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R1A1

An Overview of Virtual and Blended Modalities in Europe

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Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

Abstract:

The document does correspond to Activity 1 of Result 2 (An Overview of Virtual and Blended Modalities in Europe). This study aims to provide support in the identification of recent and leading Virtual and Blended practices connected to and conducted by higher educational institutions. The document aims to elaborate on the topic of Virtual and Blended modalities in higher education and provides a general exploration of the topic. Furthermore, the study's objective is to be a strong foundation for the later results of the INVITE project. With secondary information, it aims to map current leading practices, hoping it can serve as an overview of good practices recognised within the project's area of interest. The elaboration of Virtual and Blended practices within tertiary education aims to draw a profile of the most adaptable and innovative methodologies which are currently practised in these institutions.

Keyword List:

Higher Education, Innovation, Virtual and Blended modalities, institutional mainstreaming

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List of Abbreviations

The following table presents the acronyms used in the deliverable in alphabetical order.

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Abbreviations	Description
BIP	Blended Intensive Program
COIL	Collaborative Online International Learning
DAAD	German Academic Exchange Service
EU	European Union
EoE	Emergency online Education
HE	Higher Education
HEI	Higher Educational Institutions
IA	Internationalisation Abroad
IaD	Internationalisation at a Distance
ICT	Information and Communication Technology
IaH	Internationalisation at Home
IOC	Internationalisation of the Curriculum
IVAC	International Virtual Academic Collaboration
IVC	Individual Virtual Competence
LMS	Learning Management System

NGO	Non-governmental Organisations
MOOC	Massive Open Online Courses
SDG	Sustainable Development Goals
VE	Virtual Exchange

Executive Summary

In the past decades, the conversation was constant about the need to digitise education, and with it enable its stakeholders to acquire digital skills. The past years, the possession of digital skills and the skills that give you the ability to navigate in international and intercultural settings are becoming more and more of a necessity as these skills are growing to became crucial to operate in daily life and standing strong on the ground of the labour market. The outbreak of the Covid-19 also proved the need for such development of skills, as the gap between those who asses digital skills and those who lack it become prominent. Those without basic digital skills were clearly affected in their daily life throughout the span of the pandemic (Sustainable Development in the European Union, 2022; Erasmus+ partners (Erasmus+ Programme Guide 2021 | Erasmus+, 2021). As Pérez-Sanagustín et al. (2022) refers to it HE went through a Kafka's metamorphosis-like transformation, where in the middle of March 2020, with the pandemic all stakeholders of HEIs had to move the ordinary, well-tried form of education into the so-called emergency online education (EoE). Teachers world-wide were forced to adapt their teaching methods to the "new normal", which also meant that an unprecedentedly rapid transformation went down in education on a large scale, which also underlined the possibility, that Higher Education Institutions (HEIs) will advance in their digitalisation attempts as they were forced to make attempts if they wished to carry on supporting students in their learning journey. The metamorphosis described by Pérez-Sanagustín et al. (2022) that was suffered by HEIs also advanced their capacities and competencies in digital skills, as never before. But the transformation happened unevenly, and in the post-Covid area among other governmental initiatives, as well as initiations supported by the European Union are expected to enter the scene and pick up the pieces that the Covid-19 left, and build order again, utilizing all the learnings that the pandemic forced out of HEIs in their EoE related innovative solutions they practiced in order to keep the conduct of knowledge transfer alive (Pérez-Sanagustín et al., 2022; Mehr Vernetzung Für Eine Bessere Digitale Bildung in Europa, 2022).

Within this context, the current document aims to outline the role and potential of Virtual and Blended modalities in HEIs and provides an overview of these. Thus, it adds to the effort to identify the current state of innovation in digitalisation as well as identify - within the scope of the INVITE project - where action can be taken to support progress in the digitalisation through Virtual and Blended modalities on a HE level. It lies mainly on the information published the past few years, in hopes that the second activity of the first result of the INVITE project will support the theoretical foundation of the project with relevant data collection from

leading experts of the field in order to cover the current stage of the topic of Virtual and Blended modalities in HE.

This study aims to serve as an initial needs analysis, and its objective is to conduct a review of papers and publications, and examine cases and practices connected to the project's focus, exploring emerging trends in teaching methods, which are applied to different Virtual and Blended learning methods and environments. Furthermore, the study examines the aspects of intercultural and international collaboration and environments in which such practices happen, in order to build criteria for a framework which can be a leading guide in innovation through Virtual and Blended practices.

1 Introduction

1.1 Background and Significance

The exploration of different modalities in higher education (HE) has a complex history that goes back to the origin of civilization. The experimentation with educational modalities always served a purpose, either to strengthen diplomacy between parties or to solve the issue of distance learning in the past centuries, the reason behind educational modalities was always experimented with. Additionally, it also carried a deeper meaning: the importance of knowledge transfer and the need to create a barrier-free journey of such (Tait, 2003). In the last two decades, with technological improvement, the possibilities within the field of educational modalities expanded. But even prior, the borders of educational modalities were always challenged. What started with Sir Isaac Pitman and planted - or rather - raised the idea of the possibility of learning the same materials at different locations was followed by the breakthrough technological development of the twentieth century which enabled an entire repository of Virtual and Blended Higher Educational modalities to be carried out and be tested (Archibald & Worsley, 2019). Though oftentimes distance learning is considered to have a strong relation to the invention of radio, television and the computer, the nature of distance learning is much more simple and has a lot to do with the development of both the postage and railway system, as the historical example shows such infrastructural development led to the ability to form rudimentary forms of distance education (Tait, 2003). Therefore, it is safe to say, innovation in education always relied on technological achievements and innovation in general. The next step in progress can be described as the institutionalisation of early distance learning practices led by the University of London in 1858 that allowed students to participate in the programmes without being physically present, by completing materials sent out to them (Kenyon-Jones, 2008). In their work Pérez-Sanagustín et al. (2022) uncover the history of institutionalised HE innovation, and present how in the final years of the 1950s the concern towards the need for a remote education was raised and accepted internationally (Stone, 1985). In the making, what this awareness meant was the transformation and development of higher education, through the organisation and regulation of assessment in HE, the forming of educational support departments for both students and teachers, but also included the practice of curriculum design and similar initiatives. This transformation and regulation of HE enabled both teachers and students to learn in a more organised, predictable environment, as educational performance became easier to measure, which meant more safe and professional conditions for all parties involved (Stone, 1985; Tait, 2014). With stable development throughout the 1960s, in the 1970s open universities were formed, which required the development of more advanced support of the stakeholders, closely connected to HEIs (Tait, 2014). In recent years, the focus on globalising HE, along with the potential of digital technologies, there is a certain expectation towards HEIs to innovate their learning and teaching processes with the support of emerging technological solutions (Digital Education Action Plan (2021-2027) | European Education Area, 2021). A more strategic approach on a system level is needed in order to succeed in this attempt. Furthermore, to help individual institutions take part in globalisation, enabling a seamless transfer of information was already discussed decades ago, but the possibilities expanded with the technological development. The goal that HE should work towards developing frameworks is staying the same (Hénard & Roseveare, 2012). In their work

Pérez-Sanagustín et al. (2022) address the need for frameworks that guide these practices, as it is key to regulating innovative approaches to globalisation and formulating common goals.
These early changes and experimentation with learning modalities showed society the possibility of knowledge transfer without being physically present, while also prove how education reflected on innovation and used it as a tool to promote knowledge not just to a privileged few, but to many who were eager to learn. This study will examine today's examples of how diverse the possibilities are when it comes to the democratisation of knowledge with the utilisation of digitalisation and internationalisation. The INVITE project understands the need for frameworks and sees them as a goal to contribute to during the time the project runs.

1.2 Scope and Objectives of the Study

Over the past century distance learning, physical exchange, and virtual and blended mobilities served many functions and always had a leading role in keeping up international agreements and oftentimes served diplomacy-related functions (Barnett & Wu, 1995). However, the last decades shifted the focus towards the importance of internationalisation, language and general communication skills, and it supported tutors and trainees in their journey to gain experiences that make them desirable employees in their professional lives after completing their education in HEI programmes. Global competence is considered a skill for collaboration, much needed today given the nature of our problems' urgency to improve the collective well-being of society. The technological advancement and the widely accessible digital solutions present in developed countries brought a diversity of examples of how education is conducted there (Dziuban et al., 2018). Furthermore, the need for enabling internationalisation through HE gained serious attention in the past decades and the need for alternative solutions as opposed to face-to-face teaching has emerged, given the circumstances. (Volungevičienė et al., 2021).

The INVITE project aims to serve as a complement to other leading Erasmus+ program-funded projects in the field. Its goal is to address the role of Virtual Exchange and digital competencies in HE, furthermore, it aims to bring new perspectives into HE-related innovation, not yet covered by other projects. Additionally, it seeks to enable digital ecosystems, as well as international and cross-border collaborations to thrive and flourish to ultimately enhance the teaching and learning processes in HEIs (INVITE project, 2022; Aalborg University et al. | Project proposal, 2021).

INVITE places into perspective the development of a strong educational foundation for organising high-quality and meaningful virtual and blended academic programs and modules between international parties. Thus, work towards the development of active-learning approaches that aim to tackle global challenges. To broaden the practice of intercultural exchange, INVITE tries to include disciplines of HE not closely associated with intercultural exchange practices, such as the field of engineering, health, agriculture, and others similar. It is working on it to make interdisciplinary collaboration more accessible. The objective of INVITE is to provide tutors and trainees with all the necessary skills to develop creative international virtual and blended programs, adding valuable experience and knowledge that benefits them in their careers. The project will explore creative opportunities for bottom-up innovation and strategy development. It aims to have a notable

impact on intercultural collaborations with the involvement of HEI's staff, to support such innovative ambitions (Aalborg University et al. | Project proposal, 2021).

Additionally, the core of the INVITE project is to enhance international collaboration in the post-pandemic era. It aims to do so by implementing strategically sustainable Virtual and Blended learning modalities in disciplines that are not heavily involved in intercultural exchanges; such as agriculture, engineering and health science as leading examples. In the span of 36 months, while the INVITE project runs, it plans to develop curricula by mapping exercises and guidelines for related innovation, while developing open online interactive training modules with the use of micro-credentials. The following were identified as main priorities: stimulate innovative learning, support digital capabilities, and address digital transformation; while keeping a strong focus on HEI's internationalisation. The core of the INVITE project is to demonstrate European values, such as cross-border collaboration, and the experimentation of different Virtual and Blended modalities (Aalborg University et al. | Project proposal, 2021). With this, the INVITE project ~~is~~ wants to bring sustainable, positive impact at local, regional, national, and international levels of HE-related innovation while aiming to address the priorities and contribute to the second Digital Education Action Plan.

In this study, the focus will fall on three aspects of the HE-related Virtual and Blended innovative practices. The role of digital skills and competencies will be discussed along the chapters, as well as the need of developing them and the current practices. Furthermore, the study focuses on collecting and analysing the rising learning and teaching methods which were mainly sparked by the Covid-19 pandemic and the digitalization of everyday life. The third aspect of the study is to explore the nature of international relations regarding Virtual and Blended practices in HE and understand the types and roles of cooperation and collaboration in their making and development.

The first action of the project aims to focus on the key characteristics of selected practices and understand the reason behind the impact of these practices while analysing the nature of its contribution to the teaching and learning process in HE. It also aims to provide the foundation for the second half of the first project activity, namely: the practice of selecting the most related and leading case studies and good practices. Such elaboration aims to draw a profile of the most adaptable and innovative methodologies that are currently practised by HEIs within the subject area. Based on the learnings of the study, and in order to provide a smooth transition to the second activity of the first result of the project as a synthesis, the document will explore several questions which have key importance regarding the focus of the INVITE project. The questions were formed by the partners bearing in mind the current trends of Virtual and Blended modes in HE practices around the Covid-19 area. With such relevant questions, the study not only serves as an overview of current trends, relying on documented practices, but also presents topics that should be kept in mind in the second activity of the project.

1.3 Structure of the Research

The current publication attempts to outline the role of Virtual and Blended modalities in HE. Also, it aims to identify the existing practices of HEIs and the ways how these modalities are exercised within these institutions but pointing out the good practices and examples. The study is structured in the following

manner; chapter 1 presents the background, scope and structure of the study; introducing some details about the audience of the project. In chapter 2, based on a theoretical outline, it explores scientific definitions of the topic and elaborates on the role of HEIs in Virtual and Blended modality-related innovations. In chapter 3, the adapted methodology of the study is introduced. In chapter 4, the study is synthesised, with special regard to the selected practices, and presents a discussion about the leading methods of HEIs regarding Virtual and Blended modality practices, followed by chapter 5, the conclusion of the study. The publication contains a list of abbreviations, an annex, indicative further readings, and acknowledgements.

2 Literature Review

This chapter aims to provide an overview of leading practices in Europe connected to Virtual and Blended modalities, oftentimes fostered initiatives of the European Union, such as the Digital Education Action Plan of 2021-2027 and alike. The chapter is separated into five main subtitles, which explore different aspects of the connection between internationalisation, Virtual and Blended practices of HEIs and the INVITE project. Chapter 2.1 unfolds the need for internationalisation in HE and its benefits, while 2.2 introduces the types of internationalisations within Virtual and Blended practices in HE. Narrowing down, chapter 2.3 discusses leading European initiatives with topic-related interest, to map the leading organisations that are the main players of fostering Virtual and Blended projects and with it oftentimes IOC. As a tight knit part, 2.4 introduces the technological aspect of the topic and addresses the need for understanding the role of digitalisation and technological development related to it. Finally, chapter 2.5 presents the role and benefits of Virtual and Blended collaboration which aims to address the gains stakeholders can obtain by investing assets into such innovation.

2.1 Internationalisation of the curriculum (IOC)

As many before, in 2018 Kirk et al. also expressed the need for internationalising the curriculum (IOC), and put emphasis on articulating the need for IOC, as well as highlighted how all stakeholders should take ownership over IOC for it to succeed. The goal of IOC should be to train graduates with well-prepared skills in global citizenship, which allows students to develop skills in international awareness, as these skills should be a driver of internationalisation. As Kirk et al. (2018) stated, the need-for and benefits of internationalisation were already addressed by Knight (1994): raising awareness amongst all stakeholders and ensure staff commitment, clear planning and effective operation planning, as well as review and reinforcement.

Kirk et al. (2018) also raised awareness about the inequalities on the IOC in different disciplines. It is addressed by many how IOC has inequalities in the fields of business studies and languages, while it falls short in science-related subjects, such differences can mostly be discovered in relation to hard or soft disciplines, hard disciplines being seemingly more challenging to integrate IOC into (Clifford 2009; Newstead et al. 2015). Sawir (2011) also emphasises the differences between the curriculum in hard and soft disciplines, which might indicate the different approaches and views towards internationalisation. In conclusion, Kirk et

al. (2018) claim that across all disciplines, what is proven to shape the stakeholder's and primarily the staff's view on IOC can be found in the way it is presented to them, as the reasoning and promotion of such values seem to matter. In order to provide quality education and equal treatment to students where it is relevant, HEIs need to address and include internationalisation into the curricula as it is the guarantee to transmit timely knowledge that is aligned with international standards. Both Clifford (2009) and Sawir (2011) address the urgency and importance of IOC to benefit graduate success in employability and skills in the job market.

In order to bring change and offer the most timely and high-quality education in HEIs, there are some suggestions by Kirk et al. to adapt (2018) that provide guidance on how to raise employable global citizens, as they address the need for international collaboration and its acquisition on a skill level, while they value the ability to collaborate with peers and later colleagues from a variety of cultural, linguistic, ethnic and religious upbringing and backgrounds.

2.1.1 The role of HEI staff in IOC

To achieve such aims the staff of HEIs are identified to play a key role in transmitting such values and principles through the curricula and essentially to the students. The need for ownership was addressed already by Barnett (1994) and is strongly connected with stakeholder engagement as well as the success of IOC. In order to shift negative preconceptions of IOC, Barnett (1994) states it is needed to identify all areas where there is the potential and will to take ownership of IOC and the values it can bring. So, there is a need to integrate such values into HEIs by providing training, finding ways of motivating the staff, and by facilitation (Leask, 2015). With the mentioned practices it is more likely to engage the staff of HEIs as well as all relevant stakeholders, and by doing so to support them in developing engagement and ownership in IOC. The need for the design of engaging and ownership-strengthening activities such as staff mobility to understand the concepts and values of IOC is the key (Leask, 2015).

In conclusion, the role and potential of HEI staff can be recognized in participating in Virtual and Blended practices, as these support the IOC. Kirk et al. (2018) raise awareness on the importance of the design of educational offers with the focus on IOC, ~~it~~ and address~~es~~ the need for developing inclusive pedagogy for international students, as well as the necessity of the practice of internationalisation at home and off-campus activities; as these are all in need to be expanded within the realm of HEIs. The INVITE project, and the perspective it aims to bring into HE, are in line with these values and are devoted to contributing towards them by including all relevant stakeholders of HEIs.

2.2 Internationalization in Higher Education Institutions (HEIs)

As Martin Haigh (2014) refers to it, internationalisation is a multi-layered process, which enables and diversifies skills valuable in the adaptation to a globalising world. The benefit of internationalisation is changing perspectives and values from local to global, which provides a more suitable skillset for adapting to changing patterns in regulatory environments, educational priorities, and personal responsibilities among many other aspects.

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

In his work, Haigh (2014) explains the levels of how internationalisation and global citizenship are achieved within HEIs. The importance of his work should be addressed as it provides a tangible description of what layers of internationalisation happen in educational institutions, as well as provides insight into the benefits of the internationalisation of each layer, while also highlighting the challenges that one should be aware of when aiming to work on it. The analysis of the layers can raise awareness on what should be assigned importance when it comes to the design of a more international solution, as understanding correlations are beneficial in tackling challenges connected to the design aims.

The layers defined by Haigh (2014) are as follows:

1st layer	*The layer where HEIs open applications to international students*	This layer is a policy promoted by many universities as it is oftentimes strongly connected to the financial survival of the institutions. The first layer can therefore be considered a strategy for financial survival.
2nd layer	*The integration of international students*	The aim of the layer is to decrease drop-out numbers. Working on the oppression of discrimination and racism should be strategically approached when designing for internationalisation, as meeting with such exclusion can pull back positive change. The vulnerability of international stakeholders should be avoided by design, by offering opportunities to integrate internationals into society and prepare them for societal differences, with such opportunities offering them the development of resilience and a sense of belonging.
3rd layer	*Prestige and the work towards an internationally acknowledged place, earned by reputation*	The ability to measure university success can be materialised in university rankings, which secures a university's reputation and communicates to international stakeholders that getting connected to the institution is a task worth pursuing.
4th layer	*Accreditation of HEIs*	It confirms that stakeholders work closely for the institution to carry out its tasks excellently. ~~F~~or such measurement to be done, an international standard is required, where all HEIs can find their place, and which offers them a universally applicable standard to measure their work. Such a system is for example the Bologna accreditation system. The benefit of the use of these widely spread systems is the ability to connect and compare institutional performance, which also connects HEIs as well as motivates progress.
5th layer	*IaH, the layer of multicultural capabilities*	This layer aims to support stakeholders, students, teachers, and staff alike to develop intercultural skills. The opportunities offered by IaH and similar approaches to non-face-to-face education aims to develop the skills of a global citizen, as it is

		required with the shift as the work is getting globalised, while business is getting more cosmopolitan than ever. With internationalisation, students, teachers and staff can be exposed to intercultural and cross-cultural competency, which prepares them with skills that will be beneficial in the interaction with global partners as well as lessens the effect of a culture shock when exposed to other cultures.
6th layer	*The education for global citizenship, which includes IOC-related aspirations*	The aim of the layer is to educate students to make them understand they are citizens of the world, and communicating these values support them in growing more responsible in their professional life. It supports students to honour the limits, but also the given rights that come with respect towards others while understanding that all are equal, and with this knowledge, they can expand their empathy towards others. In order to pass on such values to the students, teachers and staff also need to share the same vision and virtue, therefore the training for them should apply at all levels of academia.
7th layer	*The internationalisation of the digital age and the utilisation of connected e-learning*	Taking advantage of the Digital Learning Environments through the internet, Open Educational Resources (OER), Massive Open Online Courses (MOOC) and similar approaches to the promotion of online learning can support internationalisation aims, while also connecting students interculturally. The goal of the layer is to explore and use the innovative ways of knowledge transfer that digitalization offers in transnational, intercultural learning.
8th layer	*The transformation of education for a more planetary consciousness*	The layer aims to put global consciousness and self-realisation into everyday practice, and with it raise a more conscious generation, who can take ownership of such values not only inside, but also outside of the educational institution and practice such values actively both in their professional and personal life.

Table 1: The 8 layers of internationalisation (source: Haigh, 2014)

Haigh (2014) the 8th Layer highlights some disciplines and says that humanities and environmental disciplines should stand out when it comes to the last layer. The author claims that there are differences applicable for disciplines on the level of how much each should work towards the values their layers carry.; but instead, the INVITE project aims to even out such differences, as the project's goal is to offer equal solutions for all disciplines. Creating differences between responsibilities might cause the false thought that some are less responsible for making certain changes than others.

In conclusion, internationalisation should be approached as a multi-layered process, as well as the design of such endeavours. The survival and recognition of HEIs are deeply connected to the ability to adapt to the globalising world and what digitalisation has to offer. Identifying where and how change is needed is key,

just like taking action. The goal is to recognise and change outdated patterns of regulation and shift the pressure of competitiveness towards a path where competition strikes action towards a long-term positive change. Furthermore, to monitor and shift outdated educational values and visions. By shifting the perspective from local to global, the changes should lead to a growth in the feeling of personal responsibility towards all beings and the raising of a more aware generation.

2.3 Typologies of the international dimension of Virtual and Blended modalities in HE

The role of Information and Communication Technologies (ICTs) in education and their potential for student exchange and internationalisation was addressed by Leaks (2004), along with their suitability to support internationalisation and an increased information flow between stakeholders. In recent years internationalisation in HE was divided into three main categories by Mittelmeier, Gunter and Raghuram (2021), allowing us to elaborate on the fact that international virtual or blended aims toward internationalisation can be separated by form and general purpose. The categories defined by Mittelmeier et al. are the following: Internationalisation at Home (IaH), Internationalisation Abroad (IA) and Internationalisation at a Distance (IaD). For the sake of the study and based on the scope and focus of the INVITE project, IaH and IaD are deemed relevant, therefore will be elaborated on in the chapter. And defined in the following way:

2.3.1 Internationalisation at Home (IaH)

The definition of IaH was specified by Beelen & Jones as:

"[P]urposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students, within domestic learning environments" (Beelen & Jones, 2015).

The core concept of IaH is to provide an international learning experience with the possibility of learning in a home setting, allowing participants to gain international skills, and face the challenges of internationalisation in their domestic environment (Crowther et al., 2000). Furthermore, rather than focusing solely on the internationalisation of the individual, IaH aims to shift the focus to a more systematic level: the internationalisation of higher education and its curricula (Wächter, 2003). The definition of curriculum internationalisation was elaborated by Leask (2009) and defined as the involvement of intercultural and also international dimensions in the educational curriculum, which should happen on the level of both teaching and learning, furthermore, on the support services of a study program as well.

