European Universities, the Highlight of International Cooperation in Higher Education. The Romanian Perspective on EU-CONEXUS

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Abstract: Inter-university cooperation has always been a desideratum of higher education institutions. It has developed at a slower or faster pace, for different reasons, depending on the era. Gradually, this cooperation has become more complex, giving rise to a new concept - the internationalisation of higher education. Supported by the development of technology and the increasing liberalisation of borders, cooperation in education has evolved from bilateral agreements to consortia of universities and eventually to European universities. Created at the initiative of the European Commission in 2017, European Universities are transnational alliances that over the last four years have brought about a paradigm shift in inter-university cooperation. This paper aims to discuss the participation of the Technical University of Civil Engineering of Bucharest (UTCB) in a European consortium, and its contribution to internationalisation at the institutional level. We will try to identify the advantages of being a member of this alliance, as well as the difficulties encountered throughout the cooperation and the means to overcome them.

Keywords: cooperation, higher education, internalionalisation, European university, EU-CONEXUS

Introduction

Medieval cultural history shows us that institutions of higher education, even in their early forms - monastic school, cathedral school, *studium*, *studia generalia* and up to the first universities that appeared in the 12th and 13th centuries - showed an openness to academic cooperation (Verger 1999), allowing, above all, *peregrinatio academica*, and the forerunner of today's academic mobility. Inter-university cooperation has always been the driving force behind the development of these higher education institutions, in particular because of the circulation of ideas it facilitated. However, this cooperation has developed at a slower or faster pace, according to the possibilities of the time. Jacques Verger (1999) and Walter Ruegg (2011) are just a few of the authors who have explored in detail the history of higher education institutions and cooperation between them.

With the industrial and later technological and digital revolution, this cooperation has developed into a broad, complex and institutionalised process, evolving from bilateral agreements to networks of universities and eventually to European universities. The need to be able to theoretically analyse this dynamic of higher education gave rise to a new concept, which would later become a tool for analysis, namely the internationalisation of higher education. This concept has been defined, elaborated, and further explored by theorists such as Jane Knight (1995, 1999, 2004, 2012), Hans de Wit (1995), and others.

If in the European space, this cooperation has appeared since the end of the 12th century and the beginning of the 13th century, through the existence of common curricula, a universal examination system and the predominance of Latin in the academic environment (Knight, de Wit 1995), on Romanian territory the first higher education institutions appear only at the end of the 17th century (Camariano-Cioran 1971), when universities in Europe had already gone through two reform processes (Ruegg 2011). The first, in the 13th century, aimed at standardizing their organization in faculties, as well as the levels of studies, and the second, in the 15th century, was imposed by the advent of humanism, which determined a common humanistic education for all European states (Ruegg 2011).

The time lag regarding the evolution of higher education and the periodization of internationalization in the Romanian space, compared to the European one (Verger 1999, Knight, de Witt 1995), can be attributed to the level of development and literacy in the

Romanian space at that time, as well as to historical vicissitudes, and can be understood in the broader context of the modernization of the Romanian Principalities (Barbu 2021).

The efforts that Romanian higher education institutions made to reduce this gap by reconnecting with Western values and undergoing institutional reform are especially visible after 1989. Thus, the main Romanian educational institutions did not miss the opportunity to participate in what we consider the pinnacle of inter-university cooperation, namely European universities. Created at the initiative of the European Commission in 2017, these transnational structures have brought about a change in the paradigm of cooperation in higher education. This paper aims to discuss the participation of the Technical University of Civil Engineering of Bucharest in the EU-CONEXUS alliance, and its contribution to the internationalisation of higher education at the institutional level. We will try to identify the advantages of being a member of this alliance, as well as the difficulties encountered throughout the cooperation and the means to overcome them.

Theoretical framework

1. Internationalisation of higher education: core concepts

From the very beginning, higher education has been one of the main means of fostering cultural exchange and facilitating interactions between different countries. These exchanges became much more complex, prompting researchers to scrutinise what had begun to manifest itself as a process per se. In the 1990s, a new concept was defined and introduced by academia, namely the internationalisation of higher education.

Over the years there have been several definitions of the internationalisation of higher education (Arum, van de Water 1993; van der Wende, 1997; Qiang 2003), but the definition that stands out is the one formulated by Jane Knight (2012, p.22): "the process of integrating an international, intercultural and global dimension into the objectives, core functions and outcomes of higher education at both institutional and national levels".

It is important to note, however, that almost all the proposed definitions describe internationalisation as a process, a very important aspect that indicates a certain

consensus in the academic community on the nature of internationalisation and helps both theorists and practitioners to approach it coherently.

Jane Knight and Hans de Wit (1995) also identify the motivations behind internationalisation, which they initially classify as political and economic one one side, and cultural and educational on the other. Later, for a better understanding of this process, Jane Knight (1997) returns and classifies them into economic, political, academic, and cultural motivations, and draws attention to the level at which they are pursued – national and institutional – stressing the need for coordination between the two. In the new context of European universities, we could add a third level, the international one, thus making the internationalisation equation more complex, given the need to align the motivations of the institutions involved, the countries of origin, and the international community to which they belong.

Irrespective of the motivation, Jane Knight (1999) warns that internationalization must prioritize:

- activities: curricula, student and staff mobility, technical assistance;
- competences: development of skills, knowledge, attitudes, and values, at both student and staff levels, development of international programmes;
- ethos: creation of a culture and climate that values and supports international and intercultural perspectives and initiatives;
- process: integration of an international and intercultural dimension into learning, research and service provision combining a wide range of activities, policies and procedures.

Regardless of the level at which internationalisation is pursued, the two sectors, home and abroad, must be considered. This differentiation was made by Jane Knight in 2012 and provides further guidance for understanding internationalisation.

Thus, internationalisation at home aims at reforming the curriculum (by introducing an international, intercultural, and global dimension in the curricula, not limited to language teaching only), teaching and learning methods, research, but also extracurricular activities involving both domestic and international students, thus facilitating their exposure to multicultural contexts.

