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HOW TO DESIGN DIGITAL LEARNING OFFERING AS INTERNATIONAL TEACHER CO-OPERATION

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Abstract

This article focuses on the experiences, good practices, as well as challenges faced by higher education institutions (HEIs) when they collaborate as part of a university alliance to establish new online programs and courses. The specific alliance discussed here consists of six different HEIs, collectively known as the Ulysseus European University. The main objective of Ulysseus is to create a dynamic and adaptable European University alliance to modernise European universities. Additionally, Ulysseus aims to promote the understanding and practice of European values and advocate for a globally engaged model of European universities.

The research presented in this study is based on a theoretical framework that examines collaborative practices among teachers in online environments and acknowledges the importance of multilingualism in contemporary European education. By investigating the interplay between these two key areas, the research seeks to provide insights into the complex dynamics that shape teaching and learning in the digital era, while also offering valuable perspectives on collaborative approaches to designing courses.

To achieve also practical contribution, we will describe how international teacher teams in two different fields collaborate remotely using technological solutions when planning a new kind of international cooperation, how the different parties experience the process and how multilingualism is implemented on several levels of the co-operation.

Keywords: teacher co-operation, international teacher team, digitalisation of education, university alliances.

1 INTRODUCTION

This article examines co-operation processes and practices when creating new academic offerings in Ulysseus European University in 2020 - 2023. At that time the alliance comprised three comprehensive universities (University of Seville, Université Côte d'Azur, and University of Genoa), one technical university (Technical University of Košice), and two universities of applied sciences (Management Center Innsbrück and Haaga-Helia University of Applied Sciences).

Ulysseus Vision for 2030 is to create a European University for the Citizens of the Future by prioritising a human-centric approach, excellence, and openness. By fostering entrepreneurial skills and embracing a global perspective, Ulysseus will develop joint European degrees as well as joint programmes and courses. The academic offering is available for students, partner universities' researchers, teachers, and professional staff. In addition, Ulysseus enhances lifelong learning by offering MOOCs and beginner's level language courses that are open to everyone.

This article specifically studies the design process of online language as well as entrepreneurship and design thinking study programmes. It investigates the creation processes of these programmes and shares understanding of online collaborative hands-on experiences through perceptions of the participating academic staff, who are referred to as teachers in this article regardless of their official designation.

2 INTERNATIONAL TEACHER CO-OPERATION IN ONLINE ENVIRONMENTS

Digitalisation of education took huge steps as Covid19 forced HEIs to look for new pedagogical methods and mindsets [1]. This change has highlighted online co-operation as an indispensable skill both for students and teachers. Recently, there have also been voices of concern when the negative effects of the digitalisation of education have come to the fore especially among the younger learners.

When digitalisation is viewed from the perspective of international cooperation, several benefits can be identified. Digitalisation has enabled online teacher co-operation globally, which has been claimed to 1)

enhance exchange of ideas, information, and experiences; 2) enable different viewpoints; 3) provide collegial support and 4) serve as an opportunity for collaborative learning [2]. Especially co-operation on MOOCs has been found to improve quality and enhance innovation in the common course offering whilst requiring strategic and institutional support from all partners involved to be successful [3].

It has been argued that online environment enhances communication, production of knowledge and innovative opportunities for interaction in teacher cooperation [4]. However, the benefits depend greatly on how the online environment is used. Especially co-ordination is crucial for successful online co-operation. Romeu et al. [2] highlight, that online coordination has five primary purposes: (a) facilitating the design, ideation, and re-designing stages to achieve innovation and better results, (b) directing the entire process and associated activities, (c) amplifying virtual team engagement and collaboration, (d) gathering responses and tracking the progress of the process, and (e) facilitating the professional development of online teaching practices.

