

Experiencing the Global Dimension of Sustainability: Student Dialogue in a European-Latin American Virtual Seminar¹

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Abstract

This article suggests as important elements of education for sustainable development an active engagement with global issues, and involvement in international communication and cooperation. As there is a dearth of learning settings that offer and stimulate an interactive dialogue between learners from the North and the South, this paper proposes as a possible model the International Virtual Seminar ‘Sustainable Development in Europe and Latin America’, which involved participants from Chile, Mexico, Peru, and Germany. Results show how students experienced the global dimension of sustainability; and that they improved their competencies crucial for international communication about and cooperation in sustainable development. The findings also indicate the main challenges faced by students during their learning process.

Keywords: Education for Sustainable Development, Global Learning, Virtual Learning, Intercultural Learning, Intercultural Dialogue, Competence Development

From Global Change to Sustainable Development

Today, humanity is facing a range of global social, economic, cultural and ecological changes which in the long term threaten the survival of the human species: ‘For the first time in human history we have the potential to make irreparable changes to the entire global fabric, including [...] climate, water distribution, land use and biodiversity’ (Harris, 2007, 1). The German Scientific Advisory Council on Global Environmental Change (WBGU) describes these worldwide transformations as a ‘Global Change’. This reflects the manner in which global environmental change is closely intertwined with economic globalisation, cultural change and

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a growing North-South divide. According to the WBGU (1996), these are the key problems of global change: climate change, ozone depletion and persistent organic pollutants, loss of biodiversity and deforestation, soil erosion, scarcity and pollution of freshwater, overfishing and pollution of the oceans, threats to food security and world health, and widening gaps in development. In our time, the interconnectedness of ecosystems, societies and economies is growing quickly and complexity is increasing rapidly. Hence, the trends of global change call for re-shaping relationships, those between ourselves and those with nature.

Because of the global environmental crisis ‘the development model of the North is historically obsolete’ (Heinrich Böll Foundation, 2002: 18). However, it is also the failure of conventional development strategies to eradicate poverty and overcome inequality that shows the concept of copycat development as no longer useful and suggests the necessity of a new development path. Such a new direction has been seen, since the Rio Earth Summit in 1992, in the ideal of sustainable development, which involves and requires fundamental social transformations.

A central constitutive element of sustainable development is its global orientation. This can be justified on three levels. There is, first, an ethical justification: in a global ethics, all individuals have a moral right to satisfy their basic needs, to fulfil their wishes for a better life and to claim the right both to the conservation of the essential life-preserving functions of ecosystems and to fair access to global resources. Second, there is a problem-oriented justification: many of the well-known problems of unsustainability are global phenomena, however different their manifestations may appear at the regional level. And, third, there is a strategic justification: global problems require not only the identification and analysis of the problems, but also the development of corresponding strategies for solutions and implementation mechanisms at the global level (Kopfmüller et al., 2001).

Against this backdrop, sustainable development requires international (as well as intercultural) dialogue and exchange about possible social transitions towards sustainability. This is because sustainable development can be understood as a social process of communication, learning and transformation (cf. Michelsen, 2007). What is crucial in this process is negotiation: without constant communication and exchange of ideas and approaches on a global level, it will not be possible to cope with problems of unsustainability in an adequate manner. To quote Harris:

Relationships, collaboration, trust and social capital are the keys to success in this more complex technological, social, environmental and economic context in which we all live. [...] there must be a strong dialogue between institutions and individuals in a changing world (2007: 5).

Thus, it is only if as many people as possible are actively involved that sustainable development can be realised. Consequently, Agenda 21 (chapter 36) points to education and communication as key factors in achieving sustainable development.

Given these facts, this article will consider: (i) the role of education in enabling people to contribute to a sustainable future, (ii) the international and intercultural dimension of education for sustainable development, and (iii) the consequences for higher education as well as the approach of virtual mobility. The empirical part of this paper presents a systematic consideration of the extent to which the promotion of a global dialogue in higher education teaching has a positive effect on students' acquisition of competencies critical for sustainable development.