On the other hand, internationalisation abroad will aim at facilitating academic mobility (for students, teachers, researchers), not only diversifying such mobility (study visits, sabbaticals, short-term fellowships, internships, or long-term study programmes), but also internationalising study programmes by setting up double degree/cotutelle programmes or online courses.

By their very nature, European universities approach internationalisation on both levels, home and abroad, in a comprehensive attempt to create a European academic climate where every member of the academic community feels at home, regardless of their country of origin. It is very important for successful internationalisation that attention is paid to both sectors equally, to achieve a balance, thus managing to both meet the needs of the members of the academic community and strengthen its international prestige.

2. Inter-university cooperation: typology

The complexity of today's world has led to a complexity of forms of cooperation between higher education institutions, such as bilateral agreements, university networks/associations, and, most recently, European universities.

Looking at the history of higher education, we note that the main means of cooperation between universities has been bilateral agreements, which continue to play an important role in the internationalisation strategy of each academic institution even today. Although there is no unanimously accepted definition of a bilateral agreement in the academic field, it can be seen as a mutual understanding between two higher education institutions expressing a desire to achieve common, specific objectives, such as research, student mobility, organisation of conferences, development of joint study programmes, etc. Walter Ruegg (2011) notes that collaboration between different European universities began on the basis of bilateral agreements and observes that until 1990, this was the most common form of cooperation, particularly in terms of mutual recognition of studies in foreign countries (2011), although he acknowledges that these were not the most effective mechanisms for promoting academic cooperation (2011).

Associations and networks of universities emerged, according to the periodisation proposed by Jane Knight and Hans de Wit (1995), in the third period of

internationalisation of higher education, which, as they state, began with the end of the Second World War and continues to this day. Following the end of the war, higher education and research institutions became increasingly important in the national political system and their role changed, becoming partners with an active role in the development of society. Thus, at the proposal of the Dutch government in 1948, the idea of the International Association of Universities was launched, founded under the aegis of UNESCO, which today has 600 members from 120 countries. As Andrew Gunn states, "alliances are a longstanding feature of the higher education landscape" (2020, p.13), and their number has grown steadily over the last 35 years, with some 38 such structures in existence in 2007 (Moodie 2010). Other examples of associations and networks are the European University Association (which brings together 850 higher education institutions from 49 European countries), the American Association of Universities, the Balkan Universities Association, the Black Sea Universities Network, Networks of Universities in European Capitals, etc.

The most recent and complex form of inter-university cooperation in the European area, but opening up to other geographical areas, are the European universities, which we will discuss below.

3. What is a European university?

The idea of a European university was, in fact, originally a political project proposed in 1948 by the German economist Alfred Muller Armack, who believed that for a complete European integration, it is necessary to have a "community of intelligence" (Lehmann 2019, p. 77). It should be noted that the idea of such a structure emerged at the same time as the idea of university associations, but unlike the latter, this project, due to its complexity, could only be achieved in 2019.

In the post-war context, European leaders did not consider such a structure necessary, and discussions continued throughout the 1950s, but without a consensus on the financial and legal status, or the main mission - innovation and development versus cultural integration (Orr et al. 2019).

The idea was not completely abandoned, and in 1960, the project of a European university defined as an institution offering a two-year postgraduate studies for 500

students in fields relevant to European integration was launched. Nevertheless, it was rejected at the Bonn summit a year later (Corbert 2005).

Italy took up the discussion in 1969, proposing the creation of the European University Institute, envisioned as a research and teaching institute for postgraduate and postdoctoral studies in the social sciences. The institution was inaugurated in 1972 in Florence, but lacked the character of a comprehensive supranational university (Palayret 1996). The institution still operates today, having the merit of bringing under one roof a truly international academic community, from academic and administrative staff to students. However, as we shall see below, it does not have the vocation of a European university, as envisaged by the European Commission, but is rather an autonomous higher education and research institution with its own premises and budget.

Consistent with the desire to create a true European university, Jose Manuel Barroso, at the time President of the European Commission, took up the discussion, proposing the creation of a European Institute of Technology, undertaking "high level education, research and innovation activities, both in some strategic thematic areas and in the field of science and innovation management" (Barroso 2006). Member States were opposed, which is why the idea never materialised (Meller 2006; Meller et al. 2006).

The election of the pro-European Emanuel Macron as President of France was providential for the recovery of the idea of a European university, and his proposal was welcomed by the European Commission, which in its report *Strengthening European Identity through Education and Culture* reiterated the need for a European identity and culture by "creating world-class European universities that can work seamlessly together across borders" (European Commission 2017a).

Thus, the European University was born, defined by the European Commission as "an ambitious transnational alliance of higher education institutions developing long-term structural and strategic cooperation. Minimum of three higher education institutions, from three EU Member States or other Erasmus programme countries are necessary to form a European University".

The call for the first round of funding closed at the end of February 19 and received 54 applications for new alliances. This resulted in 11 European Universities involving 114 higher education institutions from 24 Member States. The second call, opened in

November 2019, confirmed a further 24 European Alliances (European Commission 2019). A new Erasmus + call in 2022 now confirms a total of 44 European universities encompassing 340 higher education institutions from 31 countries, both EU Member States and Iceland, Turkey, Serbia and Norway (European Commission).

Through a European University, the European Commission aims to create:

- seamless mobility for students, staff and researchers (physical, virtual or blended)
 to study, train, teach, do research, work or share services at cooperating partner institutions;
- transdisciplinary and transnational teams of students, academics and external stakeholders tackle big issues facing Europe (such as climate protection, democracy, health, big data, migration);
- flexible curricula designed by the students, leading to a European Degree;
- practical and/or work-based experience to foster an entrepreneurial mind-set and develop civic engagement;
- a clear reflexion of the social, economic and cultural diversity of the population by the students body. (European Commission).