All co-operation, communication and interaction are based on mutual understanding. Thus, language skills and intercultural competences are key elements both in international teacher co-operation and in the professional growth of the students. According to Pirhonen [5] a multilingual community enhances language learning, and within Ulysseus, multilingualism is implemented on several levels and for several target groups. Both teachers, non-academic staff and students have their own international summer and winter schools, student and staff exchanges, workshops, webinars etc. In addition, the wide language programme created within Ulysseus is available for all the above-mentioned target groups. The versatile activities supporting multilingualism are aligned with the key competencies set by the European Union [6].

3 DESIGNING ONLINE LEARNING OFFERING USING DIGITAL SOLUTIONS: TWO CASES

When the six partner universities initiated the co-operation, task forces with a representative for each partner university were built in every work package. The deliverables had been defined already in the application phase. These two programmes produced the first co-designed course implementations in Ulysseus. When the courses began to be designed, many open questions arose: what issues are defined at the Ulysseus level and how much autonomy do the working groups have to decide for themselves; how much common guidance is there and what issues does the guidance cover, what is going to be standardised and how, how participants are entered into student systems, who ultimately awards grades and credits, and are the courses accepted as part of the degree.

The groundwork took several months due to the different organisational structures as well as administrative and decision-making processes at every university. Adapting the processes and procedures together continued throughout the planning and implementation phases of the course creation process.

To start with, the task force members were not familiar with each other, nor did they have shared ways of working. This applies also to the teacher teams, which developed and implemented the courses in the two programmes discussed in this paper. Thus, the first steps in the co-operation were to create a shared understanding of how the two task forces were going to achieve the goals and which knowledge base the co-operation was supposed to be built on.

The co-operation was conducted with Microsoft Teams as the main platform. Synchronised virtual meetings were organised according to the needs of the task forces, and between the meetings the work continued asynchronously in the form of written discussions and file sharing in Teams. Thus, the offerings in the two programs were developed online only without any face-to-face meetings, both task forces and the teacher teams working at their own pace and having their own schedules and procedures.

In the following sections we describe co-operation processes of two Ulysseus programmes: 1) entrepreneurship and design thinking programme and 2) language programme. As the task managers, the authors of this article co-ordinated and facilitated the design process of these programmes.

3.1 Case 1: Entrepreneurship and design thinking programme

At the core of Ulysseus' initiatives lies the cultivation of an entrepreneurial mindset, vital for tackling many of the challenges we encounter now and in the future. Entrepreneurship and its associated skills are considered to offer transformative potential, which is vital regardless of discipline. Ulysseus' Entrepreneurship and design thinking programme is aimed at enhancing these skills.

The Entrepreneurship and Design Thinking programme offers a range of courses. This article delves into the design process of two specific entrepreneurship MOOC courses. These courses, named "Startup – Corporate Co-operation" and "Co-innovating in Practice", were developed collaboratively by five Ulysseus partner universities. The foundations of these MOOCs were created already earlier in an international Corporate Edupreneurship consortium [7], in which two task force members had participated. Following the Corship model, the MOOC had two parts: xMOOC (individual learning) and cMOOC (collaborative learning) [8].

The final MOOC planning and implementation team had ten teachers from five Ulysseus partner universities. The team met nine times together to plan the courses and spent one day recording videos in a studio in Helsinki. Microsoft Teams platform was used to collaboratively create MOOC content at different times.

MOOCs are designed for many learners, thus requiring easy scalability. This means using automated tools, having standard assignments, and providing clear directions. All these aspects need thorough planning. The key advantages and challenges of the co-operation process are summarised in the table below (Table 1.). The summary is based on a varied set of data which comprises memos of the meetings, a survey for the teachers and course materials.