2.3.2. Internationalisation at a Distance (IaD)

The phrase used first by Ramanau (2016) but further defined by Mittelmeier et al. (2019) IaD is the internationalisation of all forms of education and stakeholders. What defines IaD is the geographical distance between involved participants who are separated by distance yet connected by technological solutions.

With such groups of Virtual and Blended modalities, the activities within HE can be categorised. In their work Mittelmeier et al. (2019) address the surprising, 86% of participants self-reporting positive attachment towards their university, which might confirm the success of IaH and IaD practices, as it is considered higher

than conducted feedback in previous studies, where students who are learning face-to-face were questioned (In Mittelmeier et al. 2019: Mokhothu & Callaghan, 2018; Rienties & Tempelaar, 2013; Rienties et al., 2012; Sennett et al., 2003). Furthermore, Mittelmeier et al. (2019) note the potential of alternative HE models - other than the traditional face-to-face realisation - laying in the nature of IaD and similar models, as its flexibility and adjustability to the student's individual needs and personal life can be beneficial in increasing accessibility to HE, and even making it more desirable for prospective students.

2.4 European Initiatives and Frameworks in Post-Covid HE Innovation

In the past decades with the rise of the digital age, society and the economy went through a tremendous change, which made an impact on everyday life and spread out to all aspects of personal life including education.

In recent years, however, Covid-19 forced education at all forms and levels to adapt to the changes brought by the pandemic and live with the opportunities offered by digitalisation, in order to make knowledge transfer on an academic level possible during such challenging times. Even though digitalization wasn't a new concept in HE by any means, its presence was limited and was mildly prominent in that area up until Covid-19 forced institutions to adapt digital methods seemingly overnight (Digital Education Action Plan (2021-2027) | European Education Area, 2021). With the Covid-19 outbreak, a need for higher levels of digital capacity in education became certain. While with the digitalization of education internationalisation new perspectives seem to emerge, the gap of inequality between those with access to digital technologies and those who lack such opportunities in their education is alarming, which provides a growing gap between those with digital skills and those who lack such competence (Sustainable Development in the European Union, 2022). The pandemic revealed major challenges and pain points in today's education, challenges that are present at all levels, from digital capacities and training systems to teacher training in digital technologies, and the digital skills of all stakeholders involved in HE. The need for modernization in education, and its prominence is undeniable, but the actions needed to provide equal opportunities for all in education are also a high priority (Digital Education Action Plan (2021-2027) | European Education Area, 2021).

In the following section, the main categories of Virtual and Blended modalities will be discussed to provide a general understanding of leading European initiatives and their focus to support diverse varieties in the conduction of such higher educational modalities. The pool of cases selected as good practices in this study will also mostly fall under the following innovative initiatives.

2.4.1 Digital Education Action Plan (2021-2027)

The EU Digital Education Action Plan (2021-2027) aims to operate as a flagship policy initiative that supports the development of a high-performing digital educational ecosystem while supporting the development of competencies and digital skills for the global digital transformation.

It builds on the principles of the first Digital Education Action Plan (2018-2020) which articulated its priorities as follows: to create better use of digital technology for teachers, students and staff within HEI, furthermore, it focused on the development of digital skills and competencies, while emphasising the priority of data analysis and foresight based education improvement and innovation (Digital Education Action Plan (2021-2027) | European Education Area, 2021).

For a high-performing and up-to-date HE ecosystem, the flagship policy initiative Digital Education Action Plan named thirteen action points in which the European Union aims to bring innovation into HE to foster talent and innovation that benefit all EU Member States (Digital Education Action Plan (2021-2027) | European Education Area, 2021).

2.4.2 European Digital Education Hub

Starting in 2022, to monitor and create a network of key stakeholders within digital innovation in HE, the European Digital Education Hub was formed and the honour to lead the initiative was awarded to the German Academic Exchange Service (DAAD). The initiative aims to hold ends together, by organising and supporting the innovative project connected to the Digital Education Action Plan, which is currently being developed by the EU Member States. The European Digital Education Hub will play a key role in providing a platform for knowledge transfer regarding digitalisation and its connection to HE innovation while providing space to EU members to exchange their experience post-Covid, while also contributing their insights on digital education and its future perspective. As a fairly new proposal, the European will not only connect HEIs together, but will also include potential outside stakeholders, who can bring value to the objective of the HUB and who can also benefit from it.

As described by the DAAD president Prof. Dr Joybrato Mukherjee the past decades since the discussion about digital education is ongoing and a key point of many innovation agendas, the development of digital education in Europe oftentimes had been patchwork-like and could be described as on one hand diverse, yet poorly coordinated and tracked developments. DAAD's aim is to bring together all key stakeholders to enable the European network of all educational sectors to take part in the experiences and solutions to bring European education on the same level and foster progress. The past years and the Covid-19 pandemic fostered a never seen before emerging in digital education offers throughout the European Economic Area. The demanding time of the pandemic facilitated the use of Virtual and Blended solutions, which now, after the phase of emergency passed, should be reflected on and adapted to all levels of education where stakeholders can benefit from such non-face-to-face teaching modes. With the lead of DAAD, the post-Covid aim is to gather all good practices within the realm of Virtual and Blended modalities in education and to generate a lasting advantage for Europe. The initiative led by DAAD is supported by leading European partners, who in the past years and decades proved to be key stakeholders of education-related innovation in Europe; therefore, are capable to facilitate and foster change that needs to be achieved for Europe to take the necessary steps towards the Actions defined by the Digital Education Action Plan and similar leading initiatives (Mehr Vernetzung Für Eine Bessere Digitale Bildung in Europa, 2022; (Erasmus+ Programme Guide 2021 | Erasmus+, 2021; Digital Education Action Plan (2021-2027) | European Education Area, 2021).

Regarding the future actions of the INVITE project, it is considered important by the partners that during R1A2 and later, the project stays informed and connected with the development of the European Digital Education Hub, as in the field of Virtual and Blended modality-related innovation the actions of the Hub are expected to be transforming and significant. Furthermore, many of the goals of the Hub are in line with the INVITE project's aims, such as the support of cross-sector collaboration, the development of - a digital - exchange experience, and the goal to focus on societal goals that all partners can benefit from, lie

sustainability, inclusion, accessibility, global citizenship just to mention a few. Additionally, both are aligned in providing proposals for the process of policymaking, and the development of supporting materials and guides for digital education in order to engage and inform stakeholders in both initiatives.

2.4.3 Leading Erasmus+ initiatives focusing of Virtual and Blended modalities in HE

2.4.3.1 Virtual Exchange (VE)

The VE, often referred to as Telecollaborative Learning or Collaborative Online International Learning (COIL) aims to engage learners in international online collaboration in a sustainable manner. VE targets individuals who wish to widen their skill set within inter- and transnational collaboration and aims to provide the experience of educational exchange but does it by using digital tools (Helm & O'Dowd, 2020).
The experimentation with blended and virtual modalities within VE often gets misunderstood and is considered as an attempt to replace physical exchange in HE, but rather it provides a toolbox of skills and international experience for those who might not have the opportunity and financial aims to experience an exchange of physical nature. However, VE is not only dependent on the lack of financial aims that currently exist, but it is also considered a great short-term, course-based practice that is more valuable at a project-based level, where participants can gain valuable intercultural skills that can support them in their professional career (Wang & Haggerty, 2014, Commander et al., 2022). Furthermore, the relevance of VE in teacher education and teacher professional development was also highlighted in recent years (Jager et al., 2019), as VE can benefit the media and digital literacy of participants. Furthermore, foster global awareness, critical and analytical thinking, and communication skills, not to mention the development of soft skills like empathy. In fact, VE is an inter- and transnational collaboration by nature with which intercultural competencies and foreign language skills are also nurtured (Helm & O'Dowd, 2020).

2.4.3.2 Blended Intensive Program (BIP)

Within the framework of Erasmus+ BIP falls under the category of Key Action 1; it provides an outstanding opportunity for individuals to experience international mobility. BIP provides a short transnational and transcultural project opportunity to students and staff in HEIs. As a type of blended mobility, BIP is a short and intensive programme with the aim to tackle global challenges, that all participating members can relate to like the United Nations Sustainable Development Goals (SDGs) or the Green Agenda.
To conduct a BIP mobility, at least two HEIs from two different countries must be involved. Furthermore, the mobility must include short-term physical mobility that can take from 5 days up to 30 days total in duration, with a minimum award of 3 ECTS to the students, while also should include a compulsory virtual component. The program is rather flexible, ~~as~~ because, after such principles are met, the programme is open for other HEI staff and students to participate outside the Erasmus+ partners (Erasmus+ Programme Guide 2021 | Erasmus+, 2021).

BIP opportunities are openly available for all students at all educational levels within HE, from diverse backgrounds, study fields and study cycles to develop innovative teaching and learning practices within HEIs (Erasmus+ Programme Guide 2021 | Erasmus+, 2021). Furthermore, the goal of integrating BIPs into HE is to open up opportunities for an international experience for those who might not have the assets and time for

a longer intercultural experience, purely due to personal reasons or for example due to the nature of their education, as it is clear from studies, that some educational disciplines are more advanced in their BIP experience than other, which is usually dependent on the nature of the education (Tan et al., 2021; Erasmus+ Programme Guide 2021 | Erasmus+, 2021).

Coming from the flexible nature of BIP, it has the potential to be adapted to HEIs' curriculum or to complement it, as based on its properties it can function as a new course, serve as a strengthening of some aspect of an existing programme offer, but can also operate as an added element to programmes and courses to support students in developing additional skills during the execution of the syllabus.
The role of the INVITE project regarding BIP-related innovation will be further explored throughout the span of the project, as each result of the 5 results in total, will focus on the development of HE reformation related to Virtual and Blended modalities, and will examine the topic of said innovation from different angles. The final stage of the project will be closely connected to BIP as it will explore the learnings of previous actions taken by the project, including the goal to offer more accessible BIP offers which can be open to associates beyond the Erasmus+ partners. With such an attempt to widen the barriers of current practices will the project work toward developing policy recommendations based on the learnings of the conducted practices (Aalborg University et al. | Project proposal, 2021).

2.5 Technological Dimension of Virtual and Blended Environments

The need for technological involvement in HE is a topic discussed over decades and was addressed by many, underlining the need for such involvement as it carries the possibility of diverse aspects that can benefit all stakeholders involved (Kirk et al., 2018). The need to universally develop digital skills is addressed and supported by the European Union and included in the Digital Education Action Plan between 2021-2027. It aims to support the development of such skills for all stakeholders within the frame of HE, including teacher training, teacher-student training and student training (*Digital Education Action Plan (2021-2027) | European Education Area*, 2021).

The goal to provide equal opportunities in digital accessibility and to make sure HEIs can build sustainable and homogenous digital equipment for all is vital to fully take advantage of the benefits that technological tools and skills usage can provide for users. The ultimate goal of the digitalization of HE is to develop soft and hard skills with the support of digital and technological tools, that enable internationalisation, development in communication and analytical skills. These can also foster empathy, a better understanding and tolerance towards cultural or international differences, to enable knowledge and support well-equipped student in entering their professional career (Chang & Gomes, 2022).

Chang and Gomes (2022) state the pandemic certainly addressed the need for digitalization in HE and expanded the perspective of how diverse the usage of digital tools can be, as well as addressed the benefits for stakeholders participating in such changed dimensions of content transfer. Due to the pandemic, the globally shifted modalities in a study supported the mainstream recognition: there is no need for physical mobility to experience internationalization within the frame of HE. However, it remains to be seen whether the pandemic brought the change into HE regarding the recognition of alternative ways towards

internationalization and the development of digital skills or whether this will lead to their integration into the curricula (Chang & Gomes, 2022).

2.6 Role and Benefits of Virtual and Blended modalities in International Collaboration

The focus on the perspectives that Virtual and Blended modalities can offer in HE innovation do not stay unnoticed by leading European Founding Programs. In recent years initiatives were supported by the Erasmus+ Virtual Exchange program, Erasmus+ Blended Intensive Programmes, Dutch Ministry of Science, Education and Culture: Virtual International Collaboration Projects and DAAD Germany: International Virtual Academic Collaboration (IVAC) to name leading ones among many. With the support of these organisations and their emphasis on the importance of internationalization, the EU-based projects can develop a collaborative approach to the digitalization of HE that nurtures and embraces the development of international and digital skills. By incorporating virtual and blended elements into the HE studies curricula, diverse positive effects can be discovered regarding both collaboration and internationalization from the individual to the institutional level (*Digital Education Action Plan (2021-2027) | European Education Area*, 2021.).

From the study of Olaisen and Revang (2017), the benefits of working at a distance are clear. The findings of their research can be aligned with the benefits addressed regarding Virtual and Blended modes in HE, such as the increased effectiveness of project delivery.

The findings of the research show that digital social interaction - one without offline contact - can be developed by knowledge transfer and the focused building of trust. They propose that teamwork can be successfully done with the use of existing technological and social platforms, without the need of offline, physical socialisation or any form of interaction outside the digital realm (Olaisen & Revang, 2017). Already in 2016, the offer in digital working was sufficient to complete tasks and succeed in project work, so it is safe to assume that the forced development of the area due to Covid-19 just made such opportunities easier to take and more accessible for many. On the other hand, a few years prior Wang and Haggerty (2011) raised awareness that to succeed in the digital age, experience with virtual work and online daily life are key determinants. Therefore, one should be taught and be trained to develop Individual Virtual Competence (IVC).

In Olaisen and Revang's (2017) research, the online way of completing projects reflects on the work of the future and is in line with the principles that highly competitive industries require when working in distributed global teams. It is only reasonable to connect education and the work industry in a way that skills are already prepared and developed for the reality of the labour market. In conclusion, the benefits of technological knowledge and the exercise of digital skills not only benefit those closely involved with it but can increase international collaboration, and the quality of projects, while benefiting society.

3 Methodology

This chapter provides insight into the methodology adopted in the case selection of relevant Virtual and Blended international modalities in HE. The chapter aims to deliver categorised insight into the selection criteria including, 3.1.1 case selection criteria, 3.1.2 building case analysis set of criteria to define and identify relevant examples of good practices; 3.1.3, which focuses on defined aspects of the practices such as the teaching and learning process of the selected case; international and intercultural dimensions of the selected case; the technological dimension of the Blended and Virtual modality cases. Furthermore, in chapter 3 as introduced in the introduction: The limitations of the study will address the possible bias of the selection and the nature of these limitations.

As Virtual and Blended modalities in HE are frequently discussed topics of HE innovation, the need to grasp an overview with an analytic approach of existing examples and leading practices is in demand. This chapter of the study provides an overview of such practices and declares that the selection was based on the criteria of sections 3.1.1 and 3.1.2 but was selected based on the best knowledge of the participants and without claiming completeness, therefore should be approached with the intent to gain a general understanding of ongoing practices of the field of interest.

To showcase the steps towards the case selection criteria presented under 3.1.1, a table will conclude all taken steps within a timeframe.

Steps	Timeline	Taken action
1st step	2022 February	Initial project meeting
2nd step	2022 March	Project meeting and the launch of R1A1
3rd step	2022 April	Collection of relevant cases
4th step	2022 May	Selection of relevant cases
5th step	2022 June	Synthesis of the selected cases following the typology
6th step	2022 June	Peer review of the draft of the study
7th step	2022 August	Peer review of the draft of the study
8th step	2022 September	Peer review and validation of the selected cases of the overall study

Table 2. Steps taken towards the completion of the study

The selected cases by the participating members of INVITE were projects and programs around Virtual and Blended practices of HEIs and their relation varies from the higher education program to HE-related innovation projects. The aim of such selection was to explore emerging trends and proven practices within the topic frame.

3.1 Case Selection Criteria

The selection criteria were based on four dimensions of the Virtual and Blended modality practices. The second step included the analysis criteria, which later can determine relevant cases for the project and support their in-depth analysis, as well as their synthesis.

Mapping needs:
With the dimension of needs, the focus is on working and well-operating examples that are focused on fulfilling the needs of all stakeholders involved: educators, students, administrative staff, organisations and institutions.

Innovative elements:
The criteria aim to shift the focus on solutions that are forming new ways and bridges in the field of Virtual and Blended modalities in HE, namely emerging innovations in recent years with special attention to solutions triggered by the Covid-19 pandemic.

Target groups/ Stakeholders involved:
The selection criteria wish to identify involved and informed target groups of existing cases in HE and by doing so, identify relevant stakeholders who can be at the centre of innovative modalities.

Expected impact:
Provide a foundation for mapping the required next steps in the design of an innovative educational offer within the field of Virtual and Blended modes. It supports the explorative approach to identifying and exploring external stakeholders. Followed by the identification of former primary criteria, a set of aspects were set to collect and analyse the selected cases and to examine their relevance for the INVITE project.

3.2 Case Analysis Criteria

Once selection criteria were defined as the frame for the desktop research for relevant cases in Virtual and Blended international modality examples, the second step followed, namely putting up the analysis criteria to provide equal assessment for each case. The four dimensions of the analysis criteria are the following:
Teaching and learning process of the selected case:
It aims to gather the involved stakeholder roles, mainly focusing on student, educator, administrative staff, institutional roles and the school's roles, stakeholders, and pedagogical approach to the case including the learning framework. With such analysis, the patterns of roles can be unveiled in the selected practices that are considered leading in the field.

International and intercultural dimensions of the selected case:
The criteria might focus on the nature of collaboration, and stakeholders involved both on a participatory or organisation level but can include the type of learning outcomes as well, if such outcomes have international or intercultural aspects or focus.

The technological dimension of the Blended and Virtual modality cases:
It aims to focus on the tools and methods applied within these learning modalities, assessing on the emerging trends in supporting tool usage.
Another dimension of the selected case: The last dimension of the case assessment aims to leave the opportunity open for addressing other relevant information about the selected practice. It might not fit under any other criteria, yet it still could be important from the point of view of the INVITE project. The criteria can contain any attributes of the following: the innovative factor of the case, level, degree, scale and duration of the HE-related program including the discipline area, if relevant. This dimension is rather flexible.

3.3 Building a pool of relevant cases

The activity of the project takes place from March to August of 2022. The activity aims to create a collection of cases with all members of the project participating to make sure cases are collected based on diverse background knowledge. In total 60 cases were collected within the time frame put aside for the activity. The cases were evaluated based on the selection and analysis criteria described in sections 2.1 and 2.2. The template of the selected cases included all criteria mentioned supplemented with general information about the project or program, including contact information, a link to the website of the selected case and information about the results of the case if applicable (see appendix 1)**.**With such a selection, a round of analysis can be conducted and used as the foundation of the project to identify the main themes and long-term goals of Virtual and Blended modality-related initiatives.

3.4 Limitations of the Study

There are some characteristics of the case collection practice that need to be addressed to identify the biases of the activity.
The area of Blended and Virtual modalities in HE is a fast-developing, ever-changing field, especially regarding technological development and innovative tools, rapidly opening new perspectives around the world, and connecting all stakeholders inside and outside HEIs. The event of Covid-19 pandemic placed high emphasis on the need to innovate and further develop the field. Furthermore, due to the subjective nature of collection conducted by the participants, this study does not claim to be an exhaustive one, as it does not state completeness and it should be approached accordingly. The main goal and motivation behind it were to gain a general understanding of existing and emerging practices in the field and position the project in an up-to-date manner based on such insight; therefore, the selection method of the study is regarded as an indicative sample. Additionally, as the nature of the study was qualitative and the goal of the case collection focused on gathering good practices of Virtual and Blended modalities present in HEIs, a selection bias should be addressed; therefore, it should not be considered a representative study. Furthermore, as each activity of the project has its assigned period, time constraints should be addressed in terms of time set aside for research purposes, while also considering cultural bias, as part of the data-gathering was carried out by the project members in parallel as an individual activity. Finally, as the field is rapidly changing and the intervention of Covid-19 causes a general delay in up-to-date research publications, it is important to address the weaknesses the study might possess due to the nature of the unprecedented times. Therefore, the study

aims to reflect on the data, that is supported by publications, while it also aims to be completed by the second activity of the INVITE project, R1A2 as the tools and methods assigned to the second half of the activity are deemed more suiting and, in a way, complementary to the R1A1.

4 Discussion

This chapter of the study connects chapters 1 and 2: the conceptual framework of the activity to the collected cases included in the annex. It aims to highlight and reflect on the variety of non-face-to-face modalities present in HE and the prospects of those (4.1 and 4.2), while it also draws conclusions from the different roles of the stakeholders involved and the role of HEIs, of which they, in general, can adapt (4.3), as well as opens up the possible future considerations and directions that Virtual and Blended modality related innovation, as well as what the INVITE project can take after gaining such insight from R1A1 (4.4) practice. Some examples from the annex are included in the discussion in order to support the summary and bear out the drawn conclusion, but only aim to serve as precedents, without claiming completeness as there are oftentimes other relevant cases included in the annex that could serve as examples.

4.1 Variety of Virtual and Blended Modalities in HEI

The goal of the study was to collect a pool of good practices within HE, while presenting a wide variety of use cases to address the diversity of existing modes of Virtual and Blended practices within HE.
It can be concluded that HEIs do make an effort toward IOC, and the cases do promote internationalisation, by offering either obligatory, voluntary or application-based opportunities in the field of Virtual and Blended modalities [14, 34, 39].
The selected cases are diverse in terms of:

- Their finance, as some of our HEI initiatives [1,2, 14, 40, 45] while others are government-funded initiatives or alike [15, 51, 53, 55, 56].
- The target audience of the project may vary, from students, including under- and postgraduate study cycles [14, 27, 29, 31, 36, 57, 60] to doctoral applicants [33, 34, 52, 58] or post-doctoral students [45]; as well as teachers and staff of HEIs [18,19], at times with the involvement of lower circle of study programmes as project partners [33].
- The types of activities within the modes are diverse, from events that are a few days long, like hackathons and similar [2, 22], to summer schools [7, 39], courses [41, 44], a few month-long activities [12, 60], to full educational programmes of both undergraduate [1, 11, 27] and postgraduate cycle [46, 47, 52], these are all either full degree programmes that include mandatory elements, or voluntary programmes based on application. Furthermore, such examples can be international opportunities within a regular programme to widen the intercultural experience of students [7, 12, 39, 41, 44, 60], or designed to be intercultural - for example in the case of a full study programme [1, 11, 27, 46, 47, 52]- these examples might be close-knit and might overlap in some cases.
- The length of practices including Virtual and Blended elements varies from a few days [3, 22, 34] to years [27, 52].
- Found in the cases, the initiatives can be innovation-focused, for example, the activity is connected to a project founded by outside stakeholders [4, 5, 17, 32, 51, 59] or for example a full educational programme that is open for internationals [14, 35, 40].
- The cases also present several examples where the nature of collaboration is not only between HEIs, but also NGOs and other non-academic partners [13, 27, 36, 38, 42, 52].

Based on the collected information, the INVITE project will contribute with recommendations regarding actions to be beneficial for HEIs to take, in order to strengthen internationalisation through Virtual and Blended modalities.

