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# VITALS

Virtual International Teaching  
and Learning Skills

## A Didactical and Methodical Introduction in Virtual International Teaching in Higher Education

*Annika Brück-Hübner*



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and Learning Skills

A didactical and methodical introduction in virtual international  
teaching in higher education

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# Preface

The internationalization of courses at universities is increasingly in demand. Through (virtual) international teaching, both lecturers and students can expand their intercultural but also professional competencies, build international networks and jointly design innovative teaching. In comparison to physical mobility, virtual internationalization is considerably less expensive. Moreover, it is more inclusive, flexible, and sustainable while promoting participants' digital competencies. However, these innovative teaching formats also entail numerous challenges, such as technical and organizational requirements, special didactical and methodological demands, as well as questions of performance assessment and certification.

This script is a written elaboration of the workshop series "VITALS - Virtual International Teaching and Learning Skills", which was conducted as part of the NIDIT project at the Justus Liebig University Giessen in spring 2023. In addition to a basic introduction to the various possibilities, potential and challenges of virtual international teaching, this script will also give you insights into different didactical and methodological approaches and practical suggestions for the (successful) design of virtual international courses.

The purpose of this script is to refresh and deepen the workshop contents and at the same time to pass on the information to all other interested people who were not able to participate in the workshop series. This document does not claim to be a scientific elaboration, but is rather a kind of introductory handbook to virtual international online teaching. This is also due to the fact that the explanations are not only based on scientific literature, but also and above all on experiences that I have gathered myself while working in the context of virtual international teaching.

I hope you will enjoy working with this script.

Kind regards,



*Annika Brück-Hübner*



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# Chapter 1

## Virtual international teaching in higher education - Definitions and basic concepts



What does internationalization mean to you?

### 1.1. Internationalization – Key dimensions

The term "internationalization" has become an umbrella term in higher education, covering multiple dimensions, elements, approaches and activities. Two main types of internationalization can be distinguished:

**Internationalization abroad** is focusing on physical mobility: One or more people travel abroad, e.g., to participate in courses or other formats in another country.

There are also types of internationalization that do not require participants to travel abroad. **Internationalization at home** can be divided into four different subcategories:

1. Virtual mobility: Virtual participation in international university offerings (e.g., online seminars, MOOCs, or digital distance learning courses).
2. Curricular internationalization: Processes of targeted integration of international and intercultural dimensions into the curricula in regular domestic degree programs.
3. Teaching and learning in a foreign language: Conducting courses in a language other than the mother tongue.
4. Off-Shore Campuses: More and more universities are establishing campuses in other countries. Off-Shore Campuses often bear the names of well-known universities and are commercialized (see e.g., Kleibert et al., 2020, p. 6).

In the following, the focus will primarily be on types of virtual mobility.

## 1.2. Virtual international teaching

Since there are a variety of forms and interpretations of "internationalization" and also "virtual internationalization", it is important to determine what is meant by virtual international teaching in the following. In our working group, we define virtual international teaching as follows:

Virtual international teaching is a **planned learning process**, in which different participants (students, lecturers, etc.) from at least two **different nationalities** use **digital media** in teaching and learning processes, and to communicate with each other.

Digital communication implies that students and lecturers do **not** necessarily need to be at the same place [...]. As a special form of distance learning, digital international teaching improves the possibilities for **intercultural exchange without the need of physical mobility** in higher education.

*Definition by Annika Brück-Hübner, Inês Gamelas and Richard Vargas*

**Check also our explainer video on YouTube:**



<https://www.youtube.com/watch?v=9GhSzb9eWpU>

# 1.3. Different types of virtual international teaching

Virtual international teaching can be designed in many different ways. It can be completely virtual, hybrid or blended learning. While the first ones are only conducted online, via digital media, hybrid teaching is also including the opportunity of face-to-face meetings at the same time. For example, there can be a hybrid common course with learning groups from Germany and Spain. They can meet in person at a classroom in their home university (face-to-face) and then connect with the international partners via digital media (virtual). In blended learning formats the virtual exchange and face-to-face meetings are sequentially mixed. All those types of virtual international teaching can be combined in diverse ways.

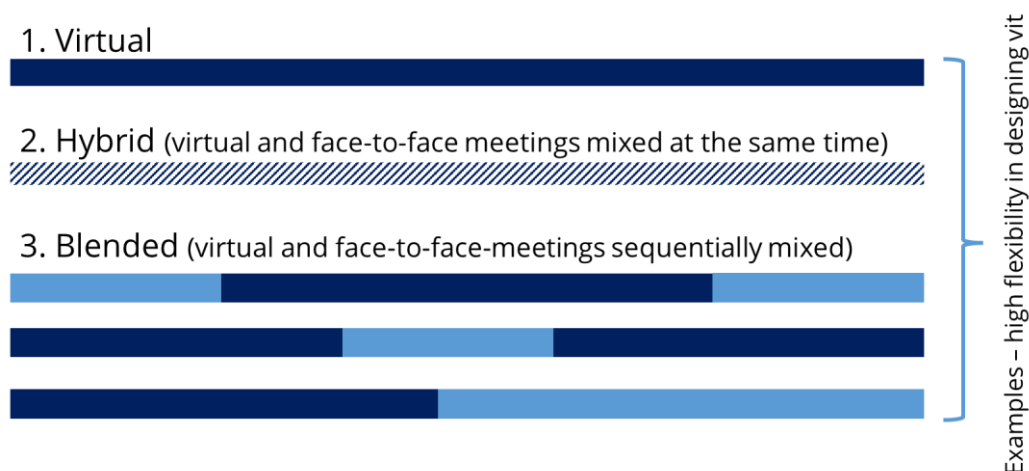


Fig.1: Different designs of virtual international teaching (vit) (own illustration)

Virtual international teaching can be conducted both synchronous as well as asynchronous (e.g. a MOCC). There can also be a mixture of synchronous and asynchronous parts. For example, the flipped classroom model can be applied: In this case, the learners initially work through the learning content themselves (asynchronous), for example with the support of a digital learning environment. Then the whole group comes together (synchronous). Questions are clarified and the content is discussed jointly.

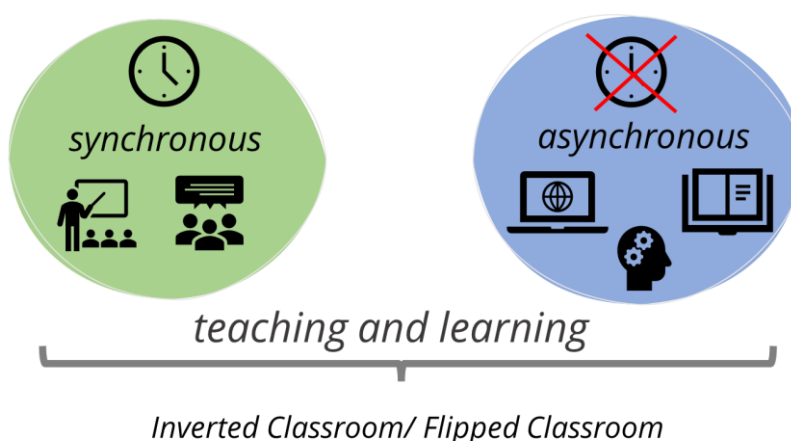


Fig. 2: Different modes of virtual international teaching and learning (own illustration)



## Excursus: COIL – Collaborative Online International Learning

As explained in the previous section, there are many different forms of virtual international teaching. One concept that has become widespread in recent years is "COIL" (Collaborative Online International Learning). As the name suggests, this is a virtual international course that is planned, hosted and supervised jointly by at least two lecturers from different (international) universities.

The seminar group consists (ideally evenly balanced) of students from the participating lecturers or universities. The course itself is strongly focused on processes of student collaboration (e.g., through discussions, projects, group work) and is therefore often very activating and interactive. Just like other forms of virtual international teaching, COIL seminars can be designed flexibly, both in terms of duration (single session, joint workshop, whole seminar, etc.) and format (virtual, hybrid, blended, etc.).

While all didactic, methodological, and content-related decisions are made by the lecturers in close cooperation, each lecturer clarifies all administrative issues for their own (local) student group (e.g., integration of the COIL seminar as a regular course in the degree program; crediting of the course). This is a major advantage of the COIL concept. Basically, if you have a suitable partner and the topic fits, any course can be converted into a COIL seminar without much additional administrative effort. On the other hand, COIL seminars require a great amount of planning - especially the first time - both in terms of content (e.g., agreement on common topics) and organization (e.g., coordinating semester times, considering time differences).

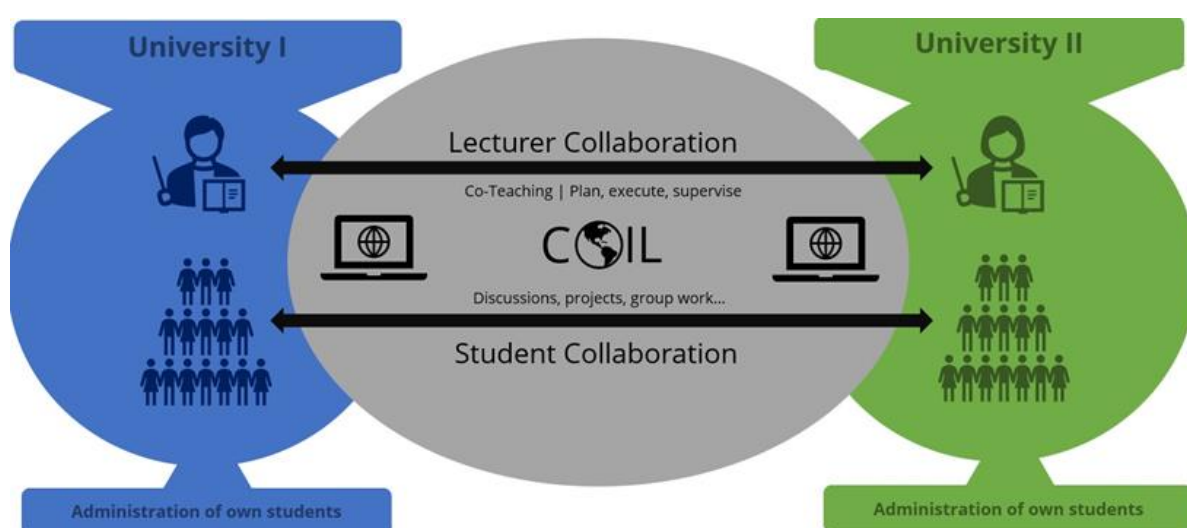


Fig. 3: The COIL concept (own illustration based on <https://coil.suny.edu/>)

# Chapter 2

## Potential of virtual international teaching

In comparison to physical mobility, virtual mobility opens up new possibilities. These are presented below in the form of theses.

### ***Thesis 1: Virtual international teaching is more inclusive***

There are many reasons why certain people cannot travel to another country: e.g. care tasks, a disability, dependence on health care or poverty. Virtual internationalization opens up new opportunities for these groups of people and is therefore more inclusive.



Fig. 4: Virtual international teaching is more inclusive (own illustration)

### ***Thesis 2: Virtual international teaching is non-demanding***

Traveling abroad is demanding. It requires extensive planning, involves high costs and travel time must be kept free from other responsibilities and commitments. Virtual forms of internationalization can be integrated into normal everyday life in a more flexible and uncomplicated way.



Fig. 5: Virtual international teaching is non-demanding (own illustration)

### ***Thesis 3: Virtual international teaching is more sustainable***

By avoiding long journeys, CO<sup>2</sup>-emissions can be reduced through virtual internationalization. Since the virtual exchange is not limited in space and time compared to physical stays abroad, it can be continued for as long as desired. This makes it possible to build long-term networks and online communities. All in all, virtual internationalization not only makes an important contribution to protection of environment, but also promotes the formation of sustainable relationships.



*Fig. 6: Virtual international teaching is more sustainable (own illustration)*

### ***Thesis 4: Virtual international teaching is innovative and future-oriented***

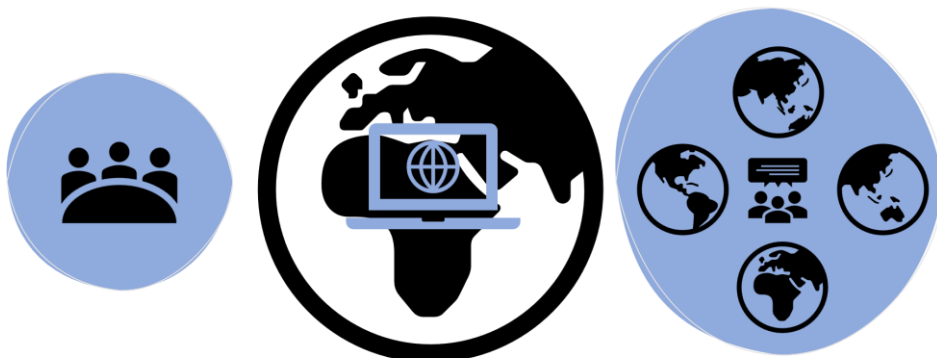
In the present and the future, the importance of international contacts and relations is increasing - at university as well as in the industry. There is a need for the formation of sustainable transnational networks. Through forms of virtual internationalization, university can support students in building such networks at an early stage.



*Fig. 7: Virtual international teaching is innovative and future-oriented (own illustration)*

### ***Thesis 5: Virtual international teaching is global and transnational***

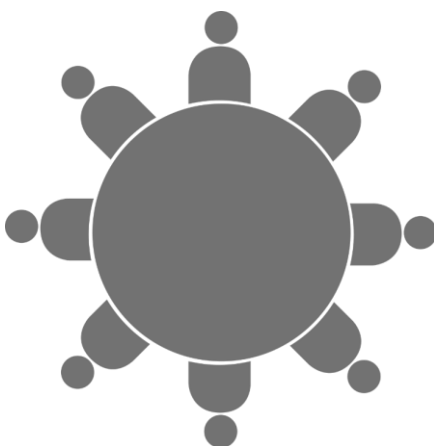
Physically, we can only ever be in one place at one time. By using virtual space, exchanges can become more global and transnational. People from different countries and continents can come together and engage in personal exchanges with each other without much effort.



*Fig. 8: Virtual international teaching is global and transnational (own illustration)*

These thesis-like statements point to a great potential of virtual international teaching. However, it should not be forgotten that there also are disadvantages. Thus, virtual mobility cannot replace the cultural experiences of a real, physical stay abroad. When students go abroad, this mobility is not limited to institutional settings. Students also spend their free-time abroad. This gives them many opportunities to experience non-institutionalized traditions and rituals, and to explore the country on their own. Also, infrastructure is not equally developed in all countries, leaving students from some areas excluded from virtual forms of internationalization.

These are just two examples that also point to the limits of virtual internationalization. In addition, there are numerous methodological and didactic challenges that have to be overcome. We will deal with some of these challenges in the next chapter.