Table 1. The key advantages and challenges of the co-operation process

	<i>Steps in the co-operation process</i>	<i>Advantages of co-operation</i>	<i>Challenges of co-operation</i>
1.	Selecting MOOC topics and subtopics	Securing commitment from each participating university	Time consuming
2.	Identifying subject matter experts from each participating university	Bringing together diverse expertise	Understanding the differences in the roles and responsibilities of academic staff versus administrative staff
3.	Onboarding of teachers	Expanding networks and embracing new insights	Navigating changes in academic personnel and dealing with delayed onboarding
4.	Drafting of detailed course descriptions	Determining the course content and learning aims collaboratively provided clear direction for the subsequent process	Struggling to establish a unified understanding among teachers
5.	Developing weekly plans using a designated planning tool	Combining fixed framework with a partly liberal approach and learning how to manage the cooperation process	Balancing the content and ensuring continuity throughout the course
6.	Creating course content and video scripts	Creating opportunities for knowledge exchange, mutual learning and for deeply exploring topics vital to one's field Ensuring a balanced distribution of workload	Limited collaboration Challenges in synchronising with all partners for timely task completion Extensive and drawn-out procedures
7.	Conducting a two-day intensive session for video recording	Meeting each other face-to-face Fostering team spirit Ensuring high quality in a studio setting Enhancing efficiency	Logistics of scheduling and convening all stakeholders Incurring high costs for certain arrangements
8.	Uploading course materials to the platform	Using standardised Ulysseus platform design Benefiting from the continuous support from the co-ordinator	Ensuring a cohesive look and feel Implementing standardised platform design Varied familiarity levels with the adopted platform among teachers
9.	Pilot-testing the course with students and adjusting based on their feedback	Learning to use testing methods introduced by the co-ordinator Getting valuable user feedback before implementation	Having difficulties in recruiting the students from each university and running the test
10.	Promoting and enrolling students in the course	Gaining direct engagement with students from each university through their respective teachers	Enlisting students for the courses demanded consistent and intensive efforts
11.	Implementing the course and evaluating student performance	Presenting a diverse array of case studies and resources from various nations	Refining and determining the correct assessment weights

When starting to plan the courses, all universities needed to find the teachers and resources for the course creation process. This was not an easy task in the middle of the semester. Consequently, the first challenge was to assemble the teacher team, which took a lot longer than the co-ordinator had expected. Some of the Ulysseus partners had chosen teachers with subject matter knowledge already in the task force while others had appointed people with administrative roles. Participating teachers also changed during the course creation process. Interestingly, this was a double-edged sword; while changes sometimes disrupted the flow, they also brought in fresh, sometimes beneficial, viewpoints.

When the teacher team started to work, there were enlightening discussions about the variances in university systems, and this exchange of knowledge was viewed as one of the co-operation's key strengths. Participating teachers also expanded their networks and gained fresh perspectives. All in all, sharing knowledge and learning from each other was considered as a major advantage of the co-operation process. This also included the opportunity to learn how to co-ordinate course creation process with several international partners. Collaborating with specific individuals also stood out, whilst fostering good personal relationships among teachers. Several teachers felt a strong sense of team spirit, even if they believed there was a lack of deeper integration between universities. It was also mentioned that there was a gap in exposure to knowledge outside of their interactions with the co-ordinating partner. To bridge this, one of the teachers suggested to collate and share best practices and case studies from the diverse members of the Ulysseus alliance. At the same time, for many, this was more than just a co-operation; it was a chance to delve deeper into subjects crucial to their profession.

While the positive factors of the co-creation process mainly concerned social aspects, the challenges were caused also by standardisation efforts and course content related issues. For example, balancing the weekly content with the overall structure and course flow emerged as a challenge. Ensuring a cohesive look and feel throughout diverse sections of the project required concerted effort and often presented challenges. The standardised platform design offered a good structure to plan the MOOC but striving for a uniform MOOC design felt also restrictive. Occasionally, the platform's technical constraints surfaced, leading to operational obstacles.

Teachers were pleased with the combination of a fixed framework with a partly liberal approach to directing content. There was also appreciation for the distribution of the workload. However, coordinating with all partners to ensure timely task completion was difficult. The prolonged nature of the work process meant that some members distanced themselves from the project. When they returned, the challenge was to reacquaint themselves with where they left off, even with notes to guide them. Despite endeavors to keep virtual meetings short and to the point, they still felt sometime burdening.

In the end of the course creation process, refining and determining the correct assessment weights proved problematic. The task of assigning appropriate values for each evaluated activity was particularly challenging. The course creation process ended in collecting feedback and revising the content of the MOOC for the second implementation.