Education for Sustainable Development and Key Competencies

The fundamental reorientations and transformations in terms of sustainable development require a far-reaching change of consciousness in individuals and thus the development of competencies to contribute to a (more) sustainable future. This can only be brought about by learning; hence sustainable development has to be understood as a learning process (Vare and Scott, 2007). Education is expected both to make people more aware and better qualified to take part in shaping future developments responsibly, and to raise their awareness of the problems related to sustainable development and bring forth innovative contributions to all economic, social, environmental and cultural issues. In order for individuals to be in a position to engage with sustainability-related issues, a change of perspective in education is required, in other words a reorientation towards 'Education for Sustainable Development' (ESD).

Given the 'development state of the world society' (Scheunpflug and Asbrand, 2006: 35), education should enable individuals to reflect on their own actions by taking into account their current and future social and environmental effects – from a global perspective – and to intervene productively in shaping them in a sustainable manner. Individuals should be empowered to act in complex situations, which may require the individual to strike out in new directions. ESD aims to develop (key) competencies that enable individuals to participate in

socio-political processes and hence to move their society towards sustainable development (e.g. Bormann and de Haan, 2008; de Haan, 2006). Vare and Scott (2007) argue that instead of promoting certain behaviours and ways of thinking ('ESD 1'), this competence-oriented concept of ESD focuses in particular on both 'building capacity to think critically about [and beyond] what experts say and to test sustainable development ideas' and 'exploring the contradictions inherent in sustainable living' ('ESD 2') (2007: 194). This competence orientation is also emphasised by Scheunpflug and Asbrand (2006: 35), who contend that the aim of a system-theory based approach of global education is to support learners in developing 'adequate competencies for life in a world society', enabling them to cope with an uncertain future and complexity.

In general, competencies may be characterised as dispositions to self-organisation which comprise different psycho-social components and are realised in specific contexts. What is needed, therefore, is an interplay of content-specific knowledge and cognitive skills with motivational tendencies, volitional control systems and personal value orientations (Weinert, 2001).

De Haan describes the overarching educational objective of ESD as '*Gestaltungskompetenz*' ('shaping competence'):

Those who possess this competence can help, through their active participation in society, to modify and shape the future of society, and to guide its social, economic, technological and ecological changes along the lines of sustainable development (de Haan, 2006: 22).

According to de Haan (de Haan, 2006; de Haan et al., 2008), this 'shaping competence' comprises the following key competencies:

- competency in anticipatory thinking,
- competency in interdisciplinary work,
- competency in cosmopolitan perception and change of perspectives,
- competency in handling incomplete and complex information,
- participatory competency,
- competency in cooperation,
- competency in dealing with conflicts of goals,
- competency in self-motivation and motivating others,
- competency in distanced reflection on individual and cultural models,
- competency in independent action,
- competency in ethical action, and
- capacity for empathy and solidarity.

The International and Intercultural Dimension of ESD

Competencies cannot be taught, they can only be developed by the learners themselves (Weinert, 2001). Therefore, the main settings of ESD are forms of self-organised, project-based learning that enable the individual to perceive interconnections and to experience a community which can deal with problems in a critical, productive, creative and effective manner. It would therefore seem that some of the key competencies that form part of the shaping competence, such as a cosmopolitan perception and change of perspectives as well as a capacity for solidarity and reflection on cultural models, can only be learned through experience in global and intercultural contexts. Accordingly, educational processes should facilitate this involvement in international projects and in a dialogue with individuals from diverse cultural backgrounds.

Thus, Selby (2003) states that individuals should be encouraged to consider different cultural, disciplinary, social and ideological perspectives on key global issues, an approach that is linked to the idea of ‘worldmindedness’. De Haan similarly emphasises the importance of a global view: ‘Because a single regional or national perspective is too narrow for orientation in a complex global society, we must transcend the horizons of our perceptions and judgements and strive for a global view’ (de Haan, 2006: 23).

However, learning about global issues cannot only take place through the acquisition of information (Bourn, 2008); what is needed are actual realms of experience. It is only in intercultural contexts that individuals can learn to perceive different perspectives and forms of knowledge (scientific, traditional, etc.) about global and local (un)sustainable development and to analyse different patterns of action on the basis of information gained through changes of perspectives – both capacities that form part of the competency in cosmopolitan perception and change of perspectives (de Haan et al., 2008). In other words, learners should be enabled ‘to look at issues and the world from a different place’ (Bourn, 2008: 18).