Methodology

Aiming to explore how the membership of the Technical University of Civil Engineering of Bucharest (UTCB) in a European university consortium, namely EU-CONEXUS, enhanced internationalization at the institutional level, this research paper is supported by both qualitative and quantitative analysis.

We have conducted an in-depth analysis of core documents elaborated by EU-CONEXUS and UTCB (reports, progress reports, agreements, statements, and policy documents), relevant for revealing the approach of these two entities towards four key elements of internationalization, namely joint study programmes, academic mobility, joint research projects and the development of international and intercultural campuses.

The study also includes a quantitative analysis based on statistical data gathered from UTCB's International Relations Department. The data covers the period 2019 (the

inauguration year of EU-CONEXUS) – 2023 (the academic year 2022 – 2023). The data will help us understand if UTCB's membership in EU-CONEXUS has caused an increase in the interest (expressed through the number of beneficiaries/participants) of academic and administrative staff in more international and intercultural exposure over the years. We are also interested in the degree of consistency of this progressive evolution, if any.

Broad context: Romania and the European universities

After the fall of the communist regime in 1989, Romania turned its gaze westwards again, in a desire to catch up to the Western values it used to share. In the context of capitalism that was alien to it, in an increasingly culturally complex world where cultural exchange had become essential to the functioning of society, Romania had to take a giant leap and catch up with what the West had been building for almost half a century.

Through small steps, universities reformed themselves according to democratic principles, participation in international projects intensified (Tempus, Erasmus), and at the national level, Romania joined the Bologna Process in 1999, succeeding in the proposed reforms through legislative changes and the rethinking of the entire educational process for a knowledge-based society. Accession to the EU has also supported Romanian higher education, both through the exchange of best practices and funding.

When the European Commission launched the call for the establishment and funding of European universities, Romanian higher education institutions were eager to take part in this initiative. Today, 14 Romanian higher education institutions are members of 14 European universities, according to the website of the European Commission:

CIVICA - The European University in Social Sciences (nine universities, among which National University of Political Studies and Public Administration);

CIVIS 2 - A European Civic University Alliance (nine universities, among which University of Bucharest):

CONEXUS - European University for Smart Urban Coastal Sustainability (nine universities, among which the Technical University of Civil Engineering Bucharest);

EUTOPIA - European Universities Transforming to an Open Inclusive Academy (ten universities, among which Babes Bolyai University of Cluj);

FORTHEM - Fostering Outreach within European Regions, Transnational Higher Education, and Mobility (nine universities, among which Lucian Blaga University of Sibiu);

EU GREEN – European University Alliance for sustainability: responsible growth, inclusive education and environment (nine universities, among which University of Oradea)

INGENIUM – INGENIUM European University (ten universities, among which Technical University Gheorghe Asachi of Iasi)

E3UDRES2 - Engaged and Entrepreneurial European University as Driver for European Smart and Sustainable Regions (six universities, among which Polytechnic University Timișoara)

EC2U - European Campus of City Universities (seven universities, among which Alexandru Ioan Cuza University of Iași)

EELISA - European Engineering Learning Innovation and Science Alliance (nine universities, among which Polytechnic University of Bucharest)

EURECA-PRO - The European University Alliance on Responsible Consumption and Production (seven universities, among which University of Petrosani)

Eut - European University of Technology (eight universities, among which Technical University of Cluj Napoca)

NeurotechEU - European University of Brain and Technology (eight universities, among which Iuliu Haţieganu University of Medicine and Pharmacy)

UNITA - Universitas Montium (six universities, among which West University of Timisoara)

Specific context: UTCB AND EU-CONEXUS

Having its roots in the "School for Land Surveyors" and the "The School of Bridges, Roads and Mines", founded in Bucharest in 1818 and 1867 respectively, the actual basic structure of the Technical University of Civil Engineering of Bucharest was established in 1948. It is the only Romanian university entirely devoted to education in civil engineering and related fields, having a long history of successful contributions to Romanian research and education. With a competitive and well-recognised academic staff, UTCB is a major actor in higher education, research, consultancy, and design code regulations.

Over the years, the Technical University of Civil Engineering of Bucharest concluded numerous cooperation agreements, currently having 23 active bilateral agreements with 23 countries in Europe, Africa, Asia, North and South America and 60 Erasmus agreements. The Technical University of Civil Engineering of Bucharest (UTCB) is affiliated to the following university associations and networks: European Civil Engineering Education and Training Association, Agence Universitaire de la Francophonie, Association of European Schools of Planning, Fédération Internationale du Béton, International Project Management Association, Permanent International Association of Navigation Congresses, International Association for the Exchange of Students for Technical Experience.

Following the call of the European Commission for the creation of European universities, La Rochelle University, as an applicant, supported by five other higher education institutions (La Rochelle Université - France, Agricultural University of Athens - Greece, Klaipeda University - Lituania, La Universidad Catolica de Valencia - Spain, University of Zadar - Croatia, and the Technical University of Civil Engineering of Bucharest - Romania) have submitted the *Grant Agreement for action with multiple beneficiaries under ERASMUS+:European Universities no. 612599/June 2019.* Their intention was to create a European University for Smart Urban Coastal Sustainability (EUCONEXUS) aiming to carry out a wide range of activities: joint study programmes, mobility coordination, joint research, external and international relations, management of projects, campus life, smart campus, sustainability and dissemination for three academic years (September 2019 - August 2022). We can immediately identify in its work

programme the fact that this new entity embodies almost all of the priority aspects envisioned by an efficient internationalization.

The proposal won funding from the European Commission in the first round, in the amount of 4 516 063 Euros for a period of 36 months, which led to the conclusion of the *Consortium Agreement from 20.09.2019* stipulating the terms of this cooperation for the following three years. At the time of its creation, EU-CONEXUS included 41 223 students, 5 421 staff members, among which 3 529 teaching/research staff, 34 faculties and 65 research groups (UTCB Report, 2019).