# Chapter 3

## How to deal with student challenges in virtual international teaching environments

The virtual internationalization of courses is not only demanding for lecturers as it requires numerous skills. This new way of teaching also poses a number of challenges to both domestic and international students. Considering that student diversity goes far beyond the linguistic dimension, differences in culture and socialization in diverse educational systems lead to a great heterogeneity of students. This must be adequately addressed didactically and methodically so that all of them can participate equally in the lessons and achieve success in learning. This chapter focuses not only on the special challenges of national and international students, but also on didactical and methodical approaches.

### 3.1. Challenges for students in virtual international teaching environments – an overview

There are many challenges for international as well as domestic students if they join virtual international courses. Carroll (2015, p. 18) identifies a total of six key challenges. This list does not claim to be exhaustive, but it clearly shows how diverse the issues are:



*Fig. 9: Challenges for students in virtual international teaching environments – an overview (own illustration, based on Carroll 2015, p. 18)*

#### 3.1.1. Dealing with language issues

Listening and speaking in a language other than the native language poses challenges for many students. Linguistic comprehension does not only require vocabulary knowledge. Other factors such as context and para- and nonverbal elements determine how a message is to be interpreted and understood. Even specialized terminology can have different connotations – depending on the national contexts – in terms of content (for example, what is meant by the term "primary school" differs significantly in different countries). The many challenges of intercultural communication are further explored in chapter 4. Language issues can also cause anxiety, so that students do not dare to actively participate in the course.

### ***3.1.2. Participation in teaching methods***

Once international students enter new learning contexts, they might experience difficulties joining in. They probably have to deal with new teaching and learning methods as well as a new “student role” which they are not used to because of a different socialization at their home universities. As a result, students often cannot benefit from lectures, seminars and tutorials.

### ***3.1.3. Different skills and knowledge***

Education systems differ internationally not only in their structure and design, but also in the content and competencies taught to learners. In a heterogeneous intercultural classroom, students can be expected to have very different levels of knowledge but also varying competencies (e.g., in academic writing). If courses assume certain knowledge and competencies, this may discourage international students and lead to inequalities.

### ***3.1.4. Get support and guidance***

As the previous points have made clear, international students typically need support and guidance to be able to participate actively and successfully in the virtual international teaching course. It is important for them to receive context-specific information as well as special skill trainings. Often, such special offerings are not explicitly provided as part of virtual internationalization, or students do not know where to find the information they need.

### ***3.1.5. Mixing and collaborating***

The feeling of social inclusion is not only important for learner motivation (see e.g. Deci & Ryan, 1993), but it also creates the base for an open intercultural exchange. It is always a challenge to integrate into a new group and build relationships. In the digital space, however, this is even more difficult. International (as well as national) students face the challenge of getting to know each other, engaging in exchange, and ideally collaborating and cooperating with each other

### ***3.1.6. Get a useful award***

Last but not least, international students want the added value that a qualification carries (e.g., credit points recognized by their home university), as well as knowledge and skills that are relevant, transferable and appropriate for their life after university. Not every learning content is therefore equally suitable for virtual international seminars. It also depends on the methodological and didactic design of the course.

### 3.2. Didactical considerations, methods and tools to deal with challenges of virtual international teaching

The previous section highlighted some challenges that international students face when participating in (virtual) international courses. In this chapter, we will now look at the didactic and methodological tools that can be used to support these students in participating successfully in the course.

### 3.2.1. How to deal with language issues

Students (national and international) have varying language proficiency in the course language, especially if it is not their native language. Often, virtual international courses are conducted in English. This also poses new challenges for our German-speaking students, for example. According to Carroll (2015, p. 18), there are three main notes and tips on how to help students with language problems:



**Notes and tips:**

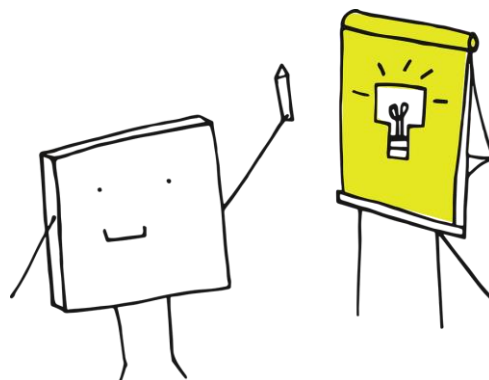
1. Lightening the student's cognitive load devoted to language
2. Try to be as understandable as possible
3. Help students to develop English language proficiency (especially discipline-specific terms)

Fig. 10: How to deal with language issues: Notes and tips (own illustration)

There are several ways to implement these hints and tips into virtual international teaching. Here are a few ideas:

### 3.2.1.1. Use visualizations to promote comprehension

Visualization, like graphics or symbols, are independent from language. Combining language and visualization in a way that promotes learning can reduce cognitive load (look at e.g., Mayer 2001, 2003) and increase language comprehension at the same time. There are numerous sources online for royalty-free images that can be used as part of the courses (e.g. pixabay.com).





### 3.2.1.2. Create a glossary

To help students understand key discipline-specific terms, it can be very helpful to create a glossary for your course. This glossary can be created in collaboration with colleagues and students. The format can also be flexible. In addition to classic written "dictionaries", the creation of multimedia explanations (e.g., in the form of explanatory videos) is also possible. If the glossary is to be created collaboratively, it is a good idea to work with collaborative software such as wikis.

### 3.2.1.3. Create "safe spaces"

To encourage students to speak in a foreign language, it is useful to create a safe space where they can practice speaking outside of the plenary. When speaking with other students in a small group, students are under less pressure and can help each other find the right words. For example, you can use the think-pair-share method in discussions. This gives students time to think about the content, discuss it with a partner, and practice how best to express their opinion before participating in a class discussion.

### 3.2.1.4. Provide learning materials or special rework session

Despite best efforts, students may lose track during a course session. Providing additional learning materials (e.g., a script or video/audio-files) gives them the chance to review the content they did not understand. These learning materials can also be provided in different languages, taking into account the students' native languages. Asynchronous learning materials give students the opportunity to explore the learning content independently and at their own pace. Explainer videos or lecture recordings also give students the opportunity to listen and re-listen at their own pace, thus support their learning (e.g., Avgerinou & Petterson, 2009, p. 1223; Zorn et al., 2013, p. 6).

### 3.2.1.5. Encourage students to speak

Last but not least, in my opinion, it is essential to encourage students to speak. Make it clear that linguistic errors are absolutely natural and do not affect assessment. To this end, it is also important to create a climate of trust. To do so, it is important to support students in building relationships with the lecturer and the other students (see chapter 3.4. as well as chapter 4).





### 3.2.2 How to help students navigate unfamiliar academic systems

New country – new rules! – As described in chapter 3, international students need support to get used to the new pedagogic culture. Carroll (2015, p. 18) points out four notes and tips, on how we can support students in encountering our academic systems:



#### **Notes and tips:**

1. Mediate between pedagogic cultures e.g. with common reflections
2. Help students learn to understand and move between pedagogic variations
3. Decode local rules
4. Provide opportunities for students to reflect on and understand their different learning experiences, looking back to previously familiar ones and understanding current learning practices

*Fig. 11: How to support students navigating in unfamiliar academic systems I: Notes and tips (own illustration)*

At the same time, supporting the "arrival" in the new system is also about taking into account differences in knowledge and skills. Carroll (2015, p. 18) provides three hints and tips on how to give international students the support and guidance they need:



#### **Notes and tips:**

1. Provide students necessary background knowledge
2. Create making-space for contributions and invite students to participate
3. Vary the used methods

*Fig. 12: How to support students navigating in unfamiliar academic systems II: Notes and tips (own illustration)*

Yet, how can these hints and tips be implemented in practice? In the following, I would like to present you a few possibilities.

#### 3.2.2.1. Early onboarding through welcome packages

It is useful to contact international students at an early stage, ideally before the official beginning of the course, e.g., by sending (physical or virtual) "Welcome Packages" or a "Welcome Video". By providing essential information, students can be picked from the beginning and problems can be counteracted.

I would like to give you an example from my practice: Once, we had the case that a large number of the international students did not show up for the first meeting. In hindsight, it turned out that many of them had trouble finding their way around the digital learning systems because they simply didn't know them.

We have learned from this that it is important to send students precise instructions in advance on how to find their way around our digital learning environments.

Welcome packets can also help build trusting relationships. Introduce yourself and your expectations, but also your wishes, make it clear that you are looking forward to the exchange and welcome the students personally in this way.



**In your opinion: What is the most important information that students need for a successful welcoming?**

### 3.2.2.2. Reflect, let reflect and communicate

Often you are not even aware of your own attitudes, perspectives and expectations! The same goes for our expectations of what students should bring to the course (both knowledge and skills). It is important to be aware of different expectations, habits and challenges in order to adjust instruction and other offerings accordingly. There are many different activating methods that promote reflection, e.g., position request, traffic light method or Image-based reflection. Systematic and continuous reflection can also be supported through ePortfolio work. If you want to learn more about how supporting reflection and about ePortfolio work have a look at chapter 5.

In addition, it is important to integrate as much communication and exchange as possible into your courses: Feedback loops, partner and group work, as well as discussion sessions. See chapter 4 for more information on how to improve feedback and design active communication.



### 3.2.3. How to support students' knowledge and skill development

Differences in knowledge and skills are a challenges we need to deal with in heterogenous classrooms. On the one hand, it is important to pick up weaker students, but at the same time stronger students must not be neglected. These three notes and tips, promoted by Carroll (2015, p. 18) can help in supporting students' knowledge and skill development:



#### **Notes and tips:**

1. Communicate with students about their questions and needs
2. Design programs that embed coaching and skills practice
3. Provide useful feedback

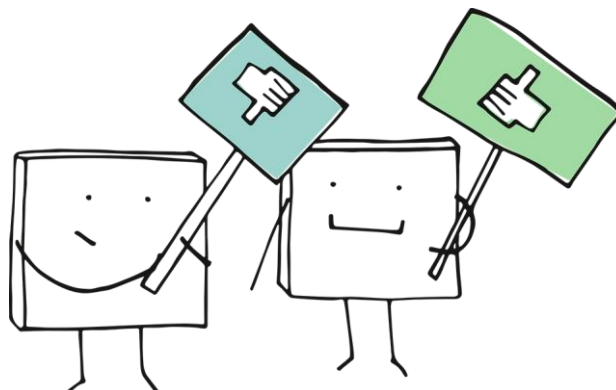
*Fig. 13: How to support students' knowledge and skill development: Notes and tips (own illustration)*

There are different methods and tools that can be used to get to know more about students' needs as well as to support them during their knowledge and skill development.

#### 3.2.3.1. Get (live) feedback

The most important requirement for adapting teaching to students' needs is to know what those needs are. Therefore, it is important that you regularly gather feedback from students to learn more about what questions they have, what problems and difficulties in understanding they have, and what else they need from you for successful learning. The more you communicate with students and the more you integrate student activities into your course, the more you will learn about their questions and needs. However, there are always students who do not dare to communicate their needs openly and honestly. Especially students who have major difficulties following the lessons often do not dare to communicate this clearly. Therefore, the integration of anonymous feedback methods is very helpful.

There is now a variety of digital feedback systems that support us in collecting anonymous feedback: OnlineTED, ARS Nova, PINGO and many more. These tools provide a simple, quick, and straightforward way to gather live mood feedback. By integrating open-ended questions, students can also ask questions without the lecturer having to know who is asking them.



### 3.2.3.2. Create supportive (additional) offers

To deal with the heterogeneity of students, it is important to find a balance to keep everyone on the same level and not to lose any student – neither the weaker nor the stronger ones. Differentiation through additional offerings can reduce possible inequalities.

**Tutoring** and **mentoring** are two ways to support students outside of class. “Follow-up” or “wrap-up” sessions – designed by a tutor – as well as personal tutor office hours can help weaker students to get the support, they need from someone other than the lecturer (“higher-level peer”). Another possibility is to form mentoring groups or tandems, e.g. consisting of national and international students (“same-level peer”). Such support structures can be very helpful for students and also save time for lecturers.

Depending on the concept, it is also possible to integrate tutorials or mentoring into the regular course and thereby into the seminar schedule.

In addition, further **learning materials** or special **workshops** (e.g., on academic writing) can also be good support for international students.

### 3.2.4. How to support collaboration, cooperation and team building

To promote intercultural learning, it is important that students get to know each other better and that a climate of trust is established. It is also important for learner motivation that students are socially involved and build relationships. Carroll (2015, p. 18) gives four notes and tips on how to promote greater collaboration.



#### **Notes and tips:**

1. Create “protected spaces”
2. Design sessions where interaction is valued and supported
3. Use methods that promote collaboration (e.g. writing circles)
4. Use assessment to value collaboration

*Fig. 14: How to support collaboration, cooperation and team building: Notes and tips (own illustration)*

#### 3.2.4.1. Promote informal exchange

If students physically go abroad, a variety of opportunities and possibilities for informal exchange automatically arise: from small talk before the start of a course to shared lunches in the canteen and activities in their free time. In virtual seminars, these informal opportunities for exchange are usually radically minimized. Since this exchange is essential for building relationships, there is a need to create opportunities for students to talk beyond the content of the course and to get to know each other and the different cultures better. Ideally, such an exchange should take place not only at the beginning but also during the seminar.

One way to promote informal exchange is to integrate team-building activities into the schedule (e.g. networking events or wrap-up sessions)

Depending on the design, the informal exchange can also be linked to the acquisition of competencies or knowledge at the same time. For example, a digital scavenger hunt or a digital escape room can, on the one hand, help participants get to know each other better and start working together, and on the other hand, the tasks can also be designed in such a way that specialized knowledge is also required for successful performance.

However, team-building activities can also be limited to just getting to know each other. For example, students can be asked to tell one truth and one lie about themselves, and the other students must then decide which is the truth and which is a lie.

Especially in intensive courses, there is also a need for regular breaks. Break-out rooms or special platforms such as [gather.town](#) or [gartic.com](#) can be used to systematically integrate informal exchanges during breaks.

#### 3.2.4.2. Use cooperative learning methods

Another approach to promoting collaboration and getting to know each other among students is the use of cooperative learning methods (see e.g. Johnson, Johnson & Stanne, 2000). Ideally, group work is designed in such a way that everyone can and must contribute. There is a variety of different cooperative learning methods, e.g. Think-Pair-Share, Group tournaments or Jigsaw. What all these methods have in common is that they are designed to create both positive interdependence and individual accountability.

#### 3.2.5. How to give students useful awards

To enable students to achieve useful knowledge, relevant skills but also formal accreditation of their work, the following notes and tips, designed by Carroll (2015, p. 18), can be used:

##### **Notes and tips:**

1. Design an internationalized curriculum
2. Use and value students' cultural and social capital
3. Develop students content-awareness for applying knowledge
4. Address employability and professional skills development



*Fig. 15: How to give students useful awards: Notes and tips (own illustration)*

The design of this aspect is very subject-specific. While there are subjects that focus on international knowledge anyway (e.g., in the natural sciences), there are also subject cultures that are very strongly shaped by a national perspective (e.g., school pedagogy, education).



