Micro-collaboration as a new pillar in the internationalisation of higher education teaching

A White paper by the E+ Strategic Partnership DIONE

www.dione-edu.eu

Content

Internationalisation

In today's era of global knowledge and technology, interconnected networks and global awareness, the internationalisation of higher education has taken an important place. One of the most important goals in tertiary education is to provide the most relevant education for students who will be citizens as well as scientists and entrepreneurs of the future. Yet, internationalisation is not an end in itself but a means to shape tomorrow's society, to train competences that we assume will be relevant in the future.

The specific purposes and goals associated with internationalisation may vary. For some, internationalisation of universities is a way to increase visibility, revenue or student numbers and quality. For others, internationalisation is primarily about giving students the skills they need for their future working lives. Others emphasise that the goal of internationalisation must be the strengthening of intercultural competence and the development of global citizens. The focus here is thus on the formation of a critical cosmopolitanism that emphasises the connectedness of all peoples and communities.

There has been a growing awareness in recent decades that internationalisation cannot only involve physical mobility and face-to-face contact. This awareness is due to a number of different personal, logistical and financial factors. Rather, higher education institutions are called upon to develop a broader and more comprehensive internationalisation strategy that not only encompasses student mobility, but also considers competences and attitudes, forms of communication and hospitality, as well as different internationalisation formats at various administrative levels.

The challenge in this field grows even more when one considers that the European Union is on the path of deep integration and that it is therefore desirable that local and national borders become blurred and that the citizens of the European Union live in constant contact with each other. A vision would be for the term *international* to disappear in intra-European cooperation - and for all cooperation within the European Union to be understood only as domestic cooperation. Internationalisation must be a way for the university to meet the needs of all students and staff in their everyday learning and working lives.

The aim of this paper is to propose a new format for just such a purpose and to outline how it can be used in university teaching.

Mobility

The goal of internationalising university teaching has received a major setback in recent years due to the Corona pandemic. Physical mobilities were no longer possible for obvious reasons. Likewise, face-to-face events at universities were cancelled. Students or teachers on mobility thus no longer had the opportunity to establish contacts on site. At the same time, the economic and other restrictions on physical mobility have led to a strong interest in expanding the field of international education on campus and in acquiring intercultural competences within curricula and participating in

international learning experiences. Also in the long term, it is obvious that we cannot fully rely on physical student mobility in the face of the climate crisis.

Internationalisation

This contrasts with the efforts of virtually all stakeholders in higher education to significantly increase the level of internationalisation. The European Union has set itself the target of achieving 20% mobility by 2020, but this has not been achieved. According to the European Commission's Education and Training Monitor data from 2020, only 13.5% of all higher education graduates in the European Union have participated in international mobility. Therefore, despite the popularity of Erasmus+ and other new strategies for internationalisation, the desire for a strong increase in student mobility remains unfulfilled.

This circumstance has certainly contributed to a broader conceptualisation of internationalisation. The result is that strategy papers now frequently refer to internationalisation experiences - which can now also mean virtual exchanges, short-term mobilities or blended mobilities. But the demands have not diminished. For example, the strategy concept of the European higher education alliance Circle U. stipulates that 50% of all students receive such an internationalisation experience in the course of their studies.

The European Commission's documents on higher education now no longer speak of the goal, often mentioned in the 2010s, of 20% of students participating in exchange mobilities. Rather, the new Erasmus programme is developing a much broader agenda that considers inclusion, diversity, the digital transformation, the fight against man-made climate change and participation in democratic life. Broad definitions of internationalisation also include a wide range of dimensions in this goal. Compare, for example, De Wit et al's (2015: 29) definition of internationalisation as "the intentional process of integrating an international, intercultural, or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff and to make a meaningful contribution to society". This comprehensive approach can no longer be achieved with physical mobility alone (O'Dowd 2022: 3). Formats must therefore be instrumentalised that enable this comprehensive embedding of internationalisation in all areas of university education and research.

Call for New ideas

The European Commission recognised this problem many years before the Corona pandemic. Accordingly, calls to find new solutions and alternatives to the issue of internationalisation that go beyond previous approaches are not new. Already in 2013, the Commission proposed that the vast majority of non-mobile learners should also have the opportunity to acquire international competences needed in a globalised world (European Higher Education in the World: 6).

Existing Internationalisation Formats

The internationalisation of higher education is a broad field with a myriad of existing concepts, formats and strategies. The field is also very well researched. There are some major studies and other publications on important aspects of internationalisation such as student mobility, virtual exchange, transnational research, branch campuses and the like (Salinas de Dosch 2021: 3).

Internationalisation efforts in higher education have often been divided according to Jane Knight's binary division into "Internationalisation Abroad" and "Internationalisation at Home". On the one hand, this refers to activities that involve cross-border education, i.e. student mobility, teacher mobility, joint degrees, and Strategic International Partnerships. The term Internationalisation at Home, on the other hand, refers to elements in the curriculum that help students acquire intercultural competences as part of their degree programme without leaving their home campus.

Furthermore, in recent years, increasing technological possibilities have also created new opportunities and forms of internationalisation. Students can stay at home and still participate digitally in programmes abroad. This is why some use the term "internationalisation at a distance" here. Let's take a closer look at some of the existing formats:

Internationalisation abroad

Strategic International Networks

Strategic International Networks play an important role in the internationalisation of higher education teaching. Such networks enable the exchange of knowledge, experience and resources between higher education institutions on a global level - even with partners with whom there is otherwise less contact. By working together in such networks, higher education instiutions can benefit from the best practices of other institutions and increase mutual mobility rates. In addition, strategic international networks can help improve access to international cooperation channels and funding, which in turn can help increase the quality of teaching and research. Networks also serve to increase the visibility of individual higher education institutions.

Branch campuses

Branch campuses are higher education locations established by foreign universities in other countries or regions. These facilities allow universities to strengthen their presence abroad while providing their students with an international education and experience. Off-shore campuses can help increase access to international students and research opportunities, promote cultural diversity and global exchange, and enhance international competitiveness. However, offshore campuses also come with challenges,

such as cultural differences and logistical challenges, which need to be taken into account to ensure successful internationalisation of higher education teaching. History has shown that this can be a risky endeavour (Hénard 2012: 14).

Physical student mobility

Physical student mobility is the exchange of students between different higher education institutions and countries which contributes to the progress of studies at the home university without involving a full degree abroad. Student mobility, together with faculty mobility, plays such a conceptually prominent role in the internationalisation of higher education that it has become, in a sense, synonymous with internationalisation. Through physical mobility, students can improve their intercultural competences, get to know other academic approaches and improve their language skills. At the same time, student exchanges can help create international research and cooperation opportunities and promote cultural exchange between countries and universities.

Physical staff mobility

Mobility of teaching and administrative staff refers to shorter stays for teaching or training purposes. In terms of numbers, it cannot be compared with student mobility. Nevertheless, it enables internationalisation at home for teaching stays, even for students who cannot participate in physical mobility themselves. Teacher exchanges can also help to improve the quality of teaching by sharing their experiences and best practices, thus contributing to a broader and more global perspective on certain topics. Through physical mobility, teachers can also improve their intercultural competences, learn about other academic approaches, develop language skills and expand their international networks. Note: We are speaking here generally of staff mobility, since a broad approach to the internationalisation of higher education is of course not just about teachers, but about university staff of all kinds.

