



Internationalization of Teacher Education in Higher Education

Theories, Concepts and Practical Approaches of Virtual, Blended and Physical Mobility



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In recent years, forms of virtual mobility and virtual international teaching have become increasingly important. However, in addition to the numerous advantages, this not widespread innovative form of higher education teaching comes with numerous challenges. In this article, needs for and challenges of virtual international teaching are discussed based on practical experience in teaching and administration. Furthermore, initial implications for the development of supportive structures provided by institutions of higher education for virtual international teaching are outlined.

Schlagworte: virtual mobility; international teaching; higher education

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Needs for the Successful Implementation of Virtual International Teaching in Higher Education – A Reflection Based on Practical Experiences

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Abstract

In recent years, forms of virtual mobility and virtual international teaching have become increasingly important. However, in addition to the numerous advantages, this not widespread innovative form of higher education teaching comes with numerous challenges. In this article, needs for and challenges of virtual international teaching are discussed based on practical experience in teaching and administration. Furthermore, initial implications for the development of supportive structures provided by institutions of higher education for virtual international teaching are outlined.

Keywords: virtual exchange, internationalization, higher education, internationalization strategy, institutional development

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1 Introduction

The internationalization of higher education programs is increasingly in demand. While physical mobility has dominated internationalization strategies at institutions of higher education for decades, virtual mobility established itself as a new, important element of the internationalization of universities in the course of the COVID-19 pandemic (Liu & Gao, 2022, 2, 11). In contrast to physical mobility, virtual mobility does not require the participants to travel or spend time abroad. Students and/or teachers can take part in courses or other learning and exchange formats digitally from campus or from home. In this article, virtual mobility is understood as an umbrella term for various scenarios. Starting with individual synchronous seminar sessions international lecturers and/or students are invited to, through asynchronous online learning environments (e.g. Massive Open Online Courses (MOOCs)) to completely digital (dis-

tance) international learning courses. Mixed forms between virtual and physical mobility are also possible (“blended mobility”).

The manifold advantages of virtual internationalization have already been discussed (see e. g. Brück-Hübner, Müller, & Seifert, 2024a; Brück-Hübner, Müller, & Seifert, 2024c, in this anthology). Even if virtual mobility brings many advantages, it is also associated with disadvantages and numerous challenges. The successful initiation and implementation of virtual mobility in higher education places high demands on lecturers and students, but also on the administration and academic politics. Precisely these needs will be examined in more detail in this article that is based on practitioners’ experiences in the fields of higher education lecturing, didactics and administration¹. The following explanations can provide an initial insight into the challenges, but do not claim to be complete or generally valid. Due to the variety of forms of virtual international teaching in particular, only a few key challenges and conclusions about the support structures required can be named.

2 Challenges for and Needs of Virtual International Teaching

Virtual international teaching has its very own needs and challenges on many different levels. As in any physical exchange, however, challenges like the academic calendars, the structure of study programs, or admission requirements remain and make innovative solutions necessary. Based on practical experience, the main part of the article reflects on challenges and needs of virtual international teaching from five different perspectives: lecturers, students, higher education didactics, the institution, and academic policy.

2.1 Challenges and Needs on the Level of Lecturers

The principle of freedom of research and teaching means that the decision to offer (virtual) international courses lies with the lecturers. Therefore, a key prerequisite is not only the willingness of lecturers to offer such a teaching format, but also that important basic requirements (e. g. language skills) do not pose an obstacle to participation. With reference to Wit et al. (2015, p. 298), a lack of commitment on the part of lecturers and a lack of recognition for lecturers are among the biggest obstacles to virtual international teaching. Therefore, it is essential that lecturers are not only aware of the basic possibilities of implementing virtual international teaching, but also that they are encouraged to offer such a new (or innovative kinds of) teaching concept(s) and are aware of the support structures of their own institution.

When lecturers plan a virtual international course, they are confronted with a wide range of possibilities and concepts (see e. g. Brück-Hübner, Müller, & Seifert, 2024a, in

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this anthology). Advice from higher education didactics (see 2.3) or administration (see 2.4) as well as “good practice” examples can facilitate orientation and help lecturers find the most convincing concept. Each approach presents its own challenges for lecturers. Inviting guest lecturers, for example, requires primarily organizational effort and possibly financial support, more extensive concepts – such as Collaborative Online International Learning (COIL) (Rubin & Guth, 2017) – come with more far-reaching challenges. The more extensive the seminar concept and the more international partner institutions, lecturers and students are involved, the more coordination processes and considerations become necessary.