4.2 Prospects of Virtual and Blended Modalities

The key outcome of this study and the first result of the INVITE project is to be able to define the influence of technological innovation of HE and how it has been imprinted in HEI-related practices and initiatives in the past few years. By collecting good international examples of Virtual and Blended practices in HE the possibility to monitor and understand the effect of such changes can be practised. The reason behind Virtual and Blended practices in HE can be diverse from a collaboration between stakeholders [9, 45,51], development of global citizen skills [52], and enabling students and teachers to gain international and intercultural experience[5, 12, 15, 18], to tackle global challenges like the SDGs or other global challenges [17, 21, 24, 36], to gain hands-on practical experience [18, 24, 30, 51], these are just a few examples of how mentioned practices can foster personal and interpersonal development of direct and indirect stakeholders in the process of these initiatives. The organisation and systematic application of these value-carrying practices are in the best interest of all who wish to enable knowledge and expertise to flow without borders (Erasmus+ Programme Guide 2021 | Erasmus+, 2021).
From the activity, it became clear how mutually beneficial and constructive the collaboration between HEIs can be, especially when modern technological tools are used, such skills are key in today's and tomorrow's labour market, while the main aim of digitalization in HE is to finetune and further develop soft and hard skills, both regarding digital and technological abilities and area of expertise. As digitalisation is interwoven in the transformation of society and progress, the benefit should be harvested, enabled by digital and technological tools such as: development in communication, analytical skills, internationalisation, empathy towards other cultures by getting to know and connect with them, as well as understanding and tolerance towards cultural and international similarities and differences that can be closely experienced by the power of technology (Haigh, 2014; Kim, 2009; Kirk, 2018; Chang and Gomes, 2022).

4.3 Roles adapted by HEI Staff

By scrutinising closely all gathered cases, the role of staff has a direct relation with the success and carrying out of the activities, as it seems to be crucial. The openness toward new ways of working and willingness to collaborate has an important role in the operation of projects both within HEIs and between these organisations. The synergy of collaboration can define the project outcome as well as the personal experiences of participants [41].
The initiatives are mainly led by HEIs, while grants might support their aims [3,4,5, 15, 17, 23, 32, 33, 39, 44, 51, 53, 55, 56, 59], or the project led as cooperation between HEIs [45] and outside organisations [13], oftentimes a mixture of these [51,52, 36].

It is presented how a wide variety of roles adopted by HEI staff can be found in between the gathered cases. The variety between roles and the function of staff is closely related to the nature of the modality, but within the same categories, differences still can be recognized [35, 41, 53, 55, 57, 59]. Roles adapted by staff can be categorised as members who work on implementing, supervising and monitoring the project [1, 14, 16, 52, 61], or are beneficiaries of the project content [15, 18, 41, 57]. It can be also recognized, that if certain cases include specific topics HEI staff are open to reaching out to outside experts, and scientific advisors are invited into a project to provide academic-level insight into a topic that a certain case is focused on [31, 36, 52, 56, 61], which might strengthen the relationship of HEIs and outside organisations [13,15, 27, 36, 38, 43].

In conclusion, it is identified that academic staff plays a key role in carrying out Virtual and Blended modality-related practices in HEIs, regardless of their discipline area or nature. With a wide range of dimensions of expertise and depending on project needs, HEI members of staff are engaged in projects on many levels, such as scientific, technical or administrative or a combination of such, just to mention a few. Key stakeholders in innovation, including Virtual and Blended practice-related innovation, it is important to monitor, address and fulfil the needs of HEI staff, or even to support and understand such needs in the form of an innovative project [18, 19].

4.4 Future Directions and Framework

This study wishes to emphasize the need for the analysis of good practices, while also tracking such initiatives. The purpose of this document - among others, stated in the proposal - is to address and document the need for innovative ways to implement Virtual and Blended practices in HE, as it is the way ahead in European education. Additionally, the need for further well-grounded research in the field should be conducted, to make progress in internationalisation and intercultural collaboration, in which the INVITE project intents to take part in with its upcoming actions. Regardless, the need for a wide variety of other than face-to-face programmes in HE education is needed, including programmes which are built on the learnings of previous initiatives, and ones which enable intercultural collaboration. The development of digital skills is key, while HE should also take its part in contributing with content to the preparation of involved stakeholders for global citizenship - students, teachers and staff alike. Furthermore, the project strives to suggest policy-making guidelines.

Regarding the ways how the INVITE project wishes to participate in the future considerations presented, the partners built up a framework to define the key questions of the topic and make sure the first activity of the project provides relevant and representative insight into current initiatives and objectives of Virtual and Blended practices within HEIs. Followed by the selection of practices, Columbus Partners defined key questions based on the collected information in R1A1 to serve as a bridge between R1A1 and R1A2 activities, to make sure the first action is in line with the second action and reflects on it. Furthermore, it proposes the right questions that should be elaborated on in the second activity – which aims to focus on the selection of good practices in HE, and by doing so can provide a profile of the leading and most innovative methodologies which are currently utilised by HEI practices of virtual and blended learning environments.

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

The questions formed by the partners are supporting the expected result of the activity: to understand – post-pandemic – how Virtual and Blended practices contribute to the improvement and innovation of existing teaching and learning processes in HE. The study aims to gain this insight by understanding and analysing the main characteristics, scope, both supporting- and main stakeholders, organisations involved and the motivation behind these initiatives, and the way how the selected cases contribute to the forming of innovative processes of Virtual and Blended modalities in HE. The following titles aim to serve as a bridge between R1A1 and R1A2, as their goal is to propose the main questions to be elaborated on in the upcoming actions of the INVITE project.

4.4.1 Current use of technology in teaching and learning processes in virtual and hybrid modalities

In reflection on today's situation of Virtual and Blended modalities in HE, it is safe to say there is a phenomenon of drifting back to offline modes of teaching, however, the knowledge gained during the pandemic restrictions cannot be unlearned, neither the practical knowledge that was utilised by many of the stakeholders of HE, students, teachers and staff alike, neither the gained digital skills, nor their perspective on how might teaching materials and knowledge can be widely shared. Technology provides never-seen-before ease in the transfer of knowledge and freedom in collaboration, therefore should be utilised. As the world is slowly waking up to a post-pandemic reality it is key to regulate and guide the changes one wishes to see in HE.

4.4.2 Significant and sustainable practices contributing to the teaching-learning processes

Based on the cases collected in the activity, it is key to identify the significance of the initiatives and conclude which practices are forward-looking. Therefore, the good practices selected in R1A2 are based on the desktop research and the primary selection of the good cases conducted in R1A1 should focus on the aspect of sustainability of the initiative, its significance and how it might benefit the teaching-learning process.

4.4.3 Typology development for emerging modalities in terms of their impact on different educational levels

During the discussion with the project partners, the development of a typology formed as a possible analytical instrument, to map and understand how the newly developed modalities of education impact students - and might as well teachers - in their learning and knowledge transferring process. The elaboration on the importance of how modalities can be adapted and altered to different target user needs is key if the impact of Virtual and Blended modality-related innovation should happen on a multi-level basis, to prepare stakeholders for their professional life. For such endeavours, it is key to explore the adaptability of initiatives as the generations raised in the digital age should be able to slowly adapt and utilise the skills that are required in technological and digital solutions in HE, or at any level of education. The benefit of such understanding would be the identification of age-related benefits in the use of Virtual and Blended modalities if there are any, but if so, a question remains: how might innovative initiatives be adapted to different levels of education.

4.4.4 The nature of the main initiatives (bottom-up or top-down)

It is key to understand and analyse the nature of the initiatives in HE related to Virtual and Blended practices and to recognize the difference between bottom-up and top-down initiatives and how they might affect the adaptability of stakeholders. Additionally, what this might mean to the formation of policies connected to these initiatives, and finally, what kind of response they foster both on the personal level of the staff, and on an organisational level. The INVITE project recognizes and supports both bottom-up and top-down approaches, as it understands the benefit of both and how they might enable the progression of HE innovation.

4.4.5 The main drivers and barriers to the integration of technologies, pedagogies and international collaboration

As presented in chapter 2.5, discussed by Wang and Haggerty (2011) and Haigh (2014) among many others, the systematic integration of the use of the digital and technological solutions in HE, as well as the acquisition of international skills required for global citizenship, are key in the innovation of HEIs. To come up with solutions that integrate such principles into HE, the exploration of limits and barriers is key to be elaborated. Furthermore, it must be understood how the INVITE project might offer alternative approaches to avoid the misuse and misinterpretation of its product outcome. These factors can be identified through case studies and the insight of professionals, and experts in the field, which is the goal of R1A2.

4.4.6 The role of collaboration between national and international universities in the dissemination of innovation

The project declares and underlines the importance of connecting national HEIs to international partners, as it is clear from the collected cases, furthermore, backed up by secondary research materials, how such collaboration plays key importance in the spread of innovation and knowledge transfer, with it equalising the level and quality of knowledge.

Connecting HEIs and related organisations in an international and cross-border collaboration manner, enables a smoother information transfer, and with it, it is more likely that innovation can spread more equally. Even though it might be concentrated in some places, as some geographical areas have clear advantages in certain disciplines due to assets others might lack, Virtual and Blended modalities and HE innovation should be used as tools in the building of a bridge between international HEIs. Collaboration between parties with strength in varying disciplines makes it more likely not to be left behind in certain geographical areas, due to a lack of resources.

4.4.7 EU support of the Digital Agenda in HE

The focus and investments from the EU part are mainly on citizen education and the involvement of digital technologies in the everyday life of these stakeholders. Higher education-related goals are articulated in the Digital Education Action Plan (2021-2027), which aims to support its target audience in the sustainable and effective adaptation to the digital age. With the framework that is provided by the Digital Education Action

Plan hand in hand with the European Digital Education Hub led by DAAD, which is currently spreading its wings, the EU aims to support the Digital Agenda in HE in many ways. To serve as an organised and stable support to the EU Member States who are following the Digital Education Action Plan, the Digital Education Hub is currently working on exchanging their experience and sharing their good practices in all areas of digital education. The Digital Education Hub's goal is to connect and link both national and international digital education initiatives, while connecting them to outside stakeholders who can benefit from these practices and can also contribute to its success.

4.4.8 The skills required by HE teachers

As it becomes clear from both the selected cases and the secondary information gathered, the educators in all cases play a key role in the success of the project or programme, regardless of their specific role in it. The focus on teacher education and preparing them for digital solutions integrated into HEI curriculums is addressed by much research conducted in recent years, while the Erasmus+ Digital Education Action Plan (2021-2027) also reflects on the need to involve teachers in the innovation process of HEIs. As discussed by Kirk et al. (2018) to work towards the goal of IOC, which includes the persuasion of integrating Virtual and Blended modalities into HE curriculum and offers, it opens the door towards both the development of digital skills and global citizenship as well, which are in line with the Erasmus+ Digital Education Action Plan 2021-2027. As Kirk et al. (2018) state, the idea of including intercultural values in the curriculum highly depends on the way it is presented, which also tends to define its success. As a general norm of this aspect of innovation, the skills required by teachers are competencies that can be learned, so, the main obstacle is not usually the aspect of learning a new skill, regardless of if it is a digital skill, rather: the challenge seems to be in the openness towards learning itself. This area will be further discussed as the semi-structured interviews and other data collection conducted in the second activity, to gain deeper insight into the topic, and to include all relevant learnings in the later actions carried out by the INVITE project.

4.4.9 Leading initiatives on digital teaching –learning innovation and further research

The INVITE project emphasizes the leading national initiatives within the European Economic Area, and by focusing it emphasises the need to understand the leading themes of such endeavours. Therefore, it is a task to be taken on by the project to find and analyse leading initiatives, and by researching them and contacting their responsible experts to gain knowledge of the current trends. Only with such insight, innovation is possible. The next step of the project in R1A2 will be the current state of Virtual and Blended modality-related innovation. While the first activity of the project conducted desktop research and collected secondary information on the trends and initiatives of Virtual and Blended modalities as its primary goal, to gather up-to-date insights on emerging initiatives that are currently formed, the second half of the first result of the project will work on - among other activities - conducting semi-structured interviews with leading professionals in the field, to understand the focus of these initiatives, and by doing so be able to define where the INVITE project should place its focus for the upcoming activities. To explore the current works and prospects of the innovation of HE with the support of Virtual and Blended practices, the INVITE project aims to gather the insight of the advocates of leading organisations in hopes that by gathering relevant information on their work, the project can feed from a well-grounded and daily insight of current trends of Virtual and Blended practices connected to HE.

5 Conclusion

The goal of the study was to select a variety of good practices of Virtual and Blended modalities in HEIs, to map and discover the diversity of existing practices in this emerging field. HEIs and the cases connected to them were examined through parameters such as typology applied, the nature of and the type of collaboration, target audience and the forms of collaboration between stakeholders. Furthermore, the level of education within tertiary education where such a case is practised. Additionally, the degree and nature of collaboration between institutions were examined to support the understanding of synergies between institutions, while understanding patterns of collaboration and internationalisation.
Use cases were collected based on the type and nature of collaboration that fit under the criteria of Virtual and Blended practices led or carried out by HEIs, so they were selected if deemed as good or leading practices internationally or regionally by the INVITE project partners.

In conclusion, the study gathered information to address the need for internationalisation, as well as the further progression of Virtual and Blended modalities within HE, as education-related innovation is closely connected to technological improvement, digitalization and the acquisition of digital skills. With the first activity of the INVITE project, information was gathered on current practices in Virtual and Blended modes connected to HEIs after the Covid-19 pandemic, which reshaped the landscape of HE innovation. The activity aimed to map out and with it, later throughout the INVITE project, utilise the diverse solutions that digitalization provided during pandemic times. With this study, - the first activity of the first result of INVITE - it is hoped that the following practices within the project can be oriented in a way, that support ~~in~~ further polishing, while directly supporting the goal of the project; to bring innovation into HE through digitalisation, namely with the help of Virtual and Blended practices. As addressed by Medina (2018) a wide variety of application of Blended - and Virtual - practices can be recognised in terms of HE innovation, which loosens the general understanding of how quality education is connected to a face-to-face carrying out mode. As for future steps for the INVITE project, this study hopes to provide an overview of current practices within the subject area, while addressing the need for a multi-level process when it comes to HE-related innovation (Haigh, 2014).

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7 Appendix

Appendix 1

Template for listing existing and emerging modalities of international collaboration in virtual and blended learning environments. Please add the related info under each category.

- **Basic info** (web site, coordinator, degree, education, discipline)

(add info here)

- **The Teaching & Learning dimension** (student's teacher's, school's roles, stakeholders, pedagogy, learning framework, etc)

(add info here)

- **The Technological dimension** (for virtual and blended learning environments)

(add info here)

- **The International dimension** (intercultural approach)

(add info here)

- **Other dimensions** (innovation, scale, duration, area, level, degree, etc)

(add info here)

- **Results**

(add info here)

The template used for the selected cases.

8 Annex

The cases included in the annex are international practices that are deemed leading, good examples of Virtual and Blended modalities of HE. The cases are presented in alphabetical order.

1. **Aristotle University of Thessaloniki**

General information

Website: https://aristotlemedical.edu.gr/

Project coordinator: Head of the Aristotle University School of Medicine, Kyriakos Anastasiadis

Education: Aristotle University School of Medicine

Discipline: Medical Degree, Medicine

The Teaching & Learning dimension

The program is open for students within the field of Medicine with a High School Graduation Certificate or International Baccalaureate Certificate. The program is carried out with the guidance of world-leading educators, surgeons and physicians.

The participants have to take part in 83 obligatory courses, which are divided into 76 courses up to the 10th semester, followed by 7 clinical exercises in the 11th and 12th semesters. The clinical skills of the students are shaped from the first semester, additionally, clinical rotations start from the 9th semester. Throughout their graduation year, students participate in full-time supervised clinical training at the recipient Hospitals. The buildup of the program is as follows: The 3 cycles of courses start out with a pre-clinical cycle from the 1st to the 4th semester; the clinical cycle takes place from the 5th to the 10th semester; finally, the clinical practice is carried out through the 11th and the 12th semester. As part of the 1st cycle, the students are taught basic clinical skills in a virtual simulation environment; the simulation practice is then followed by physical practice taught by clinical professors throughout the 5th up until the 12th semester where clinical skills are further developed and practised under supervision.

The Technological dimension

The program is taught in English, and from semesters 1 to 4, the pre-clinical courses may incorporate distance learning modality, in the form of e-courses. The courses can be carried out in 2 ways: as in-presence physical courses or by participating in the distance, virtually. By allowing the completion in an online form of the pre-clinical cycle the advantages include: gaining knowledge from a specialist professor in the field, who otherwise could not attend a physical course. It increases the responsibility of organising high-quality courses, as the materials are entailing public scrutiny. The e-course allows innovation in the field to flourish as for example new guidelines and instructions might be integrated directly into the e-course.

The e-courses can be carried out in diverse ways, though the program suggests two forms regarding its organisation: the way of theoretical development of a topic and by presenting an interesting patient case, where the students have the opportunity to carry out an 8 to 10 minutes long presentation. As a task for the students, 6 to 8 multiple choice questions are prepared, as an interactive element of the course. With answering the questions, the teacher gets to analyze the student's correct or incorrect answer and gain

insight into their knowledge. To proceed with the questions, the student must answer each question correctly.

The platform of the courses is the elearning.auth.gr platform, a page for digital undergraduate and postgraduate courses of all departments of Aristotle University. To access the content users must be active AUTh member or to be an external user who is certified as external partner of the hosted courses. The elearning.auth.gr platform is supported by the Information Technology Center and the Library & Information Center of the Aristotle University of Thessaloniki.

The programme aims to provide an environment for students which stimulates their curiosity and creativity, with the close-knit support of participating professors who take the role of guiding, and provoking leaders of pupils, while actively working on awakening the consciousness of the participants. Each student is linked with an academic supervisor, a supporting figure who is working on providing guidance and support for the students throughout their studies.

The duration of the undergraduate programme is 12 semesters corresponding with 360 ECTS.

The International dimension

is non-applicable

2. Aristotle University of Thessaloniki - MSc in Medical Research Methodology

General information

Website: https://mrm.med.auth.gr/

Contact information: Director is Apostolos Tsapas, Professor of Medicine, Department of Medicine, Faculty of Health Sciences, AUTh

Degree: MSc in Medical Research Methodology

Discipline: Medicine - medical scientific research

Duration: 12 months, 75 ECTS

Modality: Blended modality - Combination of onsite and online learning, to allow optimal time management. Only three weeks of onsite teaching are divided into one week per month in February, April and June, to ensure minimal physical presence.

The Teaching & Learning dimension

The participants of the programme are medical professionals from the field of medical doctors, dentists, biologists, bioengineers, pharmacists, and nurses or health economics professionals, while the teachers are the faculty members of the Medical School of Aristotle University and an international group of distinguished tutors.

In order to complete the programme, students have to complete 8 modules, from which 5 are compulsory and 3 are elective, furthermore they have to write their MSc thesis. The programme is open to “participating visitors” who are graduates of Greek or foreign institutions of a related field. Such visiting students can attend

up to 3 individual courses of the programme without having been admitted to the MSc. The "participating visitors" receive a certificate of attendance, once they have completed the courses they have selected.

The Technological dimension

The programme uses Moodle, an open-source learning platform. It is designed to support educators, administrators, researchers, students and learners with a secure and integrated learning system, which allows the creation of personalized learning environments suitable both for educators and students. As a tool suitable for both blended learning, distance education, and other e-learning projects in educational settings, it is primarily used to create online courses and to achieve educational learning goals.

Once admitted, students are provided with all needed supporting materials in order to make their transition into learning the usage of Moodle as easy as possible, with their personal account to the learning platform and their email address, they are secure and well-equipped to start their blended education.

The International dimension

The nature of the programme - its short duration, its language of instruction being English, followed by its blended form, and the fact that it is open for both domestic and international students - makes it outstanding in Greece and attractive to many applicants.

3. Athena European University - Sci-cafe (colloquial talks)

General information

Website:https://athena-uni.eu/research-2/research-initiatives/;
https://www.facebook.com/groups/382030219668088

Contact information: International Relations Office of the Hellenic Mediterranean University (Dr. Konstantinos Petridis cpetridis@hmu.gr)

Event: Sci-cafe (colloquial talks)

Partners: IKY Greek Directorate of Scholarships; European Universities Erasmus+; Advanced Technology Higher Education Network Alliance (ATHENA): Polytechnic of Porto (Portugal), Hellenic Mediterranean University (Greece), University of Siegen (Germany), University of Maribor (Slovenia), University Niccolo Cusano (Italy) and University of Orleans (France)

Discipline: Multiple

Modality: Distance learning

Duration: Started in October 2021 and will continue until June 2022

The Teaching & Learning dimension

The events are presented by the distinguished scientists within the ATHENA alliance, where they present their world-class research work. The seminar where such work is presented is organized within the frame of the sci-cafe talks, held every Friday.

The Technological dimension

The event is carried out on Zoom, where scientists of the ATHENA alliance are presenting their work in a form of slideshows and videos. Zoom is a video platform, that offers a solution to all digital communication needs such as meetings, chat, phone, webinars, and online events as well.

The International dimension

The nature of ATHENA and its openness for all events support the international nature of their endeavours. Their pedagogical model supports excellence in teaching and supports actions to innovate within the consortium, while allowing students to discover their full potential and understand their skills in how to use them in the job market.

4. Athena European University - Seminars on soft skills development

General information

Website: https://athena-uni.eu/research-2/students-rd-activities/#SoftSkills

Contact information: International Relations Office of the Hellenic Mediterranean University (Dr Konstantinos Petridis cpetridis@hmu.gr)

Partners: IKY Greek Directorate of Scholarships; European Universities Erasmus+; Advanced Technology Higher Education Network Alliance (ATHENA): Polytechnic of Porto (Portugal), Hellenic Mediterranean University (Greece), University of Siegen (Germany), University of Maribor (Slovenia), University Niccolo Cusano (Italy) and University of Orleans (France)

Qualification: Certificate of attendance

Discipline: Multiple - soft skills are non-technical skills that relate to how you work. They concern every profession and are divided into 3 groups: people skills, social skills, and personal career attributes.

Duration: The project started in March 2022 and will continue until July 2022. The ATHENA Soft & Research Skills Academy lectures happen every Monday.

Modality: Distance learning

The Teaching & Learning dimension

The project is a weekly series of seminars with various guest speakers presenting diverse topics revolving around the topic of “soft skills” coming from the ATHENA network. The soft skills Academy is open for all - staff, teachers, researchers and students at any level- and aims to emphasise the importance of strengthening soft skills.

The ATHENA Soft Skills Academy is where speakers from the consortium but also beyond the consortium can discuss the soft skill development of participants, students, academics and administrators. The weekly organized 90-minute courses are held online and are presented by a professor from an ATHENA institution on a specific topic. Each course is independent, therefore it provides flexibility to participants when they are joining and how many courses are they participating in.

The Technological dimension

The soft skill-related courses are organised weekly and can be attended by anyone via Zoom link. A video platform, that offers a solution to all digital communication needs such as meetings, chat, phone, webinars, and online events.