By dealing with global issues in intercultural contexts, learners get to know different perspectives and interpretations. This approach may help to avoid an ‘uncritical reinforcement of notions of the supremacy and universality of ‘our’ (Western) ways of seeing and knowing’ (Andreotti and de Souza, 2008: 23). Instead of learning about each other and perhaps reinforcing already existing assumptions and prejudices, the individuals involved can learn

from and with each other and consequently may come to question common and hegemonic ideas and conceptions (cf. Kumar, 2008 on the opportunities and advantages of dialogical learning). In this context, Spivak (1999) speaks about learning to unlearn, learning to listen, learning to learn and learning to reach out.

To sum up, addressing global issues and getting involved in international and intercultural communication and cooperation processes are important factors for developing the key competencies which constitute the shaping competence. Although communication with individuals from other world regions does not necessarily lead to the development of the competencies mentioned, it may facilitate this process. Creating settings in which learners can deal with global sustainability topics and can communicate and collaborate with people from other countries can thus be seen as essential elements of ESD. Conversely, few learning settings can be found that offer and stimulate an interactive dialogue between learners from the North and the South.

Higher Education for Sustainable Development in a Globalised World

ESD brings challenges for higher education as the place where future decision makers are educated. In order to be able to actively contribute to a more sustainable future, students need to be familiarised with the changeability of complex systems and the global dimension of sustainable development.

Dealing with questions of sustainability in higher education also introduces new demands on learning settings, such as problem-orientation, interdisciplinarity and finally the reflection of different culture-related views and their consequences.

In higher education, intercultural exchange and an international perspective on learning is stressed as a main objective. In Europe, far-reaching activities have been introduced to make European higher education more compatible and harmonised, and thus improve students' mobility, so that they are able to gain international experience. However, no more than 2% of all European students participate today in the European Commission's Erasmus programme, the main driver of international exchange between universities. Within the Integrated Action Programme for Lifelong Learning², the goal is set to raise that number to 20% by 2013 – which still leaves 80% of students who would not have the opportunity to participate in Erasmus for social, financial or other reasons.

² http://ec.europa.eu/education/lifelong-learning-programme/doc78_en.htm

In view of this fact, ‘virtual mobility’ could be an answer, offering intercultural learning settings independent of time and place. ‘Virtual mobility’ in this context can be understood as

... a form of learning which consists of virtual components through a fully ICT supported learning environment that includes cross-border collaboration with people from different backgrounds and cultures working and studying together, having, as its main purpose, the enhancement of intercultural understanding and the exchange of knowledge (Bijnens et al., 2006: 5).

Within the field of higher education for sustainable development there are a number of first attempts in setting up e-learning seminars or even virtual campuses on sustainable development issues: the ‘Virtual Campus for a Sustainable Europe’³, a joint project of five universities to build up a virtual campus on sustainability at a European level; a Virtual Campus about Sustainable Development and Environmental Management (‘SUPPREM’), developed by the Interfaculty Centre of the University of Geneva⁴; and within the PASDEL project (‘PrActising Sustainable Development through E-Learning’)⁵, e-courses on sustainability in four European languages.

While these offer some examples of international e-learning, there are only a few projects that bring together students from the North and the South and even less is known about the impact such seminars might have.

Research Question and Context

Given this background, this paper examines the impacts of a virtual seminar on sustainable development on students from both the North and the South. The research question to be answered was whether learning about sustainability in an international e-learning setting would support the students’ competence development. Given this focus of research, three sub-questions were relevant:

- Does such a seminar enable students to experience the global dimension of sustainability?
- Does it foster the intercultural negotiation of pathways towards sustainability?
- Will those students’ abilities and skills be improved that are crucial for international communication and cooperation in terms of sustainable development?