**What learning content in your teaching area is relevant for German as well as international students?**



**Are there different (national) views on the subject? How could you integrate them into your course concept?**



Overall, virtual international courses should be designed in such a way that they not only convey internationally relevant knowledge, but also support intercultural exchange. Ideally, the heterogeneity of the students is used to illuminate learning content from a wide variety of perspectives. During the intercultural exchange, central competencies that are needed in a globalized society are taught: intercultural understanding, communicative skills, social skills and many more.

Credit transfer often requires formal processes that do not have to be carried out by the lecturers themselves. In most cases, the international offices can provide support and advice in this regard. At Justus Liebig University Giessen, for example, there is the "VIP program", which is managed by the International Office. Lecturers who want to open their courses to international students have the opportunity to integrate their courses into this program. The International Office takes care of the advertising and the credit transfer of the students' achievements.

### 3.3. Summary

Virtual international teaching poses major challenges for students as the elaborations have shown. Therefore, virtual international teaching courses should be designed in such a way that they...

- ... are reflective,
- ... support on-boarding,
- ... promote language comprehension,
- ... consider students' needs and skills,
- ... support students' knowledge and skill development,
- ... promote interaction (include student-activities as well as cooperative learning)
- ... support informal exchange.

The design of virtual international courses is therefore by no means trivial from a didactic point of view. In addition to the challenges and problems addressed in this chapter, there are also numerous other aspects that need to be taken into account, especially with regard to communication.



# Chapter 4

## Communication and feedback in virtual (international) learning courses

Teaching and learning processes are based on multiple forms of interaction and communication. Compared to traditional face-to-face courses, two central changes accompany communication in virtual international seminars. On the one hand, it is digitized, whereby new phenomena (such as channel reduction, "lurking" or "socially-reduced cues") gain importance. On the other hand, communication requires the consideration of intercultural differences and specificities.

Based on different communication theories and experiences, this chapter presents challenges resulting from the above changes. In addition, (didactical and methodological) approaches to support virtual international communication and understanding processes will be discussed. In particular, this chapter highlights (reciprocal) feedback processes as a key element for successful virtual international teaching and learning, as well as criteria for good digital feedback.

### 4.1. (Intercultural) Communication

If we want to talk about communication, it is important to first clarify what exactly communication is. The term "communication" is derived from the Latin term "communicatio" (= communication or understanding) (Hartmann, 2008, p.17). Accordingly, communication in the broadest sense can be defined as the transfer of information between at least two information-processing systems (Bentele & Nothaft, 2005, pp. 221-222).

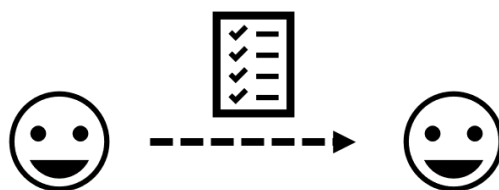


Fig. 16: Communication as information transfer (own illustration)

The communication model of Shannon & Weaver (1964, p. 34) illustrates that communication is not a simple transmission of information but is always based on media and is therefore based on processes of encoding and decoding information: Information is transformed into a message by a sender (coding) which is forwarded via a transmission channel (media) to the receiver, which in turn has to decode the incoming signal, to get the information.



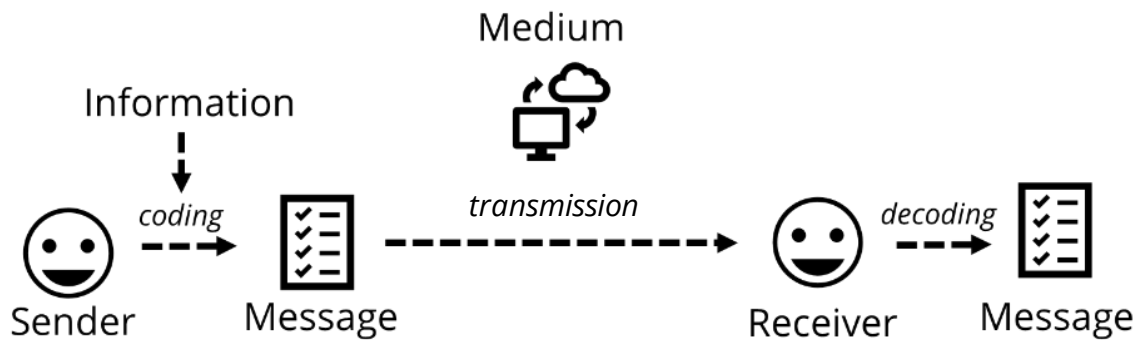



Fig. 17: Communication Model following Shannon & Weaver (1964, p. 34) (own illustration)

Even though Shannon and Weaver consider communication from an engineering viewpoint, their model already contains the most important elements of the communication process: sender, receiver, message, and medium. Communication can thus be defined in the broadest sense, as the mediated transmission of information.

In this context, it is important to note that media are not content- or form-neutral channels of communication (Döring, 2003, p. 41). Each medium provides its own framework in which very specific forms of expression can function as signs (Burkart, 2002, p. 39). For example, in face-to-face conversations, communication is transmitted through speech as well as para- and nonverbal signs (such as the sound of the voice and body language), whereas email communication is usually limited to written text.

 For these six different forms of communication, consider the symbols on which each is based on.

  
Personal conversation  
face-to-face, synchronous

  
(Hand-)Written message  
(Note; Email etc.) asynchronous

  
Personal conversation  
Telephone, synchronous

  
Personal conversation  
digital, synchronous

  
Video message  
digital, asynchronous

  
Audio message  
digital, asynchronous

Fig. 18: Different media for communication (own illustration)

However, communication is not only influenced by the media. Signs are also shaped by social, cultural and linguistic conventions and are thus also changing. Reciprocal communication between actors requires that they interpret the symbols used for communication similarly (same "representational system") (Hall, 1997, pp. 23-24).

To clarify what is meant by this, here is a brief example: Around 200 B.C., humans began to use smoke signals to communicate over long distances. Communities developed a system of different codes for this, e.g., one small and two large clouds of smoke could represent danger. Anyone who knew the code could understand and correctly interpret the message.



*Fig. 19: Intercultural communication: Same code system (own illustration)*

However, people who did not know the code system were accordingly unable to decode the message transmitted by the smoke signals.



*Fig. 20: Intercultural communication: Different code systems I (own illustration)*

Moreover, it could not be ruled out that exactly the same series of smoke clouds had a different meaning in another community. In this case, misunderstandings could not be avoided.



*Fig. 21: Intercultural communication: Different code systems II (own illustration)*

The latter phenomenon still characterizes intercultural communication today and can thus lead to communication difficulties in many cases: e.g., words that look quite similar at first glance, or even those that sound the same or very similar, can have very different meanings in different languages. One example are the so-called "False Friends":

German	English
die Angel (fishing rod)	the angel (der Engel)
bald (soon)	bald (kahl, glatzköpfig)
Brief (letter)	brief (kurz)
Handy (mobile phone)	handy (handlich)

Fig. 22: Examples: "False Friends" (own illustration)

Successful (intercultural) communication can only be achieved if both communication partners interpret the symbols used (e.g., words) in the same way. For this, they need the same "representational system" (Hall, 1997, pp. 23-24). However, not only recognizing the meaning of a sign but also interpreting it appropriate to the communicator is a prerequisite for successful communication (Burkart, 2002, p. 81). Language learning is more than just learning vocabulary. It is also about correctly interpreting the use of vocabulary in the context of the sender's communication. An example of why vocabulary learning alone is not enough are homonyms, which can occur in any language. Homonyms are words that have more than one meaning:

Word	Meaning 1	Meaning 2
right	correct	direction opposite of left
rose	to have gotten up	a flower
rock	a genre of music	a stone

Fig. 23: Examples: "Homonyms" (own illustration)

The exact meaning of a word can only be determined by understanding the overall context. However, the challenge of communication is also complicated by many other factors: for example, by the different use of para- and non-verbal signs, which can also be expressed differently in different cultures (e.g., the use of irony in conversations).



**What experiences have you had with (intercultural) misunderstandings?**



Do you notice any differences regarding communication in face-to-face or digital communication in terms of how misunderstandings arise?

## 4.2. Challenges of digital (intercultural) communication

As already mentioned in the previous section, media are by no means form-neutral, but have an influence on communication. In this section, I will now present a few selected specific challenges. Let's start with a real-life example....



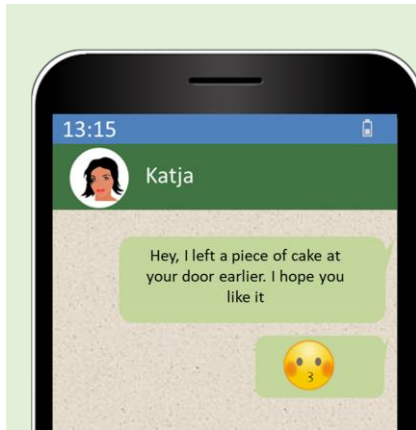
Once I wrote to my mother-in-law that I had baked a cake and therefore she did not need to get one. But her reply led to a misunderstanding: When I read the phrase "Great...", it sounds unenthusiastic and ironic to me, because three dots stand for exactly that in my kind of writing. When asked about it, my mother-in-law stressed that it was really meant seriously and that she was very happy about my message.

So: What happened? My mother-in-law and I obviously have different representational systems when we communicate digitally via WhatsApp. - And we are no exception.

Digital media have their own language based on symbols and forms. Since para- and non-verbal information is missing in written (digital) communication ("channel reduction thesis"), interpretation is very difficult - this increases the importance of signs and symbols - even beyond the text level (e.g., punctuation marks with central meanings or other expressions like smileys or gifs) (Kielholz, 2008, pp. 15-16). But even these signs and symbols are only helpful if they are understood in the same way by the sender and the receiver.

Another consequence, which according to Döring (2000, p. 28) is often associated with the "channel reduction", is the "impoverishment" of interpersonal communication: digital communication is often rougher than face-to-face communication. However, this is also due to the (supposedly) greater anonymity, but more on that later.

I want to continue with another real-life example:



Everyone knows the phenomenon: you write a message and wait for a reply... Eventually you see in the messenger app that the message has been read. But if there is still no answer, this raises questions. In the case of the example: Why doesn't she answer? Did she not like the cake? Or maybe: Did she not find it? - Over time, the lack of response may well give rise to negative feelings, e.g.: How unkind! I brought her a cake and she doesn't even answer...

Here, we find ourselves in the middle of the "black box" problem which often arises in asynchronous communication via digital media: Without a response, we do not know whether and how the message was received and whether it was "understood".

I like to compare the phenomenon with Schrödinger's experiment with his cat. When we send a message, we do not know whether communication has really taken place. Whether the message arrived, whether it was understood correctly, whether there were consequences and so on - all this remains hidden from us as long as the other person does not allow us to look into the box. In fact, it is communication and non-communication at the same time.

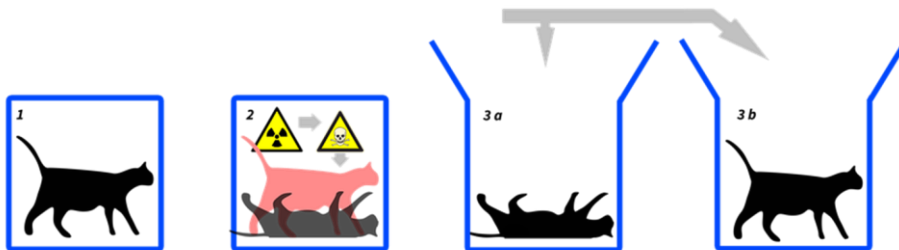


Fig. 24: Schrödinger's cat

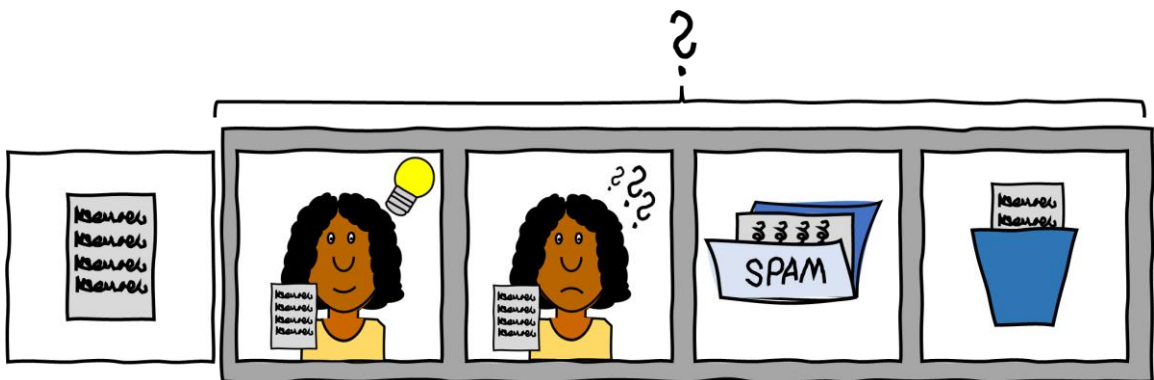


Fig. 25: The black box of (written) digital communication (Brück-Hübner, 2023a)

However, even if there is no reaction, it is not necessarily possible to speak of "non-communication".

According to Watzlawick et al. (2007), it is actually not possible NOT to communicate. This means that - as indicated in the everyday example above - there can also be a form of communication behind a non-response. Possibly, the person may not have the urge or interest to respond. In any case, non-communication can have a negative impact on relationships and cause negative feelings in the sender of the message.

But what does all this have to do with virtual international teaching? - My experience with virtual seminars as a whole has shown many times that a very big issue is that many students do not open the camera and that the participation overall is very low, unless it is explicitly requested. The phenomenon of people being invisibly present without actually being seen or heard is also described by the term "lurking". If a person joins a seminar online, leaves the camera turned off, does not participate with verbal contributions, and does not otherwise give any sign of presence - beyond the name in the list - this person is also hidden in a black box. In this case, we lecturers, as well as the other students, receive no information about the person. We do not even know if she or he is really present or not. This phenomenon, which occurs quite frequently, makes teaching and exchange difficult and can have a negative impact on the overall group feeling.