The International dimension

The pedagogical model of ATHENA puts emphasis on a student-centred curriculum. ATHENA envisions creating a learning and teaching environment that focuses on the development of soft skills and hopes, with it a boost in employability can be reached. The alliance is an international endeavour, which targets the stakeholders involved of each member of ATHENA.

5. **Athena European University - "Smart Community" Erasmus+ Blended Intensive Programme (BIP)**

General information

Website:https://athena-uni.eu/#;

https://athena-uni.eu/2022/04/22/blended-intensive-programme-for-athena-alliance-students/

Contact information: The programme initiated by the VILNIUS TECH International Relations Office and jointly implemented by Assoc. Prof. Dr Skirmantė Mozūriūnaitė

Partners: PRAXIS network, ATHENA Career Service, researchers from different disciplines and countries, etc. (https://athena-uni.eu/stakeholders-2/);

Supporters: European commission, Agence Nationale de la recherche, German academic exchange service

Degree: Workshop certificate of "Smart Community" Erasmus+ Blended Intensive Programme (BIP) - workshop certificate

Discipline: Architecture, Engineering, etc. - Smart Community

Duration: 2 weeks (one week online and one week at VILNIUS TECH)

Modality: Blended

The Teaching & Learning dimension

The ATHENA infrastructure for distance learning is advanced, including all facilities determined and required for virtual mobility, such as Multimedia lab for recording video lessons; MOOC edition and production of materials; virtual classroom, a classroom equipped with the required hardware and software for virtual attendance of classes.

Those students, who are residents of one of the ATHENA countries are able to access the materials planned for the course. To support their BIP experience, students are granted access to a common Moodle platform, that guarantees access to texts, hand-in materials and exercises set up for a given course. Furthermore, virtual classes allow students to synchronously interact with each other, while being physically present in different countries. This way, as in a real class students can interact with each other, exchange opinions, raise questions, and doubts, add comments, and discuss the course of study. The multimedia lab serves the

teachers and professors in creating virtual video classes or MOOCs; they can manage web conferences with their students and can create complete curses or individual modules for distance teaching.

Students of all study levels from the ATHENA Alliance partners can participate in the BIP held by the Academic staff from Athena University, governmental representatives and other experts in the field.

The Technological dimension

The BIP is combined with short-term physical mobility that includes lectures, group work, and social-cultural activities with a virtual component. During the course, practical tasks are carried out, for example: filling in Miro boards, preparing presentations and participating in workshops. The Workshop during the BIP was a one-week, short-term physical mobility, including lectures, group work, and social-cultural activities carried out at VILNIUS TECH with a one-week virtual component.

The International dimension

The short, workshop-like Erasmus+ mobility allows students to cover a relevant topic in a short time, present their ideas, in group work, and find peers through networking within the frame of an intercultural experience. In short, to experience an intercultural exchange which isn't as costly as Erasmus+ mobility, which can take months and requires the student to be physically present in another country.

6. Blended Intensive Programme - House of Europe - International Songwriting Project

General information

Coordinator: Stefania Franchini (Conservatorio di Pescara, stefania.franchini@conservatoriopescara.it)

Partners: Conservatorio "L. D'Annunzio" di Pescara (Italy); Metropolia University of Applied Sciences (Helsinki, Finlandia); HKU Utrechts Conservatorium (The Netherland), Música Creativa (Madrid, Spain), Vienna Music Institute (Austria) and the University of Tartu, Viljandi Culture Academy (Estonia)

Degree: non-specified, university students

Modality: Blended

Number of participants: 18-20

Duration: 4 months

Academic year: 2021-2022

The Teaching & Learning dimension

The program kicked-off with an asynchronous, online introductory course with the theme of songwriting. Then was followed by an intensive workshop on songwriting, which included collaborative group work for producing songs, which was supported by the teacher and peer-to-peer feedback. To round up the project the participants organised a final concert, where they got to present their composed work, as a fruit of the workshop and the coaching led by teachers. As a post-production period, the project contained a remote post-production period aiming to prepare the foundation for the digital release and distribution of the songs.

The Technological dimension

The digital tools used throughout the project were musical and communication applications suitable for online working.

The International dimension

The international dimension of the project can be identified in the teams formed in the project, which were set up with students from different countries and cultures. The theme of the new songs composed focused on stories about life in Europe, both through the eyes of those who considered themselves European, but also through the eyes of those who were just getting familiar with Europe, which could have diverse reasons.

Results

Results are including the songs created during the project, post-production and the final concert carried out by the participants.

7. Blended Intensive Programme in Una Europa – One Health

General information

Website: https://www.una-europa.eu/initiatives/one-health-summer-school

Coordinator: Projects team, University of Edinburgh, Email: goabroadprojects@ed.ac.uk

Partners: European University Una Europa, Freie Universität Berlin; Alma Mater Studiorum Università di Bologna; University College Dublin: University of Edinburgh; Helsingin yliopisto/ Helsingfors universitet; Universiteit Leiden; Uniwersytet Jagielloński w Krakowie; KU Leuven; Universidad Complutense de Madrid; Université Paris 1 Panthéon-Sorbonne; Universität Zürich

Degree: undergraduate

Discipline: One Health and Planetary Health

Modality: blended

Duration: 2 weeks in person followed by virtual activities

Year: 2022

Area: Europe

The Teaching & Learning dimension

The project includes an online preparatory work, which aims to support students in meeting with fellow participants in an online setting in order to support their journey in getting to know each other and get familiar with the key principles of One Health. The physical element of the project is a summer school organised in Edinburgh, that includes lectures, seminars, and collaborative group work.

The first week of the project is considered a preparatory programme, where students further investigate the various concepts of One Health and Planetary Health. After executing such exploration, participants begin their work in groups, with the aim to explore challenges, conduct preliminary research, and share their insights based on such activities. During the second week of the project, the groups work on generating solutions for the topics they explored, which concludes in a pitch at the end of the week, where teams

effectively communicate their ideas to their peers. The learning frameworks of the project include collaborative learning, active learning and project-based learning.

The Technological dimension

Not specified.

The International dimension

The intercultural dimension is identified in the multicultural aspect of teams working on the challenge, and the social and cultural nature of the activities.

Results

The expected results of the project are the development of teamwork-related skills, and development in communication, research and presentation skills.

8. Blended Intensive Programme in UniTo - Intercomprehension for Language for Specific Purposes

General information

Coordinator: Elisa Corino (UNITO)

Partners: European University UNITA, University of Torino

Discipline: Intercomprehension for Language for Specific Purposes

Modality: blended

Link to published material:

https://www.unito.it/sites/default/files/intercomprehension_bip_unito.pdf

The Teaching & Learning dimension

The project is a BIP, and requires virtual individual activity through an Open Online Course, while the physical face-to-face element in the project will be carried out through lectures and task-based activities.

The Technological dimension

The main virtual tool for the project is Moodle, an LMS platform, which is the own virtual environment of the University of Torino.

The International dimension

The participants will use their own language to communicate.

Results

The course will be held in Summer of 2022, and the project is still ongoing.

9. Blended Intensive Programme in UniTo - Renewable energy for the mountain territories

General information

Coordinator: Stefano Ferraris, Elio Dinuccio, Sergio Vinciguerra, Nadia Barbero (UNITO)

Partners: European University UNITA

Degree: Master students in all disciplines

Discipline: Renewable energy for the mountain territories

Modality: blended

Number of participants: 20 students

Duration: 6 months (virtual), 1 week (in presence)

Year: 2022

Area: Europe

The Teaching & Learning dimension

The summer school aims to be an introduction to the topic of renewable energies and explores the ways how it is connected to the mountain territories. The program will start off with an introduction to renewable energies, and will elaborate on different energy production techniques including hydroelectric, geothermal, solar photovoltaic, wind- and bio energies and will introduce the different types of energy storage approach such as pumping, batteries or hydrogen as energy carriers. Additionally, the social aspects of such development will be discussed and opened up during the teaching program. Project-based learning and game-based learning are connected to territorial issues. As part of the program excursions to local renewable energies management will be held.

The Technological dimension

No details about the technological dimension.

The International dimension

The official language of the summer school is English, the program is offered for teachers and students from different countries, and their collaboration and networking is supported by social activities organized during the program.

Results

The course is ongoing, and will begin inthe Summer of 2022.

11. Case study of the online graduate programs at the Open University of Catalonia, Spain, the University of Edinburgh, UK, and the University of Illinois Urbana Champagne, USA

General information

Partners: Open University of Catalonia, Spain, the University of Edinburgh, UK and the University of Illinois Urbana Champagne, USA

Degree: undergraduate

Duration: online graduate programs

Modality: virtual

The Teaching & Learning dimension

The presented universities in the study were selected based on their high ranking in accessibility and open-course contents, their level of program documentation, their focus on criticality in online learning, and their tool used in open educational practices (MOOC, open web publishing, blogging). The selected HEIs are also ones who practice a reflective approach towards professional practice, are innovative in their program design, and have already published in the field of digital learning.

The Technological dimension

For time management the students use digital calendar tools. For metacognitive strategies, for example, note-taking, organizing, and transforming course materials the students use digital tools such as PDF reading and annotating tools, Evernote, and Note-ability. For communication WhatsApp, Hangouts, Email, and Messenger are used. Furthermore, within the programs the following search engines and knowledge databases are considered essential: Evernote, Paperpal, Google Tasks, and similar, and for communication and collaboration the following cloud-based programs are used: Google docs; an online tool for writing documents, and DropBox; a digital sharing and storage product.

The International dimension

The international dimension is fulfilled by the nature of the program, as it is open to international students.

Results

The results are gathered in the paper published by Mitchell Peters and Marc Romero (2019); Lifelong learning ecologies in online higher education: Students' engagement in the continuum between formal and informal learning:

Lifelong learning ecologies in online higher education: Students' engagement in the continuum between formal and informal learning - Peters - 2019 - British Journal of Educational Technology - Wiley Online Library

12. **Case study of the online graduate programs at the Open University of Catalonia, Spain, the University of Edinburgh, UK, and the University of Illinois Urbana Champagne, USA**

General information

Coordinator: Jessica M. Harris, Department of Health Promotion and Wellness, The State University of New York at Oswego (SUNY Oswego), USA

Partner: The State University of New York at Oswego (USA); The Hague University of Applied Sciences (the Netherlands)

Education: Undergraduate students (SUNY Oswego: Department of Health Promotion and Wellness; The Hague University of Applied Science: Nutrition and Dietetics program)

Discipline: Health promotion and wellness

Modality: fully virtual

Duration: 6 weeks

Number of participants: 35

Year: 2020

Area: USA; The Netherlands

Published paper: Global Competency Through Collaborative Online International Learning (COIL), Jessica M. Harris, Minjung Seo, Joshua S. McKeown

http://ocs.editorial.upv.es/index.php/HEAD/HEAd21/paper/view/13080

The Teaching & Learning dimension

The teaching and learning dimension of the project placed collaborative learning in focus, as students worked in pairs on different assignments through virtual modalities. The cross-border collaborative project was broken into 6 weekly tasks including small assignments.

The Technological dimension

The participants used an LMS tool for the project, the software Blackboard supported their work as a virtual learning environment. The students used Padlet as a collaborative, virtual environment and tool for collaboration and creating materials for the project.

The International dimension

The project was carried out with mixed groups from the two participating universities. The groups were asked to reflect on their experience, compare and contrast physical activity, behaviour, and nutrition issues typical of their countries, and do such reflection with an international view on the topic.

Results

As a result of the project the final outcomes indicated that students gained insights and developed their knowledge of global governance systems, furthermore, their skills progressed in how they approach and aim to solve societal health problems with ethical principles in mind. In their feedback, the majority of the students considered the COIL experience as a project that provided them with a view on topics, and supported them to experience new ways of thinking about how they interact with the world and society. In general, COIL experiences aim to increase intercultural awareness and support participants in the development of their skills related to online intercultural communicative competence.

12. COIL VEP MCC and DUT Collaboration

General information

Program: nine-week period and one-month introduction icebreaker activity

Partners: Monroe Community College (MCC), Durban University of Technology (DUT)

Modality: blended

The Teaching & Learning dimension

Throughout the nine-week project (including the four-week introductory session) the students from the Monroe Community College and the Durban University of Technology were divided into mixed groups. After launching a case study, students had to collaboratively investigate and work on, later present a team-specific sub-case, that was strongly connected to the key elements of the main case. The participants needed to

create a personal project report with their own reflections, furthermore, they had to reflect on and assess their COIL experiences including peer-to-peer feedback regarding collaborative project work.

The Technological dimension

The collaboration of the COIL Virtual Exchange experience was conducted through the COIL Blackboard course management classroom, which was introduced to the participants within the frame of a 2-hour long introductory session, followed by a one-hour training about the usage of technology tools: Voice Thread, a collaborative voice, video, and text commenting tool; PowerPoint, to support slide-show presentations; Skype, for virtual conferencing; Google Docs and DropBox for file creation and sharing materials. The project included a WhatsApp for asynchronous communication and Facebook to co-create and explore knowledge and communicate about group-related topics in general. Synchronous tools, like Google Docs, were used for creating presentations for the case study.

The International dimension

The project was a collaboration between the South African Durban University of Technology and the U.S.-based Monroe Community College.

Results

The results of the project are published at the following link: https://www-tandfonline-com.zorac.aub.aau.dk/doi/full/10.1080/14703297.2020.1792331?scroll=top&needAccess=true

13. Columbus Hub Academy

General information

Website: https://www.columbus-hubacademy.org/

Coordinator: Columbus Association

The Teaching & Learning dimension

The initiative allows academics to design and propose a project idea that can be carried out between 3 weeks to 1 semester-long academic period. The foundation of the project idea is based on a practical activity, that allows students to collaborate with their remotely connected international peers. Incorporated in the Columbus Hub Academy there are PBL approaches and Project-Based Learning, to allow students to engage in problem-solving and learn through such challenges. With this initiative, the involvement of socio-economic stakeholders, like companies and NGOs are reasonable and enables the collaboration between them and student teams.

The platform of Columbus Hub Academy offers the opportunity for participants to team up by finding partners, with them, they work on developing their projects. Furthermore, the platform is the location for training sessions with which participants can design projects, certification for students, and self-evaluation tools.

The pedagogical approaches are very flexible and depend on the academics who design and organize the program. It allows academic leaders to define learning outcomes, learning, and teaching activities, and even assessment methods.

The Technological dimension

In most cases the projects are conducted in virtual environments, but often include blended components, primarily when participants interact with outside organizations whom they collaborate with such as NGOs, and companies. The most used virtual tools are Zoom and Google Meet; both serving as a video call tool, Open Moodle an LMS, Blackboard Collaborateand Padlet, tools for web design, docs storage and online collaboration.

The International dimension

The Hub Academy is considered to be an international and intercultural collaboration platform, which supports projects with the same values. The set minimum requirement for a project to be approved regarding intercultural and international aspects is to have at least 2 student groups and 2 teachers located in different countries who are establishing a collaboration project. The Hub Academy collects a survey with students and it is encouraged to reflect on their intercultural experience in their feedback.

Results

The projects carried out within The Hub Academy can be found on this link: https://www.columbus-hubacademy.org/proyectos

14. Distance Master Programme in Decision analysis and Data science, University of Stockholm

General information

Website: https://www.su.se/english/search-courses-and-programmes/sbdso-1.413329?semester=HT22&eventcode=43902&open-collapse-boxes=program-detail,programme-more-about,programme-labor-market

Coordinator: Prof. Henrik Hansson, henrik.hansson@dsv.su.se Phone: 46-8-16 16 96

Degree: Department of Computer Science and System Sciences, University of Stockholm, MA level

Education: Decision analysis and Data Science

The Teaching & Learning dimension

The program aims to support the student in learning how to tackle decision situations on a systematic level. Completing the programme, the students understand all stages of decision making from selecting, gathering, and processing background information, structuring the problem and assessing the consequences to making the actual decision based on rational principles in Computer-, and System Sciences. In the first year of the postgraduate programme, students focus on both subject areas of data science and decision -, and risk analysis. While in the second year they have the opportunity to specialize in either one. The program is a full-time (100% study pace) online distance learning programme with no meetings on campus. Multiple facilities are provided to the students to support their online-distance learning experience.

The programme encourages a master thesis in collaboration or to be written on behalf of a company or an external organisation in order to support the professional development and experience of the students.

The Technological dimension

Distance programme is a fully virtual programme, with no physical on-campus attendance. All teaching is conducted via the own learning platform of the MA programme.

The students use the following platforms and tools, to support their virtual learning journey: ILearn, a study platform which is mainly used in most DSV courses. SciPro supports enrolled students in their thesis work, which is an administrative support tool used by both the students and their supervisors during the process of thesis writing. Furthermore, throughout the program lectures are recorded and are accessible asynchronously. Many on the courses of the postgraduate programme personal tutoring to support students. Teachers can define the time when they are available for such sessions

For teachers of the programme the following facilities are available: To define a personalize their tutoring activities the platform https://mobile.tutoring.dsv.su.se is used. The teachers use Triton as their general-purpose SSH server. They also served with a remote desktop, which provided a similar environment as that available in the computer labs at the campus in Stockholm.

There are several services both available for students and staff, including Office 365 which provides access to MS Office, OneDrive and Outlook, and Survey&Report which is a survey tool for both students and staff, and both students and staff use Zoom. Furthermore, there are licensed programmes available for all including Grammarly, an automated grammar tutor and revision tool, Azure dev tools, a service that offers students a large number of programms from Microsoft to support their education and finally, a diverse set of softwares from SU IT Department, to give access to students a large number of software licenses through the university, including mathematics, statistics and spelling programs.

The International dimension

The MA programme is open to international students, and tuition fees are only applied to citizens from outside the EU, EEA or Switzerland.

Results

Not relevant.

15. DIVA Digital And International Virtual Academic Cooperation

General information

Website: https://diva-project.de/

Coordinator: Prof. Dr. Götz Schwab, goetz.schwab@ph-ludwigsburg.de

Partners: the University of Ludwigsburg, Kibbutzim College of Education, Technology, and the Arts in Tel Aviv, Charles Darwin University, Darwin

The Teaching & Learning dimension

Digital and International Virtual Academic Cooperation (DIVA) was a project running between 2020 and 2021 and was funded by the German Federal Ministry of Education and Research (BMBF) and DAAD. The project is part of the IVAC initiative and was led by the University of Education Ludwigsburg (Germany). The goal of the project was to strengthen existing collaborations and networks between national and international partners in language teacher education. The partners aimed to extend their already existing programs and

focus on developing new digital learning and teaching formats. The goal of DIVA was to strengthen the intercultural competencies of pre-service teachers and teacher educators and strengthen their skills in collaboration and teamwork.

The Technological dimension

The DIVA project's goal is to promote digital teaching in language teacher training and to integrate innovative didactical approaches into existing curricula. Furthermore, the project aims to methodologically implement blended mobility and foster intercultural competencies. The partner universities planned to measure student competence in digital learning with the participation of students and with the support of blended mobility. DIVA worked on a subproject: Telecollaboration to provide a digital toolkit for their target user. The tools contain Zoom, which as a digital conference tool supports communication; Mentimeter, a Padlet, as an online noticeboard, to support participants in customizing their own platforms and to enable them in collaborative work; Moodle, as an LMS; Appear.In, a video conferencing tool; and Flipgrid, a tool that allows users to facilitate video discussions.

The International dimension

The project was run with the participation of three project partners: the coordinator in Ludwigsburg, the Kibbutzim College of Education, Technology, and the Arts in Tel Aviv (Israel), and the Charles Darwin University in Darwin (Australia). The project was built on the diverse experiences of the different participating partners.

Results

In conclusion of DIVA two sub-projects supported the success of the project, Telecollaboration, which provides tools for language teachers, and the learning outcomes of proPIC, an Erasmus+ project which focuses on empowering both prospective teachers and educators in Higher Education. It supports their journey to actively engage in lifelong learning and to further strengthens the importance of professional self-reflection. The project emphasizes the importance and relevance of innovation and the value of interculturality in foreign language learning and teaching.

16. European Co-Laboratory for the Integration of Virtual Mobility in Higher Education Innovation and Modernisation Strategies

General information

Coordinator: Elena Caldirola, Flavio Ferlini (University of Pavia); Airina Volungevičiene (Vytautas Magnus University)

Partners: Vytautas Magnus University of Kaunas (Lithuania), Granada University (Spain), European Foundation for Quality in eLearning (EFQUEL) (Belgium), Università di Pavia (Italy), Jyväskylä University (Finland)

Degree: undergraduate students

Discipline: Open Educational Resources (OERs)

Modality: fully online

Number of participants: 18 students, 10 teachers

Duration: 5 weeks

Year: 2013

Area: Europe

Evaluation: initial and final questionnaire

The Teaching & Learning dimension

The project aims to explore the possibilities of Virtual Mobility in HEIs, its goal is to contribute to the innovation and internationalisation of European HEIs. Furthermore, its objective is to explore the potential of ICT and Virtual Mobility and aims to enable access to the international learning experience for all European students. The project was carried out with weekly synchronous meetings that were held by 5 teachers from the participating universities. The student participants had to exercise group work and complete weekly assignments about OERs. The results of the groups were presented weekly.

The Technological dimension

The technological dimension of the project included the tool use of Moodle, an LMS, and students had access to Adobe Connect, a web-conference system to support their communication. The possibility to visualise the recording of the previous lessons was also open to the students.

The International dimension

The dimension is fulfilled by the nature of the groups, which were mixed, therefore in multicultural groups which included members from at least 3 different countries, the students had the possibility to form intercultural connections by using English as a common language and the official language of the project.

Results

The project was carried out with excellent cooperation among students and groups, the cultural and language differences did not influence the success of the group collaboration. Regarding skill improvement, the competencies showed improvement in communication skills, students developed their skills in critical thinking, the ability to reflect, progressed in their social skills and their general attitude was positive towards virtual mobility.

The negative feedback from students included the feeling of lack of attention and feedback by supervisors and teachers; noted the short period time for and between assignments; the reduced collaboration overtime among group members, and difficulty within groups regarding lack of engagement and collaboration of some individuals. The project was a pilot test of an Open Educational Resource, and since then it became an OER itself.

17. Erasmus+ Blended Intensive programme (BIP) - Green Cities

General information

Coordinator: INSA Toulouse, Kaunas University of Technology, and University of Twente, Katja Auffret, katja.auffret@insa-toulouse.fr and Marie Agnès Detourbe, detourbe@insa-toulouse.fr

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

Education: ECIU University micro-module “Green cities”

Discipline: offered to multi-disciplinary students from Master programmes that belong to any of the Universities of the ECIU University (European University)

Topic: Environment / German language (2ECTS)

The Teaching & Learning dimension

The program is an online micro-module offered by INSA and Kaunas University through the ECIU European University. The module is offered online, and the blended component of the program was developed through the Blended Intensive Program, funded by the Erasmus + Programme. The course aims to improve German language skills for advanced learners with proficiency in B1 and over. The course is conducted with international teamwork, where the students work on a topic chosen by the group in the field of "green cities". The course is divided into 3 phases and participants have to prepare specific deliverables for each phase of the course.