When lecturers plan a collaborative course, they need to find one or more suitable (international) partners. Besides aspects such as sympathy and similar teaching topics, many organizational questions need to be discussed. In particular, differences in semester times and time zones can be an insurmountable barrier. Differences in academic expectations as well as the requirements of the respective institutions must be compared and discussed. It is also important that the learning opportunities match the local curricula and that students receive credit points for their studies. In particular, the recognition of international students’ achievements by their home university can be associated with difficulties. Lecturers therefore have to take many factors into account; the preparation phase can be very time-consuming and exhausting (see e. g. Brück-Hübner, Müller, Joseph, et al., 2024, in this anthology). Institutional support structures are very helpful in this process – not only in the processes of accreditation and organization, but also in the internationalization of curricula (see 2.3 and 2.4).

Along with the selection of suitable learning content that is equally relevant for all students and fits in with the respective curricula, teaching in a different language can also be challenging – especially with regard to concepts and terminology. Particularly in the field of teacher education, discourses are often very strongly nationally influenced and, as a consequence, terms are used very differently in different countries (e. g. elementary school, inclusion..., see e. g. Seifert, 2024, in this anthology). This has to be taken into account when designing the course. The use of such terms and the different concepts associated with them must be reflected and discussed to avoid misunderstandings. At the same time, this also offers great didactic potential.

However, the implementation of virtual international courses also involves very practical problems. Especially when working with lecturers from international partner universities, it is important to find a common platform that all parties can and are allowed to work with. This may mean that some lecturers (and their students) have to get acquainted with new systems and find their way around. However, university systems are usually highly protected and located on closed servers. In order to integrate external lecturers and students into a university system, it is often necessary to organize guest access by involving the IT department. The integration of virtual seminars into the daily university routine is also a challenge for on-site universities. If it is not possible to switch to off-peak hours, teaching and learning spaces must be organized where students can not only connect digitally, but are also able to participate actively without disturbing other students (e. g. in the library). This requires the development of hybrid

teaching or individual learning spaces. Organizing and delivering virtual international courses, therefore, requires not only a good (technical) infrastructure, but also lecturers with digital or hybrid teaching skills.

From experience, another challenge is recruiting enough students who are willing to participate in a seminar taught in a foreign language (see e. g. Brück-Hübner, Müller, Joseph, et al., 2024, in this anthology). In addition, students are often unfamiliar with the concept of virtual international seminars, which can lead to fear of contact or scepticism. This means that lecturers have to enter into discussions with students. It is important to convince students and inform them about the seminar concept and the associated requirements and special features. Even if enough students could be recruited to take part in the seminar, there are still numerous other challenges awaiting the lecturers. Considering that student diversity goes far beyond the linguistic dimension, differences in culture and socialization in different educational systems lead to a great heterogeneity of students. For example, international and national students may differ not only in their (prior) knowledge, skills, and interests, but also in their different university socializations (for more details see Carroll, 2015, p. 18 and section 2.2). If all students are to benefit equally from the course, didactics and methodology should be adapted accordingly. Lecturers also need intercultural skills and openness to other cultures, customs and perspectives (Marchwacka, 2017). In addition, there is an increased need for planning and support – and thus an increased workload for lecturers. In order to ensure high quality international teaching, adequate support and relief for lecturers is therefore required (e. g. support from student assistants, development of a comprehensive range of support services for international students, training and advice on didactics of higher education).

The explanations show how complex the implementation of virtual international courses can be. Even if everything is planned in detail, there is no guarantee that the course will go exactly as planned. In intercultural interaction, new (problem) situations can always arise that need to be dealt with productively. In such cases, lecturers need not only flexibility and a willingness to compromise, but also perseverance and error tolerance.

Overall, the descriptions show that the implementation of virtual international teaching poses numerous challenges for lecturers and is associated with increased organizational and time expenditure. Since lecturers' capacities are limited, arrangements should be found to ensure that such services are also taken into account in supervision ratios and resource allocation. In addition, the best possible support structures should be created to actively assist lecturers with organizational, technical and didactical issues.