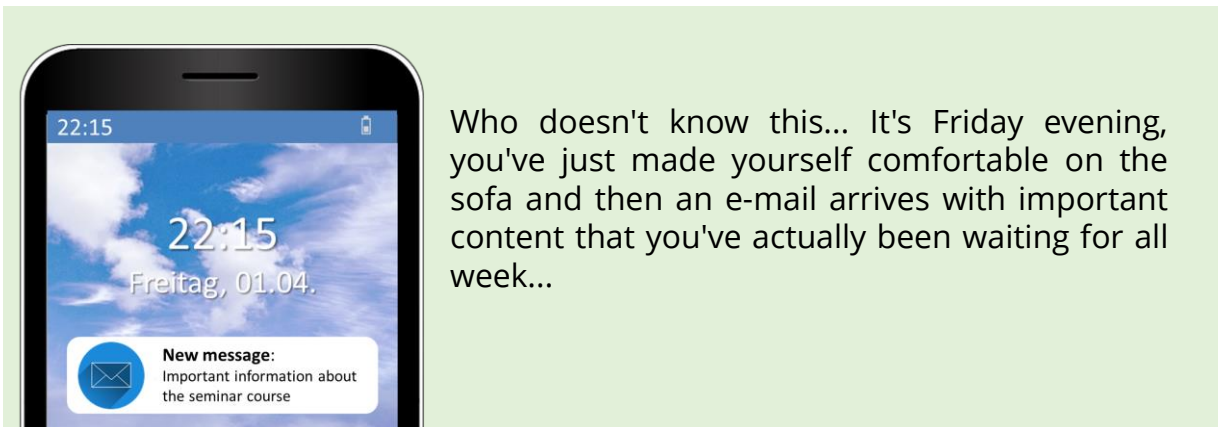
As a lecturer, one is often quickly inclined to assume that the student simply does not feel like coming forward and contributing. However, especially in an international context, there can be many reasons for black tiles and a lack of participation, such as infrastructural problems, cultural aspects or even the special challenges for international students mentioned in chapter 3. For example, I once had a meeting with colleagues from Africa. The connection was so bad that we were all forced to turn off the camera so that they could participate in the web conference at all. It is therefore very important to enter into an exchange with the people in question (e.g., by e-mail) in order to clarify the reasons for the "lurking" without jumping to conclusions too quickly - based on prejudices.

Closely related to "lurking" is also the major issue of "anonymity" when communicating via digital media. If a student does not appear in any way during an event, we cannot even be sure that the name behind the list of participants of the web conference is really the person we assume it is. It is very easy to change one's identity in the digital space, so ultimately you can never be sure who you are talking to or writing with. The more visual, para-verbal and non-verbal signs you receive, the more information you can gather about the person on the other side. But even this information can be faked (e.g., deepfake).



The “reduced social cues”-approach assumes that computer-mediated communication increases anonymity due to the lack of social information and leads to an incomplete social perception of the other person. Anonymity leads to less control and may encourage disinhibited and antisocial behavior. On the other hand, positive effects of reduced social cues are assumed, such as possible status differences between communication partners. This is supposed to lead to democratization and equalization of communication (see e.g. Döring, 2003, p. 154-155; Kieseler et al., 1984, pp. 1125-1126)

Finally, let us take a look at one last particular challenge that goes hand in hand with digital media. Let's start with an everyday example again:



Communication via digital media allows us to be available at any time and from any place - even after work or on vacation. This is accompanied not only by a blurring of spatial boundaries but also by a blurring of temporal boundaries. Of course, this has many advantages, especially for international communication - but due to time differences, messages are often received after working hours. And meetings also tend to take place at times that are no longer part of regular working hours. What is true for us lecturers is of course also true for the students! They, too, can send or receive messages from us at any time. That is why it is important to set clear rules - and also to communicate when you read and reply to messages. Personally, I also find it important to be considerate of students' free time and try to be mindful of what times I send messages.





### 4.3. Didactic considerations

The previous sections have shown that virtual intercultural communication comes with a variety of challenges. In this section, I would like to provide some didactic guidance on how virtual international teaching can be designed to proactively support and promote successful intercultural communication and mutual understanding.

The key to supporting successful communication is to **communicate about communication**: To support successful communication, it is essential to openly talk about communicative processes, problems, and misunderstandings. This is the only way to make the problems visible to everyone and to actively work on their solution. In addition, through discussions, you get to know and understand yourself and the various systems of representation better. Ideally, you make it clear to students from the beginning and over and over again that communication problems and misunderstandings are an integral part of international exchange and thus also of international teaching and learning.

The presentation of the specifics of intercultural and digital communication has also shown that the more social and communicative information is available, the easier communication is. For this reason, **communication channels that convey as much para- and non-verbal information as possible should be used** whenever possible: Talking is better than writing! Video is better than just talking! And: personal encounters always have a different quality and can make an immense contribution to really getting to know each other better. Therefore, try to include face-to-face meetings into your seminar concept whenever possible.

In addition, the better you know each other, the better you communicate with each other. That is another reason why it is important to **integrate student activities into virtual international courses**. Some methods and tools that support collaboration and exchange can be found in chapter 3 (p. 13ff.).

And last but not least: In my opinion, **feedback is the key to successful communication and learning** in (international) courses. I would like to explain how I arrive at this thesis in the following section.

### 4.4. Feedback

#### 4.4.1. What is feedback?

The concept of feedback is by no means self-explanatory. Feedback in higher education can be realized in many ways. Simply put, feedback is initially just a response or reaction. It can come from people as well as from systems. It ranges from minor spontaneous statements (e.g., an annoyed eye roll) to feedback conversations to extensive systematized data collection (evaluations) (Brück-Hübner, 2023a, p. 36; Buhren, 2015, pp. 11-12). In the best case, feedback is not a one-way street but embedded in conversations.



In that understanding, feedback is a reciprocal communication and understanding about learning (process, product) and teaching that relates to competencies and skills and has the goal of optimizing (professional) action (e.g., improving scientific work).

#### ***4.4.2. Why feedback is important in virtual international teaching environments***

As already described in chapter 3, feedback and the accompanying joint reflection are an elementary component of intercultural understanding. These are also the basis for adapting teaching to the learners' needs as well as for providing optimal support to students.

In summary, feedback conversations provide lecturers with the opportunity to...

1. ...describe and discuss the expectations and make them understandable to students,
2. ...understand and visualize (mis-)conceptions and (mis-)understandings,
3. ...reflect about own strengths, weaknesses and perspectives,
4. ...adapt and optimize the teaching process,
5. ...improve teaching skills (professionalization),
6. ...keep students on board (motivate them).

On the other hand, feedback conversations can help the students to...

1. ...express their own needs,
2. ...better understand the expectations of the lecturer,
3. ...adapt their own learning process,
4. ...reflect about their own strengths, weaknesses and perspectives,
5. ...participate (e.g., during the course or also in designing the course),
6. ...improve their work (e.g., through feedback-based revisions).

Feedback is a special type of communication and requires special sensitivity and care from all conversation partners. That is why it is particularly important here - especially with digital feedback - to reflect on the challenges of virtual communication and to address them openly with the students (e.g., that misunderstandings can arise very quickly). It is advisable to agree on clear rules for the feedback processes. In addition, as mentioned earlier, feedback should always be integrated into conversations: Ask students for feedback on your feedback or give students feedback on feedback they give you. In addition, the more (social and linguistic) information available, the easier it is for the feedback recipient to understand the feedback. For this reason, (synchronous or asynchronous) video or audio feedback should always be preferred over purely written feedback. Last but not least, and as mentioned before: please respect your students' "free time". Try to give them feedback at agreed times (see Brück-Hübner, 2023a).



#### **4.4.3. Criteria for good digital feedback**

The question "what is good feedback?" cannot be answered in general terms, as feedback processes are always very personal and individual. Nevertheless, some criteria have been established in research that represent characteristics of good (digital) feedback. The following criteria are based on a study that I conducted myself in 2022 (for more detailed results, see e.g., Brück-Hübner, 2023b).

##### **4.4.3.1. Formal dimension**

From a formal point of view, feedback should be formulated in such a way that it is easy to understand in terms of language. In addition, it should generally be given personally and individualized (privacy must be protected, especially in the digital space). Due to the diversity of students, you should ideally offer different ways to receive feedback. For text feedback in particular, the length should be appropriate (not too short but not too long either). For video- or audio-based feedback, you should also ensure that the technology works (e.g., good internet connection, good sound...) (Brück-Hübner, 2023b).

##### **4.4.3.2. Content dimension**

The content itself should be as specific, descriptive and understandable as possible. Feedback should be fact- or criteria-oriented and relate to a specific task or performance. Feedback should be needs-based and aimed at supporting the feedback recipient and helping them with personal development (educational) (Brück-Hübner, 2023b).

##### **4.4.3.3. Procedural dimension**

Feedback is often given with a significant time delay. However, feedback is most effective when it is given as soon as possible after the performance or task has been completed. It is also advisable to give feedback several times and during the process (formative). This provides the recipients of the feedback with more opportunities to adjust and optimize their learning (or teaching) (Brück-Hübner, 2023b).

##### **4.4.3.4. Emotional dimension**

As already mentioned, feedback is something very personal. For this reason, the emotional dimension is very important. Feedback should be supportive and promote the autonomy of the feedback recipient. In addition, feedback should be motivating, appreciative and sensitively formulated. For this, it is very important that the conversation is conducted at eye level. The person receiving the feedback should have the chance to ask questions and also be allowed to express his or her own opinion (Brück-Hübner, 2023b).

4.4.3.5. Personal dimension

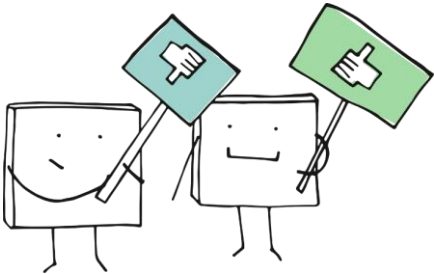
Closely connected to the emotional dimension is also the behavior and attitude of the person giving the feedback. She or he should be friendly, polite and respectful, but also honest and serious. Even though university lecturers often have many students to supervise, it is still very important for students that lecturers take their time and prepare for the meeting. In addition, those giving feedback should also be open to those receiving it and, for example, also allow criticism and questions or be willing to revise their own assessments in the discussion - if appropriate.

As pointed out at the beginning, such lists of "criteria for good feedback" are a good guide, but no guarantee for successful feedback processes. My study has shown that, depending on the medium used, there are also differences in the criteria that characterize successful feedback from the students' point of view.

Digital text-based feedback	Digital video-based feedback
Comprehensibility and clarity (33%)	Dialogical (38%)
Suggestions for improvement (32%)	Good internet connection / no technical issues (33%)
Detailed: Reasonable scope (29%)	Friendly, polite and respectful (28%)
Dialogical (26%)	Needs-oriented: Queries are possible and are answered (25%)
Needs-oriented: Queries are possible and are answered (23%)	Suggestions for improvement (23%)
Concreteness and preciseness (23%)	Lecturer is committed and takes time (23%)
Friendliness (22%)	Lecturer listens and asks for own perspective (16%)
Timely response (17%)	Comprehensibility and clarity (14%)
Traceability (16%)	Justification (14%)
Individuality (16%)	Motivating, appreciative, sensitive and understanding (13%)

Fig. 26: Student survey: The ten most frequently mentioned criteria of good digital text- and video-based feedback in comparison (n= 174 (text-based) and n=161 (video-based) (Brück-Hübner, 2023b)

Digitization has opened up many new ways for giving feedback. In the next chapter, I would like to show you the variety of possibilities and present a few selected tools.



# 4.5. Communication and feedback tools

Together with my colleague Jennifer Schluer, I conducted a study to find out which understandings of feedback and which feedback media can be found in the research literature. It quickly became obvious that there are many different ways of giving feedback.

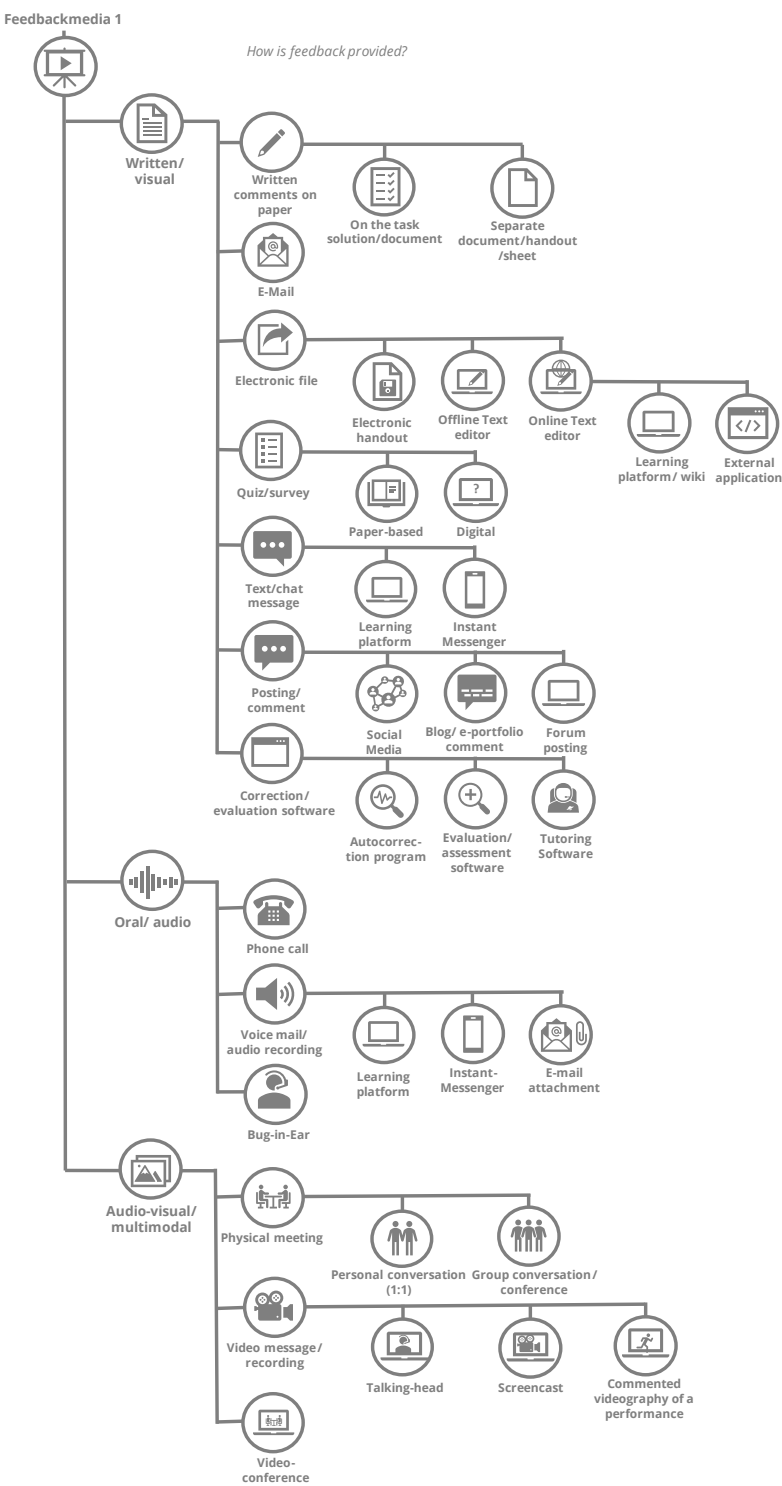


Fig. 27: Feedback-media: An overview (based on Brück-Hübner & Schluer, 2023)

## 4.6. Conclusion

The explanations in this chapter have shown that intercultural communication is confronted with many challenges, especially if it only takes place virtually. To support (intercultural) communication in virtual international learning environments, it is particularly important to keep the following rules in mind:

1. The more information you receive during communication processes (e.g., para- and non-verbal) the better, and
2. The better you know the communication partner, the better you will understand him or her.