Dual and Joint Degrees

Dual degrees are joint programmes offered by two or more higher education institutions in different countries. They offer students the opportunity to obtain degrees from two different higher education institutions in a single programme. A joint degree programme is agreed upon by two institutions for which two diplomas are issued, one by each institution (Hénard 2012: 19). The advantages of such degrees are that they promote the international exchange of knowledge and experience and improve students' intercultural competences. Dual degrees can also help open up international career opportunities and provide graduates with a valuable global perspective. Consequently, the programmes are expected to attract highly motivated students and can therefore be made partially financially self-sustaining (Hénard 2012: 19) However, even though there are a number of funding programmes in this area and dual and joint degrees are high on the internationalisation agenda, they represent a major administrative and financial challenge for all involved.

Summer schools

Summer schools are short, intensive educational programmes that usually take place in the summer months and are aimed at students and graduates. Alternatively, winter schools are sometimes offered. Summer schools provide an opportunity for in-depth study in a particular subject area or topic and allow participants to share knowledge and experience with international students and faculty. For students, this is a short but intense period of physical mobility. For host institutions, summer schools offer an opportunity to present themselves internationally in a flexible format.

Excursions

In addition, there is also the format of the excursion, which is hardly ever mentioned in this context. But this too offers students a profound insight into other cultures and languages - albeit mostly not in a university environment. As a means of developing global citizens, however, international excursions in particular should not be underestimated.

Virtual Exchange

In addition to these internationalisation formats, which are based on physical mobility of students or teachers and which are each established in their own right in the higher education landscape and have been supported with corresponding funding programmes, a number of technology-supported virtual exchange formats have also developed in recent years or a few decades. However, it is highlighted that for many years the fields of internationalisation and e-learning were developed separately and there was little understanding of how to link students' international experiences to a HEI's digital teaching activities (Starke-Meyerring & Wilson 2008).

There is a multitude of terms in this field that do not always make it easy to find one's way around. In the last two decades, at least, the following terms can be found: Virtual Exchange (Helm 2016), telecollaboration (Belz 2002), Collaborative Online International Learning-COIL (Rubin 2016; Schultheis Moore & Simon 2015), Internet-mediated Intercultural Foreign Language Education (Belz & Thorne 2006), Online Intercultural Exchange (O'Dowd & Lewis 2016), International Virtual Academic Collaboration (DAAD 2021), Virtual International Cooperation (Dutch Ministry of Science Education and Culture 2022), Globally-Networked Learning Environments (Starke-Meyerring & Wilson 2008) and even etandem (O'Rourke 2007) or teletandem (Telles & Leone 2016).

We follow here the suggestion of (O'Dowd 2022: 11) and use the term Virtual Exchange as "an umbrella term which refers to the numerous online learning initiatives and methodologies which engage learners in sustained online collaborative learning and interaction with partners from different cultural backgrounds as part of their study programmes and under the guidance of teachers or trained facilitators". UNESCO (2022) uses the term Virtual Student Mobility in a very similar definition, namely as a "form of mobility that

uses information and communication technologies to facilitate cross-border and/or inter-institutional academic, cultural, and experiential exchanges and collaboration which may be credit-bearing or not for credit".

The following formats can be grouped under this, even if the transitions here are often less easy to define. We divide the formats according to who is "moving" virtually: Individual students, student groups or teachers.

Individual Virtual Mobility

This type of mobility includes a number of different possibilities. What they have in common is that individual students take part in activities organised by a university abroad. These can be entire seminars that have been opened up to exchange students as guests. This is also called online distance learning. But they can also be events that have been designed exclusively for visiting students. This category also includes virtual formats that serve to prepare for or follow up on physical activities. MOOCs are also essentially this kind of format. This format can be advantageous if students want to take teaching formats in a language that is not the language of instruction at their home university. The individual character of the course may or may not strengthen the social aspect, depending on how the course has organised the active integration of the students. In any case, individual virtual exchanges support the learning of cultural and pedagogical perspectives from other geographical locations (Mittelmeier 2021: 271).

Virtual Teaching

This format is not part of the systematics of (O'Dowd 2022: 11), possibly because it does not primarily focus on the students. Yet virtual teaching mobilities are certainly an important category among the virtual formats in terms of numbers. This format can occur in two forms: Either a teacher from abroad teaches a study group for an entire course. Or a teacher from abroad gives only a short guest lecture. In both cases, this offers students the opportunity to gain a new perspective on university teaching, the specific topic or even on cultural aspects. The format is, of course, in principle also open to non-teaching staff. It lends itself to the integration of colleagues from research or the non-academic sector.

Class Virtual Mobility

By far the most common configuration of VE in higher education is to bring together two or more groups from different countries in collaborative online projects designed by their teachers. This configuration of VE is the basis for models such as COIL, telecollaboration and virtual teams, although the length of collaboration may vary. The main features of this type of virtual exchange include the following: The exchange is organised and conducted by the respective teachers. The project objectives usually include a combination of subject-specific learning outcomes and a focus on aspects of intercultural learning. The assignments within the VEs are linked to the respective course content and the teachers guide the integration of the VE into the classroom. Students can receive part of their course assessment through the Virtual Exchange.

Of course, VEs can vary in length and intensity from cooperation to cooperation: The participating groups may have an identical curriculum and work together constantly during their courses, or the classes may meet sporadically to discuss certain topics, for example.

Even if Sursoch still complained in 2016 that "the link between internationalisation and e-learning has not been made yet because internationalisation strategies are now clearly in the hands of the institutional leadership while e-learning innovations tend to be with the faculties and even with individual academic staff" (O'Dowd 2022: 4), the Corona pandemic has obviously changed a lot here very quickly. The only question is how sustainable this will be. Especially for the newly emerging European Higher Education Alliances, the consolidation of virtual exchange will be a litmus test.

In addition to physical and virtual exchange, there is also the format of blended mobility.

Blended Mobility

Blended mobility refers to a combination of physical and virtual mobility in the context of internationalisation of higher education teaching. It involves a mix of online learning and physical mobility, where students or teachers first participate virtually in an international collaboration and then travel physically to the partner institution in a later step. Blended mobility offers the advantage that students or teachers can participate in international activities despite time, financial or other constraints by participating online. However, physical mobility offers the advantage that participants can actually visit the host institution and country and improve intercultural competences.

As with physical and virtual mobility, a distinction can be made here between student mobility and teacher mobility. This means that teachers can also start a virtual course with a physical learning phase and continue teaching online for the rest of the semester. Blended mobility of students typically involves group exchanges, where often only one of the groups sets off while the other is the host.

In conclusion blended mobility aims to bring together the strengths of virtual and physical mobility. Due to the short periods of international travel, it is expected to offer international learning experiences to a wider range of students who would otherwise not be able to take part in traditional mobility programmes. It also aims to combine the potential benefits of VM and VE, (e.g. flexibility of learning times, development of digital skills) with the advantages of an intense period of cultural immersion.

Internationalisation at a Distance

The third category, Internationalisation at a Distance (IaD), complements existing concepts of internationalisation. The term was first coined by Ramanau (2016), though it can be defined more broadly as: All forms of cross-border education where students, their respective teachers and institutional services are separated by geographical distance and learn together supported by technology (Mittelmeier 2021: 269). For example, students may have access to different teaching styles, learning materials, learning activities and cultural approaches to education in IaD environments compared to learning in an institution within their home context (Mittelmeier 2021: 271).