Within the course, students are aiming to tackle the challenges of ever-increasing urbanisation and seek transdisciplinary solutions in international groups. The students should consider different areas of urban development and critically analyze and reflect on them from different perspectives. In this course, the focus shifts toward the major challenges of the 21st century and their impact on urban planning play a central role. Technical, economic, social, and political aspects are considered by the students in the search for innovative answers and sustainable solutions.

The last week culminated in a physical meeting in Kaunas, where the closing workshops, and meetings and cultural activities took place.

Mobility week was funded by Erasmus+ in the frame of a Blended Intensive Programme.

The Technological dimension

The tools used in the course are not specified.

The International dimension

During the course international students members of ECIU University were involved, furthermore, the course was developed jointly by 3 universities, and involved a physical mobility part in Lithuania.

Other dimensions

Innovation: They investigate existing innovative approaches to solutions and design their own innovative prototypes for sustainable living in the city of the future as a team in interdisciplinary project work.

Duration: Students worked together with teachers and coaches for eight weeks online. An online course that involves an extra week for a physical experience but it’s initially offered as an online full course.

Area: The course is connected with SDGs as the participants deal with problems of urbanisation in groups and choose a topic that they consider particularly important.

An online course that involves an extra week for a physical experience but it’s initially offered as an online full course.

Results

Some results are mentioned taking the voices of students and teachers involved in the intercultural immersion: Hemanthkumar Sureshkumar, a student at the University of Twente from India, said that participation in this programme allowed putting himself in a different role: "The workshops of the module made me push myself into new experiences and try to implement new personality traits. It also provided me valuable insight into the leadership change, the concept that I work on in the honours programme at my university". Another participant Austėja Slavykaite, a student of the Kaunas University of Technology, was happy to meet people from different cultures. "It was my first experience in an international project. Generally – an interesting experience, especially meeting people from different cultures. I learned a lot from my teammates," said Austėja, who participated in the Erasmus+ programme during her first year of bachelor studies.

18. EVALUATE project

General information

Website: https://sites.google.com/unileon.es/evaluate2019/

Contact: evaluateprojecteu@gmail.com

Partner: Alice Baroni, Melinda Dooly, Pilar Garcés García, Sarah Guth, Mirjam Hauck, Francesca Helm, Tim Lewis, Andreas Mueller-Hartmann, Robert O'Dowd, Bart Rienties, and Jekaterina Rogaten

Duration: between 2017 and 2019

The Teaching & Learning dimension

The project EVALUATE ran from 2017 to 2019 with the goal to evaluate and upscale telecollaborative teacher education. EVALUATE was a European Project Experiment that for its active two years investigated the impact of Virtual Exchange on students and teachers of Initial Teacher Education. The goal of the project was to bring together universities across Europe, join them with public authorities to carry out a study of virtual possibilities within Initial Teacher Education, and to explore these areas in order to bring new perspectives into teacher education.

The Technological dimension

Virtual Exchange engages students in communication with international partners. Virtual Exchange provides prospective teachers with hands-on experience in learning how to communicate online in foreign languages and to learn how to act and interact in an inclusive environment.

The concept of Virtual Exchange is an inexpensive solution compared to traditional study abroad mobilities and tends to be more inclusive as it is not dependent on material assets, to be part of the exchange only an internet connection is necessary. Virtual Exchange is flexible and can adapt to the use of innovative activities like eTwinning, a collaborative platform for HE staff, that enables users to collaborate with European stakeholders of HEIs. eTwinning enables users to communicate, and develop projects together and functions as a learning community.

The International dimension

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

The aim of the project is to support the development of a more sustainable and inclusive mobility alternative throughout Europe; therefore the international dimension is met in the sense that there is no limitation when it comes to nationality.

Results

The project EVALUATE ran from 2017 to 2019, the outcome of the project further strengthened the concept of Virtual Exchange to support student teachers in their education and to support improving their skills in the use of digital tools and methods. The final output of the project is a teacher training manual and the Virtual Exchange, a guide and preparatory program for students of Initial Teacher Education. The concept of Virtual Exchange is to prepare teachers and enable their skills in a culturally diverse context, help them to learn how to collaborate in a transdisciplinary setting, and use technologies in innovative ways. Virtual Exchange is a method that helps students to engage in intercultural collaboration projects online.

19. EVOLVE project

General information

Website: https://evolve-erasmus.eu/about-evolve/

Contact information: evolve@rug.nl

Partners: the University of Groningen, University of Leon, Université Grenoble Alpes, The Open University, Jan Dlugosz University, University of Padua, University of Warwick, Malmö University, Sharing Perspectives Foundation, Search for Common Ground, Coimbra Group, SGroup

The Teaching & Learning dimension

EVOLVE (Evidence-Validated Online Learning through Virtual Exchange) was conducted as a project to mainstream Virtual Exchange (VE) as an innovative form of collaborative international learning across disciplines in Higher Education (HE) institutions in Europe and beyond.

Until the end of the project in December 2020 EVOLVE promoted the implementation of Virtual Exchange by implementing online collaborative training, it offered the opportunity to educators to get accreditation through Virtual Exchange.

The project put the effort into engaging with policy and decision-makers at all levels in order to be able to demonstrate good examples and provide insight into the positive outcome of Virtual Exchange practices.

The Technological dimension

Virtual Exchange stands for sustained, technology-based education programs and activities. Virtual Exchange can have a key role in connecting individuals or groups who are geographically separated. Oftentimes these groups are from different cultural backgrounds which can bring value to the groups and can support knowledge, empathy, and intercultural skills. The Virtual Exchange is carried out with the support of educators and facilitators. The program's deep impact on intercultural connection can bring, and it is supported by the broad reach of digital technology.

The International dimension

There are no specific limitations in collaboration, the Virtual Exchange concept is a flexible program that enables participants to connect with other institutions who can mutually bring value to each other in the learning process. The partner institutions working on the EVOLVE project were the University of Groningen, University of Leon, Université Grenoble Alpes, The Open University, Jan Dlugosz University, University of Padua, University of Warwick, Malmö University, Sharing Perspectives Foundation, Search for Common Ground, Coimbra Group, SGroup.

Results

The final outcome of the project is teacher training material. The EVOLVE teacher training is available on the project website until 2026.

20. FRAMES project

General information

Website: https://frames-project.eu/

Contact information: info@frames-project.eu

Partners: UNIMED, UNICollaboration, Perspective Foundation, University of Girona, University of Limerick, University of Siena

The Teaching & Learning dimension

As a part of the initiatives which aim to work on blended mobility approaches, fostering resilience through Accredited Mobility for European Sustainable Higher Education innovation" FRAMES is focused on the implementation and accreditation of Virtual Exchange. Its objective is to innovate and make the European Higher Education Institutions more intercultural and resilient. The participating institutions are UNIMED, UNICollaboration, Perspective Foundation, the University of Girona, the University of Limerick, and the University of Siena.

The Technological dimension

The project explores the possibilities Virtual Exchange has to offer, it focuses on the integration of blended mobility, and as an output created several supporting materials to help such an integration process.

The International dimension

The project focused on working with the following topics: building a strong foundation of internationalisation, supporting university staff and relevant stakeholders in integrating into their curriculum the innovative blended mobility activities. Furthermore, FRAMES aims to work on the adaptability of the blended mobility model.

Results

FRAMES provided two project outcomes out of four so far. Started in March 2021 and will run until February 2023. The outputs provided up until this time are: potential scenarios where the integration of Virtual Exchange in higher education could bring value, the scenarios also highlight pain points and challenges. Furthermore, FRAMES started the pilot testing for online training on the integration of Virtual Exchange and blended mobility, which is a project-based course with a collaborative nature. It is targeting staff and

educators of all three participating universities and other higher education institutions. In August 2022 the "Toolkit for Blended Mobility Implementation and Accreditation" will be presented and it aims to collect relevant tools for the context of Virtual Exchange including guidelines, ECTS correspondence schemes, checklists, and relevant online spaces and tools. Finally, by February 2023 the goal of FRAMES is to provide a strategic framework for the implementation of Virtual Exchange.

21. Global Classroom

1 Global Classroom

General information

Website: https://en.tecglobalclassroom.mx/modelo

Coordinator: Tecnológico de Monterrey

Degree: ungergraduate

The Teaching & Learning dimension

The Global Classroom is based on the COIL model (Collaborative Online International Learning), a teaching and learning methodology developed by the University of New York (SUNY). Global Shared Learning Classroom (Global Classroom) is a program with the lead of the Vice-Rectory for International Affairs at Tecnológico de Monterrey and belongs to the Global Shared Learning (GSL) initiative.

The Technological dimension

The project uses technological tools to connect students, to promote collaboration and learning in an intercultural environment. With the Global Classroom, 124 universities are involved from 31 countries to take part in connecting students and supporting collaboration between their undergraduate students. The challenges taken up by the students include sustainability themed and have to include at least one of 17 Sustainable Development Goals (SDGs) by the UN. The projects integrate the principles of COIL Methodology, and include collaborative, international activities carried out by the participating teachers and students. The projects last at least for 4 weeks and have to reach at least 12 hours of activity in total, of which synchronous work 2 hours is recommended.

The International dimension

The project tasks are carried out in multicultural groups. The Tec de Monterrey is an experience, a course linked to one or more courses from an international university, which provides the international dimension of Global Classroom, and the GSL initiative as well.

Other dimensions

The Global Classroom concept targets undergraduate students and their professors who seek a well-researched and widely known approach to interaction with international students oftentimes with the help of digital tools.

Results

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

The initiative invites classrooms to take part in an international experience where participants could improve their intercultural communication skills. It enables students to practice critical thinking and decision-making, and develop their digital skills. The participating universities take part in a course with a minimum duration of four weeks. Teachers can select the relevant partner for the course they feel collaboration is the most mutually beneficial, as well as the duration of the course, and the type of interaction: either synchronous or asynchronous. They have the possibility to define the type of activities they see most fruitful among other customizable details of the collaboration. The participating educators design three main activities, with the core focus on the interaction between their students in a digital environment setting. The course aims to promote collaborative work in multicultural teams, to meet the goals of the collaboration, enabling students to analytically reflect on differences and similarities with their peers.

22. Global Virtual Hackathon 2021

General information

Website: https://www.comp.hkbu.edu.hk/designworkshop/2021virtualhack/#about

Coordinator: Hong Kong Baptist University

Degree: University students, not specified

Theme: Sustainable “New Normal” (interdisciplinary)

Modality: fully online, virtual

Participants: 170

Duration: 3 days and a pre-conference teaming

Area: global

The Teaching & Learning dimension

The hackathon includes conferences, the possibility of networking, and group working activities. Furthermore, coaching and mentoring sessions are carried out during the 3-day conference. The theme of the solutions revolve around 4 of the Sustainable Development Goals from the United Nations; 3, Good health and wellbeing; 4, Quality education; 11, Sustainable cities and communities and finally 12; Responsible consumption and production. Mentors and facilitators support groups in their work on their project, in producing their prototype and a short description of the project. As a hand-in material, groups also have to create a poster, a video introducing their project, and a group photo.

The judging criteria of the hackathon are based on the following principles: insight, innovation, impact, sustainability, and presentation.

The Technological dimension

Is not specified.

The International dimension

The teams are composed of students from different countries, and prior to the 3-day event, a warm-up session is organised in order to support team collaboration and networking activities. Such practices are also supporting the teamwork of international participants.

Results

The winners are offered prizes and scholarship opportunities. The insights of the hackathon were that the participants enjoyed the challenge, and had the opportunity to share their knowledge and improve their skills in team working and intercultural communication.

23. GO-DIJIP project (Integrating Digital Collaborative Environments into Joint Programmes)

General information

Website: https://www.unipd.it/en/go-dijip-project

Contact information: godijip.project@unipd.it

Partners: the University of Padova, University of Bergen, AgroParisTech, EMA, UNICollaboration, European Association for International Education (EAIE), Coimbra Group, ARQUS European University Alliance, Association for the Promotion and the Development of Joint International Programmes in Higher Education (ProDeJIP)

The Teaching & Learning dimension

Starting in 2021 and running until 2023 the ongoing GO-DIJIP "Integrating Digital Collaborative Environments into Joint Programmes" project is part of the UNICollaboration initiative. UNICollaboration is contributing to the international network of qualified trainers in Virtual Exchange. The project of Erasmus+ Strategic Partnership focuses on the introduction of digital elements in Joint Programmes. The project aims to focus on and develop a case for a more digitalized, innovative, collaborative, and quality-oriented higher education, providing instruments to sustainably mainstream new forms of virtual teaching and learning.

The Technological dimension

The aim of the project is to develop an innovative, digitized higher education system, with a distinct focus on collaboration and quality. The project aims to create tools to sustainably maintain unexplored forms of virtual teaching and learning.

The International dimension

The two-year project is coordinated by the University of Padova, University of Bergen, AgroParisTech and EMA and UNICollaboration. The associate partners are representatives from the European Association for International Education (EAIE), Coimbra Group, ARQUS European University Alliance, and the Association for the Promotion and the Development of Joint International Programmes in Higher Education (ProDeJIP).

Results

GO-DIJIP is an ongoing project, running until April of 2023.

24. Hellenic Open University - Master of Arts in Language Education for Refugees and Migrants (LRM)

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

General information

Website: https://www.eap.gr/en/language-education-for-refugees-and-immigrants/

Contact information: Nektaria Palaiologou, Associate Professor

School of Humanities, Hellenic Open University (HOU)

Degree: Master of Arts in Language Education for Refugees and Migrants (LRM)

Discipline: Language Education for Refugees and Migrants (LRM)

Modality: Distance learning

The Teaching & Learning dimension

The program welcomes teachers and graduates who are aiming to deepen their skills and knowledge within the field of language teaching. Applicants can be considered to be eligible to the post-graduate programme with diplomas from a higher educational institution of related disciplines with a B2 certification in the English language.

The educators of the program are the teaching staff of Hellenic Open University and other universities throughout the country (e.g. the University of the Aegean, University of Western Macedonia, University of Patras).

The aim of the program is to provide specialized pedagogical knowledge to teachers in both Primary level and Secondary level of compulsory education. Furthermore, supports the knowledge development of Tertiary graduates who wish to become teachers, as well as supports those teachers who are interested in in refugee or migrant adult education. The program contains 11 modules that are spread over the minimum duration of four semesters. Students can compete a maximum of three modules per semester, including the final semester where dissertaton and practicum are taken.

The program aims to provide postgraduate students with a strong foundation of a theoretical background, while designed to be a practical education. Furthermore, it focuses on supporting students in the ability to course design, including bespoke teaching and learning materials; deepen their knowledge of teaching methodology, while introducing them to major research tools.

In the duration of the program, participants can get hands-on practice by visiting schools, refugee camps and other related institutions that are linked in a formal or informal manner to learning about refugees and migrants.

The Technological dimension

The program uses the digital platform of Hellenic Open University called "Digital Education Space", which operates at the addresses: http://study.eap.gr and http://courses.eap.gr and is utilized for all the Thematic Units of the postgraduate programmes of the university. The service in service is based on the popular Modular Object-Oriented Dynamic Learning Environment (Moodle).

The International dimension

The international nature of the programme is fulfiled in the international nature of the programme as it is open to both national and international students. It trains its students to ask and answer the key questions of applied linguistics and second language acquisition in the world's numerous, diverse multilingual contexts.

25. Hellenic Open University - Master of Science (M.Sc.) in Data Science and Machine Learning (DAMA)

General information

Website: https://www.eap.gr/education/postgraduate/annual/data-science-and-machine-learning/

Contact person: Vassilios Verykios, Professor, Hellenic Open University, School of Science and Technology (Coordinator)

Degree: Master of Science (M.Sc.) in Data Science and Machine Learning (DAMA)

Discipline: Information and Communication Technologies

Modality: Blended

The Teaching & Learning dimension

The leaders of the programme are from various educational institutes in Greece including the Hellenic Open University, University of Crete and University of Ioannina. The two-year postgraduate programme is structured as follows; with 4 compulsory modules, students can choose 1 or 2 modules to complete each year. The mode of instruction is distance learning, carried out with group meetings on appointed of each semester during the academic year.

The Technological dimension

The platform of Hellenic Open University called "Digital Education Space" operates at two addresses: http://study.eap.gr and http://courses.eap.gr and supports distance learning in the digital realm. The Thematic Units are part of the offered postgraduate programmes. The service is based on the Modular Object-Oriented Dynamic Learning Environment (Moodle) widely used by HEIs.

The International dimension

The international dimension of the case is recognised in the way how the program is carried out: its official language of instruction is English and accepts international graduates or higher institution diplomas of related disciplines with the proof of an internationally recognised B2 certification in the English language.

27. Hesam University, France

General information

Website: https://www.hesam.eu/

Partners: Cnam, Arts et Métiers, ENSA Paris La Villette, CESI, ENSCI - Les Ateliers, IFM, ENSAAMA, École Boulle, École Duperré, École Estienne, Compagnons du Devoir et du Tour de France, CFJ, France Clusters and the FNEP

Discipline: Crossroads of human and social sciences, engineering sciences, management sciences and applied arts.

The Teaching & Learning dimension

HESAM University is a collaboration between 15 French universities that aim to build a reimagined HE structure. The common goal of the members is to build a new interdisciplinary university that makes knowledge transferable between participants and organizations. Designed by HESAM University the program "HESAM 2030 - Let's Build our Professions!" aims to provide two new offers in modular undergraduate degrees Bac+1 and Bac+3, regarding acceptance to the program the priority is given to professional baccalaureates. The programmes aim to be adaptable to everyone, regardless of geographical place, age and gender. HESAM offers the opportunity to customize curricula, which enables students to the curricula to their personal and professional aims and goals.

The Pitch'HESAM® (Bac+1) - Individualized Courses in Technology, Creation, Management and Humanities. The Bac+1 are two-semester long courses covering four professional fields and aim to foster project culture and disciplinary knowledge. The cross-disciplinary courses support professional collaboration and integration and place in perspective the possibility of further study, especially in the case of the Bac+3 Bachelor's degree program. The Pitch'HESAM® program covers the following fields Applied Arts, Design, Book Trade, Luxury and Fashion, Environment, Construction, Energy, Design and Management of the built environment and territories, Digital, Mechatronics, Electrical Engineering, Materials, Industrial Engineering Management, Administration, Commerce, Security, Human Services and Human Resources.

On Bachelor's® (Bac+3) lHESAM University and the 6 partner institutions are collaborating, including ENSCI - Les Ateliers, Ecole Nationale Supérieure d'Arts et Métiers, Cnam, ENSAPLV, CESI and SKEMA Business School to meet the job needs in economic sectors at an intermediate level, such level includes program manager; works manager; sector manager; business manager, etc. professional roles. HESAM University's Bachelor's degree is the most widely awarded post-baccalaureate diploma in the world. Based on the Bologna system, it allows students to obtain 180 ECTS during 6 semesters of training and it is certified as a Bachelor's degree by the French Ministry of Higher Education, Research and Innovation. Until 2030 HESAM plans to develop another 67 new courses, 42 in Bac+1 and 25 in Bac+3.

The Technological dimension

On the Bac+1 level there is 16 training programmes offered by member institutions that are built on the same pedagogy foundation. To build cross-disciplinary skills situational exercises are organized. Furthermore, the ability to develop digital technology-related skills in professional situations is conducted. The courses also include flipped classroom elements and training sequences where students present their assessments in front of the group and the teacher.

In general, the training requires one week per month from students based on the alternate model and includes e-learning modules that are offered throughout the training program. Such a model aims to support the integration of the student into the company and to deepen their knowledge in certain topics before or after the training sessions, which can be learned at the individual pace of the student. HESAM University provides high-value digital resources (MOOC, MOOG, SPOC), of worldwide reference. The resources are primarily in French, but English materials are also accessible to all audiences from initial training to lifelong learning.

The International dimension

The internationalization and intercultural element is most prominent at the Master's and Doctoral levels of HESAM University. Mobility opportunities are accessible for students, with the opportunity to join research with international networks. The university built a strong collaborative partnership with international companies, overseas territories, and target regions such as Africa.

Other dimensions

Open courses and modules are offered for the university members, including teacher training, and the support in skills development of educational engineers. The university offers personalised support and tutoring and training in digital tools and active pedagogy supports and guides portfolio building and guides in learning of both hard and soft skills.

Results

The university has 114 000 students and staff, 650 students in their doctoral studies.

28. IAQOS- Intelligenza Artificiale di Quartiere Open Source (Neighborhood-Open Source Artificial Intelligence)

Website: **https://iaqos.online/site/**

Outline: IAQOS (Neighbourhood Artificial Intelligence – Open Source) is creating a new artificial intelligence that will absorb the knowledge and culture in the Torpignattara neighbourhood, in Rome, and interpret it through logical associations of terms that the machine is learning. To help people empathise with this artificial intelligence, the promoters used the metaphor of a new intelligent life. They celebrated the birth of this life and brought this life along with them, around the neighbourhood, using a pram. People interact with the computer in the pram, which learns words, terms and associations IAQOS hears from the people interacting with it. IAQOS can learn and speak 40 different languages and interact on several topics that are relevant in the neighbourhood.

Status: Ongoing

29. International Hellenic University - Master's Degree in Sustainable Agriculture and Business

General information

Website: https://www.ihu.gr/ucips/postgraduate-programmes/sab#overview

Contact person: Academic Supervisor and Director of the Postgraduate Programme of Studies is Mr Stamatis Aggelopoulos, Professor of the Department of Agriculture of the International Hellenic University

Degree: The postgraduate studies for this MSc programme lead to the acquisition of a Master's Degree in Sustainable Agriculture and Business

Discipline: Sustainable Agriculture and Business

Modality: Blended - The courses are conducted through flexible learning methods combining the traditional physical education with distance learning elements

Duration: 2 years corresponding to 120 ECTS

The Teaching & Learning dimension

The program offered by the International Hellenic University is open for graduates from Greek universities, but also accepts students with equivalent background from abroad and from Technological Educational Institutions in related subject areas. The international academics arrive from universities both abroad and from other greek institutions. The programme is divided into 4 semesters in 2 years, which include 4 compulsory course modules. Students can choose and complete either 1 or 2 modules each academic year.

The Technological dimension

The teaching is carried out on weekend afternoons with the use of flexible learning methods that combines traditional face-to-face education with distant learning. The distance learning of the program is based on learner-centred education standards which involve physical or classroom-based learning, with the obligation to be physically preseant as a student. Furthermore, the students can participate as synchronous learners, where they attend the classes and courses remotely, usually on weekday afternoons 2-4 times a week. The asynchronous learning opportunity allows students to use online learning resources and to be assessed through a variety of diagnostic tools and formative assessment techniques. Finally, the summative assessment type allows participants to only attend the university physically during exam periods and spend their period of university diligence remotely preparing for the exams. The LMS tool used for distance opportunities are not defined.

The International dimension

The program is open to both local and international students.