In addition, communication about communication is of central importance for successful communication and learning, e.g., in the context of joint reflection and feedback discussions.



# Chapter 5

## **ePortfolios, (intercultural) reflectivity and assessment in virtual (international) learning courses**

Performance assessment in virtual international seminars is often a challenge for two reasons: on the one hand, accreditation and recognition of performance must be guaranteed for all students regardless of their home university. On the other hand, the focus of virtual international seminars is usually not only on the pure transfer of knowledge and thus on measurable learning outcomes but also includes more complex learning objectives such as intercultural cooperation and intercultural reflectivity. If the journey is seen as the destination, the entire teaching and learning process requires the inclusion of formative ways of performance measurement and assessment. The ePortfolio is a tool that can document both formative and summative learning processes and make them the subject of performance assessment while supporting processes of (intercultural) exchange and reflection. This chapter focuses on assessment and reflectivity in virtual international courses and provides a didactic introduction to the use of ePortfolios as a reflection and performance assessment tool in virtual international courses.

### **5.1. Assessment in virtual international courses**

As already discussed in chapter 3, it is important for both domestic and international students that the course offers them added value: On the one hand, it is about acquiring new knowledge and competencies, but on the other hand, it is also about recognition of their achievements by their home universities. Not least for this reason, it is important to think of learning and assessment together and also to keep the learning objectives in mind.

A concept that helps us align learning objectives, teaching/learning methods, and performance assessment during the planning processes is constructive alignment. The concept was developed in an experiment with ePortfolio assessment, combining and improving two elements that proved to be very beneficial: constructivist learning theory and alignment between intended learning objectives, teaching and learning activities, and performance assessment tasks (Biggs & Tang, 2011, p. 95). Based on this, the authors explain the definition of the term as follows:

“‘Constructive’ comes from the constructivist theory that learners use their own activity to construct their knowledge as interpreted through their own existing schemata. ‘Alignment’ is a principle in curriculum theory that assessment tasks should be aligned to what it is intended to be learned, as in criterion-referenced assessment.” (Biggs & Tang, 2011, p. 97)

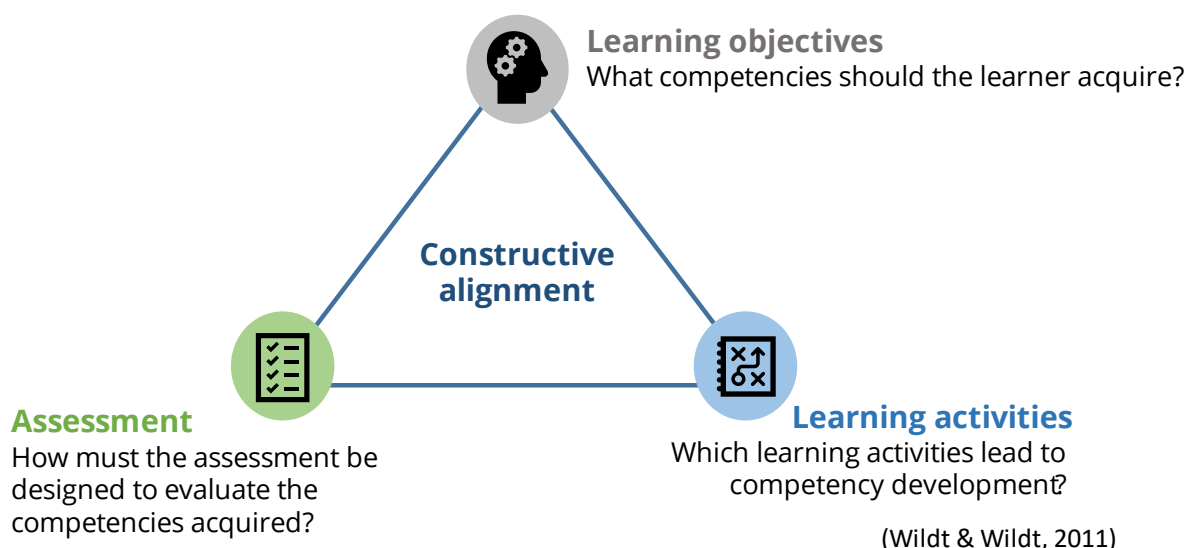


Fig. 28: Constructive alignment (own illustration based on Wildt & Wildt, 2011)

Following Biggs & Tang (2011, p.100) teaching and assessment should be designed in four stages:

1. Describing the intended learning outcome in terms of a verb (learning activity), its object (content), and a description of the context and a standard that students are expected to achieve.
2. Creating a learning environment using teaching and learning activities that address the learning outcome and are therefore likely to achieve the intended outcome.
3. Developing assessment tasks that include the intended learning outcome and thus allow you to assess, e.g., with the help of rubrics, whether and how well students' performance meets the criteria.
4. Converting assessments into standard grading criteria.

### 5.1.1. What are the learning objectives

When planning a virtual international course, according to Biggs & Tang (2011, p. 100), it is important to define the learning objectives. Bloom's Taxonomy can help us by finding the best verb (see Figure p. 36). Learning objectives are hierarchical and increase in complexity, but also in the degree of reflectivity required to achieve them. In terms of constructive alignment, it is important to only formulate learning objectives that can be subsequently reviewed.



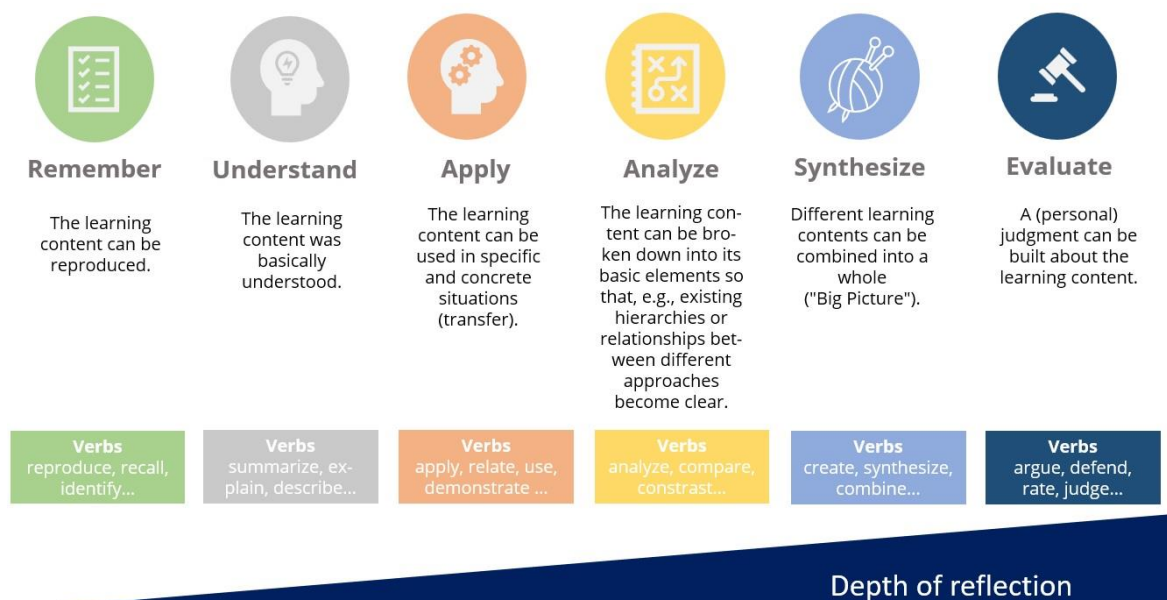


Fig. 29: Bloom's Taxonomy (own illustration, based on Bloom, 1972, p.217ff.)

In virtual international courses, it may be challenging to formulate the learning objectives for several reasons. First, when the journey is the destination, it is not easy to find a suitable learning objective. Wicking (2022, p. 9) highlights that participation does not equate to learning success. So, a "participation grade" is perhaps the easier way to assess – but not in terms of constructive alignment.

Another challenge we face is the differences in assessment socialization, but also the different levels of knowledge and competencies that students bring with them. In order to avoid inequities, it is important to differentiate learning objectives in very heterogeneous groups. Consequently, however, the learning objectives in a course may differ considerably. Nevertheless, it is also possible to formulate standardized learning objectives. In this case, the further design of the course should focus on giving students the support they need to achieve the learning objectives.



**When you think about your planned virtual international course, what are your key learning objectives?**



### 5.1.2. Which type of assessment fits the learning objectives?

Once the learning objectives are defined, the next step in constructive alignment is to select the learning and teaching methods. Since we want to focus on assessment, we will skip this step and explore which types of assessment are available to assess which is most appropriate for the respective learning objective.



Fig. 30: Assessment types – an overview (own illustration)

There are a number of different ways of performance assessment. In higher education, the following forms in particular have become classically established: Tests/exams, presentations or written assignments such as essays or term papers. All of these forms have in common that they assess knowledge or competencies at a certain point in time. Most of the time, performance assessment in these forms is done once per course. Thus, the performance assessment is primarily summative in nature. If, however, the focus is to be on development and thus progress, it is necessary to conduct formative assessment at several points in time - or entirely during the learning process. One medium that supports formative assessment is the ePortfolio. See chapter 5.2.4. for more information on performance assessment with ePortfolios.

All of these types can be used for both formative and summative processes and can also be used to capture different learning objectives. Ultimately, it always depends on the specific task within the assessment. For example, case vignettes can be integrated into essays or tests to test the acquisition of social and intercultural competencies.



**When you think about your formulated learning objectives, what kind of assessment suits them?**

### ***5.1.3. How to design an assessment that also fits the learning activities and supports learning***

As described in the previous section, performance assessment also depends primarily on the content of the tasks. Ideally, performance assessment tasks should also be formulated and integrated into the course in such a way that they not only fit the learning objectives and learning activities but also support learning at the same time. Following Wicking (2022), learning-centered assessment should be designed based on five basic principles:

#### **5.1.3.1. Creating authentic and cognitively complex tasks**

Assessment tasks should be based as closely as possible on the real world and thus reflect what learners will do outside the classroom. Authentic tasks are also performance-oriented, meaning they are both product- and process-oriented. In addition, tasks should encourage social interaction. Co-construction of knowledge through collaborative sharing is more valuable than mere memorizing and repeating facts (Wicking, 2022).

#### **5.1.3.2. Clarifying goals and criteria for success**

A very important key to successful learner-centered assessment is to clarify and share the goals of the task as well as the criteria for success with students. In order to work towards a learning goal, it is important that students have a clear understanding of what that goal is. Creating and using rubrics is a practical way to clearly communicate objectives to students. Rubrics help learners understand the desired outcomes and assessment criteria. They are not only used to assess work that has already been completed. They are also used for progression by focusing efforts on future work. Rubrics can also be used for self-monitoring and self-assessment and to promote self-directed learning. Rubrics do not need to include numerical scores but should focus on an analytical assessment of strengths and weaknesses (Wicking, 2022, pp. 12-13). On the next page you will find an example of how such a rubric could look like.

#### **5.1.3.4. Developing student's abilities to evaluate their own learning**

Monitoring and assessing one's own learning process is not only good practice but plays an essential role in successful learning processes. There are many different ways of self-assessment, such as self-assessment forms, group discussions or learning journals (e.g., in the form of ePortfolios). Self-assessment is more than just evaluating one's work. It should engage learners in deeper levels of reflection (Wicking, 2022, 14) - we will return to the central role of reflection in virtual international courses later in this chapter.

**Table 2.** Assessment Rubrics for Physics Portfolio

Objective: to use the indicators and criteria for the final portfolio assessment.				
Criteria	Poor 1	Average 2	Good 3	Excellent 4
Selection of artifacts that meet the purpose of the portfolio	Very few artifacts have met the purpose of the portfolio.	Some artifacts have met the purpose of the portfolio.	Most artifacts have met the purpose of the portfolio.	All artifacts have met the purpose of the portfolio.
Organization of the portfolio	Structure of portfolio is not organized. Needs a lot of improvement.	Structure of portfolio is organized, but needs some improvement.	Structure of portfolio is fairly well organized.	Structure of portfolio is very well organized. Excellent!
Qualities of the work samples	Samples show total lack of understanding of concepts.	Samples show some basic understanding of concepts.	Samples show adequate understanding of concepts.	Samples show in-depth understanding of concepts.
Varieties of work samples	There is no variety of work samples. (Only 1 type is submitted)	There are insufficient varieties of work samples. (2 to 3 types submitted)	There are sufficient varieties of work samples. (4 types submitted)	There are more than sufficient varieties of work samples. (more than 4 types submitted)
Reflections of work samples	Little evidence of self-reflection.	Some evidence of self-reflection.	Evidence of realistic self-reflection.	Evidence of realistic, thorough and constructive self-reflection.
Comments :				
Final Score : _____ [Scale: A = 17 – 20, B = 13 – 16, C = 9 – 12, D = 1 - 8]				
Final Grade: _____				

*Fig. 31: An example rubric (taken from Ling, 2016, p. 157)*

#### 5.1.3.4. Developing student's abilities to evaluate their own learning

Monitoring and assessing one's own learning process is not only good practice but plays an essential role in successful learning processes. There are many different ways of self-assessment, such as self-assessment forms, group discussions or learning journals (e.g., in the form of ePortfolios). Self-assessment is more than just evaluating one's work. It should engage learners in deeper levels of reflection (Wicking, 2022, 14) - we will return to the central role of reflection in virtual international courses later in this chapter.

#### 5.1.3.5. Providing feedback that promotes continuous learning

Feedback is very important for learning processes. Ideally, feedback should be provided from both formal sources (e.g., the lecturers) and informal sources (e.g., pair or group work) (Wicking, 2022, p. 15). For more information about feedback in virtual international courses see chapter 4.4.