Who is mobile?	Networks	Campuses	Stud. Mobility	Staff mobility	Degrees	Summer School	Excursions	IVM	Virtual Teaching	CVM	Blended	IaD
Individual Student	(√)	(√)	√			√		√				
Student group	(√)				√		√			√	√	
Staff	√	√		√		√	√		√	√	√	
None												√

Most formats address exactly one group - either individual students, or study groups and individual teachers. Only the Summer Schools, Class Virtual Mobility and Blended Mobilities usually involve both teachers and students.

Comparison of the internationalisation formats

The question with this multitude of internationalisation formats is, of course, which format has which characteristics and is suitable for which objectives. In order to do this, it is first useful to collect the characteristics that are generally considered relevant for the assessment of internationalisation efforts. Three groups of criteria can be identified: the first group relates to the organisation of the activities, the second group relates to the opportunities for individual students or teachers within these activities, and the third group relates to the social and environmental impact of the format.

Organisation					
	Costs	Time	Connection to programme	Registration	Flexibility
Networks	high	high	unclear	unclear	low
Campuses	high	high	no	necessary	low
Stud. Mobility	high	medium	possible	necessary	high
Staff mobility	medium	low	not relevant	not necessary	high
Degrees	high	high	no	necessary	medium
Summer School	medium	medium	no	necessary	high
Excursions	medium	medium	possible	not necessary	high
IVM	low	low	possible	necessary	high
Virtual Teaching	low	low	yes	not necessary	high
CVM	low	medium	yes	not necessary	high
Blended	medium	medium	possible	necessary	high
IaD	low	low	yes	not necessary	high

For the organisation of an exchange format, it is important, for example, what costs an activity involves and how much time it takes for organising it. It is also relevant whether the activity is linked to the existing study programmes at the respective university and is not just a purely supplementary programme. Related to this is the question of whether the activity requires a separate registration or application. The flexibility or accessibility for those in the university administration who implement the respective formats is also a key factor.

The various mobility formats differ significantly here. While physical exchange formats in particular are associated with very high costs, the opposite is usually true for their virtual equivalents. The sums budgeted in the European Union for Erasmus mobility programmes alone are enormous. The time requirements for planning and implementing the respective approaches correlate directly with the financial ones, as can be seen in the view below.

	Costs -	Costs +-	Costs +
Time -	IaD Virtual Teaching IVM		
Time +-	CVM Staff mobility	Excursions Blended Summer School	Stud. Mobility
Time +			Networks Campuses Degrees

The curricular integration of the various options varies from full integration into the home study programme in the formats IaD and CVM, but also virtual teaching, to a mostly complete separation of the offer from the regular study programmes of the home university in the case of summer schools, joint and dual degrees or external campuses. With some solutions, integration into the study programmes is certainly possible, but seems to have been implemented rather rarely so far. For example, some programmes integrate a semester abroad into their programme and thus enable fully recognised credit mobility for students. Most formats also have quite a lot of flexibility in terms of the partners with whom the formats can be implemented. Only international university networks, offshore campuses and joint degrees are less flexible, as they are designed for more long-term and institutional cooperation. However, this also means that the target group of these internationalisation formats - namely the teachers and students - are themselves also less flexible in their choice of partners if they want to utilise these opportunities on their behalf. For top-down planned university cooperation, this is a significant challenge.

The second dimension we look at focuses on the individual impact of the internationalisation formats for the participants. A first criterion is coverage, which the format allows. By this we mean the number of countries that participants can experience or the degree of internationalisation of a person that a particular model facilitates. A second criterion is whether social contact with members of other cultural groups actually occurs within the framework of a given exchange format. More specifically, the question of whether students actually learn together in the respective formats is also important. For people with a desire for personal internationalisation, it is also important

to know how flexibly the offers can be used and whether they are recognised as part of their studies or part of their work. For students, this includes the question of receiving credits.

Individuals					
	Coverage	Social contact	Credit	Joint learning	Flexibility
Networks	medium	possible		possible	low
Campuses	medium	possible	yes	possible	low
Stud. Mobility	low	high	yes	yes	high
Staff mobility	high	high		no	high
Degrees	low	high	yes	yes	low
Summer School	medium	medium	possible	yes	medium
Excursions	medium	medium	possible	possible	medium
IVM	high	low	possible	medium	high
Virtual Teaching	high	low		no	high
CVM	high	low	yes	medium	high
Blended	medium	medium	yes	medium	medium
IaD	high	no	yes	no	high

With respect to these criteria, we again see a wide range of possible characteristics. In principle, it can be stated that shorter formats also allow for a higher coverage. For example, staff mobility, individual virtual mobility, virtual teaching and the like allow a multitude of internationalisation experiences to be carried out with a wide variety of partners. Traditional physical student mobility, on the other hand, is relatively limited in scope simply because of the length of a regular degree programme. The possibility of establishing social contact, on the other hand, is inversely proportional. Physical student mobilities in particular certainly achieve the highest values here, while virtual exchange formats only allow for limited social contact.

The joint learning of students is not possible with exactly three formats. These are, on the one hand, the two types of mobility that revolve around teachers, i.e. staff mobility and virtual teaching, and, on the other hand, IaD. In the case of excursions, joint learning is possible if other student groups are also involved. International networks and offshore campuses can also integrate joint learning. This is also possible with online formats, even if the degree of actual interaction between students is certainly lower here due to virtual collaboration. Clearly advantageous here are formats such as physical

student mobility, joint degrees and also summer schools, whose goal is quite specifically to enable students from different countries to learn together.

	Flexibility +	Flexibility +-	Flexibility -
Joint Learning +	Stud. Mobility	Summer School	Degrees
Joint Learning +-	IVM CVM	Excursions Blended Mobility	Networks Branch Campuses
Joint Learning -	Staff mobility Virtual Teaching IaD		

For students, it is important that they also receive credits for this. This is possible, for example, in summer schools, excursions and international virtual formats, but the actual implementation is often rather diverse. Crediting, on the other hand, is normal in formats such as offshore campuses, physical student mobility or joint degrees and is also included in virtual group mobility, in blended mobilities and in IAD, since here the framework of the normal study programme is not left.

The flexibility for end-users, i.e. students and teachers, to choose a partner of their choice within the internationalisation format also differs between the different approaches. Flexibility is low for long-term formats such as international higher education networks, offshore campuses and joint degrees, as the choice of partner cannot be altered once it has been established. Student and teacher mobilities, on the other hand, are very flexible, as they allow the respective individuals to choose relatively freely from the usually very high number of partner universities. And of course, all digital formats are also extremely flexible when it comes to the choice of cooperation partners. Here, cooperation is possible within existing structures or networks, but is by no means limited by them. On a medium level are summer schools, excursions and blended mobility simply for the reason that their number is generally limited and therefore the individual participants also have only a limited choice.

As a third dimension, we look at the impact of the individual internationalisation formats with regard to three factors: Firstly, the aspect of internationalisation itself, i.e. the question of how many students and staff can be covered by the format in the first place. The second is the inclusivity of the formats, i.e. whether different groups of people with less privileged status can participate in them on an equal footing and in a self-determined manner. And finally, of course, it is also about the ecological consequences that the respective format entails.