30. International Hellenic University - Master's Degree in Cybersecurity

General information

Website: https://www.ihu.gr/ucips/postgraduate-programmes/cybersecurity

Contact person: Programme Director of the MSc in Cybersecurity is Christos Tjortjis, Dean, School of Science and Technology in the International Hellenic University

Partners: Cisco Networking Academy, Penetration Testing Labs, Certified Ethical Hacker (CEH) Certification, CompTIA Cybersecurity Certifications

Degree: School of Science & Technology of the University Center of International Programmes of Studies of the International Hellenic University, Master in Science

Discipline: Cybersecurity

Modality: Blended, as the programme can be attended combining distance learning with traditional face-to-face teaching

Aimed outcome: Graduate students are equipped with state-of-the-art scientific knowledge and modern practical skills, on their way to becomeing highly competitive at international level.

Duration: 14 months for full-time studying or the possibility of part-time study, 26 months with the opportunity of distance learning mode

The Teaching & Learning dimension

On the student side the program is designed for postgradutate students in the field of Informatics or Computer Science, Electrical Engineering but also open to students with the background in Natural Sciences, Economic and Business Departments, furthermore, it is required from the participants to have a background in ICT and a strong motivation to pursue a career in Cyber Security. The program has international academic staff, coming from universities in Greece and abroad.

The program includes lectures and laboratory exercises with the lead and support of some of the brightest academics from Greece and abroad, along with projects and dissertation work, which supports graduate students in their gain of state-of-the-art scientific knowledge and modern practical skills. At the begining of their persuation of their degrree, students attend mandatory foundation courses in Java and SQL, to bring participants to the same level of knowledge. In the 1st term of their studies 5 courses are mandatory to take , followed by the second term with 3 mandatory and 2 elective courses. The final term of the program is assigned for the Master's dissertation of the students.

The Technological dimension

The programme can the attended in a blended manner, combining distance learning with traditional in-present teaching. The blended modality of participation includes physical, classroom-based learning where students are required to attend courses in-person for a weekend at the beginning of each semester; it is possible to attend in a synchronous manner, where students participate remotely and attend courses weekly during afternoons about 2-4 times depending the mode of their programme of choice; the students have the opportunity to participate in an asynchronous form of learning, where they use an LMS online learning resources and are assessed through a variety of diagnostic tools and formative assessment techniques; the students can attend in a summative manner, where they are required to be physically present only during their final exams of each semester. The LMS of the programme is not defined.

The International dimension

The program is offered to local and international students.

31. International Project Management: Role of Environmental Factors and Cross-Cultural considerations

General information

Website: https://onlineinternationallearning.org/project/international-project-management-role-of-environmental-factors-and-cross-cultural-considerations/

Partners: Coventry University (United Kingdom); Tunku Abdul Rahman University College, Malaysia; Toulouse Business School

Degree: Undergraduate

Discipline: Project Management

Duration: 4 weeks

Year: 2017

The Teaching & Learning dimension

Within the framework of the project students from the United Kingdom, Malaysia and France had the opportunity to exchange their knowledge and insights of international projects. Furthermore, to share their ideas about the nature of ideal international projects.

The participants engaged in a discussion facilitated and moderated by a project leader, and carried out the activity online, in a virtual setting, and communicated via Facebook. They had the opportunity to gather their insights and post their views, and exchange their ideas and opinions in the form of comments under other posts.

During the project, an industry expert from the USA shared his experience and provided his support in answering questions raised by the participants.

The Technological dimension

For the project the main digital tools were Facebook where the communication happened between parties, and Qualtrics, a questionnaire software that supported the work of the students.

The International dimension

The discussions circulated around the topics of foreign and international projects. Students also discussed environmental factors around the theme, including cross-cultural considerations and factors in project management.

Results

The students could demonstrate an understanding of International Project Management from a global perspective, and were able to explore several critical factors that determine the success of the execution of an international project. Additionally, the participants further developed their knowledge of international Project Management principles, and explored strategies that can be crucial when executing a project internationally or in a foreign country. The participants could think globally, and had the opportunity to interact and communicate in an intercultural setting via social media platforms.

32. IVAC initiative

General information

Website: https://www.daad.de/en/information-services-for-er-education-institutions/further-information-on-daad-programmes/ivac/

Contact: ivac@daad.de

Partners: DAAD

The Teaching & Learning dimension

IVAC aims to support teachers and lecturers of German institutions of Higher Education in incorporating their international partner's curriculum into their courses through integrated virtual collaboration formats. Furthermore, IVAC's main goal is to empower students and lecturers in gaining international experiences and to apply digital and intercultural skills in Higher Educational settings through virtual cooperation. The

stakeholders of IVAC are selected teachers and institutions who collaborate to further progress the international blended mobility opportunities within Higher Education.

The Technological dimension

The initiative places emphasis on integrating the developed virtual cooperation formats into the teaching offers of Higher Education programs focusing on existing IT services or relevant intersections.

The International dimension

IVAC's goal is to support students and lecturers in international virtual collaboration, and by doing so to build a professional network and form a community of practice.

Results

IVAC has already founded 60+ relevant projects, however, the initiative is ongoing.

33. Mathematics teacher training within the Erasmus+ Project: SMART (Science and Mathematics Advanced Research for Good Teaching)

General information

Website: http://smart.carloanti.it/

Coordinator: Prof. Marina Marchisio

Partners: UNITO (Italy), TU Delft (The Netherlands), Chalmers University of Technology (Sweden), Università di Roma 3 (Italy), Italian Ministry of Education, Accademia delle Scienze di Torino (Italy), IS Carlo Anti (Italy), St.-Thomas-Gymnasium Wettenhausen (Germany), Radnóti Miklós Economic Vocational Secondary School (Hungary)

Degree: Continuous education (teacher training)

Discipline: Teaching Mathematics through problem-solving and digital technologies

Modality: Fully online

Innovation: new learning methodologies for teaching mathematics

Scale: training module was conducted with 3 schools (about 10 teachers); the training materials and the learning activities, modified after the teachers' experimentation, were used to build an Open Online Course.

Duration: 2 years (2014-2016)

Area: Europe

The Teaching & Learning dimension

The student participants of the project were mathematics teachers of the secondary schools participating in the project and the partnership, while the tutors of the project were university stakeholders, mainly PhD students or young researchers. The activity of the project was to work on an online teacher training module, with the main topic around problem-solving in a virtual learning environment with an advanced computing environment and automatic formative assessment.

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

The training methodologies included the creation of an international virtual learning community which could interact through online synchronous meetings with tutors, a forum served as the platform for identifying, opening up and solving doubts, and sharing practices and experiences related to the project. Furthermore, training materials such as interactive files, and videos were made available to the participating community.

Learning activities for school students were shared by the tutors of the project, which included tasks with automatic assessment and the task of solving mathematical problems with the use of an advanced computing environment.

The project contained the experimentation with the methodologies and served as the object of teacher training throughout the project. In such experimentation, the teachers were asked to explore some of the activities proposed by the tutors and explore them with their classes. Each teacher had a Moodle course for their class that served in carrying out learning activities. The opportunity to receive support from tutors via the forum of the project was open. The results of the practice were collected through questionnaires.

The Technological dimension

The digital aspect of the project was carried out by a Digital Learning Environment, the Moodle platform. Within the platform, Adobe Connect was integrated as a Web Conference Tool in order to support communication between participants. Additionally, the forum feature enabled participants to share materials including documents and media content. For the project and Advanced Computing Environment, Maple was used, and to enable the possibility of assessing an Automatic assessment system, Moebius Assessment was integrated within the platform.

The International dimension

The primary language used during the project was English. In order to understand cultural differences, discussions were carried out during the project, which supported the members in understanding how to adapt contextualised problems to different cultures. The international dimension was also met by the learning activities designed for school students, as the pupils used CLIL lessons.

Results

The results and insights can be found in the Open Online Course “Mathematical Modelling” on the link: (https://opensmart.miurprogettopps.unito.it/)

34. Master Class for MSCA-PF applicants with Ghent University as their Host Institution

2 Master Class for MSCA-PF applicants with Ghent University as their Host Institution

General information

Website: https://www.ugent.be/en/research/funding/eu-int/msca-masterclass.htm

Coordinator: Ghent University

Partners: MSCA-Postdoctoral Fellowships applicants

Degree: Post-doctoral studies

Duration: 2-day Master Class

Participants: MSCA-PF applicants, Post-doctoral researchers from abroad or those who work at Ghent University, Ghent University professors who wish to be supervisors

Area: preparatory opportunity to support Postdoc researchers make their MSCA-PF proposal

Modality: virtual/online

The Teaching & Learning dimension

Researchers of any nationality can apply to the opportunity to complete a PhD by the time of the deadline of the MSCA-PF call 2022, which is the 14th of September 2022. Furthermore, those who have a maximum of 8 years of full-time experience in research can apply.

The Technological dimension

The opportunity is a virtual 2-day conference, a Master Class opportunity for those applying to the MSCA-Postdoctoral Fellowships research proposal.

The Master Class is open to MSCA-Postdoctoral Fellowships applicants, it is an online free-of-charge opportunity, an MSCA Master Class on 19-20 May 2022.

The International dimension

The offer is open to all, - regardless of nationality - who meet the entry criteria.

Results

The results are not yet published.

35. Micromodules and Challenges European Consortium of Innovative Universities - ECIU

General information

Website: https://www.charm-eu.eu/masters/globalchallenges

Coordinators: The Academic Director of the Master's Programme (Chair): Prof. Catherine Comiskey, Trinity College Dublin

Partners: Prof. Nuria Casamitjana, University of Barcelona. Rector's Commissioner for CHARM EU and professor in Pharmaceutical Science and in Global Health, Dr. M.J. (Marjanneke) Vijge, Utrecht University. Assistant Professor of Sustainability Governance in the Developing World at the Copernicus Institute of Sustainable Development, Prof. László Zentai, Eötvös Loránd University. Vicerector for Education, Dr. Patricia Cucchi, University of Montpellier. Associated Professor in Organism Biology

Chief of the Joint Virtual Administrative Office: Meritxell Chaves, CHARM-EU Alliance Manager.

The Head of the JVAO: Conor Spillane, Trinity College Dublin.

Degree: Master's degree

The Teaching & Learning dimension

The 1,5 year-long 90 credits (ECTS) Master's degree contains seven modules which are a combination of lectures, seminars and workshops, furthermore, these activities are combined with self-study work,

assignment preparation and individual and team-based project work. The three phases of the program consist of phase 1, a preparatory phase with three compulsory courses including courses in the following topics: sustainability, social innovation and transdisciplinary research. The 2nd phase of the programme includes modules on one theme, that are selected from three thematic pathways: food, water, life and health. Finally, the 3rd phase includes a Capstone project, consisting of one 30 ECTS module. The semester focuses on collaborative student work between peers, academic staff, and external actors (e.g. business and society). The teams work on an authentic sustainability challenge which is based on the student's original disciplinary field. The students are at the centre of the pedagogical model, which was made to support them in facing the upcoming challenges of society and does it with a multidisciplinary approach.

The Technological dimension

The mobility is embedded in the Master's program's curricula, with the flexibility for students to define what type of exchange they are interested in. In the master's programme, participation in mobility during Phase 2 is obligatory, and in Phase 3 students can decide whether to continue their studies at another university or to stay at their current location. The CHARMobility experience is an international HE community present at 5 university cities across 5 countries. The CHARM-EU mobility offers the opportunity for participants to meet and interact with classmates both online and in-person, which makes it blended mobility. By participating, students can develop their academic, personal, social and professional competencies and skills, while strengthening their communication and language skills in a unique intercultural environment.

CHARM-EU exchange can be carried out in the form of a virtual exchange programme, by traveling physically for a co-creative project, but also can be in a form of blended mobility. The length of the CHARM-EU mobility can be a short, intensive exchange, can be mid-length or deeper or longer and comprehensive. The students can participate individually or in teams as well.

It is exclusive to the program, that all students admitted to the master's programme are entitled to benefit from different Erasmus+ grants regardless of the country of origin, if they are eligible based on the Erasmus+ granting scheme.

The International dimension

This Master's programme is carried out among the members of the Charm Network as an international collaboration.

Other dimensions

In order to support teachers, innovative pedagogies and support to learning the use of new technologies are carried out in 2021. Tools have also been designed to support and advise teachers on such skill development.

36. MUBS Virtual Exchange Program with Stanford University

General information

Website: https://www.mubs.edu.lb/en/campus-life/news/studentexc_december_2018.aspx

Partners: Stanford University, Modern University of Business & Science in Lebanon, Lebanese American University, American University in Beirut

Duration: 6 weeks

Area: Global Health

Degree: Undergraduate

Type of teaching: Virtual Exchange

The Teaching & Learning dimension

The VE was organized to create solutions for the arising humanitarian crisis that went down in Lebanon, as Syrian refugees arrived and made up a sixth of the population of Lebanon. The small country faced a massive challenge to provide resources for the arriving refugees and cope with such a challenging crisis. The mixed student groups had the task to select one of the topics: primary/secondary education, mental health, reproductive health, or geriatric health. Furthermore, the mixed groups had the opportunity to collaborate and interact with local partner institutions, and national and international organizations. Students also consulted with experts both in Lebanon and the US. The final capstone project ended with a presentation of a solution to the selected topic.

The Technological dimension

For the project Learning Management System (LMS) was used, other tools were: slide shows through web-conference tools, small-group tasks in virtual break-out rooms, shared online documents, virtual whiteboards, but also with traditional brick-and-mortar classrooms.

The International dimension

The international dimension of the project is identified in the nature of the project and the multicultural aspect of the teams working on the challenge. The participants of the project were 24 students from Stanford, 24 students in total from Modern University of Business & Science in Lebanon, Lebanese American University, and American University in Beirut. Within the frame of a 6-week long capstone project with the aim to create detailed solutions for the refugee-related humanitarian crisis of Lebanon.

Results

The results of the project are concluded in capstone project proposals that can be visited on the following links:https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8189728/ , https://www.mubs.edu.lb/en/campus-life/news/studentexc_december_2018.aspx

37. National and Kapodistrian University of Athens - Certificate of Continuing Education in Nanotechnology & Nanomedicine

General information

Website: https://elearninguoa.org/course/health-nanotechnology-nanomedicine/nanotechnology-and-nanomedicine

Contact information: The Programme's Scientific Supervisor is the Professor of Economics at the National and Kapodistrian University of Athens, Panagiotis E. Petrakis (supervisor for all the e-learning programmes)

Degree: Programme leads to Certificate of Continuing Education in Nanotechnology & Nanomedicine

Discipline: Health - Nanotechnology & Nanomedicine

Duration: 10 weeks

Modality: E-learning programme

The Teaching & Learning dimension

The e-learning programme is open to all qualified Greek and International graduates, qualification is defined by an equivalent degree of related field, which is defined by holding at least a Degree in Medicine Biological, Biomedical or Biochemical subject, Pharmacy, Chemistry, or in a related field.

The Technological dimension

The e-learning course of 10 weeks is an online and distance training learning offered by the National and Kapodistrian University of Athens. The design of the course enables students to learn and train in an innovative way, with tutors and fellow trainees from around the world. The e-learning course is presented on a user-friendly educational platform, based on the Distance Learning Principles.

Courses are structured as synchronous weekly online meetings; where students interact with the course tutor and other trainees, all of such interactions are taking place in a digital learning environment, where students can access courses whenever it is convenient for them, though within a given deadline to give frame and structure to the 10 week period. The educational platform used by the course aims to provide access to electronic educational material, which is based on modern distance learning technologies. The e-learners are provided access to the LMS learning platform, Moodle in order to access all learning materials, to furthermore, to seek assistance and help from their tutors if needed, with such interactive nature of the platform the university aims to create an interactive learning environment where all anxieties and concerns are addressed in time, so students are able to get most out of their experience.

The International dimension

The programme is an Innovative distance education, which is open to both domestic and international applicants from related fields.

38. National and Kapodistrian University of Athens - Supplementary Distance Education Programme (E-Learning) of the Center of Continuing Education and Lifelong Learning of the National and Kapodistrian University of Athens

General information

Website: https://elearninguoa.org/course/environment-architecture/design-and-optimization-zero-energy-consumption-buildings; https://zero.elearninguoa.org/

Contact information: The program's Academic Coordinator is the Professor of the Physics Department of the National and Kapodistrian University of Athens, Mattheos Santamouris

Degree: Certificate of Specialized Training (UoA-UIA)

Discipline: Environment-Architecture, Design and Optimization of Zero Energy Consumption Buildings

Duration: 26 weeks

Modality: Distance learning

The Teaching & Learning dimension

The 26 week-long course is targeting architects and other related specializations such as Civil Engineers, or engineering scientists of related fields dealing with issues of planning, evaluation and optimization for buildings, with the main focus on built environment of zero energy and positive energy balance. The tutors of the course are acknowledged architects, scientists and engineers of related fields from around the world.

The proposed CPD Professional Development and Training programme is in close collaboration with the International Union of Architects UIA CPD programme and the UIA Work Programme ARES (Architecture & Renewable Energy Sources).

Designed by academics and lecturers from the National University of Athens, other domestic Universities, Research Institutes and Cultural organizations the participants can attend a thoroughly designed course.

In the digital learning environment, participants can attend weekly meetings and have the opportunity to interact with their course tutor and other students. The courses are flexible and can be completed within a set period, which makes it a flexible option, that can be fitted around other outside engagements. In total, throughout the 26 weeks, trainees have to complete 25 lessons, which are provided weekly in the form of video lectures, text notes or relevant presentations, sometimes as a combination of them. All administrative information is presented in the Announcement section of the platform.

The Technological dimension

The distance learning program's base is the educational system of the e-learning Programme of the Center of Continuing Education and Lifelong Learning of the National and Kapodistrian University of Athens (UOA). Online and distance training enables participants to experience new ways of innovative learning and training techniques and allows them to interact with their tutor and fellow trainees from around the world. The educational platform used by the program is a portal that offers access to electronic educational material based on modern distance learning technologies. With the computer-based materials, new technology is being introduced to students continuously and lets them engage and learn in a tailored way that can meet their needs. Participants in the e-learning course get access to an LMS platform, which can be entered with their code number. With it, they have the opportunity to browse all relevant training material, upload their works and interact with their tutors.

The International dimension

This programme is regarded as an innovative and unprecedented course, as it enables researchers and academics regardless of their geographical place and in which universities they work to teach in parallel with other tutors, to contribute to a meaningful scientific project. Practice meets theory in a flexible program.

39. NICE project

General information

Website: https://www.nice-eu.org/

Partners: Partners: University of Amsterdam, University College Dublin, University of Edinburgh, University of Göttingen, Alexandru Ioan Cuza University of Iasi, Lund University, University of Padova, University of Salamanca

Contact information: The University of Edinburgh, 33 Buccleuch Place, Edinburgh EH8 9JS, Scotland, UK, goabroadprojects@ed.ac.uk

Duration: 12-week project in international teams supported by online modules combined with summer school. The 12-week is divided as follows: Online module + team project: Introduction (1 week); working as a team (1 week); Identifying entrepreneurial opportunities in your Global Challenge (2 weeks); Testing ideas (2 weeks); Asking for resources (2 weeks); Making decisions (2 weeks); Final feedback (2 weeks)

Area: Entrepreneurship, business management

Degree: full-time, part-time and visiting students from partner universities including the University of Amsterdam, University College Dublin, University of Edinburgh, Lund University, University of Padova

The Teaching & Learning dimension

With the initiative of the University of Edinburgh, the idea of the NICE project started to form into reality in September 2017, and it concluded in December 2020 and was co-founded by the Erasmus+ programme of the EU. Network for Intercultural Competence to facilitate Entrepreneurship (NICE) is an initiative to help HE students nurture their entrepreneurial skills through Global Challenge projects. NICE offers the opportunity beside developing business skills to take part in online interactive modules, where participants can work on their abilities. The program is guided and supported by the partner universities of NICE.

The Technological dimension

Interactive virtual Modules with the topic: intercultural competence and entrepreneurship. Participants can create an innovative business idea in international teams, that addresses a Global Challenge, the teams can select from the available topics on NICE's Global Challenges page. The participants have a virtual final pitch event, where they pitch their solutions to the judges of experts.

Furthermore, NICE offers a Summer School program, a physical opportunity taking place in July 2022, depending on the pandemic, the summer school may be conducted virtually.

The International dimension

The program is open to students from the following HE institutions: University of Amsterdam, University College Dublin, University of Edinburgh, Lund University, and the University of Padova who are either full-time, part-time or visiting students. The leaders of the projects are staff of the partner universities.

40. NoVA program offered by Aalto University, Konstfack University of Arts and Aalborg University

General information

Website:http://nova-master.com/ https://www.aalto.fi/en/department-of-art/masters-programme-in-nordic-visual-studies-and-art-education-nova

Coordinator: Anni Rupponen, anni.rupponen@aalto.fi

Contact information: nova-arts@aalto.fi

Degree: Master's double degree program (from 2023)

Education: Visual Studies and Art Education

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

Discipline: Arts and Humanities

Duration: 2 years

Area: Art education

Technological dimension: physical / with blended opportunities

The Teaching & Learning dimension

The Nordic Master in Visual Studies and Art Education (NoVA) is a Master's program welcoming practitioners, professionals and researchers of contemporary art and education. The program focuses on audiences and communities, digital communication and visual studies. The aim of NoVA is to the capsule and communicate the values of Nordic research, practice in education, research, and visual studies. The program strengthens the pedagogical interaction skills of those who work in the field of cross-cultural and international education and within communication environments. The program is open to both domestic and international students and thought in English. From 2023 the program will offer a double degree from Aalto University and Aalborg University.

Throughout their studies, the students engage in many different learning and teaching methods. The methods include whole group pedagogy, in-person and online and home learning and teaching. Furthermore, the students have the opportunity to take part in an exchange within their studies at one of the host universities (Aalborg, Konstfack, Aalto). The program also includes the possibility to visit retreats and Nordic seminars.

The Technological dimension

NoVA is a blended learning education, it is based on online and physical education at recurring seminars and lectures. Though NoVA is a physical postgraduate program, it puts emphasis on the development and value of cultural and theoretical competencies in Information and Communication Technology (ICT). Skill development in online communication is the base principle of the programme as content and as pedagogical methods. As a contemporary art education program NoVA is a project and problem-oriented program, it is a collaborative and participation-based learning postgraduation program based on contemporary methods, theories of art, pedagogy, and mediation.

The International dimension

The program is an international Master's program and with the participation of Nordic HE institutions aims to capture the value of Nordic art education.