By winning funding for three more years after the 2022 call, three other universities have joined as partners, namely the University of Rostock - Germany, South East Technological University - Ireland, and Frederick University - Cyprus, therefore a new *Consortium Agreement (EU-CONEXUS PLUS)* was signed in January 2023. According to the information available on the EU-CONEXUS website, since April 17, 2024, a large academic community has formed around it, counting 71 423 students, 8 173 employees, including 4 848 academic staff members/researchers, 50 faculties, 72 research groups and 928 study programmes for all levels. The development of this entity from six to nine members after the second round is proof of not only its potential for the internationalisation of higher education, but also the success of its approach taken on this process after three years of intense activity.

EU-CONEXUS defines itself as a transnational European higher education and research institution that covers smart urban sustainable coastal development from a global point of view. EU-CONEXUS partner institutions are located in France, Greece, Romania, Lithuania, Spain, Ireland, Cyprus, Germany, and Croatia. These partners are united around common values such as academic freedom, responsiveness, diversity, inclusiveness and gender equality, sustainability, transparency and multiculturalism.

At the management level, EU-CONEXUS has a Governing Board, responsible for making strategic decisions, which includes the rectors of the partner universities. The implementation of the alliance's activities is overseen by a Joint Management Board, made up of institutional coordination managers. The strategic orientation and implementation of joint study programmes or research projects is coordinated by an academic council and a research council. Another body of EU-CONEXUS is the External Advisory Board, whose

task is to regularly review the progress of the Alliance. Students from all partner universities are also represented in the Student Board, participating in strategic decision-making at all levels and even in the implementation of student activities. The alliance counts also on the support of an an Executive Board and a Coordination Committee.

EU-CONEXUS aims to develop a European Coastal Policy, and, at the same time, to create cross-disciplinary, multi-disciplinary and cross-sectorial study and research programmes. The Alliance also focuses on the creation of an inter-university campus, which promotes academic and administrative integration, thus facilitating the exchange of best practices and, in the long term, improving the institutional climate of each partner.

Another ambition of EU-CONEXUS members is to succeed in setting up joint European study programmes and even the possibility of awarding joint European degrees, which of course requires access for international students, teachers, and researchers. The main issues on which the proposed study programmes will focus are marine biotechnology, aquaculture, coastal sustainability, marine hydrology, marine environment engineering, civil engineering and port constructions, green transport, energy efficiency, smart port city, etc.

In addition to the establishment of new study programmes, another goal is to make existing programmes more accessible to Alliance members by offering courses or full study programmes in an international language. This will also increase the mobility, both physical and virtual, of teachers, students, and researchers.

Another ambitious project is the creation of a Living Lab to enable exchange of ideas and collaboration between students and young professionals in order to bring innovative solutions to problems the industry currently faces.

It is clear that the European university, through its approaches, encourages and facilitates the internationalisation of each partner, both at home and abroad. On the other hand, this joint approach makes their internationalisation process more coherent and targeted than would have been the case with individual internationalisation.

Findings on the contribution of EU-CONEXUS to UTCB's internationalisation

1. Joint study programmes

One of the main purposes and achievements of the EU-CONEXUS was the accreditation of joint study programmes, two minor programmes - Blue Economy and Growth and Costal Development, and a Joint Master Programme in Marine Biology.

A Minor programme (also called a "secondary specialisation") is a set of courses in English offered by one of the six EU-CONEXUS founding universities that students can choose to complement their main programme of study. To obtain an EU-CONEXUS Certificate, students must accumulate 30 credits by taking five courses over three semesters at three different universities in the alliance.

According to the report, the two Minor programmes proved to be successful and increased the interest in cooperating at the Bachelor programme level in other fields. These programmes enhanced the use of new pedagogical methodologies in other courses as well, thanks to the training on teaching methologies they offered.

The language in which these Minor programmes are taught is English. Many efforts were made to expand the accessibility of these courses by providing them in other languages with the support of automatic translation tools or by creating subject related glossaries. Unfortunately, as the report emphasizes, all those efforts proved to be unsuccessful. However, in order to give access to a larger number of students to these study programmes, a course of English for sustainability was offered.

Despite the language barrier, these two Minor programmes expanded the academic offer in the English language of the universities involved, which intensified the academic and teaching mobilities with 233 teaching staff members in physical or virtual mobility within the Alliance. These programmes also imposed a harmonization of the academic calendar, the recognition of non-curricular/extra-curricular learning outcomes in diploma supplements, and the development of a common online learning management system through the EU-CONEXUS Moodle.

Thanks to their interdisciplinary and cross-sectoral approaches, the universities involved managed to make their curricula more flexible and to intensify management and automatic recognition of new formats of physical, virtual, and blended mobilities.

These two minor programmes were an innovation at the level of European higher education and were unique at the national level. They allow students to build up their own academic path, being characterized by flexibility and multidisciplinarity.

UTCB has a valuable and consistent contribution to these Minor programmes, launched in the second semester of the academic year 2020-2021, by coordinating one of the two programmes and two sectors within them, and by offering ten courses taught by 45 UTCB teaching staff members, with the intervention of external experts in some cases. The courses are attached to the curriculum of the English section of the Faculty of Engineering in Foreign Languages.

The minor courses managed by UTCB are: Sustainable Transport Engineering for Coastal Region Energy from Renewable Resources I (wind, waves, tidal, currents), Energy from Renewable Resources II (solar, hydrothermal, biomass, osmotic, OTEC), Built Facilities for Aquaculture, Performant built facilities for sustainable tourism, Natural hazards in coastal regions, Sustainable Built Environment Effects of Climate Changes, Geographic Information Systems and Remote Sensing Pollution / Depollution (water, air, soil).

The evaluation questionnaires administered to the students participating in the Minor programmes showed their appreciation of the teaching and interaction with the teaching staff, as well as the quality of these programmes. Within the programmes, a professional Minor course - Introduction to Underwater Archaeology, organized by UNIZD, was piloted - four UTCB students participated in a physical format.