When it comes to the question of the effectiveness of the internationalisation formats, we are primarily interested in whether large groups of students and staff can be reached with the respective format. The assessment we make is a mixture of the actual figures and the potential of the respective strategy. We estimate the effectiveness of formats such as offshore campuses, joint degrees, summer schools as well as excursions to be low, as they only address a small group of students in each case. With a further expansion of these formats and a broader offer, the massiveness could of course be improved. We see individual physical mobility and also individual virtual mobility at a medium level in terms of massiveness. In the case of student and teacher mobility, we have seen that the European Commission's plans of a rate of 20% could not be achieved, but have arrived at around 13% to date.

	Coverage +	Coverage +-	Coverage -
Contact +	Staff mobility		Stud. Mobility Degrees
Contact +-		Networks Branch Campuses Summer Schools Excursions Blended Mobility	
Contact -	IVM Virtual Teaching CVM IaD		

Virtual formats, on the other hand, have a very high outreach, at least potentially, as they can theoretically be offered in every university course and thus reach each and every person at the university. However, this reach is so far only a theoretical one, as the implementation of virtual exchange formats leaves much to be desired to date.

The inclusivity of the respective internationalisation formats actually depends very much on their implementation. Therefore, it is relatively difficult to make a clear judgement. Nevertheless, we estimate that especially physical mobility has relatively high hurdles for people with physical

impairments, with a difficult financial or social background or people in non-mainstream life situations. The same applies to the smaller formats, such as joint degrees, summer schools, excursions or blended mobility. However, it can be assumed here that an inclusive design is easier to achieve due to the formats being limited either in terms of time or in terms of the number of people involved. In contrast, we see a high potential for inclusion in virtual

formats, as they can actually take place as part of the normal course of study, at least in the majority of universities - and even more so after the wave of investments into the digital infrastructure of universities during the Corona Pandemic. This means that students generally find the inclusivity here that also characterises the university itself. However, it should not be concealed that virtual formats also have their difficulties in terms of inclusivity, be it in terms of physical impairments or financial - and thus equipment-related - handicaps.

Impact of internationalisation formats			
	Outreach	**Inclusiveness**	**Climate**
Networks	unclear		unclear
Campuses	low		unclear
Stud. Mobility	medium	low	medium
Staff mobility	medium	low	low
Degrees	low	medium	medium
Summer School	low	medium	medium
Excursions	low	medium	low
IVM	medium	medium	high
Virtual Teaching	high	high	high
CVM	high	high	high
Blended	low	medium	low
IaD	high	high	high

The ecological footprint of the internationalisation formats here primarily includes the consequences of travel activities, even though each learning activity naturally leaves its own specific ecological traces.

The criteria we use here are the number of people involved in the mobility and the period covered by the mobility. We recognise that mobilities of a physical nature, which are carried out in the context of excursions, blended mobility and teacher mobility, are often of a very short nature. The short-term nature and the integration of mobility into the normal study or work routine also often makes it difficult to switch to alternative, climate-friendly forms of travel (O'Dowd 2022: 19). Summer schools, on the other hand, also involve many participants, but due to the timing within the holidays and the comparatively longer duration of the programme, climate-friendly travel to and from the school is more feasible. The same applies to physical student mobility, which of course has the longest time horizon of these formats. The

virtual formats, on the other hand, do not have an ecological footprint through travel, but it must still be addressed here that digital resources and technologies also consume resources.

	Climate +	Climate +-	Climate -
Massive +	Virtual Teaching CVM IaD		
Massive +-	IVM	Stud. Mobility	Staff Mobility
Massive -		Joint Degrees Summer School	Blended Mobility Excursions

Why we should promote virtual exchange

The comparison of the different internationalisation formats was not intended to identify a champion. An all-encompassing internationalisation of higher education teaching can only work if the strengths of the different strategies are combined.

However, the comparison of the selected internationalisation formats in the three dimensions shows very well the potential of virtual approaches. Especially virtual group mobility, i.e. the virtual exchange between entire student groups, has very positive characteristics in different dimensions.

From an organisational point of view, the format combines the advantages that they can be carried out for the most part free of charge, that they can be very easily integrated into existing study programmes, do not require registration and allow a very high degree of flexibility for the organisers. Overall, the administrative effort for implementation is very low. The only challenge in this area is the time needed to prepare the virtual group mobility.

The format also combines a number of positive features for participants in virtual group mobility. For example, the theoretically unlimited choice of partners gives them the opportunity to gain a very wide range of different internationalisation experiences. The flexibility of the format for the participants is also very high. The format also makes it easy to combine international experience with the regular acquisition of credits. Shared learning, i.e. actual contact with students from other countries, is also achieved in this format. Of course, it should not be expected that the degree of shared learning would be comparable to physical mobilities. In fact, one can assume that the social contact created by virtual group mobility is rather low.

The virtual group mobility format achieves the highest values in terms of impact. This is because probably no other strategy for internationalising the university can achieve a similar reach. In terms of inclusiveness, too, very high values can be achieved, depending on the design of the teaching. And finally, the format is also climate-friendly, as travel is completely avoided.

Advantages and challenges of Virtual Group Mobility					
Organisation	Costs	Time	Connection to programme	Registration	Flexibility
	low	medium	yes	not necessary	high
Individuals	Coverage	Social contact	Credit	Joint learning	Flexibility
	high	low	yes	medium	high
Impact	Outreach	Inclusiveness	Climate		
	high	high	high		

As we can see, there is a high number of positive characteristics and only a small number of characteristics where other formats score better. The goal of an internationalisation strategy should therefore be, among other things, to support and further develop this format so that the three areas in which only medium scores are achieved can also be improved.

The direction in which support for this mobility format should proceed can also be seen if one looks at two other characteristics.

Who is organising (b) – and who is travelling (a)												
	Networks	Campuses	Stud. Mobility	Staff mobility	Degrees	Summer School	Excursions	IVM	Virtual Teaching	CVM	Blended	IaD
Student	a	a	a		a	a		a			a	
Staff	a			a		b	b+a	b	b+a	b+a	b+a	b+a
Department					b	b						
University	b	b	b	b		b						

In this table we have marked two different roles that the different status groups at the university have within the framework of the individual internationalisation formats. One is the role of the person who is responsible for the existence of this format (here marked as b = base). And secondly, there are those who participate in this format and have to become active in order to participate (a = actual).

We see that for most physical mobilities, the university is responsible for facilitating them in principle. The basis for these internationalisation formats are generally Inter-Institutional Agreements. In addition, individual mobilities are usually supported by the International Offices at university or faculty level. Summer schools, on the other hand, can be organised at different levels: There are those organised at university level as well as those run by individual departments. And individual teachers can also organise summer schools. In all these cases, those who have to choose to participate are at a

different level. Mostly, these are students who have to decide for physical mobilities, for joint or dual degrees or for participation in summer schools.

The situation is different with excursions, virtual teaching mobilities, virtual group mobilities and also with internationalisation at a distance. In these formats, it is usually the teacher who plans and organises the format itself and thus brings it to life in the first place. At the same time, however, it is also the teacher who decides to use this format in his or her teaching - while the students have predominantly no individual choice here.

With blended mobility, it is usually the case that the teachers also participate in both mobility phases, but the students can usually decide for themselves whether to participate in the physical mobility.