Results

The results of the pilot program can be read in the paper of Mie Buhl and Stine Ejsin-Duun: Blended Learning Promoting New Developments for Nordic Master Programs in Visual Studies and Art Education. https://books.google.dk/books?hl=hu&lr=&id=HI5mCwAAQBAJ&oi=fnd&pg=PA100&dq=Nordic+Visual+Studies+and+Art+Education&ots=auzzouxMGt&sig=Q9WBlMntEd1tKQ2lIiSwjKgQKXk&redir_esc=y#v=onepage&q=Nordic%20Visual%20Studies%20and%20Art%20Education&f=false

41. Open Virtual Mobility between Student Teachers from Italy and Spain

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

General information

Coordinator: Prof. Antonella Poce, Roma Tre University, Rome, Italy

Partners: Roma Tre University (Rome, Italy) and the University of the Balearic Islands (Balearic Islands, Spain)

Degree: Bachelor's students in the Teacher Education Program

Education: Education Sciences

Number of participants: 52

Duration: 5 weeks

Area: Europe (Italy and Spain)

Published paper: Poce, A., Tur, G., Amenduni, F., Darder, A. (2020). Open Virtual Mobility between student teachers from Italy and Spain: an opportunity for the enhancement of the curriculum. In: Human and Artificial Intelligence for the Society of the Future Short Paper Book of the European Distance and E-Learning Network (EDEN) 2020 Annual Conference, Timisoara, pp. 52-61.

https://www.eden-online.org/wp-content/uploads/2021/02/Timisoara_SPB_v5.pdf#page=60

The Teaching & Learning dimension

The mobility is a virtual exchange (VE) between the two universities, there were 8 groups involved in the project, all randomized, mixed groups. The purpose of the project and the aim of the group work was to produce Open Educational Resources (OERs) materials during the VE. Regarding the intercultural activity aspect of the VE, the students were free to organize their time and tasks as they considered suitable, but also they were suggested a possible schedule as a guideline to follow.

The Technological dimension

The groups had the opportunity to use Skype as a tool to support virtual team meetings, while Google Drive was the primary tool for presentation and file sharing. Additionally, several tools were selected for creating the OERs; Canva: A free photo- and video editor, a graphic design application which allows users to create and customize social media posts, videos, cards or create flyers and photo collages; Story Jumper: is a website that allows students to ceate and share stories with each other, that they illustrated. The website is used for practising illustration and writing skills; Storybird: is a website for writing, which uses illustrations to spark inspiration. The website provides materials to users to support their writing journey. The materials include tutorials, challenges, quizzes and similar; Edmodo: a network that helps educators and students to get connected and provides them with a platform for communication, with the possibility to involve the student's parents as well; Mindmeste: is a mind-mapping tool, with the possibility of creating sub-topics, color-coding it is an organized tool to explore ideas, with the possibility to add attachments and files to the mindmaps; Mural.ly: is a digital whiteboard with the possibility for collaboration, it is designed to work as a tool for innovation; Stormboard: Stormboard is a whiteboard and workspace, it is designed to help collaboration in the digital realm. Google: a search engine to support students in their work; MyMaps: a Google-owned service, that enables users to customize Google Maps, by attaching information to locations; Google Art &

Culture: is a content platform with material from over 2000 leading museums and archives; Eduloc: a GPS tool that helps users who work on location-based projects, it operates with the use of mobile devices; Kahoot: a free learning platform, with game based-learning the platform support students in their education; Google Classroom; virtual teaching and learning platform, which supports educators and student to learn with the support of a digital tool that helps their content be more organized; Movie Maker: a video editing software, that allows users to create and edit their own video from images and video clips; Prezi: an online presentation assembly tool to create animated presentations; Enhanced book: The Elsevier Enhanced Book Shelf (EEB Shelf) uses augmented reality to support students in their learning process by visualizing their materials; Padlet: a web-based virtual whiteboard with the possibility to collaborate between partners, it is provided by the project; Minecraft education: The education edition of Minecraft aims to get connected with study materials and educate students through gamification in a playful manner; Steller: is a storytelling app that enables users to edit and create content, it is a platform to upload digital media content in order to create a storybook; Podcast: the app allows users to find, save and listen to podcast materials, the app supports users in their learning process by providing a place to collect and organize their podcasts; Virtual Reality Headset: VR headsets are tools to connect users to Virtual reality experiences.

The International dimension

The groups were formed including members from both countries. The teams were asked to produce OERs for primary students on the cultural heritage of their cities. Throughout the VE 3 languages were used Italian, Spanish, and English was the official language of the VE.

Results

The students reported development in their collaborative and technological skills as the outcome of the group activities throughout the course. Based on student feedback the Italian participants were generally satisfied with the VE, while students from Spain were generally unsatisfied. Based on their feedback the main drawbacks included organisation-related issues, for example, the difficulty to coordinate schedules, which were highly influenced by local routines and habits. They also reported confusion about the aims and goals of the work and difficulties with different ideas of ideal teamwork management.

42. Participatory budget, City of Paris

Website: https://budgetparticipatif.paris.fr/bp/

Outline: Participatory budget/Budget participation is an initiative by the City of Paris that allocates 100 million annually from 2014 to 2020 to fund projects submitted and voted by citizens (open governance), on a crowdsourcing platform. The projects belong to 8 thematic categories, such as Intelligent city, Mobility, Sport, Solidarity, Property, Education, Culture, etc. In 2016 more than 150,000 inhabitants took part, selecting 219 projects which are now being implemented by the City of Paris. Progress of the selected projects can be monitored online.

Status: ongoing

43. POLAR, ELOPE, and POLE Transdisciplinary and Intercultural Learning Environments

General information

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

Website: https://www.pole-project.ch/

Coordinator: Andy Goodman, eese0d@bangor.ac.uk

Collaborating network partners for Elope: Bauhaus University Weimar, Germany; Bern University of Applied Sciences – Architecture Wood & Civil Engineering, Burgdorf CH; Cologne University of Applied Sciences, Germany; Haute École du Paysage, d'Ingenierie et architecture, (HEPIA) Geneve; Polytech Marseille, France; Politecnico di Milano, Italy; Stanford University, USA; Tecnologico de Monterrey, Campus Queretaro Mexico;

Degree: Master level

Education: Students at Master level, especially from architecture, planning disciplines, with the involvement of other disciplines depending on the project/challenge to be solved.

The Technological dimension

POLAR, ELOPE and POLE are learning, teaching, and research platforms that share a similar philosophy and has common roots: Enable and facilitate transdisciplinary, transcultural, and virtual development processes with the goal to create a better mutual understanding in the planning process, to improve the decision-making processes, to reduce planning risks, and finally, to achieve better results in a shorter time with lower overall lifecycle costs.

What joins the platforms is the aim to bring together specialists who recognize the need for transdisciplinary and transcultural approaches in academic learning and teaching. It targets those who wish to practice the innovation of solutions for sustainable development, furthermore, to support and raise graduates who aim to nurture the value of neighbouring disciplines. The projects all bring together faculty members, students, industry partners, and groups interested in sustainable goals. The POLE projects were primarily focused on different branches of engineering with micro-projects and concrete results; ELOPE initiative has developed projects in the field of architecture at a macro level, while the POLAR project – the most recent platform, - brings together projects in both, engineering, architecture at macro and micro level as a combination of prior initiatives.

The platform encourages and supports the continuous research and development of the working methodologies. Furthermore, the learning platforms offer students the opportunity to contribute to their full potential, by enabling students to work in multidisciplinary teams supported by learning facilities that are based on experimental and interactive technologies. With the three projects, the students are at the center of the working model. They have the honour and responsibility to build a multidisciplinary team with one or two representative students coming from each profession. As the students are attending different universities around the world, they bring together different methodologies, experiences, and work-ethic to tackle a task and have access to an attractive set of faculty coaches.

The Technological dimension

The POLAR project has designed a methodology for guiding and helping students in maximizing their communication. They created the POLAR Kitchen, a group of interconnected online tools, that tackles the disciplinary, interdisciplinary, international, and the diffusion of the results of the project. The information and communications system introduce five tools that students use. Each tool integrates with the others. Each

team can use all five tools to work effectively in what they call the POLAR Kitchen. These tools are listed below in order of immediacy.

Slack supports the students in communication, with it participants can message each other and it can be integrated with all other tools of POLAR Kitchen: Google, Miro, Zoom and Twitter. Zoom enables participants to conduct Video Conferencing with breakout rooms for real-time meetings, Google is used as a Filing System with Documents, Presentations, and Spreadsheets for creating content and, and Miro supports real-time collaboration as an interactive whiteboard with templates and tools that support the project work. Lastly, Twitter is the selected social media platform for sharing outside of The Kitchen. Tweets are curated and retweeted by the Swiss Federal Office of the Environment through their social media channels.

The document "POLAR Kitchen Guidelines" are provided to students to improve communication.

The International dimension

The projects support students' disciplinary knowledge, and their ability to work in multicultural environments and groups efficiently. As such values become more and more actual. The learning system of all projects cooperates with a network of international universities and industry partners and supports students in their discovery of intercultural, international and multidisciplinary values.

Other dimensions

POLE started in 1999 and is still circulating under other names.

An important aspect that allowed the sustainability of the projects is that in general it can be stated from all projects, that they placed emphasis on working with funds from companies or public organizations.

Results

The results of the ELOPE project are concluded in the following link:
https://www.yumpu.com/en/document/read/9450484/elope-5-ahb

44. Sustainable Cities and Infrastructure Erasmus+ Blended Intensive programme (BIP)

General information

Website: https://www.blendedintensiveprogram.eu/

Coordinator: University of Antwerp (UAntwerp)

Degree: Last year BA or MA student, international students

Partners: University of Girona (UdG), Instituto Superior de Engenharia do Porto (ISEP), University of Minho (UMinho), University of the Basque Country (UPV/EHU), Aristotle University of Thessaloniki (AUTh), Polytechnic University of Madrid (UPM), Wroclaw University of Technology (PWR) and Manipal Academy of Higher Education, India

Duration: 01 February 2022 - 30 April 2022 (3 months)

The Teaching & Learning dimension

The goal of the collaboration is to support the learning of newest technologies and sustainability visions on how to improve the design, engineering, material selection and construction processes for future cities,

buildings and infrastructure such as roads, rivers, tunnels and bridges. Within the framework of the Blended Intensive Program (BIP) visions, methodologies and best practices are shared and discussed between professors and students in both a virtual learning environment and a physical, face-to-face manner, in order to set the new horizon for the built environment.

The Technological dimension

The tools used during the virtual element of the course are not specified.

The International dimension

The participants can earn 3 ECTS by completing the course. The project work includes presentations from the international group and written reports as well, furthermore, an international week requires physical attendance from the participants.

The international dimension of the course is as follows: the lecturers teach in a language other than their mother tongue. Furthermore, the lecturers use course materials in a foreign language, while students give and write their presentations and reports in English. Students collaborate face to face as well as in a virtual environment within an international context of partner universities.

The lecturers teach the subject of the course mainly as an internationally oriented comparison and they provide insights into their cultural frame of reference to other perspectives relevant to the topic of the course and they actively use the presence of international students to create an international classroom, on campus as well as virtually.

Other dimensions

A program is an Erasmus + BIP-funded project, which is open to international students. The project is free for students who study within the EU, those outside the EU Erasmus+ program have to pay a fee for accommodation and stay for non-Erasmus students. The physical meeting of the course is in Antwerpen.

Results

There are no published results yet.

45. UNIVERSITAS21 (U21) & Early Career Researchers (ECRs) Workshop

General information

Website: https://universitas21.com/

Coordinator: Strathcona 109, University of Birmingham, +44 (0)121 414 9596, u21@universitas21.com

Partners: The University of Melbourne, UNSW Sydney, The University of Queensland, University of Sydney, KU Leuven, McMaster University, Pontificia Universidad Católica de Chile, The University of Hong Kong, Fudan University, Shanghai Jiao Tong University, University of Delhi, University College Dublin, Waseda University, Tecnológico de Monterrey, The University of Auckland, National University of Singapore, University of Johannesburg, Korea University, Lund University, University of Zurich, University of Amsterdam, University of Birmingham, The University of Edinburgh, University of Glasgow, University of Nottingham, University of Connecticut, University of Maryland, UC Davis

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

Program: collaborative cross-border international knowledge exchange

Duration: 5-day-long workshop

Area: All

Degree: post PhD researchers

Type of activity: workshop

Learning environment: virtual

The Teaching & Learning dimension

With its 28 member HE institutions, Universitas 21 (U21) is a global network that aims to bring together world-leading, research-intensive universities through collaboration and with the aim of internationalisation. U21 holds together member-led initiatives and programmes, with a collaborative and sharing mindset. The collaborative initiative aims to benefit all members with its approach to developing a global network. The partners focus on projects that are connected to the Sustainable Development Goals, among other sustainable projects, that are relevant for all.

Early Career Researchers (ECRs) is an annual workshop for young researchers, it provides international networking, professional development, and knowledge exchange opportunities for its members. ECRs aim to provide the foundation of a global collaborative network and its goal to link young researchers and support them in their professional relationship building. As a general goal of U21 – to tackle current global challenges – the workshops were thematic and organized around the theme of the UN's Sustainable Development Goals.

Stakeholders: Universitas 21 (U21), The Rights Lab: the largest group of modern slavery scholars in the world, the world's leading academic experts on modern slavery, The Researcher Academy: a network for researchers and staff at the University of Nottingham.

The key audience: annual ECR workshop participants, researchers and junior faculty in their early careers, who aim to establish international research networks. The participants are researchers and academics who are within 8 years of receiving their PhD.

The Technological dimension

The ECRs conference is usually conducted offline as a physical workshop, but due to Covid-19 U21 had to redesign the dimensions of how the event is introduced to the public.

Tools used were Microsoft Teams and Zoom to support video conferencing and virtual communication between participants, the Learning Management System used in the project was Totara, events were hosted here, meetings, resources were stored on the platform, and registered users could communicate both synchronously and asynchronously via an online forum, chatroom, instant messaging function. Padlet served as the project's web-based virtual whiteboard, and TimeandDate.com supported the participants in their time management, and served as a free online service, to make it easier for participants to organize their collaborative work.

The International dimension

The workshop is a collaborative, international event. The groups are matched based on interest prior to the 5 day-long workshops.

Results

The results were published in the following links: https://universitas21.com/sites/default/files/2021-04/Engaging%20Early%20Career%20Cohorts%20in%20a%20Digital%20Environment.pdf

https://universitas21.com/sites/default/files/2020-12/u21_ecr_workshop_programme_26.11.20.pdf

46. University of Aegean - Master of Business Administration (MBA) in Shipping

General information

Website: https://www.stt.aegean.gr/en/mba-in-shipping/

Contact information: Director is Professor Seraphim Kapros

Partners: the University of Antwerp, University of Genova, Technical University of Delft, Shanghai Maritime University

Degree: MBA Diploma in "Master of Business Administration (MBA) in Shipping"

Discipline: Business Administration

Duration: 1 academic year, full time; 60 ECTS

Modality: Blended modality: distance learning combined with two short-term phases of intensive lectures

The Teaching & Learning dimension

The programme is open for domestic graduates of the following departments and universities: technological educational institutions as well as of equivalently recognized foreign academic institutions such as business administration and economic studies, shipping studies, engineering schools, informatics, political and social sciences, humanities and similar academic subjects. The teachers of the programme are academics and teaching assistants of the University of the Aegean. Furthermore, reputed academics of top international partnering universities also participate in the programme from the University of Antwerp, University of Genova, Technical University of Delft, and Shanghai Maritime University.

The Technological dimension

The programme is offered in a primary distance learning setting, with elements, that require physical presence, which makes the programme a blended educational offer. The MBA programme in shipping is built on modern academic distance learning approaches. As part of the distance learning program, the structure is combined with 2 short-term phases of intensive lectures requiring students' physical presence at the Department's headquarters, on Chios island, at the beginning and the end of the course.

The International dimension

The thought in English Postgraduate Program in Shipping is an innovative approach to "distance learning", and remains the only Postgraduate Program in Greece that combines the English language with distance learning education; while being a leader in building a dynamic institutional feedback process and ongoing dialogue between academia and the shipping industry in Greece.

47. University of Peloponnese - Master of Arts (M.A.) in Mediterranean Studies

General information

Website: https://med.pedis.uop.gr/

Contact information: The Program operates under the administration of the General Assembly of the Department of Political Science and International Relations of the University of the Peloponnese. Vasiliki Lalagianni, Professor is the director of the program.

Partners: Institute of International Relations (IDIS) of Panteion University of Athens; Department of Political and Social Sciences and the Department of Cultural Heritage of the University of Bologna (Italy); INALCO – Institut National des Langues et Civilisations Orientales of the Université Sorbonne Paris Cité (France); Department of International Relations of the Yaşar University (Turkey); Department of Economics and Finance of the Neapolis University of Pafos (Cyprus)

Degree: Master of Arts (M.A.) in Mediterranean Studies

Discipline: Political Science, International Relations, Cultural Studies, and Economics

Duration: 1 year, full-time, 75 ECTS

Modality: Blended - One third of the courses are organized with the use of distance learning methods

The Teaching & Learning dimension

The program invites graduates from both domestic universities and Higher Technological Institutes as well as graduates of foreign recognized equivalent institutions to submit their application for enrollment. Applicant students should come from a background of at least second-class honours, from the field of Political Science, International Relations, Sociology, Cultural Studies, Economics and Law.

The Technological dimension

One-third of the courses are organized with the use of distance learning methods.

The International dimension

The programme is open to both domestic and international students with equivalent backgrounds.

48. University of Thessaly - Master of Science (MSc) in Host-microbe interactions

General information

Website: https://hosmic.uth.gr/

Contact information: Konstantinos Kormas, Professor

Partners: University of Thessaly: School of Agricultural Sciences Department of Agriculture Crop Production and Rural Environment (DACPRE), School of Agricultural Sciences Department of Biochemistry and Biotechnology (DBB), School of Health Sciences

Degree: the University of Thessaly, School of Agricultural Sciences, Departmenbusiness-related and Aquatic Environment (DIAE)

Discipline: Environmental Sciences – Agricultural Sciences – Biotechnology – Symbiotic Relations between micro- and macro-organisms and between organisms

Duration: The minimal MSc duration is 1 calendar year. An extension of the study period of 6 more months can be provided if deemed necessary

Modality:

The Teaching & Learning dimension

The students have to be graduates of national and peer international universities, as well as Technical Institutions of the following study fields:

• Biology, Biochemistry and Biotechnology, Molecular Biology and Genetics, Biological Applications and Technology, Computational Biology and associated fields.

• Agricultural Sciences

• Environmental Sciences

• Diet and Nutrition

• Food Technology

• Chemistry, Chemical Engineering, Environmental Engineering and associated fields

• Veterinary Science

The leading and participating tutors are well-established international researchers on organism microbiomes. HosMic is parted into 1 academic year or 2 academic semesters that include the attendance and successful examination in 5 courses followed by the research diploma thesis.

The Technological dimension

E-classes are provided to the students in order to support them in their learning procedure.

The International dimension

HosMic is implemented exclusively in English, furthermore it is open to attend by international students.

49. Technical University of Crete - Master in Technology & Innovation Management

General information

Website: https://www.mtim.tuc.gr/en/home

Contact information: Director of the program is Professor Nikolaos Matsatsinis

Degree: Master in Technology & Innovation Management

Discipline: Technology, Engineering, Management

Duration: Minimum duration of one 1 academic year for the full-time program and 2 academic years for the part-time program, 75 ECTS

Modality: Distance learning - through an eLearning platform

The Teaching & Learning dimension

The programme is designed for graduates from a wide range of academic backgrounds including Engineering Schools, Physics, Mathematics, Chemistry, Biology, Geology, Agriculture, Business Administration, Finance, Information Technology, Medical & Bio-medical, Military Academies and Technological Universities & Institutes from EU and non-EU countries.

The MTIM program students should attend 8 mandatory courses provided with the support of the Faculty of the Technical University of Crete, which consist of the following three main components: Lectures, Laboratory exercises, Computer exercises. After the successful completion of their exams, students have a 3-month period to prepare their master thesis.

The Technological dimension

The courses are offered through an eLearning platform.

The International dimension

The nature of the programme allows graduates to attend from a wide range of academic backgrounds, and is open for both national and international students.

50. The American College of Greece - Master of Science (MSc) in Data Science

The American College of Greece - Master of Science (MSc) in Data Science

General information

Website: https://online.acg.edu/programs/msc-data-science/

Contact information: Degree School of Graduate and Professional Education - Dr. Dimitrios Vogiatzis **Degree:** Master of Science (MSc) in Data Science

Discipline: Information Technology - Data Science

Duration: Two years (part-time) or up to three years maximum

Modality: online/blended, asynchronous learning

The Teaching & Learning dimension

The programme is offered to students with a wide variety of educational backgrounds, such as information technology, computer science, engineering, economics, MIS including business-related studies with some basic mathematics knowledge.

The resident professors of education are supporting students in their production of high-calibre research, which were published in many prominent journals since the start of the program.

In order to receive their diplomas students need to successfully complete a total of 12 courses, which leads to the Master of Science in Data Science degree from the American College of Greece. In order to complete the program, it requires a total of 468 asynchronous and 72 optional synchronous active learning hours from the student participants, divided into 8-week study cycles.

The Technological dimension

The students' learning journey is mainly set in a carefully designed asynchronous learning environment, the programs also include some optional live sessions about 72 hours worth of activity, where students and faculty can interact with each other and are able to facilitate the learning process. The asynchronous sessions are delivered online, while the optional synchronous sessions are delivered with the support of Canvas, a Learning Management System.

This MSc in Data Science program is taught through an online learning environment, which supports students through their learning journey. The materials can be accessed on a number of devices, regardless of time or geographical place, which makes learning flexible and suitable for modern professionals. .

The program also contains an unparalleled data science curriculum and an online pedagogy, which are dynamic in nature and adaptive to online students' learning needs.

The International dimension

By the asynchronous nature of the programme the degree is open for both national and international students with the eligible background.

51. UAS7 project

General information

Website: https://www.uas7.org/en/uas7-virtual-academy

Contact person (Berlin): Claus Lange, Executive Director Berlin, lange@uas7.de

Partners: The State University of New York, Drexel University, University of Pittsburgh, University of New Orleans, Clemson University, Universidade do Vale do Rio dos Sinos, the Pontifical Catholic University of Rio Grande do Sul, Universities in the Rio Grande do Sul, German Academic Exchange Service, German Center for Research and Innovation NY, German American Chambers of Commerce, German Consulate General New York

The Teaching & Learning dimension

The UAS7 Virtual Academy is both a virtual and blended mobility program that brings together students from Germany and the US. The project is in progress, starting in November 2020, it includes eight transatlantic projects within six disciplines. The aim of UAS7 is to lay a strong foundation for digital collaboration format in the future.

The Technological dimension

The UAS7 Virtual Academy offers a practical solution to reimagining international university cooperation across all disciplines. It establishes a new innovative teaching and learning format focused on virtual learning opportunities.

The International dimension

The participants of UAS7 involve seven German Universities of Applied Sciences. UAS7 students can attend a 'Virtual Academy' module if at their home university they are students of one of the participating classes.

Results

The UAS7 practice is a DAAD-founded project which is currently an ongoing program.

52. UNA Europa Network: Joint PhD Programs, Joint Innovative Formats, EU Projects

General information

Website: https://www.una-europa.eu/initiatives/joint-doctorate-in-cultural-heritage

Coordinator: Maria Gravari-Barbas, Chair, Una Europa Self-Steering Committee for Cultural Heritage maria.gravari-barbas@wanadoo.fr; Isidora Stankovic, Postdoc leader Cultural Heritage Isidora.Stankovic@univ-paris1.fr

Partners: Freie Universität Berlin; Alma Mater Studiorum Università di Bologna; University College Dublin; University of Edinburgh; Helsingin yliopisto/ Helsingfors Universitet; Universiteit Leiden; Uniwersytet Jagielloński w Krakowie; KU Leuven; Universidad Complutense de Madrid ; Université Paris 1 Panthéon-Sorbonne; Universität Zürich.