The other joint study programme offered within the EU-CONEXUS community is the Joint Master programme Marine Biotechnology (JMPMB), successfully accredited by the European Approach for Joint Programmes. It is one of the first three joint programmes created by European University alliances and the only one with Erasmus Mundus funding. The four-semester study cycle started in September 2022 with 25 students of 18 nationalities.

This programme was created as a transnationally integrated multidisciplinary one based on joint enrolment and administration with embedded personalised curricula, innovative pedagogies, high insertion of professionals in the teaching process, hands-on training, joint Diploma, etc. Its implementation helped to identify a series of barriers to transnational collaboration and to overcome them by impacting national and international decisions towards automatic recognition, European Degree, quality assurance, and other tools.

UTCB is involved in this study programme by intervening in two courses, and coordinating two research projects as well as dissertations if students choose a UTCB coordinator.

A direct follow-up are the numerous expressions of interest from the staff community to create more joint Master offers with EU-CONEXUS partners. The successful implementation of this joint Master program led to the increased interest of the EU-CONEXUS community in creating other joint MA programmes, such as an MA in Digital Humanities, which has already won an Erasmus Mundus Design Measures funding and an MA in Fisheries and Aquaculture Business Management, which is supported by the Greek Ministry of Development and Investments and co-funded by the European Union under the Greek Operational Program Human Resources Development, Education and Lifelong Learning.

A Charter and Code of Conduct for Automatic Recognition will serve as a basis for further deployment of the EU-CONEXUS joint educational offers and for easier mobility of credits, thus facilitating personalized and flexible curricula. The joint pressure put on Member States for legal changes facilitating the creation and implementation of joint study programmes by the European University Initiative, actively supported by EU-CONEXUS, has already led to modifications of the respective laws in Romania, Croatia, Greece, and Spain.

In the Ph.D. area, the alliance worked on cataloguing Ph.D. topics on the EU-CONEXUS theme, the development of a long-term joint Ph.D. programme, the initiation of co-supervised Ph.D. programmes between the universities in the alliance, and the organisation of a summer school for Ph.D. students from July to August 2021. The first

EU-CONEXUS Ph.D. Summer School took place in July in Zadar, where UTCB had three students and two teaching faculty members.

2. Student academic mobility

The joint programmes opened the path to new academic mobility possibilities, incoming and outgoing, for both students and teachers. Based on the data obtained from the International Relations Department of UTCB, we have managed to summarize the dynamics of students' incoming and outgoing mobility for the period 2020 – 2023.

Table 1. Dynamics of access to minor courses between 2020 and 2023

SEMESTER	UNIVERSITY								RATE OF	
	AUA	KU	LRUniv	SETU	UCV	UNIZD	UROS	UTCB	TOTAL	GRADUATION
Spring 2020 - 2021	252	29	35	-	24	7	-	96	443	104 (23.4%)
Fall 2021 - 2022	151	19	19	-	25	9	9	75	307	179 (58%)
Spring 2021 - 2022	151	24	27	8	34	14	20	64	342	207 (60.5%)
Fall 2022 - 2023	40	13	21	-	24	3	22	43	166	90 (54.2%)
Spring 2022 - 2023	75	19	51	-	16	13	38	57	269	179 (66.5%)
Total	669	104	153	8	123	46	89	335	1527	756 (49.5%)

The data in Table 1 shows an overall fluctuation in the dynamics of accessing the courses offered by the two Minor programmes developed within EU-CONEXUS. The highest number of applications was at the moment of its launch, in the Spring semester of 2020 – 2021, when 443 students applied. The lowest number of applications was 166 and was registered in the Fall semester of 2022 – 2023. From 1527 applications, 767 were for the Minor programme *Blue Economy and Growth* and 760 for the Minor programme *Costal Development and Marine Sustainable Tourism*, which showed the attractiveness of both Minor programmes among the students.

We can see that, considering the total number of applications over the five semesters, UTCB is the second most active member within EU-CONEXUS in terms of outgoing student academic mobility, with 335 applications, following the Agricultural University of Athens, which had by far the largest number of applicants, 669.

However, the rate of graduation is a little less than 50%, although we can observe that the rate of graduation has generally followed an ascending trend, from 23.4% to

66.5%, despite the fact that the number of applications decreased. This can suggest that the programme managed to acquire some coherence from both an administrative and academic point of view, facilitating the access to courses and consolidating the importance of these Minor programmes to the overall economy of the BA programme.

Table 2. Dynamics of graduation rate of Minor programmes between 2020 and 2023

SEMESTER	TOTAL	RATE OF	DROP-OUT	FAILED	N/A	
SEMESTER	IUIAL	GRADUATION	DRUP-UU1	FAILED		
Spring 2020 - 2021	443	104 (23.4%)	82	5	255	
Fall 2021 - 2022	307	179 (58%)	114	13	1	
Spring 2021 - 2022	342	207 (60,5%)	128	7	0	
Fall 2022 - 2023	166	90 (54.2%)	44	3	29	
Spring 2022 - 2023	269	179 (66.5%)	58	22	13	
Total	1527	756 (49.5%)	426 (27.8%)	50 (3.27%)	298 (19.5%)	

As data in Table 2 shows, although the graduation rate has seen an overall increase over the years, the rate is still under 50%. The data suggests that the biggest issue is the tendency among the students to drop out somewhere along the course and, even if it decreased over the last two semesters, the overall rate is 27.8%. An encouraging aspect is the rate of failure among those students who went through the entire programme, which is a little more than 3%. For a rate of 19.5% of the applicants there was no data available regarding their progress within the programme.

Equally important from point of view of internationalisation is the number of incoming student mobilities. According to the data received from the International Relations Department of UTCB, in the period 2020 – 2023, UTCB was the host university that received the highest number of applications, 415, as shown in Table 3.