So we see the following picture when we compare the internationalisation formats from this perspective: the conventional internationalisation formats based on physical mobility usually create an interplay between university structures and the individual participants in the mobility. Smaller and especially virtual internationalisation formats, on the other hand, cannot rely on an established university support structure. Here, therefore, the teachers are both initiators and implementers - and this naturally puts them in a special situation, which is associated above all with increasing responsibility and a greater workload.

To support the virtual group mobility format, it is necessary to support teachers to minimise the workload in planning and preparing the exchange formats. It is also useful to provide tools, strategies and other solutions to support social contact between student groups and collaborative learning as much as possible.

Why we should downsize collaboration: Towards Micro-Collaboration

Virtual group mobility between student groups from different universities has, as we have seen, great potential to play an important role in the internationalisation of higher education teaching. This has not gone unnoticed by various actors in internationalisation, as well as in research. Thus, there are several recent publications on the topic of virtual exchange. One of the better-known formats in this area is the COIL format, which has been developed since 2004, especially at the State University of New York.

Since the main role in the organisation and implementation lies with the individual teachers, it is important to work out exactly what tasks await them. These tasks can be roughly divided into content-related and organisational tasks. The content-related tasks mainly comprise the definition and elaboration of the topic and the activities of the respective cooperation. The organisational tasks include the temporal, technical and practical implementation of the planned cooperation.

Of course, a collaboration starts with identifying a partner at another university and matching one's own teaching content and identifying suitable points of contact. The second part in particular presents teachers with a great challenge, as the content and organisational features of the respective courses cannot be separated. This begins with very basic time constraints. For example, the semester times are decisive for whether and how one can work together, just as the time zone in which one teaches, for example. But the question of the organisation of the curriculum is also a decisive component, even in the initial considerations of a possible cooperation. The question is whether and to what extent courses within a degree programme can be adapted to the requirements for international cooperation at all. In some higher education systems, such processes take several years; in others, a redesign of course content is possible with complete flexibility.

From the experience we have gained as project members in working together, in joint plans for courses, modules or programmes, it is apparent that in order to overcome this initial hurdle, it is above all important to reduce the concept of the format and, above all, its scope. For most teachers, it will not be an option to plan a full course in such a way that it is feasible to run it together with an international partner. For this reason, the very idea is often dismissed as far-fetched at the very outset.

The COIL format therefore works, for example, with short collaborations that can be carried out regularly for selected courses with fixed partners. But even if a special course architecture is of course an option in principle, it can certainly hardly develop a sufficient scale to decisively advance the internationalisation of higher education teaching. In addition, the flexibility of this solution is, naturally, somewhat limited. This is particularly noticeable when either the higher education system is organised in such a way that the

content of courses changes regularly, or when mobility or fluctuation among teachers is high.

Our approach is therefore first of all to downsize the very concept of the internationalisation of teaching. That means, that we need formats that are so small and flexible that they can be integrated into the lessons again and again without much effort. In addition, we need to work on making teachers realise that internationalisation does not only work in large and long-term formats, but that every cross-border intervention in the classroom, no matter how short, represents added value.

This is why we have developed the concept of micro-collaboation.

The term micro-collaboration is not entirely new. It was already mentioned in different contexts in the 2000s. For example, we have seen approaches where microcollaboration has been used to facilitate the design, development, implementation, and evaluation of high-quality learning materials between learning designers, education experts and learning (Cifuentes 2013: 383). The conclusion here was that without strong microcollaboration, the chances of developing a qualitative, interactive learning object are very low.

The term micro-collaboation can also be found, for example, in the development of SQA services and in other technology-oriented development strategies (Blooma 2013: 110).

We define micro-collaboration as small and non-intrusive learning formats that use existing overlaps between university courses to enable students to learn together across borders.

"Micro"

First of all, it is important to understand the term *micro* and to take it seriously. Micro collaborations are collaborations in higher education that are either limited in time or have a small impact on the normal day-today life of the university.

MICRO

Non intrusive:

No new courses

No need to be approved by administration

No major changes in course structure or content

No additional workload for students

Short collaborations include, for example, 1 to 5 weeks of teaching collaboration. This means that collaborations only occupy a small portion of the semester time. They are thus never a whole course, but always only parts of existing courses.

Collaborations with low interference refer to interactions that do not take place in class but bring students together outside of the classroom, e.g. in joint projects.

Importantly, both formats do not interfere with everyday university life. In microcollaborations, which take place in the classroom, both sides use topics or methods that are part of the curriculum regardless of the collaboration. Micro collaborations should also not disrupt the course structure and the way students actively learn. Tasks for students within the micro-collaborations, such as in student research projects, should also not go beyond the students' normal tasks within the respective courses.

"Collaboration"

The term collaboration, in turn, refers to actual working together and learning together. The goal of micro-cooperation is that students learn together. We are thus moving away from passive internationalisation at home to student-centred, activating internationalisation. Student involvement takes place through joint student activities. It is obvious that courses with research-based learning or learning through research are particularly suitable here. It is important that students actually come into contact with each other through virtual social activities and get to know each other. For teachers, the term collaboration likewise means that no onesided invitations or guest lectures are exchanged, but that active co-teaching is actually carried out and courses are planned and carried out together.

COLLABORATION

Co-teaching instead of guest lectures

Co-mentoring of projects

Co-creation of assignments

We are convinced that a truly broad, far-reaching acceptance of a comparable internationalisation approach can only be achieved if the corresponding events can actually be carried out with as little additional effort as possible. Therefore, we think it makes sense to first of all change the mindset of the decisive people - namely the teachers - with the help of some possible collaboration scenarios and real-life examples, so that they can actually recognise the opportunities for micro-collaborations.

Collaboration Scenarios

So, first of all, we have compiled and partly designed anew various scenarios that could be considered for such micro-collaborations. We will see below that these collaboration scenarios, as we call them, provide answers to some relevant questions or challenges faced by those who want to implement teaching collaborations across countries.

The different options differ in principle according to whether the micro-collaborations can be carried out in such a way that groups of students from different countries can learn together synchronously. We therefore distinguish between synchronous and asynchronous scenarios.

Synchronous scenarios

Synchronous micro-collaboration scenarios require finding a time during the week, during the course of the learning day, when both study groups have classes together. This can be achieved by having lessons at the same time, either by chance or planned. However, it is also possible that a cooperation partner shifts his or her lessons to the lesson time of the partner group for the time of the micro-collaboration. Another possibility is for both groups to find a joint additional slot for the time of the cooperation, which may also be outside the normal lecture time.