# 5.2. ePortfolio-Work

## 5.2.1. What is a portfolio / an ePortfolio?

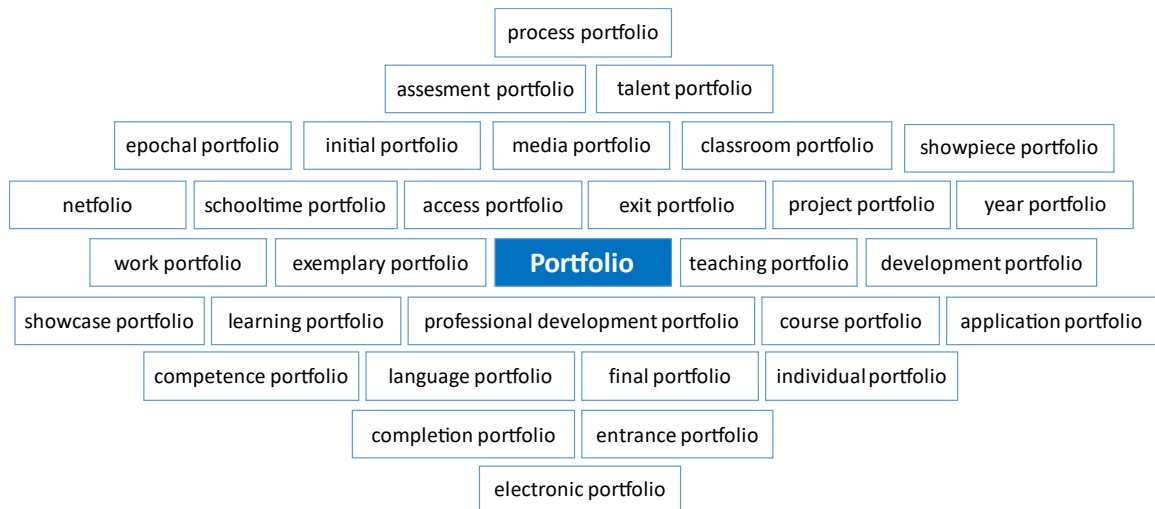


Fig. 32: Diversity of ePortfolio-understandings (Illustration based on Häcker (2006) and Brück-Hübner, 2020, p.93)

In practice, theory and research, there are many different understandings and perceptions of what a portfolio or ePortfolio is. As the figure shows, there are many different types of (e)portfolios but even within the different types, there are different forms of characteristics. For this reason, it seems impossible to find a definition that applies equally to all ePortfolio forms. In the context of my dissertation, I have developed a working definition that tries to include as many forms of ePortfolios as possible:

An ePortfolio is an intentional digital collection of artifacts selected (more or less) independently by the learner, which can reflect not only the learner's skills and performance (competencies), but also the learner's progress and thus individual development over a period of time and in a specific area. The products are usually complemented by (self-)reflections in which the learner critically reflects on his or her learning. The ePortfolio serves as a basis for a dialogical, development-promoting and communicative exchange between learners and lecturers (development tool), but can also be used for performance assessment (performance assessment method). The latter is occasionally done using jointly negotiated assessment criteria. Compared to the paper-based portfolio variant, an ePortfolio is also characterized by the features of 'multimedia', 'interactivity', 'connectivity' as well as 'publicity' and 'control'. (Brück-Hübner, 2020, p. 103)

The artifacts of the ePortfolio can be diverse: from texts (e.g., essays, documentations or term papers) to the integration of presentations to the inclusion of multimedia and dynamic elements (e.g., videos or interactive graphics) - the possibilities are very diverse.

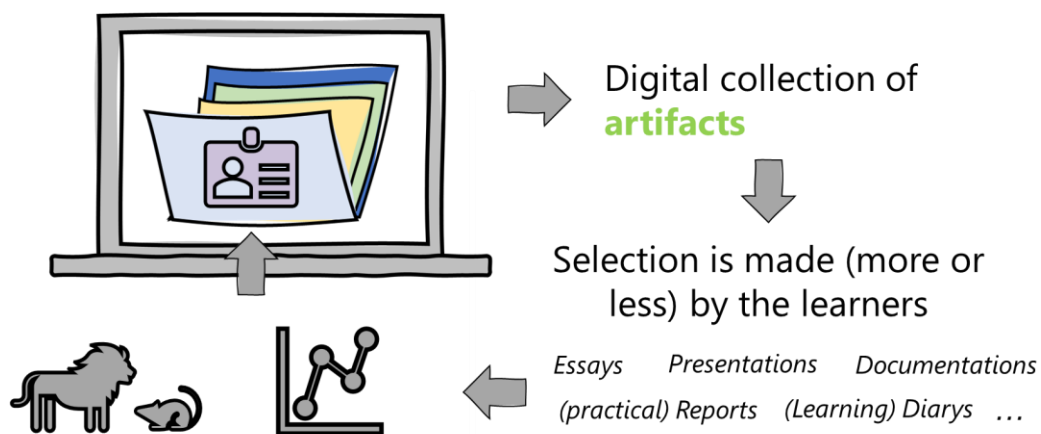
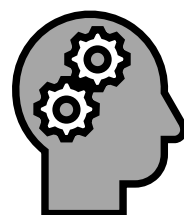


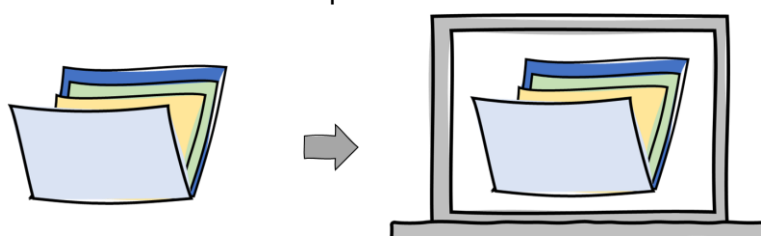
Fig. 33: What is an ePortfolio? – Overview (own illustration)

Working with ePortfolios can support formative and learning-oriented assessment and, depending on the design, allows us to gain deeper insights into the personal development and the strengths and weaknesses of each individual learner. Besides that, ePortfolios can support reflectivity.



### 5.2.2. ePortfolios – Digital Variant of the (Paper) Portfolio or New Concept?

The previous explanations do not refer specifically to electronic portfolios, but can also apply to the paper-based variant. This raises the fundamental question of whether electronic portfolios are a simple digitization of the paper-based variant or even a new concept.



Question of principle:  
Digital variant of the (paper) portfolio or new concept?

Fig. 34: Portfolio vs. ePortfolio (own illustration)

This question cannot be answered clearly either, because it depends on how the ePortfolio work is designed and to what extent the new possibilities, the “special features” of ePortfolios, are used.

### Special features of electronic portfolios

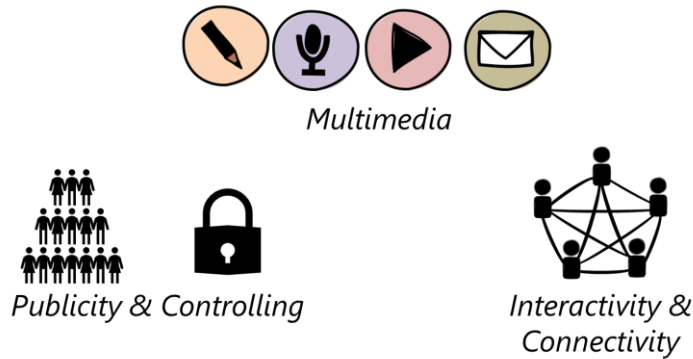


Fig. 35: Special features of ePortfolios (own illustration based on Brück-Hübner, 2020, pp.102-103 )

First of all, ePortfolios are **multimodal/multimedial**. This means that not only texts and static image elements, but also multimedia elements (such as videos or audio files) or interactive elements (such as dynamic graphics, simulations, etc.) can be embedded directly on a page without much effort. This creates greater flexibility and diversity in the design of learning products. For example, reflections can be integrated not only as text elements but also, for example, via blogs or as audio or video files.

Paper-based portfolios are usually one-off copies that can only be viewed by one person at a time. This also means that it is difficult or, depending on the format of the portfolio, impossible for learners to continue working on their work if the lecturer has just collected the portfolio for review. This is where ePortfolios offer completely new possibilities: By making them available online, you can give the **public**, and thus many people at the same time, access to the ePortfolio. Parallel to the process of sharing, learners can still work on their projects at any time. Most ePortfolio platforms also give the learner the ability to decide who can and who cannot view the ePortfolio, when and for how long. So, the **control** over this is with the learner. For example, a student can share his or her work with a peer before submitting it to the lecturer and receive feedback with just a few clicks.

This also creates new opportunities for **interactivity** and **networking**. Students can share their work, ask for feedback, and revise the content. ePortfolio platforms also allow students to collaborate (e.g., group work). They gain insights into each other's work and, in turn, also into alternative solutions, subject areas and interests. In the process, they also get to know each other better. This can lead to the formation of working and interest groups. But also in our own ePortfolio, technology allows us to link content more closely together (e.g., through the use of hyperlinks and tags). This creates a "big picture" of a learner's knowledge and competencies over a longer period of time.

In summary, the possibilities of virtual ePortfolio platforms differ greatly from the paper-based variant, so that one can certainly speak of a new concept. But as already mentioned, this is only the case if these special features also come into play.

### 5.2.3. ePortfolio – Development and Communication Tool vs. Assessment Tool

As already mentioned in my working definition, there basically are two fundamentally different uses of ePortfolios - but they can certainly also be combined.

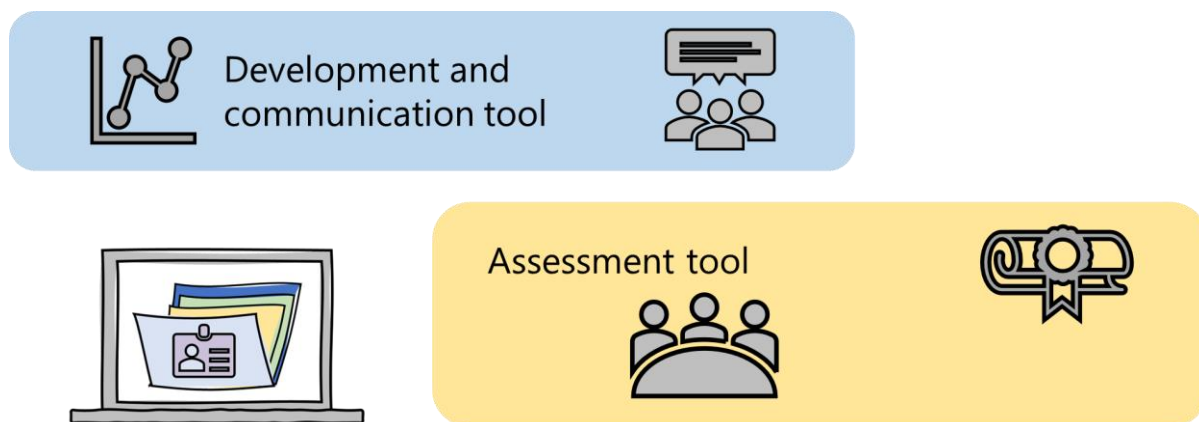


Fig. 36: ePortfolios as development and communication tool vs. assessment tool (own illustration)

#### 5.2.3.1. ePortfolios as development and communication tool

If ePortfolios are created during the learning process, we can use them to document the learner's development. But more than that: Already during the process, we as lecturers get insights into the thoughts and ideas but also strengths, weaknesses and problems of the learners. This enables us to give formative feedback and to support the learners in their learning through individualized support measures.

#### 5.2.3.2. ePortfolios as assessment tool

ePortfolios can contain a wide variety of artifacts and thus also allow us greater flexibility in performance assessment. For example, we gain insight into individual development and can also take this into account in performance assessment. Alternatively, multimedia/multimodality allows learners to demonstrate and display performance (knowledge or competencies) in different ways. However, this raises the question of how such eportfolios can then be assessed.

### 5.2.4. How to assess ePortfolios

When planning assessment of ePortfolio work, there are four main decisions to make:

#### 5.2.4.1. Content selection:

As a lecturer, there is a tendency to quickly evaluate everything that is integrated into ePortfolios. However, it is advisable to be selective for two reasons: first, it is also important to have assessment-free spaces that should really only serve the learner and their individual development.



Secondly, it is very time-consuming to work through and assess all of the contents of the ePortfolio. The selection can be made by both students as well as lecturers, or a mixture of both (e.g., two reflection reports could be required from the lecturer in an internship, but it could be left to students to decide exactly what those reports should be about).

Looking back at the constructive alignment, it is very important that the content selection also takes into account that the learning objectives can be adequately assessed and evaluated. Depending on the learning objectives and also the degree of individualization in the context of teaching and learning methods, it has to be decided to what degree the content selection must be standardized, whether the focus is more on the learning process or the output/product, and whether it is more about assessing knowledge or competencies or also reflectivity.

#### **5.2.4.2. Definition of the assessment criteria**

Depending on the learning objectives it is also important to define assessment criteria. This can be done by the lecturer alone or in collaboration with the students. Again, it is important to decide whether assessment should be individualized (e.g., through individual learning contracts) or standardized (e.g., through rubrics).

#### **5.2.4.3. Who is assessing?**

Classically, performance assessment is done by the lecturer alone. As already mentioned above, the evaluation of ePortfolios involves a lot of work. Not only for this reason, there is always the possibility to involve the learners themselves in the assessment process: Be it through forms of self-assessment or peer assessment. This then requires clear rules and good guidance. At the same time, however, the participation of learners in performance assessment processes also promotes self-assessment skills and self-directed learning (see e.g., Winter, 2012, pp. 10-14; Vögeli-Mantovani, 2011, p. 251).

#### **5.2.4.4. When and how often will be assessment take place?**

Last but not least, it is important to determine when and how often the ePortfolio content should be assessed. In principle, it is important to avoid permanent pressure on the students to perform and to include assessment-free spaces in the planning. Formative assessment in particular should therefore be treated with caution. At the same time, I would like to emphasize that formative assessment is not the same as formative feedback: ePortfolio work is predestined for lecturers to take a look at the students' work during the process and also to give them feedback. The ability to revise content to achieve the best possible end result is a major advantage of ePortfolios. However, work during the process does not always need to be graded directly.



### 5.3. Assessment in virtual international courses – My personal experience and opinion

In my personal opinion, virtual international courses are still in their infancy and represent a great adventure for all sides - lecturers as well as students – in which interaction and intercultural exchange, participation and reflection of one's own perspective and positioning are the main issues. In many cases, the actual learning content comes second to the acquisition and development of key competencies - such as intercultural communication. For this reason, my personal focus is on motivating learners - which also means that I am prepared to fall short of my usual demands in terms of performance assessment. Especially because of the great heterogeneity of the student body, it is important to remain flexible - anything else would be unfair to one of the student groups. In my opinion, it is also important to leave "language skills" out of the evaluation criteria. On the contrary, I have the utmost respect for students (and lecturers) who do not have a perfect command of the course language but still actively participate and contribute to the adventure. In my opinion, it is therefore important to approach the whole issue of assessment calmly and openly and not to set too high expectations for students.

However, this does not mean that the issue of assessment should not be considered when planning and conducting a course. On the contrary, constructive alignment is a concept that is so popular precisely because it is geared to the needs of students. Students do not only want to acquire knowledge and competences but also added value - in form of an assessment that is also accepted and recognized by their home university. For students, performance assessment is usually the pivotal point in courses, to which they also orient their activities. The central importance of assessment as extrinsic motivation must not be forgotten – it is, therefore, important to find a good balance between learning/exchange and assessment.