3.2 Case 2: Language programme

Language learning is a crucial priority of the EU, because language skills make it possible to promote mobility, to enhance intercultural understanding and to support Europe's competitiveness. One of the objectives the EU has is that European citizens learn two foreign languages in addition to one's mother tongue [9].

The importance of language skills as a central element of expertise is acknowledged also within Ulysseus. Thus, the +2 Language programme (+2LP) implements the above-mentioned objective of the EU in practice by offering a wide language offering within, and beyond, Ulysseus. 36 online language courses in ten different languages are offered and the levels vary from A1 to B2 according to the Common European Framework of Reference for Languages [10;11]. The languages and CEFR-levels are presented in Table 2 below. The +2LP includes fully self-paced courses and more guided ones with online lessons with a teacher. The A1 level courses in the first six languages mentioned in the table below (Table 2) have open access to everyone interested.

Table 2 – Languages and CEFR-levels in +2LP.

<i>Language</i>	<i>Level</i>
English	A1 – A2 – B1 – B2
French	A1 – A2 – B1 – B2
German	A1 – A2 – B1 – B2
Italian	A1 – A2 – B1 – B2
Russian	A1 – A2 – B1 – B2
Spanish	A1 – A2 – B1 – B2
Arabic	A1 – A2 – B1
Chinese	A1 – A2 – B1
Finnish	A1 – A2 – B1
Slovak	A1 – A2 – B1

The planning and creation of the language offering was co-ordinated by the task force in which every partner university was represented. The background of the task force members varied; some of them had an administrative role while the others had a more pedagogical background. The task force remained the same during the whole creation process except for one partner university changing its representative in the middle of the process. This ensured continuity of the work and enabled the building of shared understanding and trust, which had a positive impact on the results, as well as, for potential co-operation in the future. The task force had synchronous online meetings approximately every or every second month depending on the needs, and between the meetings, the work continued asynchronously in Teams.

The creation of the common language offering was started by charting the existing online language courses at each partner university and by estimating their adaptability to Ulysseus' purposes. Only two partner universities had online language courses in their offerings prior to Ulysseus, so there was a need for creating totally new courses specifically for Ulysseus' needs, as well.

The high amount of the courses and the diversity of the languages and levels did not enable a proper cocreation process with teachers from several universities collaborating on the contents, but the solution was to divide the courses on the partner universities' responsibility. Some languages and levels were easier to find a creator for meanwhile it demanded more time and discussions to have all the languages and levels covered. Thus, the discussion about which university was to take responsibility for which courses continued throughout the first year of the co-operation and the courses were finalized at different times. Despite the divided responsibilities, co-operation took place when the courses were peer-reviewed within the task force. For this purpose, the task force created a common quality criterion for the courses. After that, the task force was divided into two smaller groups and the representatives from two other partner universities cross-checked every course based on the criterion. In addition, co-operation took place when some language teachers from different partner universities collaborated to ensure a continuum between the course levels.

Some challenges were met during the process when several universities with diverse backgrounds collaborated. One of the challenges was the experience and level of online teaching, when some of the universities had a wide range of online language courses prior to Ulysseus, and some universities lacked this experience and knowledge totally. Thus, discussions were needed to find a collective understanding of the level of requirements on the courses, whether a final exam should be demanded on every course and of the use of ECTS. Another challenge was how much resources were allocated to the language programme at each university. This had a clear impact on how much the partner universities could participate in the creation process and how many courses each university created.

The original schedule for the language courses was ambitious, when the first six courses were originally due only nine months after the task force started to work. Fortunately, it was possible to postpone the deadline by four months, and after that all the courses were delivered according to the schedule.

Some structural features had an impact on the work, as well. When working online only, it took time to build trust and to find a mutual vision of how the task force was to achieve the targets. Another structural

fact was the whole Ulysseus being built simultaneously, which meant that there were no administrative structures to rely on at the beginning. But on the other hand, this offered a possibility to discuss which administrative procedures would be the best ones. When the Ulysseus Learning Platform was implemented, it made it technically easier to handle the course creation process.