2.2 Challenges and Needs on the Level of Students

Many of the challenges that lecturers face in the context of virtual international courses also apply to students. In this regard, the language of instruction is very important. Many students are afraid to communicate in a language other than their mother tongue and are concerned about how this will affect their learning and performance assessment. The majority of virtual international learning opportunities are conducted

in English. However, according to Wit et al. (2015, p. 302) and Stallivieri (2020), this situation needs to be critically analyzed. Even though “English” is considered the lingua franca in research and education, there are still many (local and international) students (and lecturers) who are not proficient in this language and are consequently excluded from these opportunities. In Europe alone, there are 24 different official languages. Given this diversity, internationalization efforts should not be limited to one language. Multilingualism, understood as “the ability of societies, institutions, groups and individuals to engage [...] with more than one language in their day-to-day lives” (Katsarova, 2022, p. 2) is an important factor for inclusive internationalization. For this reason, international courses should also be offered in languages other than English if possible. In addition, value should also be placed on a language-sensitive design of teaching (Brück-Hübner, 2023, pp. 14–15).

In addition, an international – but also national – comparison of countries reveals large differences in digital infrastructure. Not every student has access to digital devices and a stable Internet connection at home (see Liu & Gao, 2022, p. 9). A lack of or low level of digital literacy (“digital gap”) also limits access (see Stallivieri, 2020). The latter refers not only to the basic availability of an Internet connection, but also to its stability. For example, international students might technically only be able to take part in the course if they turn their camera off, which in turn can have a negative impact on participation and ‘virtual presence’. A consequence is an exclusion of groups of students from virtual internationalization offers. There are different ways to enable such students to access virtual courses, e. g. by creating “learning spaces” with good equipment and internet connection at universities. At the same time, however, digital skills must also be promoted, e. g. in relation to the use of learning platforms that may be unfamiliar, but also digital learning, cooperation and communication in general.

In addition to language and technical barriers, many other factors can be challenging to students. Differences in academic socialization and, as a result, different teaching and learning styles and pedagogical cultures can make it difficult for students to fit in. They are likely to have to adapt to new teaching and learning methods and to a new ‘student role’. For example, not all students are used to self-directed or cooperative learning. There are also differences in the way of addressing lecturers and fellow students in different countries (e. g. addressing lecturers by title, first name or title and surname). Uncertainty in communication can discourage students from actively participating in virtual international courses, or make them afraid to contact the lecturer directly, e. g. to ask questions. As a result, students need support in finding their way around the new learning culture, the new requirements and their new role. On the one hand, lecturers are required to mediate between the different cultures and help students find their way around, while on the other hand, the administration can also initiate additional support services (Carroll, 2015, pp. 17–18; Brück-Hübner, 2023, pp. 16–20).

Education systems vary internationally, not only in their structure and design but also in the content and competencies taught to learners. In a diverse and intercultural classroom, it is reasonable to expect students to possess differing knowledge levels and

various skills, including academic competencies. If courses presume certain levels of knowledge and skills, this could discourage international students and lead to inequalities. Here too, lecturers are required to communicate openly with students about their questions and needs and to provide helpful feedback. In addition, other support services organized by lecturers or administrators can help students to succeed in their studies (e.g. tutoring, mentoring or workshops on topics like academic writing) (Carroll, 2015, pp. 17–18; Brück-Hübner, 2023, pp. 16–20).

In the digital space in particular, it is also more difficult for students to interact with other students and build relationships. The feeling of social inclusion is central to motivation (Deci & Ryan, 1993) and the feeling of social exclusion can discourage students. When designing virtual international courses, it is, therefore, important to support students getting to know each other and building relationships (e.g. by including parts of informal exchange or collaborative work). Additional networking opportunities help students engage in exchange and collaborate with each other (for further implications see Carroll, 2015, pp. 17–18; Brück-Hübner, 2023).

The challenges students face in the context of virtual international teaching are manifold. Therefore, international students typically need support and guidance to be able to participate successfully and actively in virtual international teaching offers. It is important for them to receive context-specific information and – if they have a lack of knowledge or competencies – additional skill training. Universities usually have special offers for students who are studying at their institution for a semester abroad. To ensure that international students who take part in virtual courses also benefit from such offers, they must be opened up to this group and adapted to their needs (e.g. take place virtually). It is also important that students are aware of support offers and know how to take part in them.