³ <http://www.vcse.eu>

⁴ <http://supprem.unige.ch>

⁵ <http://www.pasdel.eu>

The research reported in this article focused on the International Virtual Seminar ‘Sustainable Development in Europe and Latin America’, which took place at the Leuphana University of Lüneburg in the summer term of 2008. This had emerged from a joint project between three European (Open Universiteit Nederland, The Netherlands; Örebro Universitet, Sweden; Leuphana University of Lüneburg, Germany) and six Latin American (Universidad de Arte y Ciencias Sociales ARCIS, Chile; Universidad Bolivariana, Chile; Universidad de San Martín de Porres, Peru; Universidad Autónoma Metropolitana – Unidad Xochimilco, Mexico; Universidad Autónoma de San Luís Potosí, Mexico; Universidad Nacional de Cuyo, Argentina) universities, and was supported by the European Union’s ALFA programme⁶. Over two years of cooperation (2005-2007), these universities developed the basis for a joint international Master’s Programme in Sustainable Development and Management, to be implemented at all nine institutions (Rieckmann et al., 2007; Van Dam-Mieras et al., 2008). By implementing this Master’s programme, the cooperating universities aim to contribute to the dissemination of the concept of sustainability and to train students to participate in the shaping of social processes based on it. In other words, students are meant to become competent in promoting sustainable development in their chosen fields of endeavour.

For the introductory stage of the Master’s programme (semesters 1 and 2), a module called ‘Introduction to Sustainable Development and Intercultural Virtual Dialogue’ was developed. In order to test the module and its impacts on the students, in particular with respect to possible effects of the intercultural dialogue about sustainability, the international virtual seminar ‘Sustainable Development in Europe and Latin America’ was conducted by the Leuphana University of Lüneburg in the summer term of 2008. The seminar served in this way as a pilot course for the future implementation of the Master’s Programme. As the introductory module had originally been developed as a two-semester course, the structure had to be adjusted to make it fit into the time frame of a one-semester class.

The course’s main objectives were the acquisition of knowledge about central elements of the idea of sustainable development and about the strikingly different perspectives on sustainable

⁶ ALFA (América Latina - Formación Académica) is a cooperative programme between the EU and Latin American higher education institutions (http://ec.europa.eu/europe-aid/where/latin-america/regional-cooperation/alfa/index_en.htm). It is one of the programmes of EuropeAid, an EU organisation responsible for implementing all external assistance outside the EU.

development in Europe and Latin America. Another learning outcome was for students to develop interdisciplinary and intercultural competencies by working together in groups involving students from different disciplines and countries.

The course was offered as an e-learning seminar, designed for self-directed, problem-oriented and collaborative learning. The Moodle⁷-based e-learning environment offers a number of collaboration tools such as a wiki, different discussion forums and tools for file exchange. The complete seminar consisted of seven different parts (see Table 2) with a total workload (WL) of 150 hours over fourteen weeks.

After the course had been announced at their respective universities, seventeen students from four different countries (Chile, Germany, Mexico, and Peru) enrolled voluntarily in the course. Table 1 gives some information about the twelve students who successfully completed the course.

Table 1: Students who passed the course successfully

Total number of students	12
Home countries	Chile (4), Germany (7), Peru (1)
Universities	Universidad Bolivariana, Santiago de Chile (4) Leuphana University of Lüneburg, Germany (7) Universidad de San Martín de Porres, Lima, Peru (1)
Educational background	bachelor students (10), post-graduate students (2)
Disciplines	environmental sciences (7) geography (3) communication studies (1) economics (1)
Age	20-28
Gender	female (10), male (2)

The course was taught in English. The essential study material was an introductory text about sustainable development containing chapters for all sections of the seminar. This set text had been created specifically for the introductory module ‘Introduction to Sustainable Development and Intercultural Virtual Dialogue’ by European and Latin American experts involved in the joint project.

⁷ Moodle (<http://www.moodle.org>) is an open-source learning management system.