There were several positive features in the co-operation. In time, a good team spirit was built up in the task force and the co-operation became fruitful and pleasant; every issue could be discussed, and mutual support was offered. Because the level of the digipedagogical competence varied between the teachers participating in the co-operation, it was highly appreciated by the other partner universities when Haaga-Helia UAS could assist teachers at partner universities with digipedagogical mentoring.

In spring 2023 a feedback survey was sent to the language teachers involved in creating the courses. The replies show that the teachers found the process very positive, interesting and rewarding when creating new materials and courses in a new kind of international co-operation, which can be described even unique. In addition, the results achieved were regarded as successful. To adapt the materials for a target group combining students from several universities, countries and cultural backgrounds and to utilize and improve one's own digipedagogical skills was considered a meaningful experience. The teachers also found it advantageous and worthwhile to create new materials and courses while elaborating their pedagogical approaches. The teachers experienced the cross-checking process as a meaningful way to get peer review feedback from the course design. The courses were aligned with the CEFR regulations (Council of Europe, European Union, 2018, 2020), which was appreciated by the teachers, as well as was the usability of the Ulysseus' own digital platform and the clear communication during the process.

The opportunity to work in an international atmosphere with students from different countries, and to be able to offer the experience to the students was highly appreciated by the teachers when implementing the language courses for the first time. Teachers with a strong digipedagogical knowhow and a long history of teaching online found it very valuable to be able to use their expertise when offering the opportunity to study online also to the students at partner universities with no offering of online language courses. The teachers regarded the materials created for the +2LP as innovative and useful when helping the students to enrich their language skills. Flexibility and interactive elements of the courses were considered as very important for the students' self-study process.

According to the survey, technique was experienced as the biggest challenge when creating the online language courses. To transfer materials from a university's own learning platform to Ulysseus' one included difficulties even if both platforms are Moodle based. When creating online language courses, audio and video materials are of great importance, and as a part of the technical resources the teachers considered that a professional level recording studio and equipment is needed for high-quality materials.

The overall experience of creating language courses for Ulysseus was valued as a very beneficial process, and both pedagogic viewpoints and co-operation with the colleagues were mentioned as arguments. Even a wish to continue the work with +2LP courses was uttered. Thus, it seems that the language teachers were well engaged in the work, which entails fruitful prospects for the future.

4 CONCLUSIONS

European universities want to improve international collaboration in higher education, eliminate obstacles to cooperation, and achieve specific benefits, while encouraging to implement new educational approaches. Unfortunately, complex governance structures have been identified as one of the main challenges in European Universities, which prevent successful co-operation between the partner universities [12].

At its best, co-operation with teachers in a transnational partner network can bring numerous benefits and serve as a platform for collaborative learning. However, successful co-operation relies on trust, familiarity, and a deep understanding of the unique contexts within each university. These factors take time to establish, making it challenging to achieve immediate results.

It is challenging to ascertain precisely how the collaborative process might have evolved had there been an opportunity for face-to-face planning. Based on our evaluation, a joint face-to-face planning session could have offered significant advantages. Getting to know each other, building trust, and orienting the teacher teams would have been quicker and easier. Particularly, ideating jointly and visualising the bigger picture in a live meeting might have led to better and more creative outcomes.

Co-operation should be built on shared responsibility and interdependence among the teachers. To be able to utilise the full potential of cooperation, the focus should be in building joint knowledge and sharing different views, instead of simply delivering information to reach common course offering [2]. It is also very important to plan the overall timing and prioritise the work at each partner university, when constructing a new learning entity. When administrative processes and issues related to them are solved before the pedagogical development starts, there will be a clear framework within which the teachers are able to concentrate on the pedagogical topics. This will save time and make the process smoother for both the pedagogical and administrative experts. When the level of commitment of every actor is equally strong, it makes the process easier for every party.

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