Table 3. Situation of applications/host institution within EU-CONEXUS

INSTITUTION	AUA	KU	LRU	UCV	UNIZD	UROS	UTCB
NUMBER OF	206	160	193	227	306	20	415
APPLICANTS:	200	100	175	227	300	20	113

It is important to analyse this number of applications at the UTCB level so that we can draw conclusions regarding the impact on internationalization at the institutional level. Results are presented in Table 4:

Table 4. Dynamics of access to minor courses offered by UTCB between 2020 and 2023

		Ŋ	EAR C	F STU	DY			STUDY			
ACADEMIC YEAR	1	2	3	4	5	N/A /6	TOTAL	Blue economy and growth	Costal development and maritime sustainable tourism	RATE OF GRADUAT ION	
2020 - 2021	25	61	43	14	57	0	200	76	124	52 (25%)	
2021 - 2022	7	25	18	12	19	30	111	37	74	59 (53.15%)	
2022-2023	10	38	29	11	15	1	104	32	72	72 (69.23%)	

Analysing the information in Table 4 we can observe a constant decrease in the number of applicants, from 200 to 104. However, the rate of graduation has increased significantly and constantly, from 25% to 69.23%. Another important observation is that, if at the EU-CONEXUS level, both Minor programmes have more or less the same number of applications, when it comes to the courses offered by UTCB accessed by students from other partner universities, there is a clear and constant interest in the Minor programme *Costal development and maritime sustainable tourism*. Compared to the overall dynamic at the EU-CONEXUS level, we can point out that the number of applications and the rate of graduation follow the overall trend.

3. Joint Research projects

Progress has also been made in the field of research, with the implementation of the EU-CONEXUS Research for Society (RFS) project, which aims at the institutional transformation of all partner universities in order to create favourable conditions for the development of an internationally challenging and competitive multidisciplinary research and innovation area based on a transnational inter-university campus.

The establishment of the EU-CONEXUS Joint Research Area was hindered by initial barriers to mobility, but gained momentum through meetings, lab visits and conferences/workshops. Summer schools for Ph.D. students were also successfully

implemented and helped to raise awareness among young researchers and supervisors about EU-CONEXUS and opportunities for researchers.

Another successful outcome of the intensified cooperation of EU-CONEXUS researchers is the submission of 11 joint research projects. Research cooperation has significantly intensified thanks to the first face-to-face scientific workshop in June 2022. This meeting also provided an impetus for the cooperation and structuring of Joint Research Institutes (JRI), which are the main fora for the exchange of ideas and the development of joint research.

EU-CONEXUS Plus will further support this structuring and integration. Equally important is the top funding provided by H2020 (EU-CONEXUS Research for Society), through which institutional harmonization and transformation in research are taking place and which will attract more researchers into the activities of the Alliance. In the pursuit of excellence, EU-CONEXUS research laboratories have continued to receive accreditation certificates. During the project period, one certificate was issued to AUA and three more certificates for UCV, KU, and UTCB are pending approval. The best practices identified through these pilot accreditations will continue into the full dissemination phase.

A scientific mapping carried out in the first phase allowed a mutual knowledge of research facilities. This mapping has been integrated into the research portal and each researcher can identify potential collaborators through this information system.

The mobilization of common research interests also within the JRI by funding project development and organizing research hours, funding research mobility, organizing scientific conferences and workshops has led to the submission of 11 joint research projects involving more than 60 researchers from all partner institutions. So far, two projects have been accepted for funding (H2020-SwafS proposal and COST action).

The Alliance has also been organizing a series of scientific workshops/conferences and research mobilizations which have proved to be very useful in creating a fertile ground for further cooperation and development of the JRI. As a result of these activities, new project proposals such as EIT-HEI, MSCA Doctoral Networks, and COST Action are under preparation/in progress.

As far as the development of UTCB's research dimension is concerned, it must be stressed that, through the Joint Research Package (WP4), a database of research units in the partner universities has been established. In this package, eight working groups have been set up and UTCB is coordinating working group 7 – the Coastal Engineering Institute. It is worth noting that UTCB took the initiative to create a database of project proposals, coming up with a package of 12 concrete proposals. As a result of the participation of UTCB representatives in the respective work packages, information on relevant calls was disseminated, support materials for laboratories were developed on the harmonization of procedures, data for the completion of the research platform were collected and submitted, and the Project Development Fund call was disseminated.

An important activity in this area is the submission of joint project applications by consortium partners. The first winning project is EU-CONEXUS Research for Society, a link on the Horizon 2020 funding line dedicated to European Universities. The aim of the project is to support research in the universities of the alliance and to develop a joint multidisciplinary research and innovation environment on Smart Coastal Urban Sustainability.

The EU-CONEXUS Research for Society project has developed public policy documents, development guidelines and exchange of best practices for research in the alliance and at the European level on topics such as open and participatory science, innovation, integrity, gender equality, etc. Three UTCB representatives were involved in the Young Researcher Skills Training Programme and the first online conference was organised; 11 UTCB representatives participated in the first physical alliance conference on Perspectives in Smart Urban Coastal Sustainability Research and six UTCB researchers benefited separately from Research for Mobility grants from the main project; a training for laboratory accreditation was financially supported by the alliance for 20 UTCB participants representing UTCB research facilities; EENVIRO involved three papers, two keynote speakers and a workshop from the EU-CONEXUS alliance partners (LRUniv, AUA and KU); three UTCB academics participated in La Rochelle in the Teaching in Multicultural Environment training and in the Virtual Café online editions, and the whole UTCB community of academics was invited; 13 Job-Shadowings were organised for UTCB administrative staff within the alliance partners.

The main results of interest for UTCB within EU-CONEXUS in 2023 were:

- Winning the Horizon project EU-CONEXUS ENABLES;
- "Promoting excellence through innovative eco-systems!" under the coordination
 of UTCB and Professor Ilinca Năstase, the first project funded by the Horizon
 programme won by UTCB as coordinator. The budget was about five million Euros
 for all the ten partners;
- Winning the project "Building Student Identity for European Universities Alliance",
 coordinated by LRUniv and funded by the French ERASMUS+ Agency.