## 5.4. Reflection

### 5.4.1. What is reflection?

"Reflective **thinking** consists in a lively, persistent, careful **validation** of something held to be true in the light of the grounds on which the view is based and the further **conclusions** toward which it tends" (Dewey, 2002, p. 11, as cited in Keller, 2015, p. 117).

Reflection is directly linked to thinking. By reflecting, we start to think about...

... our own learning,  
... our own knowledge and skills,  
... the learning content,  
... our own (world-)view,  
... our feelings and needs,  
... or about something else,

...with the aim of validating, optimizing and/or processing it more deeply.

Based on Keller (2015, p. 11), there are three different depths of reflection:

- *Level 1: Descriptive* (e.g., by looking back or telling what happened)
- *Level 2: Reflective* (e.g., making and analyzing connections; checking the validity of one's own knowledge/feelings...)
- *Level 3: Critical-reflective* (checking and testing if e.g., insights/attitudes are justified and free of contradictions; gaining own insights from acquired knowledge; adapting behavior to newly learned knowledge and skills)

In my experience, most student reflections tend to be at a lower level. The higher the level of reflectivity, the greater the gain from reflection and the more it can lead to real learning processes or the acquisition of real competencies.



**If you think of the example of intercultural misunderstandings that arise from the use of different representational systems, what would the reflection of this misunderstanding look like on levels 1, 2 and 3?**



### Task solution:

#### Level 1

**Descriptive** (e.g., looking back/telling what happened).

He didn't understand me.

#### Level 2

**Reflective** (e.g., making and analyzing connections)

He didn't understand me correctly because in his culture they use different signs for communication.

#### Level 3

**Critical-Reflective** (e.g., gaining own insights from acquired knowledge)

He didn't understand me correctly because in his culture they use different signs for communication. It is important that we agree on a common sign so that we can warn each other safely next time.

### 5.4.2. Reflection and intercultural learning

**When looking at that picture, what do you see?**



Fig. 37: Old or young woman? (Resource: <https://www.sehTestbilder.de/optische-taeschungen-illusionen/>)

Some of us see an old woman, while others first see a young woman. After thinking about it for a while, some of us see both versions. Some, however, find it very difficult to see the other version as well. Even with help, it can be hard to see both versions equally.

This phenomenon of looking at things from our own perspective, thinking quickly in categories, and then having difficulty changing our thinking characterizes intercultural learning. These processes of rethinking and reordering our perspectives and category systems require processes of (self-) reflection. Based on this, I argue that reflection is the key to developing intercultural competencies. This thesis is also supported by the "iceberg model of intercultural communication" (see Fig. 38).

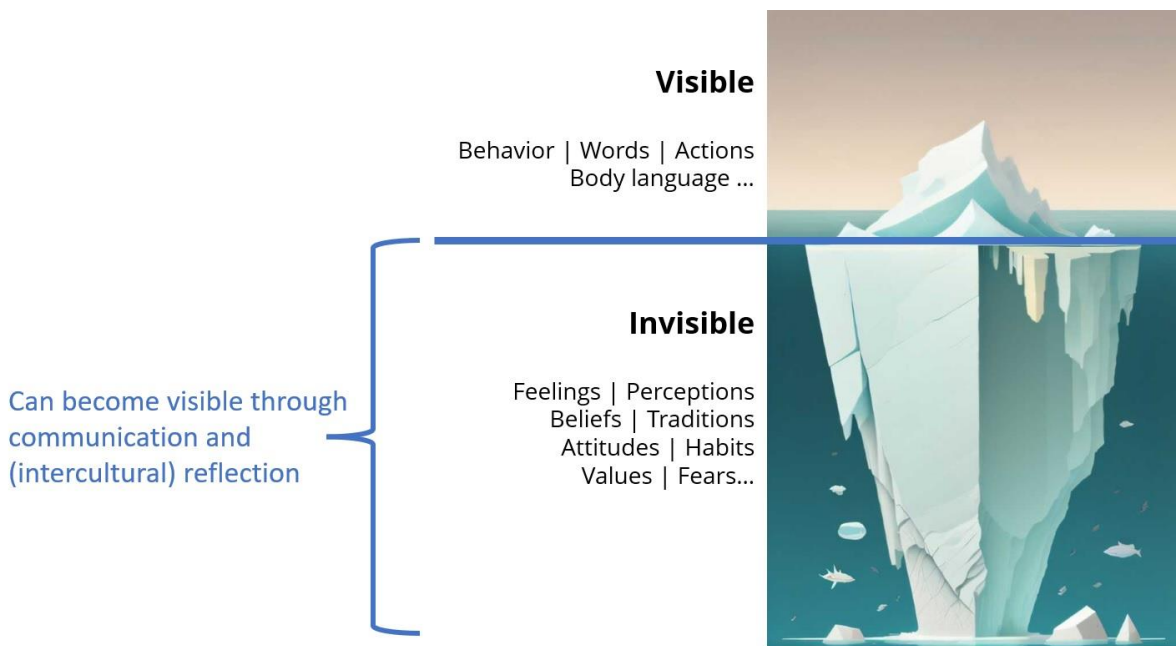


Fig. 38: The iceberg model of intercultural communication (own illustration based on Kohls & Knight, 2004).

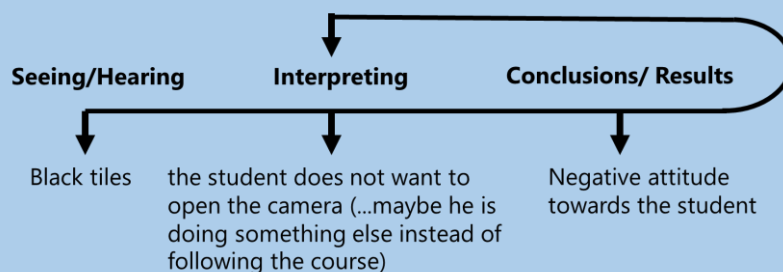
According to Kohls and Knight (2004), our perception in the context of intercultural communication processes can be compared to an iceberg. When we meet someone from another culture, there are certain things that are visible and thus directly accessible to our perception. These include, for example, the language that is spoken, the choice of words, actions, and body language. However, these "external" behaviors are influenced by many cultural characteristics that are invisible to us. These include, for example, feelings, beliefs, traditions, fears, values and much more. Like an iceberg, we can only see a very small part during the communication process, while the much larger part remains hidden from us. This model explains why misunderstandings very often occur in intercultural communication. For example, when I communicate as a German with a student from China, the student may not look me directly in the eye. Based on my German values, I perceive this as impolite. In Chinese culture, however, it is rather an expression of respect. Consequently, due to the differences in the value systems, I come to the wrong conclusion. The true meaning of the behavior remains hidden from me.

Our own perspective and (world) view as well as our thinking in categories is always culturally shaped. This includes, for example, role models, "good" and "respectable" behavior, and political views. When we experience challenging situations, our cultural habits help us to orient ourselves and to act adequately. It is precisely this "adequately" behavior that can differ culturally.

Intercultural exchange is about avoiding jumping to conclusions and categorizations. Because we only ever see a small part of the whole, and it is important to learn more about what is hidden. That is why communication is essential for an intercultural exchange. Intercultural competencies are developed through communication AND reflection on the situation and the different perspectives.

Here is a small example that should look very familiar to all of us from virtual events....

Everyone knows the situation: learners are asked by the lecturer to turn on their cameras. However, there are almost always students who leave the cameras off. If we are honest, the first interpretation of this behavior is usually that the students just do not feel like opening the camera because they might be doing something else instead of following the course. If we do not think about it any further and classify this conclusion as the most likely scenario, it can lead us to develop a negative attitude towards the student. This, in turn, influences our subsequent behavior as well as the interpretation of other behaviors that the students later display (e.g.: "Obviously, the homework is not good. It can't be, after all, he didn't actively participate in the course").



*Fig. 39: An example of the vicious circle of intercultural misunderstandings (own illustration)*

But how can such a vicious circle be prevented? Through communication and (self-)reflection. Firstly, we have to realize that our conclusion is our own interpretation, which may differ from the actual causes. Here, it only helps to contact the student (e.g., via e-mail after the course) and openly ask about the reasons for the closed camera. Perhaps it will turn out that there is a completely different (culturally influenced) reason why the student has turned off the camera (see e.g. chapter 4)

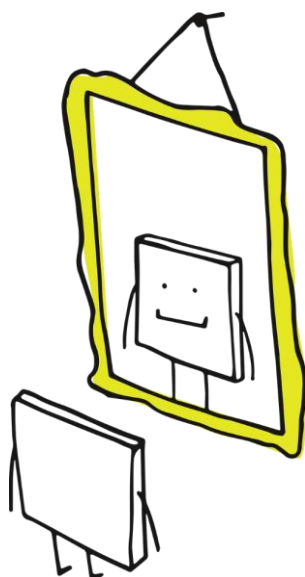
A possibly negative, but also a very positive attitude towards individual students should also always be reflected. Whether we like it or not, this attitude has a significant influence on us and our behavior - not least in the context of the assessment.

However, virtual international courses are not just about us lecturers reflecting about our own cultural competencies and building them up as a result. Of course, the students should also acquire cultural competencies. It is therefore very important to promote and specifically stimulate their reflectivity. One way to do this is the use of so-called “reflection prompts”. Reflection prompts are hints or questions that initiate a productive learning or reflection process (Glogger et al., 2009, p. 96). Especially in the initial phase, the use of prompts is important. It is recommended to reduce these reflection aids over time, as the goal is for students to reflect more independently (“Adaptive fading”, Barlett-Bragg, 2003, p. 6; Nückles & Renkl, 2010, p. 322). It should also be considered that too rigid instructions can have a negative impact on motivation.

## 5.5. Conclusion

Based on constructive alignment, it is important that performance assessment is ideally based on learning objectives while also promoting learning. The learning objectives of virtual international teaching are often not easily measured by tests – other forms of assessment are required. An example of this is the use of case vignettes. ePortfolios are digital applications that allow us to collect a variety of artifacts while engaging in exchange with other people and also link content with each other. They can further support (formative) assessment as well as reflection (e.g., by integrating reflective learning diaries).

Reflection – combined with communication – is the key to successful (intercultural) learning. It is important that we become aware of our own culturally shaped perspective and also of the cultural conditioning of our thinking and behavior. However, cultural learning requires reflections of high quality (level 3: critical-reflective). Such forms of reflection must be learned and - at least at the beginning - specifically supported and guided.



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# Appendix

## Tool Collection

### *Audacity*

Audacity is a free program that allows you to create, edit and save audio recordings in various formats.

DSGVO\* compliant: No, only in older versions (up to 3.0.2.). URL: <https://www.audacity.de/>

### *ARS Nova click*

ARSnova.click is a free browser-based tool that allows to create various forms of quiz questions. The special feature here is that even the creators do not need to register (the quizzes are saved via cookies). URL: <https://arsnova.click/>

DSGVO compliant: No

### *BigBlueButton*

BigBlueButton is an open-source web conferencing tool. It is well suited for web conferences and has many other features integrated (e.g., group formation, collaborative whiteboard work, shared notes...). URL: <https://bigbluebutton.org/>

DSGVO compliant: Yes

### *Camtasia*

Camtasia is a video editing software that can also be used to create and edit screencasts (including audio track). The editing options are very diverse (e.g., cutting, mixing, special effects...). URL: <https://www.techsmith.de/camtasia.html>

DSGVO compliant: Dependent on the use

### *Conceptboard*

Conceptboard is a (DSGVO compliant) paid online whiteboard that supports collaborative work. URL: <https://conceptboard.com/de/>

DSGVO compliant: Yes

\*DSGVO = a basic data protection regulation that contains regulations on the processing of personal data by public bodies - such as universities. Tools that are DGSVO-compliant may be used without any problems in the context of courses. For tools that are not compliant, it is necessary to inquire about the possibilities of use within the university in each individual case.

### ***Doodle***

Doodle is a web-based application that makes it easy to create and conduct polls and appointment searches online. The basic functions are free of charge. URL: <https://doodle.com/de/>

DSGVO compliant: No

### ***Edupad/Etherpad***

Edupad/Ethepad is a text editing software that allows users to work on the same document simultaneously. URL: <https://edupad.ch/>, <https://etherpad.org/>

DSGVO compliant: Dependent on the use

### ***GarageBand***

GarageBand is a software from Apple that lets you produce your own music tracks. For this purpose, a free collection of sounds and samples, but also your own vocal or instrumental recordings can be created and used. URL: <https://www.apple.com/de/ios/garageband/>

DSGVO compliant: unknown

### ***Gartic***

The gartic website provides drawing games that can be used in different contexts. URL: <https://gartic.com/>

DSGVO compliant: No

### ***Gather Town***

Gather. town is a web-based program that allows to create virtual spaces where people can move and interact with each other. Besides (protected) conversations and multiple interaction possibilities, there is also the possibility to embed presentations and instructions, like in classic videoconference tool meetings.

DSGVO compliant: Dependent on the use

### ***Google Docs***

Google Docs is a program that allows multiple users to create and edit texts in real time, free of charge. It is integrated with the Google Drive file hosting service, where the files are automatically saved. URL: <https://docs.google.com>

DSGVO compliant: No. The only way to use this Google service in a privacy-compliant manner is to upgrade to Google Workspace.

### ***Kahoot!***

Kahoot is a platform that offers learning games, but also allows their individual creation, e.g., in the form of quizzes. URL: <https://kahoot.com/>

DSGVO compliant: No.

### ***Limesurvey***

LimeSurvey is a free tool that can be used to create anonymous online surveys. URL: <https://www.limesurvey.org>

DSGVO compliant: Yes, if consent to comply with the DSGVO has been requested via an online contract tool from Limesurvey.

### ***Mahara***

Mahara is a software that can be used to create ePortfolios. These can be made alone or in groups and shared with others. URL: <https://mahara.org/>

DSGVO compliant: unknown

### ***Mattermost***

Mattermost is an instant messaging service that can be used to exchange information in individual or group chats. URL: <https://mattermost.com/>

DSGVO compliant: Yes

### ***Movie Maker***

Movie Maker is a free software from Microsoft that lets you edit and cut videos and photos. URL: <https://apps.microsoft.com/store/detail/movie-maker-video-editor/9MVFQ4LMZ6C9?hl=de-de&gl=de>

DSGVO compliant: No

### ***OnlineTED***

OnlineTED Education is a web-based system that can be used to conduct and evaluate both live and multi-day voting. URL: <https://onlineted.de/de>

DSGVO compliant: Yes

## **PINGO**

PINGO ("Peer instruction for very large groups") is a free poll software with live feedback system developed by the University of Paderborn. It makes it possible to capture opinions and knowledge levels of large groups as well as to collect feedback. URL: <https://trypingo.com/>

DSGVO compliant: Yes

## **Pixabay**

Pixabay is a database where license-free images, videos and music are made available by the associated online community. URL: <https://pixabay.com/>

DSGVO compliant: unknown

## **QuizAcademy**

QuizAcademy is a learning software that can be used to create your own flashcards, surveys and quizzes. These can be made available to a learning group and the results evaluated afterwards.