2.3 Challenges and Needs on the Level of Higher Education Didactics

Designing and successfully implementing virtual international courses all students can benefit from equally, is by no means trivial. In addition to the heterogeneity of the students, their different needs and required support, the implementation of virtual seminars is challenging in itself. This is especially the case if the course aims at intensive (intercultural) exchange (see e.g. Brück-Hübner, 2024, in this anthology). Higher education didactic support is therefore an important component for the successful implementation, expansion and extension of virtual international courses. Universities need qualified staff who can provide lecturers with targeted advice and support for (digital) internationalization. In addition, information websites, good practice examples and networking events can also support lecturers in the internationalization of their teaching.

To ensure that competent and situation appropriate advice can be provided to lecturers, higher education didacticians do not only need comprehensive knowledge of the various forms and formats of virtual international courses. Above all, they need to address issues of successful digital teaching and learning, digital group and team building, intercultural exchange and communication, a pedagogy of diversity and much

more. For this reason, it is very important that higher education didacticians deal intensively with the topic and engage in further professional development ("train the trainer"). In addition, it is also helpful if the didacticians are familiar with the institutional support structures and can therefore provide lecturers with appropriate contacts for administrative or organizational questions.

Higher education didactics experts are also frequently involved in curriculum development processes. In this context, they can pay attention to a stronger internationalization of the curricula and thus make an important contribution to the integration of internationalization aspects into teaching. However, this requires an awareness of the necessity of such forms of internationalization as well as knowledge of how the internationalization of curricula can be advanced.

2.4 Challenges and Needs on the Institutional Level

The success of any (virtual) mobility offer depends on an intensive partnership between members of the institutions involved. Further prerequisites in virtual mobility should be innovative institutional policies in combination with innovative pedagogies (Starke-Meyerring & Wilson, 2008, 13–14, p. 222). Especially in the case of virtual mobility, institutional conditions such as international partnerships and available infrastructure determine the way virtual mobility can be implemented or not (Stallivieri, 2020). Since physical mobility has been the standard for a very long time, the comprehensive introduction of virtual mobility is not without challenges on the institutional and administrative level. First and foremost, a series of administrative processes must be set up and implemented, which not only takes time, but also requires additional qualified personnel.

Partnerships, policies, and pedagogies (Starke-Meyerring & Wilson, 2008, 13–14, p. 222) require the engagement of three groups that have a major influence on the success of virtual exchange: international mobility officers, university management, and teaching faculty (see. 2.1; O'Dowd, 2021, p. 223). First, the position of university management must be clear and supportive towards allocating resources to the implementation and development of virtual mobility. Furthermore, in the sense of a whole institution approach virtual mobility needs to be integrated as a permanent strategic dimension of administration, research, and teaching into the institution's policies (O'Dowd, 2022, pp. 132–133). This would require a general recognition of virtual teaching as being equally valuable as physical teaching. Universities might also need to find ways to compensate lecturers for the increased effort, for example by reduction of the overall teaching load (see 2.1). In order to promote the institutionalization of virtual mobility, O'Dowd (2022, p. 132) recommends to "collaborate with university management to link VE [virtual exchange] with teacher promotion and recognition of innovation (e. g. teaching time reduction, points for internal promotion, etc.)". Second, the responsibility of administration must be handed over to a central unit, for instance the International Office (O'Dowd, 2022, pp. 129–137); due to its expertise in international cooperation, the International Office – if staffed accordingly – seems an obvious choice. O'Dowd (2021, p. 213) remarks:

“[...] in university education in general, VE had remained misunderstood and undervalued and, in many ways, it was lost between the different silos in which universities were organised. [...] For international mobility officers, it was seen as belonging to the domain of teachers, not international offices.”

O'Dowd states that there was uncertainty about responsibility, which in turn means that it must be assigned clearly if an institution strives to promote virtual mobility (cf. the guide for senior international officers published by the Stevens Initiative 2020). In that case, the International Office could be responsible for stakeholder management, could support in questions of accreditation or study program development. However, next to university management and International Office many other units need to be involved as well such as the central student service (e.g. enrollment of international students), the IT department (e.g. hosting guest accounts for lecturers, see 2.1), the dean's offices at faculties, etc. This underlines that virtual mobility is a cross-sectional institutional task.