4. International and intercultural campus

Cultural activities have also been organised over the three years to promote European culture and languages. Intercultural exchanges are particularly important because, by getting to know our partners, we can ensure successful cooperation even at times when opinions differ. Due to the pandemic, a good part of these exchanges was organized online, but with the return to normal academic activity, these exchanges have been carried out with physical presence. Summer and winter schools were also organised.

In the area of social and cultural activities, the first EU-CONEXUS virtual race was organized with 419 runners participating.

At the EU-CONEXUS Cultural Festival in Klaipeda, UTCB was represented by 12 students, where they prepared a play written by them and sang songs known in the partner universities. At the University Sport Games, the EU-CONEXUS basketball team had four UTCB students.

The second edition of the EU-CONEXUS Cultural Festival was organized by UTCB within ConstructFest, gathering 150 participants from the alliance, and involving the Student Culture House, the Artists' Nest, artistic moments by UTCB students and ASCB. Also during ConstructFEST, there was a presentation of the academic offer of the alliance and professional development and orientation sessions in English for EU-CONEXUS students.

The first EU-CONEXUS social entrepreneurship programme was also coordinated by UTCB, in which 20 students from the alliance participated in learning sessions, external mentoring (from Romania Climatosfera, Act for Tomorrow, Ateliere senza

Frontiere, Red Cross, EcoVision) and proposed plans for the development of social startups. Six winners went on international mobilities in the EU-CONEXUS countries.

UTCB also participated in Portathon, Lithuania with four students and one mentor, and ranked at 6th place out of 16 teams with the proposal "Automatic Application for Logistic Incidents and Predictive Threats".

The EU-CONEXUS Career Center on JobTeaser coordinated by UTCB was developed with 427 students and alumni registered from the alliance, and 80 job and internship offers in EU-CONEXUS countries were posted by member universities. UTCB also coordinated the EU-CONEXUS Career Forum online with jobs/internships in the IT field, 45 students from the alliance participated and 8 companies from different countries were present.

The second edition of the EU-CONEXUS Summer School for EU-CONEXUS Ph.D. students on Open Science took place in Valencia, with six UTCB students and two facilitators. In the Student Civic Engagement project of the alliance four students and four UTCB teachers and researchers participated in training on student civic engagement in Klaipeda and Valencia and a debate with UTCB students was organised in Sinaia.

EU-CONEXUS Sports Games in Zadar had six UTCB students in the EU-CONEXUS basketball teams, winning the 2^{nd} female and 4^{th} male place in the international competition. EU-CONEXUS Final Sports Games in Zaton where traditional sports games were organized counted 20 UTCB students ranking 2^{nd} place in the music culture competition.

Discussions and conclusions

Going back to the definition of internationalization quoted at the beginning of the article, we can see that the European university is perhaps the most successful element in accelerating the internationalization process at the level of each higher education institution.

Different from the status of a separate entity, the membership of a university in a European consortium gives an additional push towards system-level reforms in the attempt to harmonise different systems and institutional climates.

We believe that European universities have the potential to accelerate the internationalisation process of the participating educational institutions by what they propose. On the other hand, a larger number of educational institutions from the same country involved in this type of cooperation could also accelerate the internationalisation of higher education at national level. Last, but not least, such European universities, through cooperation between their members, have a greater chance of helping to implement European Union policies at the level of Member States, from an economic, cultural and academic point of view.

For UTCB, EU-CONEXUS represents an opportunity to take the internationalization process to another level by increasing efforts to reform the curriculum, to improve the quality of research and to form a modern, international and multicultural campus that responds to the needs of both the Romanian society and the European community.

On the other hand, there are many challenges that this alliance has faced and for which solutions are still being sought. These are more of a legislative and administrative nature, and concern different requirements for the accreditation and quality assurance of joint programmes, different academic calendars and grading, different admission process. Restrictions in the language of instruction in higher education courses are still an obstacle to cooperation between partners, as well as the different institutional climates. There are also financial obstacles, such as different funding systems and tuition fees.

References

Arum, S., Van de Water, J. (1992). The need for a definition of International Education in US Universities. In C.B. Klasek (Ed), *Bridges to the Future: strategies for internationalizing higher education*, Carbondale: Association of International Education Administrators, 191 – 203.

- Barbu, O. (2021). *O abordare culturală a procesului de internaționalizare a învățământului superior românesc*. Editura Universității din București, București.
- Barroso, J. M. (2006). *Speech: Europe: art or science? Opening Address 164th Dies Celebration of Delft University of Technology*, 13th January, available at https://www.timeshighereducation.com/news/mr-jos-manuel-barroso-president-of-the-european-commission-europe-art-or-science-dies-celebration-opening-address-delft-university-of-technology/200821.article, accessed on 15.03.2023.
- Camariano-Cioran, A. (1971). *Academiile domneșsti din București și Iași*, Editura Academiei Republicii Socialiste România, București.
- Corbett, A. (2005). Universities and the Europe of Knowledge: Ideas, institutions and policy entrepreneurship in European Union Higher Education Policy, 1955–2005.

 Basingstoke: Palgrave
- De Wit, H. (1993). On the Definition of International Education. In *European Association* for International Education Newsletter, 11, June, 7 10.
- EU Commission (2017a). Strengthening European Identity through Education and Culture: The European Commission's contribution to the Leaders' meeting in Gothenburg, 17 November, available at https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52017DC0673, accessed on 08.03.2023.
- EU Commission (2020). Selected European Universities Second call 2020, available at https://education.ec.europa.eu/education-levels/higher-education/european-universities-initiative, accessed on 05.03.2023.
- EU Commission (2022). Selected European Universities Second call 2European Universities Erasmus+ call 2022: Results, available at https://education.ec.europa.eu/document/european-universities-erasmus-call-2022- results?, accessed on 05.03.2023.
- EU-CONEXUS Plus Progress report M6-M12 (01.05.2023 31.10.2023), internal document provided by the International Relations Department of UTCB
- $\label{eq:conexus} \mbox{EU-CONEXUS Final Report (01.09.2019-31.10.2022), internal document provided by the} \\ \mbox{International Relations Department of UTCB}$