Table 2: Structure of ‘Sustainable Development in Europe and Latin America’

(1) Introduction and orientation	Week 1 / WL = 4 h
<i>Content:</i> <ul style="list-style-type: none">– Principles of e-learning	
<i>Activities:</i> <ul style="list-style-type: none">– Tasks to make students familiar with the e-learning environment and the idea of virtual learning– Getting to know each other	
(2) Globalisation, knowledge generation and application	Week 2 / WL = 13 h
<i>Content:</i> <ul style="list-style-type: none">– Globalisation and its impacts on knowledge generation and application– Individual motivation for participating in the course	
<i>Activities:</i> <ul style="list-style-type: none">– Studying set text– Writing an individual statement of participation– Group work: Discussing students’ statements of participation– Individual reflection based on the discussion	
<i>Products:</i> <ul style="list-style-type: none">– Individual statements of participation	
(3) Inter- and transdisciplinarity	Week 3 / WL = 12 h
<i>Content:</i> <ul style="list-style-type: none">– Importance of inter- and transdisciplinarity for sustainable development– Inter- and transdisciplinary working methods	
<i>Activities:</i> <ul style="list-style-type: none">– Studying set text– Group discussions of individual questions based on the reading	
(4) Sustainable development and its challenges	Weeks 4-6 / WL = 35 h
<i>Content:</i> <ul style="list-style-type: none">– Key problems of global change– Effects of global change in different regions/ countries	
<i>Activities:</i> <ul style="list-style-type: none">– Studying set text– Individual investigation into a specific problem field of global change– Presentation of short text on the platform– Group discussions	
<i>Products:</i> <ul style="list-style-type: none">– Short individual texts about effects of global change in different regions/countries	
(5) Sustainable development from its beginnings to the present day	Weeks 7-8 / WL = 21 h
<i>Content:</i> <ul style="list-style-type: none">– General history of the idea of sustainable development– Specific history of the concept in different regions	
<i>Activities:</i> <ul style="list-style-type: none">– Studying set text– Individual preparation of a presentation about one’s own perspective on the history of sustainable development– Group discussions	
<i>Products:</i> <ul style="list-style-type: none">– Individual Power Point presentations about one’s own perspective on the history of sustainable development	

(6) Theoretical considerations of the concept of sustainability	Weeks 9-13 / WL = 55 h
<i>Content:</i>	
<ul style="list-style-type: none"> - The discourses on the concept of sustainability in Europe and Latin America - Different concepts of sustainability in Europe and Latin America - Differences and commonalities of these different concepts 	
<i>Activities:</i>	
<ul style="list-style-type: none"> - Studying set text - Group discussions of the different perspectives/ concepts in Europe and Latin America - Elaboration of papers on the different perspectives in small intercultural groups 	
<i>Products:</i>	
<ul style="list-style-type: none"> - Group papers on the different perspectives and concepts of sustainability in Europe and Latin America 	
(7) Final discussion and feedback	Week 14 / WL = 10 h
<i>Content:</i>	
<ul style="list-style-type: none"> - The discourses on the concept of sustainability in Europe and Latin America - Structure of the seminar 	
<i>Activities:</i>	
<ul style="list-style-type: none"> - Final discussion of central issues of the sustainability discourse - Individual feedback on the course 	

Methodological Approach

The intercultural e-learning seminar described above was investigated and analysed qualitatively in an exploratory case study. Given the research question, at least three different aspects needed to be considered:

- Students' feedback on the learning setting;
- Students' learning processes, with an emphasis on competence development;
- The role of the intercultural dimension in such a learning setting.

Three empirical methods were used for the analysis. First, to obtain information about both individual perceptions of the seminar and its impacts and collaborative aspects, data from a focus group was collected. This focus group was conducted with six German students and one Peruvian student in July 2008. Second, the process of discussion and reflection on different views was studied through participatory observation of the ongoing debate in the discussion forums. Third, content-oriented aspects were investigated through an analysis of the output of the students' group work.

The qualitative analysis of the data (focus group transcript, group work papers, individual statements of participation, and discussion forum transcripts), oriented to the understanding and reconstruction of the processes of competence development, was carried out based on the coding paradigm of Qualitative Content Analysis developed by Mayring (2000).

Results

Students' feedback on the seminar

Overall, the students' feedback on the course and their personal learning outcomes were generally positive. Students approved the general structure, the intercultural setting and the exchange of ideas that had taken place.

