge-based, cross-disciplinary approaches to research and innovation

- Approaches to curriculum development and learning design.
- An approach for assessing challenge-based learning.
- An approach on the psychology of learning so it's learner-centred.
- Protocols on quality assurance.

Innovative learning & training

- A modular study program for students with high redundancy.
- A system of micro-credentials.

Innovative solutions, adaptable to different regions in Europe

- A business development plan for research linked to education and learning.
- Internship marketplace (website) involving companies and universities

Models of good practice in teaching or research

- Research models on challenge-based learning and digital learning.
- Continuous creation of knowledge.
- Building and supporting agency development.

Priorities / Focus areas

Prioritised activity 1: Hub 4 will serve an advisory role to Hubs 1-3

- Join 'knowledge-creating teams' in HUBs 1-3 to: assess pedagogical approaches in projects' initial stages, and advise on business development with industry and other universities.
- Decide and develop quality assurance framework foundations and approaches (e.g., developmental, appreciative, etc.).
- Assess the legal feasibility of a multilateral joint degree.
- Co-create challenge-based learning and "train the trainer" modules for professionals eager to share their expertise.

Prioritised activity 2: Development of pedagogical approach & digital learning

- Develop a research strategy around learning.
- Map state of art to share existing expertise, assess topics for which to develop new expertise and formulate relevant research topics.
- Identify the target groups of educational providers, industry, businesses and NGOs that will form a sustainable learning ecosystem.
- Pilot pedagogical and learning practices and infrastructures.
- Develop the architecture and operations of laboratory sharing system.

Prioritised activity 3: Development of learning offerings for the community

- Define areas of educational offerings (e.g., online learning, curriculum development based on challenges, competence-based learning, etc.).
- Work on a model for effective continuous professional development.
- Start designing a common curriculum.
- Integrate an inclusive approach to learning delivery.
- Define learning facilitators' training needs and help them meet their needs.
- Development of maker spaces across the partner institutes.

Hub 5: Vision & Goals

Vision: HUB 5 aims to redefine, embrace and promote mobility through sustainable and inclusive internationalisation. This HUB aims to bring together a wide variety of learners, strengthen the exchange of ideas and practices and support sustainable entrepreneurship.

Why do we need this hub?

This hub focuses on:

- Creating a **common understanding and awareness** across students on internalisation processes and opportunities for traditional, blended and online mobility.
- **Broadening access to learning opportunities**, with free movement of knowledge and easy transfer of credits.
- Supporting and **deepening the relationship between participating partner universities**, for mutual operational support between universities.

3-5 year targets

Re-define internationalisation DNA

Develop sustainable mobility and internationalisation ways (e.g., short-term solutions)

Involve students in the HUBs' decision-making & directions

Raise awareness about HUBs' activities across institutions

Develop and align common infrastructure and support structures for mobility

Strengthen educators and support staff's professionalisation

Exchange practices with partners for mutual learning

Establishing and embedding structures for inclusive internationalisation

Why us?

The **interesting spread of partner countries** and their **unique range of expertise** contributes to this partnership's novelty. The partners have a competitive advantage in the **research and education of sustainable entrepreneurship** topics and strive for UAS focused- and **practise-oriented programs**. The partners have also **identified their individual weaknesses**, which they plan to work on collaboratively. For instance, they recognised the level of administrative and technical complexity required to broaden educational opportunities. Moreover, the participants recognised that in some countries the partners lack visibility, and staff and students have English language skill gaps.

One-year goals

Define the portfolio of activities

Define practical and operational means of RISEN, e.g., bi-lateral agreements

Develop a RISEN course catalogue

Establish the needed IIA's

Share between IRO's (e.g., Erasmus charter, inclusive mobility measures, etc.)

Move beyond traditional long term mobility

Hub 5: Activities

Collaborative Activities

Build European knowledge-creating teams

- Kick-off a Shared Student Council, for students to participate in the HUB's decision-making.
- Connecting HUB4 and HUB5 to support other HUBs.
- Develop collaborative resource repositories, e.g., projects outcomes, results.
- Establish an European network of 'IRO's in an EU.'
- Develop structures that embed societal and external partners.

Innovative learning & training

- Develop a double or joint European Degree.
- Summer school models/educational models for PhD and students within RISEN topical areas.

Innovative solutions, adaptable to different regions in Europe

- Create a shared mobility platform.
- Promote mobility opportunities for migrants.
- Sharing between IRO's (e.g., grading tables, Erasmus charter, inclusive mobility measures, etc.).

Joint, flexible and innovative learning & training curricula

- Develop a RISEN course catalogue.
- Develop internationalisation curricula and/or home structures.

Priorities / Focus areas

Have not been created yet

The logo for the University Industry Innovation Network (UIIN) consists of the letters 'UIIN' in a bold, white, sans-serif font. The 'U' is significantly larger than the other letters, and the 'I's are thin and closely spaced.

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