Taking on virtual mobility inevitably results in a variety of differentiated areas of responsibility comprising operations, communication, support of students and teaching staff, or further program development in combination with quality assurance through evaluation (cf. O'Dowd, 2023, p. 131 for a visualization). The operational level includes a long range of aspects among which are the creation of semester-by-semester course catalogs, the maintenance of the central information platform, the application management and following enrollment of students as well as the support of teaching staff. Communication entails networking with stakeholders, the target-group oriented preparation as well as distribution of information, or match-making. The communication effort should not be underestimated. The support of students and teaching staff can take different forms like the recruitment of student assistants who, for example, organize social interactions to bridge the distance, the organization of further training for lecturers, or the advice on funding opportunities for networking and initial planning. It is also important to bear in mind that the partner universities' International Offices must be assigned similar responsibilities and staffing. Only this way they can function as a main distributor of information and supporter of own students and staff. Therefore, all universities involved need to build up structures and implement policies that allow fostering virtual mobility.

In the course of the COVID-19 pandemic, many universities settled spontaneously on virtual mobility to enable exchange at all. Quite a few of these reactionary initiatives have been implemented permanently in the meantime, at least in Germany. These initiatives show (for example JLU Giessen's Virtual International Programme, Kiesler et al., 2021) that virtual mobility offers are in demand and oriented towards current needs in the education sector. Over the years, it was possible to identify champions extremely engaged in virtual mobility among faculty and partner universities. The impression is, however, that the number of active faculty is still comparatively low which not only has to do with a lack of support structures, a lack of digital as well as linguistic competencies, but also with the increased effort required for virtual exchange and collaboration (see 2.1).

2.5 Challenges and Needs on the Level of Academic Policies

After a brief look at institutional framework conditions, this section comments on the necessity of innovative policies to implement virtual mobility in higher education. In education, we are faced with a complex and hierarchically organized network reaching from the local to the regional to the (supra)national (see, for example, EU policy topics https://commission.europa.eu/education/policy-educational-issues_en) to the international level. Negotiating policy bottom-up and top-down seems inevitable at this point. How education is structured and valued depends on historical, cultural, societal, economic, or political factors. Societal needs and interests can exert major influence on policies, for example when the recruitment of international students or experts to ensure economic competitiveness is concerned (Balch et al., 2012, p. 9). A negative side effect of this is the increasing privatization of education (Wit et al., 2015, p. 293). Virtual mobility can function as 'gate-keeper' for physical mobility especially in countries relying on high numbers of international students. Policies facilitating virtual mobility can be an important success factor here. In this sense, some universities have opened their virtual courses to students worldwide for a fee (e. g. Stanford: <https://online.stanford.edu/>). Others have opened up branches in other areas to reach more students (Kleibert et al., 2020).

If the education system is strongly oriented towards the physical presence of students, like in European countries, the implementation of new policies regarding virtual mobility poses huge challenges. In such a case, many directional decisions on different levels determine the acceptance among parties involved and the options of comprehensive implementation of virtual mobility. In teacher education in particular, a reworking of policy frameworks can focus on various aspects. They could include, for instance, the role of (virtual) internationalization in initial and further teacher education, the contents of curricula, required and future-oriented competencies, new ideas about teacher professionalism and professional development, life-long learning as well as a reviewed idea about the purposes and aims of school and university education (cf. Tonna & Madalinska-Michalak, 2018).

These sketchy explanations illustrate the complex interdependencies associated with internationalization efforts. It can be assumed that the development of sustainable policies will be a lengthy and dynamic process that requires great openness as well as a fundamental discussion about future-oriented education. For the time being, it seems sensible to build-up more communities of practice and to initiate joint projects.

3 Conclusion

This article outlines numerous challenges university stakeholders are confronted with when expanding virtual mobility in higher education. It also highlights the associated needs and implications for practice. It became clear how complex the expansion of forms of virtual internationalization is and that all stakeholders involved need to work hand in hand. The explanations are based on the personal experiences of the authors

and should be supported by empirical studies in future. Even though this article points out major challenges of virtual international teaching – especially in the initial phase –, it is not intended to discourage. Conducted projects illustrate how diverse the advantages of virtual international teaching are (see Brück-Hübner, Müller, & Seifert, 2024b) and that it is worth establishing targeted support structures at universities to attract more lecturers and students to virtual mobility.

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