Students stated that their high level of motivation to participate in the course was grounded in their individual interest in the topic of sustainability. Indeed, the data shows that all students considered sustainable development to be very important – both for them individually and for society at large. This was clearly stated by students at the beginning of the course: *'Mankind is in great need to promote sustainable development at all levels'* (statement of participation, German student), and its importance was emphasised again as a result of the group work at the end of the seminar: *'Sustainable development is a concept which concerns all countries, all cultures and all people on earth. Only if everybody contributes to this, it will be possible to reach the various aims of the concept'* (group paper 03).

Furthermore, students emphasised the necessity of such learning settings for them to be enabled to deal with the challenges of sustainability as well as the need to consider both a global and a regional perspective: *'without learning, substantial change will be difficult to obtain'* (group paper 02). The intercultural setting of the seminar was thus seen as a major benefit that increased their motivation to learn more about other perspectives, to broaden their horizons and to critically reflect both on their own perspectives and the existing discourses of sustainability.

Students equally emphasised that the didactic decisions to structure the seminar in sub-modules and to include tasks with a relatively high degree of freedom were motivational for their individual learning processes. As a way to virtually work and learn together, e-learning was considered very positively, with students showing a general openness towards this new learning approach. Although both the lack of 'real contact' and asynchronous communication were seen as drawbacks because they led to more difficult discussions and more time-consuming collaboration, these problems were nevertheless accepted as a reasonable cost in exchange for the additional benefits of an intercultural exchange: *'It was a pleasure to work*

with you through that. I believe that we broke the geographic barriers!' (group discussion 01).

Learning processes and learning outcomes

One of the central aspects of the learning process was dealing with diverse concepts of sustainability. Students recognised the chance to broaden and reflect on their previous knowledge about sustainable development. Critical consideration of both the European and the Latin American discourses led to different theoretical positions, reflection on the history of the diverse discourses, and the grounding of individual perceptions. In the course of the seminar, students learned more about these diverse discourses and analysed similarities and differences of perception related to sustainability, especially with regard to understandings of development, the role of participation and direct democracy, and the links between ecological and social aspects:

Sustainability politics in Germany mainly focus on reconciling the economic and ecological dimension. In the public discourse many social issues are being debated, but they are rarely put in the context of sustainable development.in Latin America there is critique about the economic system, the dependencies it creates and the current situation which impedes the countries to adapt themselves to the new worldwide tendencies. (group paper 01)

Having analysed the differences and commonalities between European and Latin American discourses of sustainability, students realised that distinct historical and political contexts can be seen as the reasons for differences between them. Another of their insights was that, because of these differing contexts, it is impossible to establish *one* model of sustainable development that is valid for the whole world and that therefore strategies for sustainable development have to be adapted to the particular conditions in each region.

This teaching and learning approach helped to make students aware of their individual 'blind spots' and raised their awareness about different cultural perspectives. Thus, the analysis of differing sustainability discourses helped them to develop: (i) a basis for intercultural understanding, (ii) competency in cosmopolitan perception and changes in perspective, (iii) the capacity for empathy and solidarity, and (iv) competency in distanced reflection on individual and cultural models.

Working in groups and collaborating on common tasks also contributed to students developing the competency in both self-motivation and motivation of others. Students were

inspired to deal with differing critical perspectives on sustainable development, which helped to overcome difficulties in the learning process and problems with the relatively high workload of the seminar. Other important learning steps were achieved through the students' reflections on different roles in the team, development of possible solutions to the problem of distributing tasks and responsibilities, open discussion about different views and approaches, and joint work on the set text.

Lastly, a number of soft skills were addressed such as time and project management and the capacity to write and discuss in a non-native language. Students were keenly aware of the need for these skills as they were working in a virtual learning environment without knowing each other and were dependant on the work of their team partners.

Intercultural aspects

A major part of the seminar discussion was the common, but differentiated, responsibilities which different countries have regarding sustainable development. By debating issues that figure prominently on the agenda of international climate conferences, for example, students learned to negotiate questions of global sustainable development. It became obvious that agreement on the relevance of sustainable development does not preclude a critical discussion of the concept and its validity in different contexts: *'Since the theory has been imported from Europe, it does not meet the most urgent needs in Chile or Peru'* (group paper 01).