Degree: PhD programme

The Teaching & Learning dimension

The university network offers a wide range of courses, MOOC, mobility programs, challenges formats, and full degree programmes for students, academics, administrative staff, socio-economic stakeholders and alike. The two programmes offered are joint doctorate programmes on cultural heritage, an initiative of FutureUniLab and Una.Futura. The Joint Doctorate is a double European doctoral title recognized widely. The PhD programme offers participants Double PhD, workshops, certificates of Lifelong Learning and a Chair in Cultural Heritage. The aim of the PhD programme is to create cohorts of doctoral candidates, and support them in their interaction with each other, throughout the program and within its offers like workshops, research teams, courses and seminars. The issue of Heritage is a source of common identity and cohesion among the Una Europa universities, all of which demonstrate a rich offer in Cultural Heritage as a field of study and research. The Una-Her-Doc programme builds on the offering of other PhD fields such as Fine Arts, Tourism, Law, Documentation Sciences, Philology, Humanities, Geography, History, Architecture and Engineering.

The Technological dimension

The programme includes the following activities that have a technological dimension: Blended activities and virtual workshops, the possibility of joining research teams in working in a remote setting, MOOC, Master Classes of external stakeholders, and digital workshops that certify Lifelong Learning and gain professional experience.

The International dimension

The Joint Doctoral programme was funded by the European Commission, the consortium initiative offers PhDs from 11 leading European universities, with the final degree being recognized by at least 2 partner universities. The international dimension of the case can be connected with the co-supervisors and supervisors conducted throughout the programme, from at least 2 countries. Furthermore, the offer is open to international students from partner universities, Europe and beyond. The programme offers the

opportunity to the students to spend at least 12 months in other universities, as Mobile students, while their studies are also supported by language courses.

Other dimensions

The UNA programme offers a wide range of training and networking programmes within the 5 main focus areas. The think tank of UNA can be recognized in The Future UniLab, which is designed as a 'living laboratory, aiming to be the forum for discussion on the topics related to the future role of universities in society. Furthermore, it aims to develop tools and models that foster and stimulate cooperation in European HE. The objective of Future UniLab is to develop a new method for discussion and problem-solving for European Universities, with the support of experts coming from within and outside of UNA, with visionaries of particular issues in a way that is transferable and scalable for use in various contexts and institutional settings. University stakeholders, outside entrepreneurs, and representatives of NGOs, with the support of local and national governments representatives and EU policy experts will support the projects.

Una.Futura, is a part of the 1 Europe Erasmus Project and a digitalized project financed by the Polish National Agency for Academic Exchange, the part of the Academic International Partnerships programme and the Excellence Initiative - Research University programme financed by the Polish Ministry of Science and Higher Education. The Una.Futura projects can be described as challenges assigned to one or more international teams.

During the challenge, each participating team works on a task, with meetings organised with other teams working on the same challenge to share their insights and research material. Across different challenges, teams meet up virtually at several instances in order to participate in a joint cross-European kick-off, take part in keynote meetings and present their final presentations. The challenges include the following topics: For the Challenge 'digital empowerment' supports the initiatives in online global education, a challenge in the topic of higher education platform for online courses and joint diploma, and includes Una.talem, which is conducted offline at UNA universities in order to support the development in digital skills. The challenge of 'digital citizenship' supports the innovation around E-voting platforms and includes two projects: a challenge in the topic of e-voting platform and participation and interaction between citizens; and the topic of e-voting system at the EU level. Global hub aims to challenge the participants about the topic: a free educational platform for data and information about education and job. The challenge 'digital economy' is focused on the topic of Cross-border transfers, aims to bring innovation into making money transfers easier, pictures a future without banks, and revolves around virtual currency. CC-101 is an education platform about cryptocurrencies, explanations for dummies, and game experts. The challenge of 'Augmented human' is focused on multi-sensor solutions and innovative research algorithms for better art and information accessibility. The challenge 'Cyber threats' are searching for solutions to make digital detection platforms and education more enjoyable. Finally, the challenge 'Mental well-being and social relations' aims to raise awareness of mental health challenges and to interconnect people through digital platforms and apps.

Results

The results of the projects and initiatives can be found through the following links:

https://una-europa.imgix.net/resources/Booklet-of-the-Future-UniLab-final-version.pdf

https://una-europa.imgix.net/resources/position-paper-scroll-final_2021-06-02-140658.pdf

https://una-europa.imgix.net/initiatives/Una.Futura_guidebook.pdf

https://www.una-europa.eu/stories

53. VeLAD - Virtual Exchange Agreement Between the University of Leipzig, University of Auckland, University of Otago

General information

Website: https://www.philol.uni-leipzig.de/institut-fuer-anglistik/forschung/vela-virtual-exchange-leipzig-auckland

Coordinator: Dr. Petra Knorr, pknorr@uni-leipzig.de

Partners: the University of Leipzig, University of Auckland, University of Otago

Education: Faculty of Philology, Institute for English Studies

The Teaching & Learning dimension

Virtual exchange Leipzig - Auckland – Dunedin (VeLAD) is a DAAD-funded project which involves the University of Leipzig, the University of Auckland, and the University of Otago and has its focus on a binational, virtual exchange seminar between students. The students work on design-related projects, tests and do research as well.

The VeLAD project will work on the development of materials and collaborative courses to support seminars, supervision sessions, and the overall evaluation concept as well. The preparation of Open Educational Resources for teachers and students will be published during the summer of 2022.

The Technological dimension

To support the virtual cooperation formats IT services will support the participants when the testproject seminar will be held with the participation of students from all locations during the 2022 summer semester. The project aims to produce OERs for German and English learners and teachers as well, which will be available in the EduDigitaLE platform managed by the University of Leipzig. To support the virtual community and its practice digital tools and research instruments will be available, and learning management systems, and open educational resource platforms are prepared to support the international and virtual community in practice.

The International dimension

The international dimension of the project is fulfiled as the project has several goals in order to contribute to the development of digital, multilingual, and intercultural skills. It aims to help in enabling international virtual experiences for the students involved. The project wants to contribute to the digitization and internationalization of HE.

Results

The project is part of and funded by the Erasmus+ program of the European Union and runs over 2 years March 2021 to February 2023. The goal of the project is to develop an E-Tandem Learning to support intercultural and multilingual experiences and the development of OERs.

54. VAuLT project (Virtual and Augmented Reality for Language Training) University of Oregon

General information

Website: https://casls.uoregon.edu/classroom-resources/vault/

Contact: info@uoregon.edu

Partner: The U.S. Department of Education, Center for Open Educational Resources, Language Learning (COERLL), Treetop Academics

The Teaching & Learning dimension

VAuLT delivers experiences for language learners with augmented reality (AR) and virtual reality (VR) technologies. The aim of VAuLT is to provide cultural and language learning opportunities to users in immersive, play-oriented environments. The project integrates analogue materials with virtual technologies, the user experience supports the learning experience skill development through communication, collaboration, and analysis.

The project targets as its stakeholder students at all levels of second language experience, who are aiming to develop their skills in one of the following languages: English, French, German, Italian, Spanish, Russian, Ukrainian, Arabic, Mandarin, Yucatec Maya.

The Technological dimension

Students have been supported in their language learning journey by VR and AR technology. The mixed reality provides the students with increased collaboration and helps them to be more focused on tasks. The mixed-reality learning simulation within a meaningful educational context provides a customizable teaching outcome.

The International dimension

The international dimension of the project can be recognised in the aspect of VAuLT, which the project refers to as “Intentional Tourism”, an aspect where participants have the opportunity to explore language-related and cultural content that is relevant to targeted locations. By experiencing such exploration, the participants can interact with a guide within VR and AR technologies, where they can learn about critical sites and artefacts. With AR and VR support they can explore places and artefacts, where otherwise they might not visit in real life. With such experience, their intercultural skills their knowledge can be expanded.

Results

Vault supports communication, analysis, and collaboration skills with the integration of augmented reality (AR) and virtual reality (VR) supported by analogue materials. The project offers cultural virtual experiences and language learning opportunities to participants, and does it in immersive and play-oriented environments.

55. ViGiL project

General information

Website: https://vigil.uni-jena.de/hauptseiten/Startseite_englisch.php

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

Coordinator and contact: Juergen Bolten, juergen.bolten@uni-jena.de

Partner: Friedrich-Schiller-University Jena, Université de Montréal, Université de Poitiers, Åbo Akademi University, Alexandru Ioan Cuza Universitatae Iaşi, Beijing Foreign Studies University, Uniwersytet Adam Mickiewicz

Duration: December 2020 to December 2021

The Teaching & Learning dimension

Virtual Interactive Games of Intercultural Learning (ViGiL) is a German Academic Exchange Service (DAAD) funded project that aims to create sustainable networks for universities from all over the world. By doing so, the goal of the project is to enable intercultural learning experiences for students. ViGiL was initiated by the Intercultural Business Communication department at Friedrich-Schiller-University Jena.

The Technological dimension

The ViGiL project connects universities worldwide with simulation games that support learning, connecting with other Higher Education institutions. The project was created with six participating universities, together the ViGiL team worked on a train-the-trainer material and a simulation game as well. Later with the aim to connect the participating universities and other Higher Education institutions worldwide. The goal of the project was to enable the participating institutions to not only include the simulation materials in their lectures, courses, and seminars but to continue the collaboration as well.

The International dimension

ViGiL was carried out with the participation of six universities, which provides its international dimension. The Université de Montréa, Université de Poitiers, Åbo Akademi University, Alexandru Ioan Cuza Universitatae Iaşi, Beijing Foreign Studies University, and Uniwersytet Adam Mickiewicz worked in collaboration on carrying out the project.

Results

The final outcomes of the project are two simulation games: Megacities (for interculturally less experienced teams), and Bilangan (for students from intercultural study areas). The ViGiL project targets universities worldwide and supports them in their journey in internationalization and digitization. The keywords of ViGiL solution are "virtual mobility" and "Internationalization at home". The solution enables users to collaborate with other universities, with it an international network can be built which can connect universities in a sustainable way, that enable users (teachers and students as well) to build a good foundation for strengthening intercultural competencies.

56. VirtualLAS project

3 VirtualLAS project

General information

Website: https://www.ucf.uni-freiburg.de/teaching-projects/virtuallas

Coordinator: Anne Klemperer, anne.klemperer@ucf.uni-freiburg.de

Partners: School of Public Health and Community Medicine, University of Gothenburg, Center for Medicine and Society, University of Freiburg, Department of Geosciences and Natural Resource Management, University of Copenhagen, Business School, University of Exeter

The Teaching & Learning dimension

The VirtualLAS project is part of DAAD's IVAC initiative. In 2020, UCF launched VirtualLAS to promote collaborative, digitally based teaching, and student-instructor dialogue. VirtualLas aims to provide a digital solution for intercultural competencies, while supporting the development of team-working skills.

The Technological dimension

The development of virtual problem-based learning and virtual excursions are included in the curricula and are discussed with international experts. The courses are carried out in a blended setting, with a student-centred virtual learning form which happens with mixed international teams and for example by presenting a virtual scenario of the selected topic the course focuses on.

The International dimension

The project runs with four collaborating partners: the School of Public Health and Community Medicine, the University of Gothenburg, the Center for Medicine and Society, the University of Freiburg, the Department of Geosciences and Natural Resource Management, University of Copenhagen, Business School, University of Exeter. The VirtualLAS courses provide the opportunity for the participating students to form international groups with peers from other participating universities and work on the project.

Other dimensions

The three-focus area of the project is: 20 students in the 'Pandemics' joint course, and an additional 20 students from three partner universities to study the outbreak and the management of pandemics. After understanding the partner institution needs more advanced course set-up was created (including an e-learning module) to accommodate all needs. The second course is 'Sustainable Cities 2.0 – Exploring Cities from the North to the South with 20 participants, which is a project focusing on sustainable cities in Israel, Denmark, and Germany. The third course 'Closing the Sustainability Loop? Governance of Sustainability, Actors, Rights, and Principles' with the participation of 30-35 students, aim to focus on governance of sustainability from an interdisciplinary perspective. The students participate in mixed teams and the highly interdisciplinary course in a virtual setting centred around the topic of the UN's Sustainable Development Goals.

Results

The second year of VirtualLAS is ongoing with the involvement of the University of Copenhagen, the University of Exeter, and the University of Gothenburg.

57. Web-Enhanced Flipped Learning: A Case Study at the Teachers' College in Bahrain

General information

Coordinators: Bani Arora from University of Bahrain, Naman Arora from the University of Guelph

Partners: the University of Bahrain, University of Guelph

Duration: more than 2 weeks in 2021

Participants: 129 students

Area: Teacher Education

Degree: undergraduate

Modality: flipped learning blended approach

The Teaching & Learning dimension

The students were divided into small groups, and within the concept of the flipped classroom had the task to prepare a portion of the course content which was assigned through a Learning Management System (LMS) which were Moodle and Blackboard. During their presentation of the content, the students used posters, flashcards, digital technology and tools such as PowerPoint slides-shows, mobile phones, and Kahoot!, a game-based learning platform. The course was organised within the framework of TPACK which focuses on preparing teachers for effective digital technology tool usage, which is over their own thought curriculum.

The Technological dimension

The course Study Skills was organized as a flipped learning course with a blended approach.

The International dimension

The project was led by Bani Arora from the University of Bahrain and Naman Arora from the University of Guelph. The study was conducted including 129 students in their foundation year of a Teachers' College in Bahrain, the name of the course was Study Skills.

Results

The results are concluded in the paper of Bani Arora and Naman Arora:

https://cjlt.ca/index.php/cjlt/article/view/27905/20522

58. Web Portal -Technological Ecosystem of the PhD Programme Education in the Knowledge Society, University of Salamanca

General information

Website: https://knowledgesociety.usal.es/

Coordinator: Director, Francisco Garcia fgarcia@usal.es and Alicia Garcia Holgado, aliciagh@usal.es

Degree: PhD programme

Published paper: Definition of a Technological Ecosystem for Scientific Knowledge Management in a PhD Programme. Garcia-Holgado, Alicia. 2016. https://dl.acm.org/doi/10.1145/2808580.2808686

The Teaching & Learning dimension

The PhD Programme on Education in the Knowledge Society arises within the Research Institute for Educational Sciences. The aim of the programme is to: highlight the teaching-learning processes as the driving

force of the Knowledge Society, to discuss and generate new knowledge about learning as a key element of the Knowledge Society, including both the Social Science.

The programme has an interdisciplinary approach, for which the foundation is provided by research groups recognized by the University of Salamanca, such as: GRIAL; GITE; E-LECTRA; OCA VISUALMED and Robotics and Society Group.

The Web Portal of the Technological Ecosystem of the PhD Programme Education in the Knowledge Society project fulfils two basic objectives: It operates as a tool for the management of the knowledge produced in the Doctoral Program, it serves as a tool for scientific dissemination to society and provides access to learn about the program and carries the possibility to attract future candidates. It aims to support knowledge **distribution and creation and aims to make it accessible to the public.**

The Technological dimension

Scrum and Kanban methods are the foundation of the development of the technological ecosystem. Scrum is a methodology based on prioritized tasks depending on the benefit that is provided to the final user of the product, while Kanban is an approach to introduce change to an existing software development lifecycle or project management methodology. The architecture is based on four layers such as presentation, services, static data management and infrastructure supported by two input streams which introduce the human factor as an added element to the technological ecosystem.

The infrastructure layer has two components Drupal, a Content Management System (CMS) and a user management tool mail server based on Postfix that is provided by the University of Salamanca.

The third layer of the Web Portal is composed of several services: a SlideShare profile to share presentations and visual documents; a YouTube profile to share videos produced during seminars, conferences and events; it includes an online tool to send bulk emails, and also supported by Mailchimp and a user-centred portal.

Furthermore, the portal includes a news section where users have the possibility to publish information about events, seminars, and conferences that are related to the PhD Programme. The platform also functions as the students' work evidence. Evidence includes the tasks performed by students to advance in their thesis and improve their research profiles. Students have the opportunity to publish such materials with three privacy levels: private, which is only accessible to research groups, coordinators, and administrators; limited, which is a setting that makes their work only accessible to registered users; and finally: public, which makes their work accessible to any user. An evaluation and approval process is also introduced, in order to verify the materials and assure quality.

The International dimension

Social Sciences (Education, Communication, Information and Documentation), Engineering and Health Sciences (Medicine), are the disciplinary fields involved in order to support the interdisciplinary and multicultural approach and work on research related to topics of the programme.

The group of researchers at the University of Salamanca is in collaboration with a wide group of outside national and international researchers. With such collaboration, the Education in the Knowledge Society works on the following research areas: Human-Computer Interaction; Education Assessment and

Orientation; Communication Media and Education; Robotics in Education; eLearning; Computers in Education; Medicine and Education; Engineering and Education; Information Society and Education.

Results

The main component is the portal accessible through the link: https://knowledgesociety.usal.es.

Furthermore, quantitatively, by 2019 the portal has an evidence base of 24 defended doctoral theses, 60 seminars, and 617 publication records.

The tool Web Portal is designed to fulfil the needs of all roles related to a doctoral program, achieving quality in the data handled in PD. Regarding the most innovative character of this management practice, the fusion of the management can be pointed out, which is from the coordination to the users (top-down) and from the users to the coordination (bottom-up). The success of the system can be addressed by the fact that has been transferred to other Mexican universities such as the Tecnologico de Monterrey and Universidad de Guadalajara, and has been presented in different international congresses.

59. WeLearn project

General information

Website: http://welearn-project.eu/

Coordinator: Ilona Ilvonen, Tampere University Instructor

Partners: Tampere University, Film University Babelsberg, Università Cattolica del Sacro Cuore, Aalborg University, Suleyman Demirel University, Riga Technical University

The Teaching & Learning dimension

WeLearn is an Erasmus+ funded project, with several universities involved in the project which runs until the summer of 2022. With the lead of Tampere University, Film University Babelsberg, Università Cattolica del Sacro Cuore, Aalborg University, Suleyman Demirel University, and Riga Technical University. WeLearn aims to find ways that can support teachers and students in higher education, the project aims to bring change in multicultural learning environments by supporting “neighbourness”. Furthermore, the project’s focus is to support teachers and students in the practice of neighbourness both in digital and physical learning environments.

The project observed general internationalization practices and identified two main internationalization strategies in the form of exchange studies/student mobility programs and at-home internationalization practices. In general, the project observed internationalization strategies generated by universities and aims to provide a new, more advanced solution in the field by primarily focusing on user insights about the topic.

The Technological dimension

The agenda of the WeLearn project is to build a framework for neighbourness skills and to develop online and offline toolkits for teachers that support such aims. Furthermore, within the project’s scope, the toolkits will be tested in different pedagogical environments. Within the scope, the participants developed tools to identify intercultural patterns, and behaviours and to understand how participants connect on a personal level.

Overview of International Virtual and Blended Modalities in Europe and Good Practices selection

The International dimension

The idea behind WeLearn is to promote intercultural practices and to treat interculturality as a competence that can be learned and practised.

Results

The project is ongoing, and the results will be available in the late summer of 2022.

60. X-Culture

General information

Website: https://onlineinternationallearning.org/project/x-culture/

Coordinator: Ernesto Tavoletti (Università di Macerata; Ellie Hickman (Coventry University)

https://docenti.unimc.it/ernesto.tavoletti?set_language=en&cl=en)

Partners: Università di Macerata (Italy); Coventry University (United Kingdom); Monmouth University (United States); the University of North Carolina at Greensboro (United States)

Degree: Undergraduate, 3rd-year

Discipline: Corporate Marketing Strategy

Duration: 2 months

Academic Year: 2014/2015

The Teaching & Learning dimension

Throughout the project, the students worked in international teams in a virtual setting over a 2-month period. While the project ran, they had weekly assignments and deadlines to meet.

Three days prior to the weekly deadlines, each participant individually received a reminder email with a personalised link to an online progress report form. With it, the students provided detailed weekly reports on performance for the instructors that provided insight into all individual students' experiences. Throughout the 2 month period, the participating students also received feedback, and guidance in how their group should proceed, and gained insight into how their teams are doing compared to other teams. Such coaching and guidance in the project are considered to be a key building block of the learning process. In each lecture it was made sure, that instructors devote some time to discuss student and group progress, reflect on concerns and answer arising questions. As the final step of the project, the students use the TurnItIn platform to hand in their international business proposals as the final outcome of their work. Additionally, the participating students also complete online post-project feedback that includes a peer evaluation.

In order to support students in their reflection regarding the project, as an assignment, the students need to write a document where they get to express their learnings, gained skills and in general what they have learned from the project.

The Technological dimension

Students can choose to use different tools in order to support their communication in the digital realm, such tools include Skype, for virtual meetings; Facebook or WhatsApp to communicate with their peers and teammates; Google Docs, for content creation and collaboration; and Dropbox for file sharing purposes.

The International dimension

The dimension can be recognised in the international nature of group formation, and the reflective assignments on their intercultural experience.

Results

The project outcome is to prepare students for the challenges of the professional environment, the project aims to develop their skills in project development, intercultural abilities, leadership, team working and problem-solving in order to support them in the early stages of their careers such as job interviews, and in the workplace, and to enhance their employability. Furthermore, to enable the possibility for cross-cultural research.

61. Your Career Opportunities Worldwide

General information

Website: https://eafponline.eu/conference/eafp-annual-conference-2022/

Discipline: Participants: 38 professors, 111 students and 76 professionals (from 11 countries working in 60 institutions)

The Teaching & Learning dimension

The project started out with an introductory session that served as an icebreaker in order to help participants get to know each other, and intercultural activities were carried out with such intention. The participants joined in online meetings held in Teams, where professors from the 3 participating universities supported, guided and supervised the students' progress and work.

The project included interaction with outside stakeholders, students interacted with 2 to 3 professionals who were experts in Pharmacy, Biotechnology or Nutrition & Dietetics and took part in conferences where they could interact with relevant professionals. Furthermore, students participated in plenary conferences and a workshop through LinkedIn.

The Technological dimension

The COIL was carried out in a virtual learning environment and can be separated into two modalities. The first one is synchronous, 'real-time' during the COIL, which enables students to communicate with professors and professionals from different countries in a live setting. A second modality is an asynchronous form, where during the COIL project students and professionals could interact and work together at different times. Tools used during the project were Microsoft Teams, for conference meetings and LinkedIn served the project as a social media platform, where students had the opportunity to participate in a virtual workshop.

The International dimension

For many students, the COIL project provided the first opportunity to engage with international peers and to experience an intercultural event. The opportunity to connect with people from other cultural backgrounds supported their reflective skills and helped them recognize cultural differences.

Results

As a result of the project, more than 80% of the students felt that the COIL project enabled them to develop their soft and intercultural skills, and increased their motivation to work abroad. In their feedback, 90% of the students agreed that the project will be beneficial for their professional future.