DSGVO compliant: Yes

## **Screencast-o-matic**

Screencast-o-matic is an online tool that can be used to record images and videos using screencasts and webcams and then edit them. In the free version, among other things, the recording time of the videos is limited to 15 minutes and a watermark is visible on the videos. URL: <https://screencast-o-matic.com/>

DSGVO compliant: unknown

## **Skype**

Skype is a free video conferencing service from Microsoft that can also be used to make calls (for a fee) to landlines and mobile phones. URL: <https://www.skype.com/en/>

DSGVO compliant: No

## **Teams (Microsoft)**

Microsoft Teams is a platform that offers various services for work groups. It includes a chat, a (video) conferencing tool, access to Microsoft services Word, Excel, PowerPoint and OneNote, and file sharing options. The free version only includes the chat and conference function. URL: <https://www.microsoft.com/de-de/microsoft-teams/group-chat-software>

DSGVO compliant: unknown

# Collection of Methods and Concepts

## Cooperative Learning

"Cooperative learning" is a concept that aims at making partner and group work more effective by avoiding common problems. Specific measures are taken to ensure that students really work together and support each other. The core of the concept consists of five basic principles: (1) Positive Interdependence (the group can only be successful if everyone participates), (2) Individual Responsibility (each group member takes responsibility), (3) Supportive Interaction (group members encourage and support each other), (4) Social Competencies (communication, conflict and cooperation skills are both prerequisites and (learning) goals of Cooperative Learning), (5) Evaluation (group activities are formatively and summatively evaluated with the goal of improving (future) cooperation). Cooperative learning methods are designed to address these five characteristics. However, the basic principles should also be considered in task design.

**For further details see: Johnson, D.W., & Johnson R.T. (1994). *Leading the Cooperative School*. Interaction Book Company.**

## ePortfolio

See chapter 5.2.

## Flipped Classroom (or „Inverted Classroom“)

University teaching is usually done in such a way that students are taught knowledge in lectures or courses, which they then repeat and apply at home as part of a work or learning assignment. In the "Flipped Classroom", the "classic" way of passing on knowledge is "turned around". In the run-up to the session, the students receive various learning materials (e.g., scripts, (explanatory) videos, technical literature) as well as concrete work and learning tasks and use these to actively prepare for the session. During the regular course session, what has been learned in advance is then discussed and, possibly, tested in practice; in addition, questions can be answered. By applying this concept, the phases of pure knowledge transfer are consequently outsourced from the courses, so that more interaction and a more intensive exchange can take place here.

## Glossary

A glossary is a list of terms that are used in the course but need to be explained (e.g. due to different national meanings, such as the term "primary school", which is understood very differently depending on the nation). The goal of the glossary is to provide all participants with the same basic understanding of the term as it is used in the course. Glossaries are usually written. However, it is also possible to include other forms of presentation (e.g. photo materials or explanatory videos).

## Group Tournament

The group tournament is a method that combines cooperative learning with game-based-learning. The method is divided into two phases. First, students are divided into "home groups" and given the task of working together to learn the content. The goal is for everyone to have a comprehensive knowledge of the topic after this phase. This is followed by a competitive phase. Competition groups are formed with one member from each home group. The competition is then carried out in these competition groups, where each participant has to demonstrate his or her own knowledge. The points achieved by each member of the home group are then added up to a group score. The home group with the highest score wins.

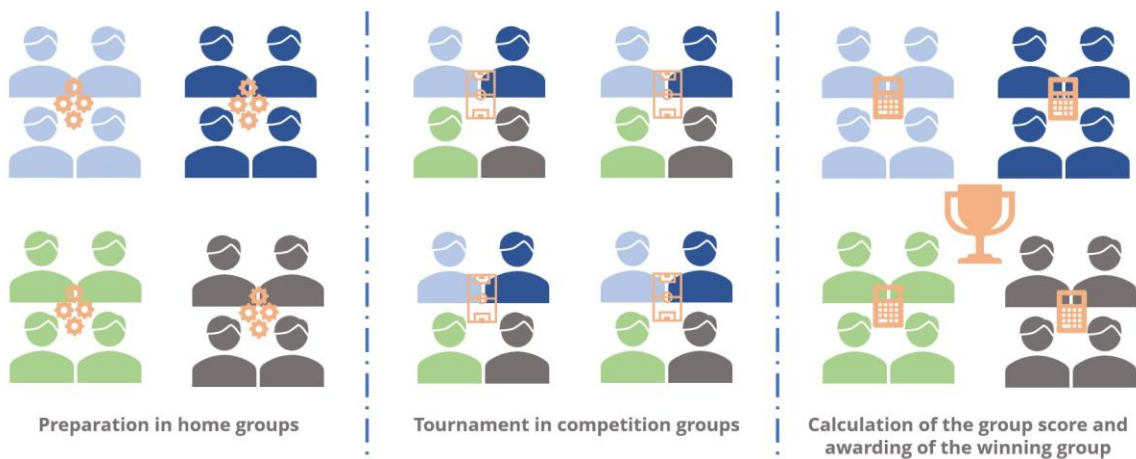


Fig.: Group Tournament (own Illustration)

For further details see: Brünig, L. & Saum, T. (2009). *Erfolgreiches unterrichten durch kooperatives Lernen*. Neue Deutsche Schule.

## Image-based Reflection

The basic principle of image-based reflection is very similar to that of the traffic light method. Instead of the three color fields, however, different images are presented for selection. There are also many different ways of using this method. For example, different pictures of classroom scenarios could be presented, and students are asked to mark which one they perceive as "typical" of their educational system. Yet, this method can also be used to illustrate mood pictures or attitudes (see the next page for an example).



## Picture Reflection...

...how do you feel right now?



VITALS | Part II | Dr. Annika Brück-Hübner | NIDIT | Justus-Liebig-Universität Gießen | Date: 27.01.23

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Fig.: Image-based reflection - an example (taken from the presentation of the VITALS workshop)

## Jigsaw

This cooperative learning method can be used for all topics that have a certain degree of complexity. A prerequisite for the implementation of Jigsaw is that the topic to be worked on can be subdivided into several sub-topics of as equal size as possible.

The material is distributed among the members of the home groups like puzzle pieces, so that one expert is responsible for each part of the overall material. All students working on the same topic then form new groups - the expert groups. Here, the chosen topic is worked on together. Questions are asked, notes are taken, and problems are solved. After the work in the expert groups is completed, the students meet again in their home groups. Here, they then work together on a group task that builds on the topics of the expert groups. The task can only be solved by putting the individual parts together. The success of the group work, therefore, depends on each learner (individual responsibility). Successful work is only possible if the group members work together and can rely on each other (positive interdependence).

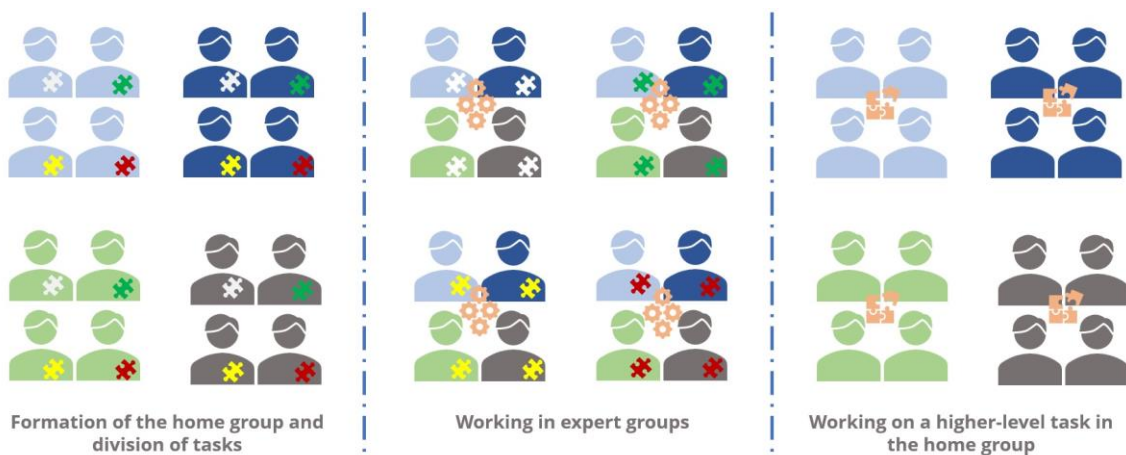


Fig.: Jigsaw (own Illustration)

## Mentoring

In mentoring, an experienced person (mentor) supports a less experienced person (mentee) in their professional or personal development. Mentoring is needs- and problem-oriented. Basically, two forms of mentoring can be distinguished:

1. *Expert consulting*: The mentor suggests solutions, shares information and gives advice.
2. *Process consulting*: This focuses on helping the mentee to help themselves. The mentee is asked to work out a solution themselves, and the mentor supports this process (learning guidance and supervision).

As already mentioned, the mentor is traditionally ahead of the mentee in terms of experience ("step-ahead-mentor"). However, there are many different types of mentoring. Recently, for example, peer mentoring formats have gained popularity, in which people at the same status level share their experiences and work together on similar problems and challenges.

For further details see: Brück-Hübner, A.; Frei, J.; Kopp, M. & Weber-Koppitz, N. (2023). *Mit Mentoring Lernbrücken bauen: Ein interdisziplinäres Projekt zur Professionalisierung angehender Grundschul-lehrkräfte und zur Unterstützung des Übergangs von der Schule in die Hochschule*. In: Seminar 4/22 ("[Mentorinnen und Mentoren in der Lehrkräfteausbildung qualifizieren](#)"), p. 52-67.

## Position Request

The basic principle of the position request is similar to both the "traffic light method" as well as the "image-based reflection". Instead of assigning themselves to a specific color or image, students can locate themselves on a line (see example below). In the context of digital courses, position request can be done on a whiteboard or concept board. In interactive spaces, such as GatherTown, it is also possible for students to position themselves accordingly in the virtual space with their avatars.

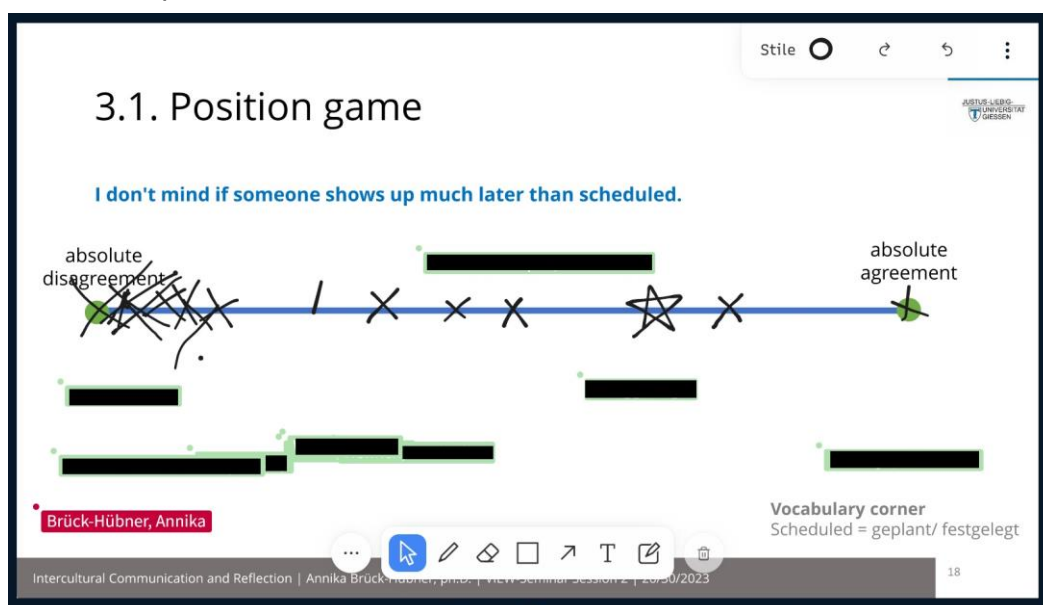


Fig.: Position request - original example from my COIL seminar: „Virtual International Exchange: Intercultural Communication and Inclusion in Global Educational Contexts“

## Think-Pair-Share

As the name suggests, the think-pair-share method consists of three steps: (1) First, a learning, work, or reflection task is worked on by the students individually. (2) This is followed by an exchange with a peer. This phase can either be limited to an open exchange or include working on a new, more advanced task. (3) This is followed by the plenary phase. Here, the results are summarized together, questions are clarified, and further discussions are held.

I have often found that students usually need a certain amount of preparation time, both in terms of content but especially language, in order to be able to actively participate in discussions. The think-pair-share method gives them the opportunity to first think for themselves and also to start thinking about how they can express their thoughts in the respective language (e.g., there is then also the possibility to research vocabulary). This is followed by a protected exchange with a peer. Here - in addition to the exchange of content - speaking can also be practiced together. In my experience, these preparatory phases reduce students' anxiety and help them to actively participate in following plenum discussions.

## Traffic Light Method

The basic principle of the traffic light method is that corresponding to a traffic light there is the possibility to position oneself accordingly in the colors green, yellow, and red. There are different ways to use this method in terms of content. At this point, only a few examples will be listed:

1. *Assessment and attitude*: a statement is shown. The students are asked to assign themselves to one of the three colors according to their personal attitude or assessment (green: agree; yellow: neither; red: disagree) (e.g., "I find it easy to work in intercultural groups"; "The death penalty is a legitimate form of punishment").
2. *(Formative) Evaluation*: students are asked to comment on the current course and personal situation (green: yes; yellow: conditionally; red: no) (e.g., "Can you follow the current session well? Do you need a break? Should content XY be repeated?"). - This allows you to adapt the teaching accordingly.
3. *Quiz*: A question is presented with three different possible solutions. Each field is assigned to one possible answer. The students are then asked to mark that field which they think is the correct answer.

Technically, these methods can be implemented in virtual courses in different ways, e.g., three colored fields can be added to a digital whiteboard or a concept board. Students can then assign themselves to one of these fields, either anonymously (e.g., by marking with crosses or dots) or by writing their name in it (see the next page for an example).

I understood the "black box phenomenon" of digital communication.



*Fig.: Traffic light method - an example (own illustration)*

### **Truth or Lie**

The game "Truth or Lie" can serve both to get to know each other and to test knowledge (e.g., in the form of a quiz). In the former, students introduce themselves by saying, for example, three short things about themselves - two of these things are "true" and one is a "lie." The other students must then decide together which of the statements is a lie. In the knowledge check, for example, three different statements about a scientific text can be asked. Here, the students must then decide which of these statements appear in the text and which are not.

### **Tutorial**

A tutorial is a (often voluntary) additional offer to a course, which is usually not led by the lecturer, but by a student tutor. The tutorial can serve to clarify questions, to practice together and to deepen contents. Depending on the design of the tutorial, this can be a regular and formalized form of mentoring.