Students also commented that one of the seminar's main benefits was that the discussion of diverse discourses on sustainable development in the North and in the South led to a high degree of reflection and a more focused view on cultural differences: *'Through these discussions I was able to notice that also Germany and the other countries have got their own problems. And I noticed the distinct perspectives'* (focus group). On the other hand, it was not always easy for the participants to understand the perspectives of the others from another continent: *'Yesterday's discussion definitely helped me to understand what is done differently in Germany. But it is still difficult for me to talk about the Latin American side'* (group discussion 01).

The students regarded language barriers as the main challenge to communicating and cooperating with participants from Europe and Latin America. Many of the participants were not used to writing about and discussing academic topics in English, and the levels of

knowledge of the English language differed sharply. However, although language was seen as a barrier, students were willing to work to overcome any drawbacks: *'Well, it was quite exciting for me to conduct a whole seminar in English, and that we are sort of constrained to conduct it in English, because people participate who don't speak or understand German'* (focus group).

Overall, the students recognised the importance of international communication and dialogue for negotiating sustainable development, and in order to find a common path towards global sustainability. They not only inspired one another in a process of continuous questioning, but also came to see that diverse understandings and concepts of sustainable development are a challenge for international communication.

Conclusions

Against the background of globalisation and an increasingly complex world, higher education has to address a number of new challenges. As a place where future decision-makers work and learn together, higher education itself enables people to develop competencies to deal with these challenges. Both an understanding of the complexity of multiple, parallel and interrelated social processes and a global perspective may be seen as necessary preconditions for such competence development. ESD offers a theoretical framework for new learning approaches and the well-grounded selection of necessary key competencies.

Competencies that are important for contribution to a (more) sustainable future are, among others, the competency in cosmopolitan perception and change of perspectives, the capacity for empathy and solidarity and the competency in distanced reflection on individual and cultural models. To achieve these competencies, both knowledge about global issues and a critical perspective on sustainable development are necessary, but not sufficient. No less crucial, in addition to such cognitive dispositions, is the need for reflection on relevant norms and values as well as the motivation to become active. Consequently, it is necessary to create opportunities for intercultural experiences and truly interactive intercultural dialogues and therefore to facilitate new ways of learning in higher education. In this context, e-learning and the approach of virtual mobility may be seen as one way to offer such new didactic approaches for competence development in intercultural dialogues.

The international virtual seminar ‘Sustainable Development in Europe and Latin America’ was set up as an effort to overcome the constraints of a ‘normal’ university seminar by using the possibilities of e-learning for such an interactive and truly intercultural learning experience. The students’ positive feedback and the learning processes experienced confirm the value of this approach.

The course evaluation shows that by learning with and from each other the students gained new insights about Europe and Latin America in general, and the sustainability discourses and concepts in these regions as well as the main differences and commonalities between them in particular. The students addressed global issues and came to know new and critical perspectives on sustainable development, broadened the horizons of their thinking about sustainability, and thus were able to experience in their own learning process the international and intercultural dimension of sustainability. Furthermore, students recognised the importance of different historical, political and social contexts for defining and realising sustainable development and the impossibility of establishing *one* model of sustainable development that is valid for the whole world. By getting involved in an international and intercultural dialogue, the students learned about the significance of negotiating sustainability and were able to gain experience in doing so. Furthermore, they improved their competencies and skills in areas such as team work, project management, (intercultural) communication, reflective and critical thinking, and – last but not least – also developed their language skills.

These benefits helped the students to deal with the challenge of having to communicate in a non-native language, with problems of mutual understanding in intercultural communication, and with the limitations of virtual discussions such as asynchronous and non-verbal communication.

In conclusion, it can be said that this pilot course highlighted the potential benefits of international virtual seminars for higher education for sustainable development and the significance of such a form of intercultural learning through virtual mobility. A next step could be to institutionalise and develop further learning settings like the one reported in this article, especially by integrating them into existing curricula. While the additional benefits for highly motivated students, who enrolled voluntarily in the course and were willing to deal with the challenges faced during the learning process, have been shown, the question remains how a more heterogeneous group of students (with respect to their interests, motivations, etc.)

would deal with these challenges and how their learning experience could be adequately facilitated.

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