- Gunn, A. (2020). The European Universities Initiative: A study of Allience Formetion in Higher Education. In A. Curaj et al. (eds). European Higher Education Area: Challenges for a New Decade, 13 30.
- Knight, J., de Wit, H. (1995). Strategies for Internationalization of Higher Education: historical and conceptual perspectives. In Hans de Wit (Ed), *Strategies for Internationalization of Higher Education: a comparative study of Australia, Canada, Europe and the United States of America*, Amsterdam, European Association for International Education, 5 33.
- Knight, J. (1997). Internationalization of Higher Education: A Conceptual Framework. In Knight, J. and De Wit, H. (Eds). *Internationalization of Higher Education in Asia* Pacific Countries, European Association for International Education Publications, Amsterdam.
- Knight, J. (1999). Issues and trends in internationalization: A comparative perspective. In Sheryl Bond, Jean-Pierre Lemasson (Eds.), *A new world of knowledge: Canadian universities and globalization*. International Development Research Centre, Ottawa, 201-238.
- Knight, J. (2004). Internationalization Remodeled: Definition, Approaches and Rationales. In *Journal of Studies in International Education*, vol.8, no.1, Spring, 5 31.
- Knight, J. (2012). Student Mobility and Internationalization: trends and tribulations in research. In *Comparative and International Education*, vol. 7, no.1, 20 33.
- Lehmann, L. (2019). The controversy surrounding the idea of a European supranational university. In van Heumen, L., & Roos, M. (Eds.). *The Informal Construction of Europe*. Abingdon: Routledge.
- Meller, P. (2006) Barroso hopeful for slimmer, cheaper European Institute of Technology. *Science|Business Network*, 17th October, available at https://sciencebusiness.net/news/73129/Barroso-hopeful-for-slimmer%2C-cheaper-European-Institute-of-Technology, accessed on 26.02.2023.
- Meller, P., Hudson, R. L. and Lau, T. (2006) Barroso boost for European Institute of Technology. *Science/Business Network*, 1st March, available at https://sciencebusiness.net/news/73914/Barroso-boost-for-European-Institute-of- Technology, accessed on 26.02.2023.

- Moodie, G. (2010). Associations of universities. In Peterson, P., Baker E., and McGaw, B. (Eds.) *International Encyclopedia of Education*, 3rd edition, (pp. 485–490). Oxford: Elsevier.
- Orr, E., Unangst, L., & de Wit, H. (2019). The long, problematic road towards a European University. University World News, (546) 6th April., available at https://www.universityworldnews.com/post.php? story=20190404102239861, accessed on 26.02.2023.
- Palayret, J. M. (1996). A University for Europe: Prehistory of the European University Institute in Florence: (1948–1976), with Schreurs, R., Translated from French by Iain L. Fraser. Rome: Italian Presidency of the European Union. https://cadmus.eui.eu/handle/1814/36018
- Qiang, Z. (2003). Internationalization of Higher Education: Towards a conceptual framework. In *Policy Futures in Education*, vol. I, no. 2, 248 270.
- Ruegg, W. (2011). *A History of the University in Europe*, Cambridge University Press, Cambridge.
- Van der Wende, M. (1997). Missing links: the relationship between national policies for internationalization and those for higher education in general. In T. Kalvemark and M. Van der Wende (Eds), National Policies for the Internationalization of Higher Education In Europe, Sockholm: National Agency for Higher Education, 10 41.
- Verger, J. (1999). *Culture, enseignement et société en Occident aux XIIème et XIIIème siècles,*Presses universitaires de Rennes, Rennes.

Webography

- Consortium Agreement from 20.09.2019, available at https://www.eu-conexus.eu/wp-content/uploads/2020/07/EUCONEXUS-CONSORTIUM-AGREEMENT.pdf
 https://www.eu-conexus.eu/wp-content/uploads/2020/07/EUCONEXUS-CONSORTIUM-AGREEMENT.pdf,accessed on April 15, 2024
- Consortium Agreement (EU-CONEXUS PLUS), available at https://www.eu-conexus.eu/wp-content/uploads/2024/01/FINAL-VERSION-CONSORTIUM-AGREEMENT.pdf, accessed on April 15, 2024

European Commission Website:https://education.ec.europa.eu/education-levels/higher-education/european-universities-initiative

European University Association Website: https://eua.eu/

EU-CONEXUS Website: https://www.eu-conexus.eu/ro/

Grant Agreement for action with multiple beneficiaries under ERASMUS+:European Universities no. 612599/June 2019, available at https://www.eu-conexus.eu/wp-content/uploads/2020/07/EUCONEXUS-CONSORTIUM-AGREEMENT.pdf https://www.eu-conexus.eu/wp-content/uploads/2020/07/EUCONEXUS-CONSORTIUM-AGREEMENT.pdf, accessed on April 15, 2024

International Association of Universities Website: https://www.iau-aiu.net/

Ministry of Education Website: https://www.edu.ro/procesul-bologna-0

Technical University of Civil Engineering Website: https://utcb.ro/

- UTCB Progress report for 2019, available at https://utcb.ro/wp-content/uploads/2020/04/Raport-stare-UTCB-2019.pdf, accessed on April 12, 2024
- UTCB Progress report for 2020, available at https://utcb.ro/wp-content/uploads/2021/04/Raport-privind-starea-UTCB-in-2020.pdf, accessed on April 12, 2024
- UTCB Progress report for 2021, available at https://utcb.ro/wp-content/uploads/2022/04/Raport-Stare-UTCB-2021.pdf, accessed on April 12, 2024
- UTCB Progress report for 2022, available at https://utcb.ro/wp-content/uploads/2023/04/Raport-stare-UTCB-2022.pdf, accessed on April 12, 2024
- UTCB Progress report for 2023, available at https://utcb.ro/wp-content/uploads/2024/04/Raport-stare-UTCB-2023-2.pdf, accessed on April 12, 2024