En-bloc

The simplest way to enable students to learn together is to have them collaborate virtually with students from another university for a certain period of time within an existing course. Since micro-collaborations are always short meetings, they only involve a few sessions of joint learning. In principle, it is sufficient for a very basic internationalisation experience to have a collaboration of only one week or one session. In our experience, however, it makes more sense to plan at least four weeks for the collaboration. This also gives the students the opportunity to get to know each other better and allows the teachers to build an appropriate getting-to-know-you phase into the micro-collaboration. It is the most flexible format, provided that the term times of the respective programmes more or less coincide. Such a short collaboration can be scheduled at the beginning of the semester, in the middle or at the end and offers space for the most diverse virtual forms of cooperation.
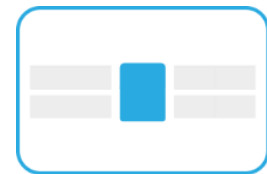
Hinge

This format corresponds in principle to the En Bloc scenario. The main difference comes from the time constraints imposed by the study organisations at the participating partner universities. This is because this scenario is intended for those situations in which the semester times differ greatly between the partner universities. For instance, we are faced with the case where the summer semester in Germany starts very late, in mid-April - at a time when in many countries the spring term is already slowly coming to an end. In this case, there are sometimes only three or four weeks available for collaboration.
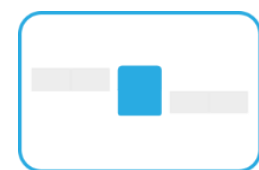
The real challenge here, however, is not the limited time overlap, but the fact that one study group is at the beginning of the course while the other has already completed a full course. In this scenario, cooperation has to be organised between a group that is just entering a certain topic and a group that already has advanced knowledge.

Therefore, the scenario is well suited for learning-by-teaching, but also joint project work in which the advanced group supports the counterpart.

Clamp

Sometimes it makes sense not to work together intensively for a short period of time, but only briefly at a longer time interval. For this purpose, the 'brace' scenario is available, which foresees that the micro-collaboration consists of two synchronous meetings. The first meeting is planned at the beginning of the semester and the second meeting at the end of the semester. For example, one can compare expectations and interests in knowledge at the beginning of the semester with the learning results and insights gained in the course of the semester and reflect on them together. This scenario assumes that the semester times are more or less the same. The scenario can also be used if one wants students to exchange about the topic or pedagogy without the teacher's supervision.

Short circuit

In some cases, it may make sense for the student groups involved to meet several times for a short period during the semester. Then the micro-collaboration can be extended over the whole semester, with three or four virtual meetings in between. This micro-collaboration can also be held with different partners. So, if the workload allows, a new partner can be involved in each meeting. Another possibility is for several partner study groups to conduct micro-collaboration with each other in turn.

Asynchronous scenarios

Of course, there may be many instances where it is not possible to find a time together to work synchronously with each other virtually. But even then, bringing students together for joint collaboration is quite possible.

Accompaniment

In this form of micro-collaboration, students from two or more universities worked together on a project for the entire semester, or the major part of the semester. The work they do is part of the normal seminar assignments. This format allows for a very intensive and long-term exchange, but only works well if the student groups are roughly the same size. With this format, it also makes sense to organise at least one round of getting to know each other together. Because completely without a prior introduction, it will be difficult for the students to organise themselves independently.

Peer guidance

In this scenario, one of the groups guides the other group of students through a particular topic or method. It is therefore learning by teaching for one group and peer to peer learning for the other. This scenario is useful, for example, when a more experienced study group meets a less experienced one. This can be the case, for example, when students from different study levels collaborate, such as Master students with Bachelor students. But it can also be the case when we have a hinge scenario where one group has already learned something during the semester and can teach it to the other group in this exchange.
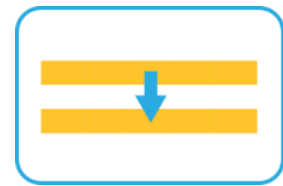
Mutual teaching

If the student groups are working on different topics in their respective courses, but the topics would be mutually enriching for each other, then this scenario comes into question. Here, both groups of students have the opportunity to experience learning through teaching by imparting to the other group in the micro-collaboration competences they have acquired either in the given course or in their studies. The teaching activity itself should then of course be recognised as part of the course credits.
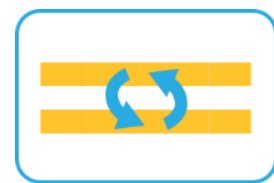
Divide and collaborate

It can sometimes happen that the two groups of students with whom a micro-collaboration is to be carried out do not completely fit together. This is the case, for example, if one group is very large and the other much smaller. But it can also be the case that a student group consists of different study programmes with diverging interests. Or it can simply be the case that only some of the students are interested in an internationalisation experience, for example for linguistic reasons. Then one scenario is to split up one of the groups and involve only part of the course group in the micro-collaboration. The exact involvement can follow one of the asynchronous scenarios described above. It is even possible that in courses where different project groups are working on different topics, micro-collaborations are carried out with different partners.

Divide and guide

This scenario is a combination of the Divide and Collaborate scenario and the Mutual Guidance scenario. In that case, some students may, for example, conduct a teaching session with another course as an assignment within the course, or accompany them in the elaboration of a project. Of course, this work should be recognised.
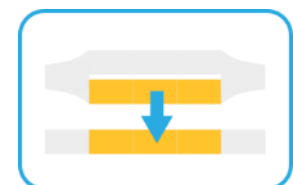
These are just a few scenarios that are conceivable in principle. The purpose of these scenarios is mainly to open teachers' eyes to the fact that international teaching collaborations are feasible with the help of technology in almost any constellation. It is important to understand that the implementation itself is the added value and does not need perfect planning

and realisation, especially if you are just discovering the concept of virtual exchange.

The concept of micro-collaboration is primarily based on finding formats that are as seamless as possible and feasible without extensive planning and costly development of planning skills and teaching tools. The idea is to propagate a completely open format that lives primarily through its idea. In this way, the concept differs significantly from the Coil concept, for which the monetisation of both the development of planning skills and networking itself is unfortunately a crucial element.

I believe that micro-collaboration is the most sustainable way to internationalize the curriculum and provide horizontal opportunities for all people to enjoy the benefits of internationalization. It removes social barriers, strengthens inclusiveness and takes care of the environment. In my teaching, micro-collaboration will be introduced progressively in order to make it a common practice in the medium to short term. At the same time, it will be presented to colleagues to capture their interest so that it becomes a generalized practice with exponential growth by snowballing.

Raúl Ruiz-Cecilia, Universidad de Granada

Planning a micro-collaboration

In our view, planning a micro-collaboration starts first and foremost with identifying overlaps between the courses offered by two potential partners. Therefore, the first step in planning a micro-collaboration is to analyse and compare in detail the environmental conditions of the teachers, students and courses involved. It is evident that certain basic conditions can and must always be assumed. This includes, first and foremost, the will to establish a virtual exchange in the first place. And in general, one will assume that the topics and the teaching philosophies of the teachers involved are also somehow compatible. However, the following points are also worth considering.

Asynchronicity

Time is a decisive factor in whether a virtual exchange can take place within the framework of a micro-collaboration. This concerns, on the one hand, the semester time, i.e. the time when a semester begins or ends, whether it is a trimester or a semester, etc. On the other hand, it refers to the specific teaching time. Since it is very unlikely that two courses happen to use the identical time slot, there are three possibilities here to find a way out for the short period of micro-collaboration. First, if it is possible, one can schedule the class time to coincide. Here it is sufficient if one partner can make this possible. Secondly, one student group could use the other group's time slot for the micro-collaboration time. Or, thirdly, one finds a common time to use for this short period. If none of these options is possible, asynchronous collaboration scenarios are a good option.

The curriculum

Teachers often have reservations about including new, international elements in their own courses, fearing a complicated and lengthy modification of the curriculum. However, the concept of micro-collaboration has been developed precisely for this purpose. It is about seeking opportunities for virtual exchange without changing anything in an existing curriculum that would have to be approved by the university's governing bodies. Moreover, micro-collaborations never refer to entire courses, but only to short sections.

Syllabus

In some cases, courses are taught according to predefined schedules. In this case, it may be useful to see if the partner can change something in its structure to enable collaboration. Alternatively, asynchronous formats can be used.

Language

Of course, it is crucial for a successful collaboration that the students can communicate with each other. Naturally, a common and often viable solution is to conduct the micro-collaboration in English. However, this assumes that the students have an appropriate level of competence and are comfortable enough in the language to want to communicate virtually with strangers.

Alternatively, other languages are of course possible, for example other common foreign languages such as French, Spanish or German. It is also an option to divide the student groups into linguistically compatible groups. Scenarios such as divide and collaborate also lend themselves here, especially if a significant part of a student group speaks the language of instruction of the partner.

Group size

For virtual exchange in micro-collaborations, the size of the student groups is a factor that should not be neglected. Smaller groups of a comparable size are best suited for this format. For large groups, on the other hand, it can be quite difficult to implement this format productively. Also, one has to be careful to take certain measures in case the student groups are of different sizes. In our experience, it is difficult when one group is both smaller in number and lags behind the other group in terms of experience. On the other hand, smaller groups with more experience in the chosen topic can also cope well as mentors with a larger counterpart.

Communication

It is crucial for successful micro-collaboration to find a communication channel. This should allow students to access common teaching materials or work on materials together. It should also allow for synchronous exchange and for students to reach each other outside of class. Experience shows that despite the fact that the two partners may use the same learning management system or the same communication platform, it is often difficult to actually unite the two courses.

Technology

Relevant for the configuration of micro-collaboration is also the available transmission technology as well as other technology that is relevant for the respective topic. Enabling virtual co-teaching, group discussions as well as discussions in smaller groups is rather difficult from a technical point of view. In our experience, the simplest solution is actually for all participants to log into a shared virtual room via their own end device. However, this presupposes that all participants have such end devices and also have a corresponding internet connection.

Study level

We believe that differences in study levels are not a principal obstacle to conducting a micro-collaboration. There are different ways to bring students from Bachelor, Master or PhD programmes together. It is also quite possible to build in small internationalisation experiences even at the very beginning of a degree programme.

Subject

The topic around which a micro-collaboration to be realised revolves is of course the be-all and end-all for both teachers and students. However, since the topics in the different scientific fields naturally behave quite differently and are compatible in different ways, it is difficult to give general advice here.

In general, however, it can be said that the goal of students learning together favours an approach rooted in research-based learning.

If the aim is to encourage students to work together, this can be done in a number of ways. One possibility is, of course, that both participating groups look at or investigate the same topic using the same method. But even if the scientific topic is different but the method used is the same, interesting collaborations can be planned. This also applies the other way round: if the student groups in their seminars look at the same topic from different methodological perspectives, a fruitful collaboration concept can also be developed from this.

Our offer for micro-collaboration

The basic idea of micro-cooperation differs significantly from the coil format in that it does not aim to cooperate beyond differences. On the contrary, the aim is to identify precisely the commonalities and exploit them to enable students to experience internationalisation in their core courses.

As we have analysed above, the key challenge for a widespread implementation of virtual exchange is to ease the planning and implementation effort for the teachers involved. We have now shown that the concept of micro-collaboration addresses the general understanding of international teaching collaboration and tries to make the idea more accessible to all teachers by downsizing it. This applies to the scope of collaboration. And this applies above all to the idea of exploiting existing overlaps and similarities in order to minimise the need for changes in existing course structures and topics.

The second element of our micro-collaboration approach is to support teachers in implementing international teaching collaborations by providing different collaboration scenarios. These are primarily intended to address the conceptual effort required to identify the principle possibility for collaboration at the very beginning. We deliberately focus on a different number of scenarios that can be applied in very different settings. There is neither an ideal internal structure nor an ideal duration of micro-collaboration. The nuts and bolts of the concept are flexibility and openness to adapt to the challenges of the respective constellations.

A third element that we have initiated in the DIONE project is the provision of ready-made teaching materials as Open Educational Resources. On the one hand, these should be able to be used as ready-made units for micro-collaboration without requiring any in-depth preparation on the part of the teachers. On the other hand - and this is even more important - they should serve as templates or examples of how micro-collaboration can look, which learning materials can be used and how students can be activated for collaboration. In our opinion, it makes sense to support teachers with ready-made solutions, especially for generic elements of micro-collaboration. This applies especially to the getting-to-know phase. These are particularly important to balance the biggest disadvantage of virtual exchange, namely the relatively low social contact.

The fourth element, which we consider important to promote virtual exchange in the form of microcollaboration, is the provision of platforms that facilitate finding collaboration partners. This need has been well recognised by other initiatives, and so we find a large number of collaboration platforms nowadays. The crucial feature that such a platform must have is easy accessibility and appeal to teachers. It should not be forgotten that the majority of teachers plan their courses around thematic or research interests. The proportion of teachers who incorporate the goal of the internationalisation experience into their students' teaching concepts, rather than focusing on course content, will be rather limited overall. Therefore, we consider it sensible to organise platforms in principle in such a way that they

address potential participants on a subject-related, academic level. This can be achieved, for example, by creating thematically oriented platforms.

Platforms should also have the possibility for teachers to post their teaching interests and course topics and find possible cooperation partners in the given network. In addition, they should be able to enter finished micro-collaborations and experiences on them and thus provide other teachers with best practice examples on the one hand, and on the other hand be active as a multiplier and profile themselves in this respect.

What is the added value of micro-collaboration?

The format of virtual exchange, as we have shown above, has a variety of positive features that predestine it for broad integration into an internationalisation strategy alongside other formats. The concept of micro-collaboration attempts to address the few weaknesses of these virtual formats and offer solutions. In addition, the idea of micro-collaboration has a number of other positive features that it partially shares with other forms of virtual exchange.

Benefits for teachers

For teachers, micro-collaborations have the advantage that they are completely flexible and can be used by them entirely according to their own preferences. They are also entirely free to choose their partners, the topics of the collaboration, the time, the length and also the amount of work they want to put into the format. Furthermore, they provide them with complete independence from administrative hurdles and curricular constraints. The format is therefore a very democratic form of internationalisation of teaching compared to the often top-down initiated international networks or strategic partnerships. Another advantage for the teachers is that they themselves also come into contact with their colleagues and enjoy actual joint teaching, which also offers them the opportunity to learn from one another. In addition, the format is useful when teachers want to offer their students new perspectives or develop competences that cannot be covered at their own university.

I believe that virtual micro-collaboration is the most flexible form of internationalisation of our higher education. Co-teaching with colleagues from abroad and co-learning with international fellow students is a win-win situation all parties may benefit from. Although organizational challenges and preparatory workload should not be underestimated, micro-collaboration offers the students the opportunity of an international, multicultural experience "at home" and invites the teachers to have a refreshing look at their own teaching practices.

Kristel van Goethem, Université catholique de Louvain

Benefits for students

For students, the micro-collaboration format, like virtual exchanges in general, has the advantage that they actually come into contact with other students. However, this happens in a way that is far more inclusive than physical mobility formats. This is because this internationalisation experience does not require any temporal or financial commitment from the students. Therefore, students who cannot afford semesters abroad, summer schools or similar activities can also benefit from it. Additionally, the format also takes along those students who do not prioritise an internationalisation experience in their study planning. Compared to other virtual formats, such as virtual guest lectures or Internationalisation at a Distance, this is an active internationalisation at home, where self-directed intercultural impressions

can be gained. Another advantage of micro-collaboration, as we explained above, is that the format is particularly suitable for research-based learning. This suggests that an implementation of this format also goes hand in hand with a stronger competence orientation of the respective curriculum.

Benefits for universities

A still theoretical but very decisive advantage of the micro-collaboration format - which also applies to all formats of virtual exchange - is the extreme coverage of the format. It is theoretically conceivable that every teacher, every staff member and every student participates in international micro-collaborations in various activities. This can lead to the internationalisation of the university actually becoming part of the daily study and work routine of all members of the university. The format also opens up the field of internationalisation to new groups within the university: student groups can be addressed that previously had either no opportunity or no interest in internationalisation. It can be used to address fields of study for which internationalisation of the curriculum was previously out of the question for subject-related reasons. Groups can be addressed that have shied away from internationalisation for linguistic reasons and teachers who have so far avoided the effort of integrating transnational teaching into their courses.

An additional and important asset for universities is the scalability of the format of micro-collaboration. On the one hand, the format itself is scalable in its scope - entirely according to the needs of the participants. On the other hand, it is also conceivable to cooperate with various non-university actors, such as partners from industry, NGOs, schools or civil society actors. Examples of this already exist today, and they show the potential in promoting small, flexible collaboration formats (see e.g. Cassidy 2013, Bjerregaard 2009).

Challenges for the future

In order to sustainably promote the format of micro-cooperations - and virtual exchange in general - and thus significantly strengthen the degree of internationalisation at universities, universities can become active in different areas. In general, it is advisable to think about the areas of e-learning and internationalisation together at university level in the strategic considerations of the future of the university and university teaching. The previous restriction of funding programmes and other actions to the areas of physical student and teacher mobility, which has recently been extended tentatively to include blended mobility, should be lifted so that the organisation and participation in virtual exchange formats is also promoted and recognised. The recognition should concern both the teachers and their commitment, as well as the crediting of student work done in these formats.

In addition, universities, preferably together with their strategic networks, or within European University Alliances, should work to provide resources that enable teachers to identify potential partners for cooperation. And they should make existing approaches and the solutions, materials, templates, best practices and the like developed within them available to their teachers to maximise their support in implementing these learning formats.

References

Belz, J. A., & Thorne, S. L. (Eds.). (2006). Internet-mediated intercultural foreign language education. Annual volume of the American association of university supervisors and coordinators. Heinle & Heinle.

Bjerregaard, Toke (2009): Universities-industry collaboration strategies: a micro-level perspective. In European Journal of Innovation Management 12 (2), pp. 161–176.

Blooma, Mohan John; Kurian, Jayan Chirayath; Chua, Alton Yeow Kuan; Goh, Dion Hoe Lian; Lien, Nguyen Huong (2013): Social question answering: Analyzing knowledge, cognitive processes and social dimensions of micro-collaborations. In Computers & Education 69, pp. 109–120.

Cassidy, Erin Dorris; Hendrickson, Kenneth E. (2013): Faculty–Librarian Micro-Level Collaboration in an Online Graduate History Course. In The Journal of Academic Librarianship 39, pp. 458–463.

Cifuentes, Lauren; Park, Seung Won (2013): A Micro-Collaboration for Developing Case-based e-Learning Modules. In Proceedings of the Association for Educational Communications and Technology, pp. 382–389.

DAAD. (2021).International virtual academic collaboration (IVAC).www.daad.de/en/informationservices-for-higher-education-institutions/further-information-on-daad-programmes/ivac/

De Wit, H. (2016). Internationalisation and the role of online intercultural exchange. In R. O'Dowd & T. Lewis (Eds.), Online intercultural exchange: Policy, pedagogy, practice, pp. 192–208. London/New York: Routledge.

De Wit, H., Hunter, F., Howard, L., & Egron-Polak, E. (2015). European parliament, directorate-general for internal policies of the union, & centre for higher education internationalisation (CHEI), E. A. for I. E. (EAIE), international association of universities (IAU). Internationalisation of higher education. European Parliament.

Dutch Ministry of Science, Education and Culture. (2022). Virtual international cooperation projects. www.dus-i.nl/subsidies/virtuele-internationale-samenwerkingsprojecten

European Commission. (2013). European higher education in the world. Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions.

Helm, F. (2016). Facilitated dialogue in online intercultural exchange. In R. O'Dowd & T. Lewis (Eds.), Online intercultural exchange: Policy, pedagogy, practice (pp. 150–172). Routledge.

Hénard, Fabrice; Diamond, Leslie; Roseveare, Deborah (2012): Approaches to Internationalisation and Their Implications for Strategic Management and Institutional Practice. A Guide for Higher Education Institutions. OECD.

Mittelmeier, Jenna; Rienties, Bart; Gunter, Ashley; Raghuram, Parvati (2021): Conceptualizing Internationalization at a Distance. A "Third Category" of University Internationalization. In Journal of Studies in International Education 25 (3), pp. 266–282. DOI: 10.1177/1028315320906176.

O'Dowd, R. (Ed.). (2007). Online intercultural exchange: An introduction for foreign language teachers. Multilingual Matters.

O'Dowd, Robert (2022): Introduction. In Robert O'Dowd (Ed.): Internationalising Higher Education and the Role of Virtual Exchange. London: Routledge, pp. 1–7.

O'Dowd, Robert (Ed.) (2022): Internationalising Higher Education and the Role of Virtual Exchange. London: Routledge.

O'Rourke, B. (2007). Models of telecollaboration (1): E(tandem). In R. O'Dowd (Ed.), Online intercultural exchange: An introduction for foreign language teachers (pp. 41–62). Multilingual Matters

Ramanau, R. (2016). Internationalization at a distance: A study of the online management curriculum. Journal of Management Education, 40(5), pp. 545–575. https://doi.org/10.1177/1052562916647984

Rubin, J. (2016). The collaborative online international learning network. In R. O'Dowd & T. Lewis (Eds.), Online intercultural exchange: Policy, pedagogy, practice (pp. 263–272). Routledge.

Salinas de Dosch, Ana Lucía (2021): Internationalisation of Higher Education in Europe and Germany: The State of Play. Universität Rostock.

Schultheis Moore, A., & Simon, S. (Eds.). (2015). Globally networked teaching in the humanities. Routledge.

Starke-Meyerring, D., & Wilson, M. (2008). Designing globally networked learning environments: Visionary partnerships, policies, and pedagogies. Sense Publishers.

Telles, J., & Leone, P. (2016). The teletandem network. In R. O'Dowd & T. Lewis (Eds.), Online intercultural exchange: Policy, pedagogy, practice (pp. 273–298). Longman.

UNESCO. (2022). Moving minds: Opportunities and challenges for virtual student mobility in a post-pandemic world. UNESCO. https://www.iesalc.unesco.org/wp-content/uploads/2022/03/IESALC_220315_RE_VSM_EN.pdf

HUMBOLDT-UNIVERSITÄT
ZU BERLIN

UCLouvain
Université

UNIVERSITY OF
BELGRADE

UiO :
University of Oslo

Circle U.
European University Alliance

NAUCI·ME

ugr | Universidad
de Granada

UNIVERSITY OF
WOLVERHAMPTON